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TEST OF A SUPERSONIC AXIAL COMPRESSOR STAGE INCORPORATING SPLITTER VANES IN THE ROTOR

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Wright-Patterson Air Force Base, Ohio

June 1975

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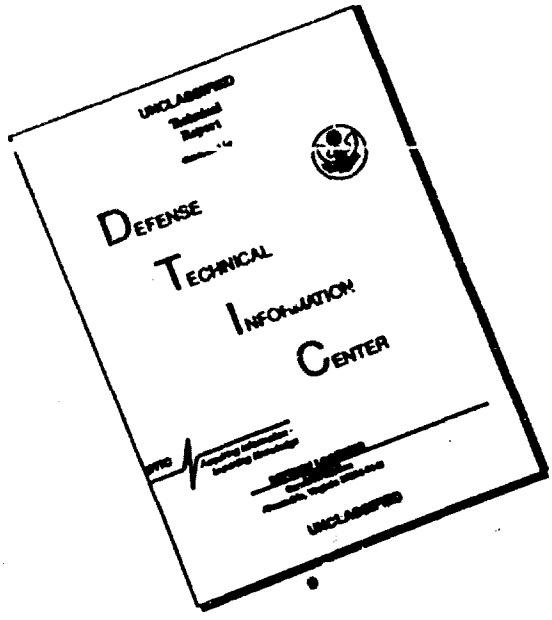

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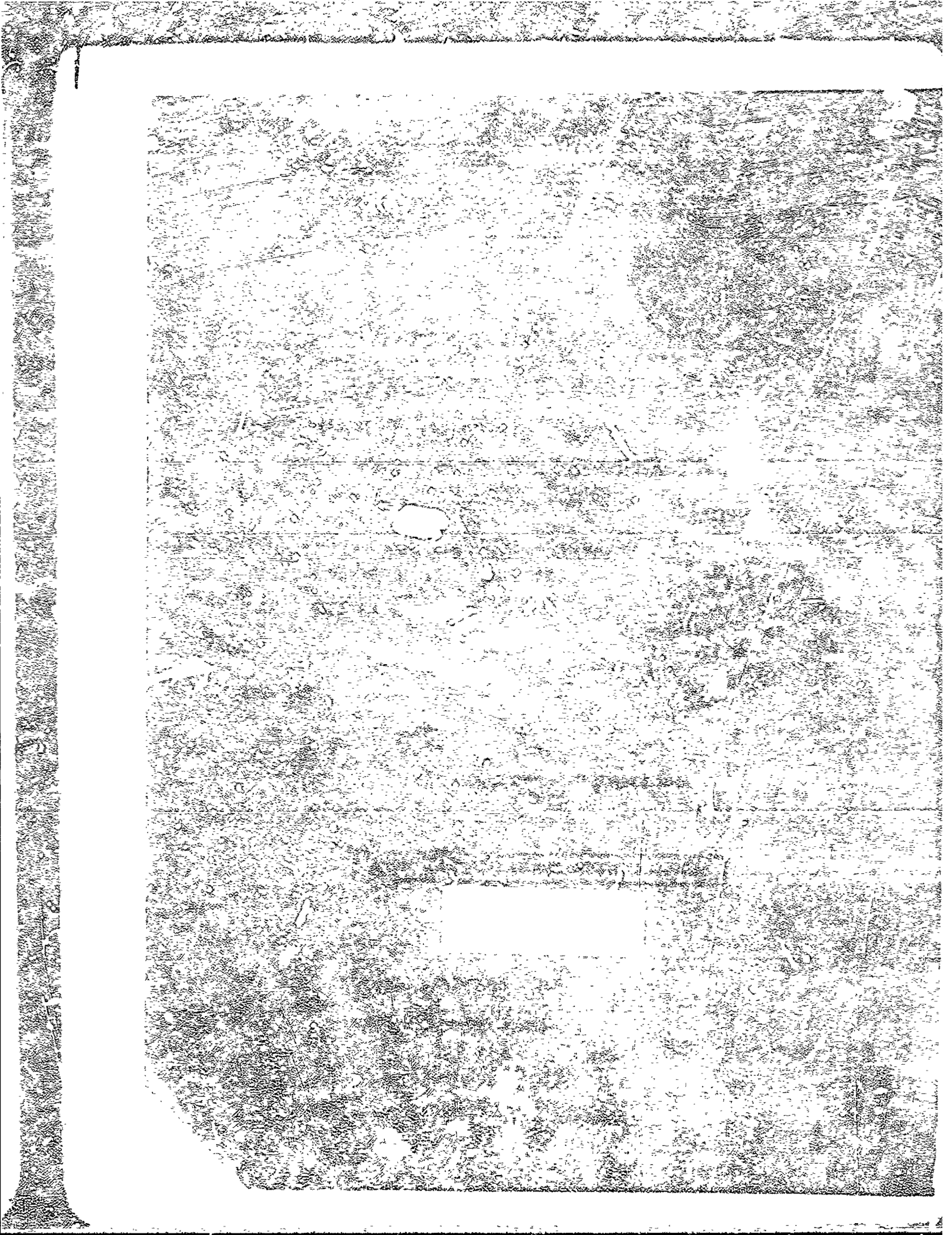

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Complete experimental results are presented from tests of an axial-compressor stage designed for a tip speed of 1600 ft/sec, a stage total pressure ratio of 3.06, and an inlet hub/tip radius ratio of 0.75. The rotor had been redesigned to incorporate a splitter vane between each pair of principal airfoils. At design speed, the compressor passed 88 percent of design flow, achieved a stage total pressure ratio of 2.77, and achieved isentropic efficiencies of 0.846 for the rotor and 0.674 for the stage. This represented a major improvement over the preceding configuration tested without rotor splitter

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vanes. Future tests are to include various types of boundary-layer control.

PREFACE

This interim report was prepared by Dr. Arthur J. Wennerstrom and 2/Lt William A. Buzzell of the Fluid Mechanics Research Laboratory, Aerospace Research Laboratories (AFSC), Wright-Patterson Air Force Base, Ohio and Mr. Robert D. DeRose of Systems Research Laboratories, Inc., Dayton, Ohio. The work herin reported was accomplished between December 1972 and December 1974.

The report presents results from a portion of the effort of the Fluid Machinery Research Group supervised by Dr. Arthur J. Wennerstrom and conducted under Work Unit 09 of Project 7065, "Aerospace Simulation Techniques Research," under the over-all direction of Mr. Elmer G. Johnson, Director.

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SECTION I

INTRODUCTION

This report presents the results of an experimental evaluation of the single stage, supersonic axial compressor described in Reference 1 and modified according to Reference 2. This compressor was designed for an over-all stage total pressure ratio of 3.06 to 1 at an isentropic efficiency of 81.5 percent. Design tip speed was 1600 ft/sec at standard conditions, and the inlet hub/tip radius ratio was 0.75. There were no inlet guide vanes. The modification described in Reference 2 consisted of redesign of the rotor to incorporate a "splitter vane" between each of the principal rotor airfoils. The splitter vane consisted of an airfoil located circumferentially mid-way in the downstream half of each rotor blade passage and extending full span.

The compressor tested was designed for diffusion levels beyond the range of past experience in both rotor and stator. This choice was deliberate in order to provide a suitable test bed for the evaluation of boundary layer control devices applicable to a compressor and to obtain data at values of Diffusion Factor above 0.5. The performance of the original design, reported in Reference 3, was extemely poor. The results reported herein, obtained after the addition of splitter vanes, represent a major improvement in both rotor and stage performance. The rotor performed relatively close to, although somewhat below, design goals. Stage performance was still significantly short of design objectives. No boundary layer control devices were installed for this test.

The second section of this report describes the test facility flow path, the compressor test vehicle, and the complete instrumentation system. Section III describes the procedures used in taking data and subsequently in reducing the data. The results of the test are presented in Section IV. Section V, the last section, summarizes the conclusions drawn from the data. Appendix A presents detailed aerodynamic results, including computing stations within blade rows, for the data point on each speed line corresponding to peak stage efficiency. *The rest of the Appendices provide sufficient data such that any reader wishing to process any data point not fully presented here, or wishing to process any data point differently, can, with the aid of References 6 and 7 , completely reprocess the data or adapt the raw data to his own data reduction scheme.*

SECTION II

APPARATUS

1. FACILITY FLOW PATH

The test facility used is of the open-loop variety. It is schematically shown in Figure 1. Air enters the facility through a filter designed to remove five micron particles with a 99.5 percent efficiency. The air then passes through a 30-inch duct to a Ball Flow Tube located about six pipe diameters downstream. About two pipe diameters further downstream, the air is turned 90 degrees with the aid of turning vanes and then passes through a perforated plate designed to reduce inlet pressure approximately three psi at 24 lb/sec flow at standard atmospheric conditions. Following this, the air passes through a tube bundle and subsequently enters a 48-inch diameter settling chamber. The settling chamber contains a perforated conical flow spreader and two screens patterned after the model investigation reported in Reference 4. From the settling chamber, air enters the compressor through a direct-coupled bellmouth. Air leaving the compressor is deflected radially outward to a peripheral throttle. The throttle consists of one stationary and one rotating cylindrical ring, each with 16 circumferentially distributed matching holes. Throttling takes place at a diameter of approximately 47 inches. Downstream of the throttle, the flow enters a collector, from which it is passed through a 24-inch duct to a silencer, and back to the atmosphere. A fast-acting poppet type valve, bypassing the throttle valve, is also available to relieve surge conditions. A cutaway drawing of the complete test facility is shown in Figure 2.

2. COMPRESSOR TEST VEHICLE

A cross section of the research compressor is shown in Figure 3. The design employs a cantilevered rotor supported by four 0.5-inch thick bearing support struts with leading edges located about two stator chord lengths downstream of the stator trailing edge plane. The rotor tip diameter at the leading edge is nominally 18 inches. Oil seals are controlled gap carbon seals with an air barrier. No oil leakage into the flow path has ever been experienced. Cold rotor radial tip clearance with the rotor at rest is 0.037 to 0.039 inch. Hot clearance at design speed is predicted to be approximately 0.020 inch or about 0.6 percent of the mean rotor chord. The rotor shaft is mounted on ball bearings. Radial runout does not exceed 0.0005 inch. The bulletnose and inlet hub flow path are supported by six bi-convex struts in the inlet. The flow area contraction ratio between the trailing edge plane of the struts and the leading edge plane of the rotor is 2.72 to 1. Surface finish on all surfaces adjacent to the flow upstream of the bearing support struts is 32 microinches or better. An abradable coating has been employed in the casing adjacent to the rotor tip. However, no rubs have been experienced, even in stall. The rotor is of integral construction, the blades and disc being machined from a single forging

of 6Al-4V titanium. The stator blades are individually inserted but are machined integrally with platforms at hub and tip. The gap between adjacent platforms lies in the range of 0 to 0.002 inch. A photograph of the rotor is shown in Figure 4.

3. COMPRESSOR INSTRUMENTATION

Aerodynamic instrumentation in the compressor consists of measuring points in stator leading edges for total pressure and temperature, rakes downstream of the stators for total pressure and temperature, a large number of static pressure taps distributed on the inner and outer flow path and on the surface of one pair of stator blades, and dynamic wall pressure measurements made over the rotor tip. Measurements of inlet total pressure and temperature, mass flow, relative humidity, and rotor speed are accomplished outside of the compressor and are discussed in paragraph 4 of Section II. The Supersonic Compressor research vehicle has a total of 133 sensors measuring aerodynamic parameters at various points throughout the stage. Refer to Figure 3 and Table 1 for specific locations. Some of the static pressures are sensed at more than one point and are manifolded to become, in each case, a single measurement. Figure 5 shows the vehicle instrumentation bulkhead.

a. Temperature Measurements

(1) Location

A total of thirty-nine Chromel-Alumel thermocouples are used to sense temperature. Four are mounted in the plenum, ten are mounted in the vane leading edges, and twenty-five are located in the five discharge plane rakes. The vane leading edge and the rake mounted thermocouples are of the slot vented probe type (Figures 6, 9a., and 10). A detailed analysis of the features of the slot vented design, along with recovery factor characteristics, may be found in Reference 5. The rakes were designed with the sensors dividing the discharge annulus into equal radial increments while circumferential spacing is on divisions equal to 2.2 times the distance between vane trailing edges. In Figure 3, the discharge plane drawing is in error. The temperature rake shown at 209° 31' should be located at 211° 33'.

The ten stator leading edge thermocouple probes are mounted on four vanes with two vanes having two thermocouples and two vanes having three thermocouples. As with the discharge rakes, these probes are also spaced to divide radially the stator annulus into five equal increments; however, in this case with two sensors per radius.

(2) Calibration

All thermocouples were fabricated from individually insulated, single rolls of Chromel and Alumel wire. Samples were taken periodically along the rolls as the thermocouples were made for vehicle installation. These sample thermocouples were calibrated against a model 162 platinum resistance bulb primary standard manufactured by

Rosemount Engineering Company. A constant temperature oil bath, made by Lauda Division of Brinkman Instruments, Inc. was used as the heat medium. The bath was set at four different temperatures within the range of interest. The results, indicated in Table 2, show a worst case error of plus or minus 0.5°F at the highest temperature.

With thermocouple calibrated as indicated, the entire electronic system employed to record temperature data was examined. The results are shown in Table 3. Taking the worst case error, at the highest temperature, for both the thermocouples and readout system yields a maximum error of plus or minus 0.9°F. The more realistic RSS error goes from 0.23°F at 150 degrees to 0.65°F at 350 degrees. Finally, when recovery factor variation is added, the RSS error at 350°F becomes plus or minus 1.0°F. Figure 7 depicts the equipment used in the calibrations.

b. Pressure Measurements

(1) Location

Thirty-five static (PS) and thirty-five total (PT) pressures are measured in the vehicle flowpath. Twenty-five of the static taps are distributed at various points on the compressor flowpath liners. In particular, ten of these are located over the rotor blade tip, starting at 0.25 inch axially forward of the leading edge and following at 0.25 inch axial intervals extending downstream. A further ten statics are located approximately mid-chord radially on two vanes with seven suction side taps on one vane and three pressure side taps on the other.

The ten vane mounted total pressure probes are of the Kiel stagnation tube design (Figure 8) and are mounted with two sensors on each of two vanes and three on each of two other vanes. All are radially located to divide the annulus into five equal parts, with two measurements per radius. The other twenty-five are impact tubes mounted as five radial rakes of five sensors each, dividing the discharge annulus into equal increments which are circumferentially spaced in a manner similar to that of the temperatue rakes. An impact pressure rake is shown in Figure 9.b.

Located for use in conjunction with the static taps placed over the rotor blade tips are eight Kistler Model Number 603A pressure transducers and a Bentley Model 316 proximity detector. Because of problems observed at high speed with the Kistler dynamic pressure data, no further mention will be made of this sytem.

(2) Calibration

Four Statham strain gage type transducers are used to convert the various pressures into electrical signals for processing through readout and recording. One transducer is located in each of four, forty-eight port Scanivalve sequential pressure switching devices. The

pressures to be sampled are connected to odd numbered ports while moderate vacuum is applied to all even (Roughing) ports to minimize hysteresis effects.

Three calibration pressures are sensed by all four Scanivalves on every scan. These are barometric, 15 PSIG and 30 PSIG. The 15 and 30 PSIG standards are supplied by Ametek Model PK-30 self-regulating, primary deadweight type, pressure standards referred to atmosphere. The computer software used for data reduction corrects these two gauge values against variation in local barometric pressure and creates a new transducer calibration curve for every scan. Two absolute calibration pressures have been added to this system for use in future tests, and the barometric calibration pressure has been eliminated.

c. Readout Electronics

Data are collected and recorded through use of a Hewlett Packard 2012B Data Acquisition System (DAS). This system is comprised of a 2911 guarded crossbar scanner, 2547A coupler, 2402A integrating digital voltmeter, 5050B digital recorder, and a Kennedy 1506 incremental tape recorder.

As previously stated, pressure measurements are routed through four Scanivalve units using Statham transducers for conversion into electronic signals. A "Scanivalve" offers the advantage of using the same transducer to measure many pressures and lends itself to on-line calibration as described above. An interface unit was built to program the Scanivalves, along with other parameters, into the HP DAS in a manner which minimizes scanning time without compromising transducer settling time. Instead of sampling the same port on all valves sequentially before stepping to the next port, the digital interface causes each valve to move through its next roughing port to its next data point immediately after being interrogated. Each transducer then has an opportunity to settle out at its next test pressure while two others are sequentially interrogated. This sequence is repeated until all ports are sampled. Approximately six seconds lapse for the entire procedure.

Thermocouple outputs are routed through a Kaye Instruments' Model K170 electronic ice point reference into the interface unit and then to the HP DAS.

4. TEST FACILITY INSTRUMENTATION

a. Rotor Speed

A Bentley Model 306 transducer senses six grooves machined into the gearbox/rotor driveshaft coupling. The output is fed into a Model 3115 proximitor for signal conditioning. The proximitor signal is a train of pulses having a repetition rate corresponding to rotor RPM/10. This

repetition rate is directly recorded by the HP DAS. A Bently Model 5030 digital tachometer provides a visual indication of rotor speed accurate to ten RPM. The Tachometer also includes an adjustable speed limiting switch as a safety feature.

b. Mass Flow

Inlet pressure is metered through a product series 122 Dall tube venturi manufactured by B.I.F. Industries with a 12.687-inch throat. Metering accuracy has been calibrated to plus or minus one-half percent by the manufacturer. Static pressure taps are located both in the throat and in the inlet cavity.

c. Inlet (Plenum) Total Pressure and Temperature

Compressor inlet total pressure is assumed equal to plenum static pressure just downstream of the last screen. Four static taps are manifolded into one pressure and recorded on two separate Scanivalves. The Maximum error associated with this assumption is 0.06 percent. Temperature is sensed by four bare junction thermocouples located in the same axial plane as the pressure taps, and supported on two crossed cables.

d. Analog Compressor Mapping

An on-line plot of stage pressure ratio vs pseudo mass flow was effected through use of a Mosely Model 2FRA X-Y plotter. Teledyne pressure transducers were used to sense stage inlet P01, stage exit P03 from a mid-radius stagnation tube and hub P1 (measured 0.25 inch upstream of the rotor). Operational amplifiers were used to ratio exit P03 to inlet P01 and also to ratio hub P1 to inlet P01. Stage pressure ratio was used to excite the Y-axis while 1 - (P1/P01) was sent to the X-axis. The approximate compressor map so obtained was used to select a reasonable distribution of throttle settings at which to record detailed data.

e. Relative Humidity

A Foxboro Dewcel Model 2711TG-K222 was mounted in the inlet stack to monitor humidity. This device continuously measures the moisture content of the air by sensing the temperature at which the partial pressure of its water vapor is equal to the water vapor pressure of a saturated salt solution. The humidity information is acquired by the DAS as a thermocouple reading on every test run and subsequently treated in the Phase I data reduction program.

SECTION III

TEST PROCEDURE AND DATA REDUCTION

1. TEST PROCEDURE

Test data were taken in order of increasing speed, with each speed-line being entirely probed before any data at higher speed were acquired. The on-line analog x-y plot capability discussed in paragraph 4.d. of Section II was used to select the test points, since on-line data reduction was not available.

For each speedline, test data were first acquired at a partially-closed exhaust throttle settling, after which the compressor was gradually throttled to include stall. After recovery, data were taken at several points as the throttle was opened from near-stall to wide-open. Stall was indicated by two sources: the dynamic pressurers across the rotor tip, which were displayed on oscilloscopes on the test operator's console, and a microphone in the plenum. Sudden oscillations of the above-mentioned x-y plotter were further indicators that stall had occurred.

Data were acquired at the rate of about one speedline per hour. On dates when elevated speed lines were investigated, a single test point at each of several lower speeds was taken to assure data integrity by comparison to previously acquired data at these lower speeds.

Prior to each test, an atmospheric pressure reading was obtained from a mercury barometer at the test site. The rig was initially brought up to speed and then monitored for about ten minutes, when it was assumed equilibrium had been reached. A five-minute dwell at each throttle setting was observed prior to data acquisition. Two data scans were acquired per test point on each speedline.

A 12-character test identification number was manually assigned to each test point and acquired by the DAS as the first item of information during data acquisition at that point (character 1: last digit of year; characters 2-3: numerical month; characters 4-5: numerical day of month; characters 6-7: test point number on that particular date; characters 8-10: numerical throttle setting; characters 11-12: last two digits of the nominal percent-speed (e.g., 85% = 85; 100% = 00)). Where two scans were taken at a particular test point automatically each scan bears the same test identification number.

Finally, a listing of all raw experimental data which were acquired during testing of this stage is provided in Appendix D, and all computer input data used for Phases I and II of the data reduction are provided in Appendix B.

2. DATA REDUCTION - PHASE I

Phase I reduction of the test data was accomplished by using a slightly modified version of the computer program described in Reference 6. The modifications are subsequently described in Reference 3.

In Reference 6, Equation (11) is in error and should be expressed as follows:

$$W = C1 \cdot \frac{CQ\ Y\ d^2\ F}{\sqrt{1 - \beta^4}} \sqrt{h(\gamma_a + \gamma_v)}$$

No change, however, is required to the actual computer coding of the original program.

3. DATA REDUCTION - PHASE II

Phase II reduction of the test data was accomplished by using the computer program described in Reference 7.

To aid in the calculation procedure of the within blade analysis, a CALCOMP plotting routine labeled DEVPLOT was developed to allow better visualization of the deviation angles at each rotor computing station and hub, mid, and tip streamlines. The DEVPLOT input values used are the final deviation angles determined during a within blade calculation. The values are given as a function of normalized axial distance. A complete listing of this program is given in Appendix C1.

In addition to the DEVPLOT routine, a second CALCOMP plotting routine was utilized to plot the stator mid-span surface static pressure distribution for each within blade analysis. This program is labeled STAPLOT and uses the experimental readings of the seven suction surface static taps and the three pressure surface static taps (located on the mid-span of the instrumented stator blades) as input values. Extrapolated static pressure values for the stator leading and trailing edges are also input to the plotting routine. These values are based on the radial location of the first and last suction surface static taps and the leading and trailing edge calculated values of static pressure determined by the within blade analysis. A complete listing of this program is given in Appendix C2.

SECTION IV

RESULTS

1. OVER-ALL PERFORMANCE

The mass-averaged performance of the rotor and of the complete compressor stage is tabulated in Table 4 and plotted in Figure 12. The performance shown is a major improvement over the original configuration tested (without rotor splitter vanes) and reported in Reference 3. At 100 percent design corrected speed, corrected flow was approximately 12 percent low, rotor efficiency was 5 points low, stage efficiency was 14 points low, rotor total pressure ratio peaked at 3.47 versus a design value of 3.35, and stage total pressure ratio peaked at 2.77 versus 3.06, respectively. The compressor was throttled to stall at each corrected speed shown on the map. The data point nearest stall was taken at a throttle opening approximately 0.5 percent further open than the setting which precipitated stall. This change in throttle area is equivalent to about 0.9 percent of the annulus area at the rotor inlet.

2. BLADE-ELEMENT PERFORMANCE (ACROSS BLADE)

The radial distributions of relative inlet Mach number, incidence angle, loss coefficient, deviation angle, and diffusion factor for both rotor and stator are presented in Figures 13 through 82, using Tables 5-11, for each data point shown on the compressor map. One set of these five radial distributions is presented for each blade row at each corrected speed. In each of these sets, the distributions for all throttle settings are superimposed on each respective plot. As described earlier in Section III, this data was reduced using the full radial equilibrium equation with the equations of momentum, continuity, etc. satisfied at each computing station for each streamline. This data, also used for the compressor map, was reduced with computing stations only at blade-row edges and in free spaces; there were no computing stations internal to blade rows.

3. BLADE-ELEMENT PERFORMANCE (WITHIN BLADE)

The data point nearest maximum stage efficiency for each operating speed was selected for more detailed analysis. The more detailed analysis involved the introduction of four additional computing stations within the rotor. The data reduction was then accomplished in the same manner as before, with blockages and deviation angles internal to the rotor adjusted so that the calculated and measured static pressures along the casing adjacent to the rotor tip were as nearly coincident as possible. The results of these analyses include plots of the radial

distribution of the same five parameters for rotor and stator described in the preceding paragraph (Figures 102 through 191), plots of the experimental (rotor only) and calculated axial distribution of static pressure at hub, mean, and case (Figures 192 through 201), corresponding plots of the distribution of deviation angle within the rotor blade row (Figures 202 through 211), plots of the surface distributions of static pressure for a mid-span section of the stator (Figures 212 through 221), and a complete aerodynamic description at each computing station - streamline intersection (Appendix A).

ROTOR TIP DYNAMIC PRESSURE MEASUREMENTS

The dynamic distribution of static pressure over the rotor tips was observed during operation to assess qualitatively flow stability during the test. In general, the flow appeared much more stable at the higher speeds than was the case with the previous compressor configuration reported in Reference 3. Also, as design speed was approached, the dynamic pressure signal measured 0.25 inch upstream of the rotor because very weak, indicating that the passage shock had probably been swallowed. A few bursts of these data were recorded on wide-band FM magnetic tape. However, no further processing of these data was attempted since at no time during the course of these tests were all elements of the dynamic pressure recording system working satisfactorily simultaneously.

SECTION V

CONCLUSIONS

The major conclusion drawn from the reported tests was that splitter vanes added to the axial compressor rotor accomplished their intended purpose of controlling rotor deviation angles at off-design, high incidence operating conditions with a satisfactory level of total pressure losses. Furthermore, operation of the compressor was now close enough to its design point that it appeared feasible to embark upon the series of boundary-layer-control modifications originally envisioned to assess their potential usefulness in this type of environment.

The dramatic decrease achieved in deviation angle is best seen by referring to Figures 222 and 223. The first of these figures presents deviation angle at the rotor trailing edge mid-radius location versus rotor incidence at mid-radius on the leading edge for the original rotor as presented in Reference 3 and also for the new rotor. Whereas a definite trend was apparent for the original rotor, all data points for the new rotor fall in a cluster, exhibiting no apparent sensitivity to incidence angle. The single data point shown for each corrected speed corresponds to operation at peak stage efficiency for each respective speed. The second of these figures compares the design radial distribution of deviation angle with distributions measured at design speed for the first and second rotor configurations. Whereas deviation angles measured with the first rotor remained well above design values all along the span, deviation angles recorded for the second rotor remained substantially lower than design values over most of the span. Only locally near the tip was deviation observed to rise rapidly above the design level. This might be due to boundary layer separation on the outer casing. It might also be due to rotor boundary layer and wake fluid, rotating at near blade speed, being centrifuged outward and collecting at the outer casing.

In order to assess the loss characteristics of the rotor, it was necessary to divide the measured total losses into diffusion losses and shock losses. Reference 8 presents the results of a cascade test of a blade section corresponding to streamsurface No. 10 in the design calculations of Reference 1, with splitter vanes added. At design-point operating conditions, static pressure along the suction surface of the principal airfoils was seen to be nearly constant at the undisturbed free-stream value up to the shock impingement point indicating that neither precompression nor expansion has occurred upstream of the passage shock wave. Consequently, since the compressor stage passed only about 88 percent of design flow, the suction surface Mach number just upstream of the shock wave was assumed

to be increased above the free stream relative value by an amount equal to a Prandtl-Meyer expansion from the relative free stream Mach number through an angle equal to the difference betweem actual operating incidence and design incidence. Shock loss was then presumed equal to the total pressure loss through a normal shock having an upstream Mach number equal to the average of the relative free stream and section surface Mach numbers on any streamsurface. Interpolating between streamsurfaces, these computations were performed for blade sections at 10, 50 and 90 percent span. Shock loss was subtracted from the total loss measured at the same location, and the result was plotted in the form of Total Pressure Loss Parameter versus Diffusion Factor in Figure 224. Blade solidity was presumed equal to the sum of principal blade chord plus splitter vane chord divided by the mean circumferential spacing between principal blade sections. Shown in this same figure are curves derived from Reference 9 and the extrapolation made for design purposes and presented in Reference 1. The interesting conclusion drawn from this figure is that at Diffusion Factors below 0.6, where there is extensive data, the blade section including splitter vanes performs exactly as would be expected, upon taking the increaed solidity into account. However, at Diffusion Factors substantially above 0.6, the blade section with splitter vanes continues to perform satisfactorily and with losses lower than expected.

Consequently, the application of splitter vanes to axial compressor blade rows has potential for configurations combining relatively low aspect ratio with high aerodynamic loading. They should be suitable for stationary as well as rotating blade rows. They may also be suitable for fully subsonic blade sections as well as supersonic sections for which the concept was demonstrated. Although the rotor performance reported herein was good, the data of Reference 8 indicate that the splitter vane design was not optimum. The simple approach used for this splitter vane design, which consisted of duplicating the camber line of the principal airfoils and locating the splitter vane in mid-channel, resulted in very poor pressure distributions around the splitter vane, including re-expansion to supersonic Mach numbers according to Reference 8. It appears that a splitter vane carefully designed in the cascade plane might produce much lower losses than reported herein.

TABLE I

INSTRUMENTATION LIST

ITEM NUMBER	TYPE SENSOR	LOCATION			REMARKS
		AXIAL	RADIAL	CIRCUMFERENTIAL	
057	T/C	6.181	7.800	36°48'	Disch Rake Element
058	T/C				Humidity
059	T/C				(Not In Use)
060	T/C			45°	Plenum
061	T/C			135°	Plenum
062	T/C			225°	Plenum
063	T/C			315°	Plenum
064	T/C	LE	8.371	Vane 22	Leading Edge
065	T/C	LE	8.371	Vane 42	Leading Edge
066	T/C	LE	8.251	Vane 24	Leading Edge
067	T/C	LE	8.251	Vane 44	Leading Edge
068	T/C	LE	8.121	Vane 22	Leading Edge
069	T/C	LE	8.121	Vane 42	Leading Edge
070	T/C	LE	8.001	Vane 24	Leading Edge
071	T/C	LE	8.001	Vane 44	Leading Edge
072	T/C	LE	7.871	Vane 22	Leading Edge
073	T/C	LE	7.871	Vane 42	Leading Edge
074	T/C	6.181	8.440	4°28'	Disch. Rake Element
075	T/C	6.181	8.440	36°48'	Disch. Rake Element
076	T/C	6.181	8.440	69° 7'	Disch. Rake Element
077	T/C	6.181	8.440	211°33'	Disch. Rake Element
078	T/C	6.181	8.440	243°58'	Disch. Rake Element
079	T/C	6.181	8.280	4°28'	Disch. Rake Element
080	T/C	6.181	8.280	36°48'	Disch. Rake Element
081	T/C	6.181	8.280	69° 7'	Disch. Rake Element
082	T/C	6.181	8.280	211°33'	Disch. Rake Element
083	T/C	6.181	8.280	243°58'	Disch. Rake Element
084	T/C	6.181	8.120	4°28'	Disch. Rake Element
085	T/C	6.181	8.120	36°48'	Disch. Rake Element
086	T/C	6.181	8.120	69° 7'	Disch. Rake Element
087	T/C	6.181	8.120	211°33'	Disch. Rake Element
088	T/C	6.181	8.120	243°58'	Disch. Rake Element
089	T/C	6.181	7.960	4°28'	Disch. Rake Element
090	T/C	6.181	7.960	36°43'	Disch. Rake Element
091	T/C	6.181	7.960	69° 7'	Disch. Rake Element
092	T/C	6.181	7.960	211°33'	Disch. Rake Element
093	T/C	6.181	7.960	243°58'	Disch. Rake Element
094	T/C	6.181	7.800	4°28'	Disch. Rake Element
095					
096	T/C	6.181	7.800	69° 7'	Disch. Rake Element
097	T/C	6.181	7.800	211°33'	Disch. Rake Element
098	T/C	6.181	7.800	243°58'	Disch. Rake Element

TABLE I (continued)

ITEM NUMBER	TYPE SENSOR	LOCATION			REMARKS
		AXIAL	RADIAL	CIRCUMFERENTIAL	
101	Atmos				Barometric Pressure
103	PS				Venturi Throat
105	PS				Venturi Cavity
107	PT				Plenum
109	PS	-0.25	ID	315°	Casing (Same as 751)
111	PS	-0.25	OD	315°	Casing
113	PS	0.00	OD	306°	Casing
115	PS	0.25	OD	294°	Casing
117	PS	0.50	OD	180°	Casing
119	PS	0.75	OD	190°	Casing
121	PS	1.00	OD	310°	Casing
123	PS	1.25	OD	170°	Casing
125	PS	1.50	OD	290°	Casing
127	PS	1.75	OD	301°	Casing
129	PS	2.00	OD	160°	Casing
131	PS	3.227	8.163	Vane 16	Suction Side Vane
133	PS	3.393	8.175	Vane 16	Suction Side Vane
135	PS	3.361	8.184	Vane 16	Suction Side Vane
137	PS	3.837	8.190	Vane 16	Suction Side Vane
139	PS	4.115	8.191	Vane 16	Suction Side Vane
141	Ref.				Not Used
143	Ref.				Atmos.
145	Ref.				15 PSIG Reference
147	Ref.				30 PSIG Reference
201	Atmos				Barometric Pressure
203	PS				Same as 103
205	PS				Same as 105
207	PT				Same as 107 and 752
209	PS	4.281	8.192	Vane 16	Suction Side Vane
211	PS	4.559	8.194	Vane 16	Suction Side Vane
213	PS	-2.00	ID	45° & 135°	Two Manifolded Taps
215	PS	-2.00	ID	225° & 315°	Two Manifolded Taps
217	PS	-2.00	OD	45° & 135°	Two Manifolded Taps
219	PS	-2.00	OD	225° & 315°	Two Manifolded Taps
221	PS	2.25	OD	Vanes 18,22,	Four Manif. Taps
				40 & 44	
223	PS	2.25	ID	113.5°,156.5°	Four Manif. Taps
				290.5°&334.5°	
225	PS	6.181	OD	60°	Casing
227	PS	6.181	OD	120°	Casing
229	PS	6.181	OD	252°	Casing
231	PS	6.181	OD	300°	Casing
233	PS	6.181	ID	60°	Casing
235	PS	6.181	ID	120°	Casing
237	PS	6.181	ID	252°	Casing
239	PS	6.181	ID	300°	Casing

TABLE I (continued)

ITEM NUMBER	TYPE SENSOR	LOCATION			REMARKS
		AXIAL	RADIAL	CIRCUMFERENTIAL	
241	Ref.				Not Used
243	Ref.				Atmos.
245	Ref.				15 PSIG Reference
247	Ref.				50 PSIG Reference
301					Not Used
303					Not Used
305	PS	3.393	8.175	Vane 17	Pres. Side of Vane
307	PS	3.837	8.189	Vane 17	Pres. Side of Vane
309	PS	4.281	8.191	Vane 17	Pres. Side of Vane
311	PT	LE	8.371	Vane 20	Leading Edge
313	PT	LE	8.371	Vane 40	Leading Edge
315	PT	LE	8.251	Vane 18	Leading Edge
317	PT	LE	8.251	Vane 47	Leading Edge
319	PT	LE	8.121	Vane 20	Leading Edge
321	PT	LE	8.121	Vane 40	Leading Edge
323	PT	LE	8.001	Vane 18	Leading Edge
325	PT	LE	8.001	Vane 47	Leading Edge
327	PT	LE	7.871	Vane 20	Leading Edge
329	PT	LE	7.871	Vane 40	Leading Edge
331	PT	6.181	7.800	20°47'	Disch. Rake Element
333	PT	6.181	7.800	52°37'	Disch. Rake Element
335	PT	6.181	7.800	195°29'	Disch. Rake Element
337	PT	6.181	7.800	227°49'	Disch. Rake Element
339	PT	6.181	7.800	260° 8'	Disch. Rake Element
341	Ref.				Not Used
343	Ref.				Atmos.
345	Ref.				15 PSIG Reference
347	Ref.				50 PSIG Reference
401	PT	6.181	7.960	20°47'	Disch. Rake Element
403	PT	6.181	7.760	52°57'	Disch. Rake Element
405	PT	6.181	7.960	195°29'	Disch. Rake Element
407	PT	6.181	7.960	227°49'	Disch. Rake Element
409	PT	6.181	7.960	260° 8'	Disch. Rake Element
411	PT	6.181	8.120	20°47'	Disch. Rake Element
413	PT	6.181	8.120	52°71'	Disch. Rake Element
415	PT	6.181	8.120	195°29'	Disch. Rake Element
417	PT	6.181	8.120	227°49'	Disch. Rake Element
419	PT	6.181	8.120	260° 8'	Disch. Rake Element
421	PT	6.181	8.280	20°47'	Disch. Rake Element
423	PT	6.181	8.280	52°57'	Disch. Rake Element
425	PT	6.181	8.280	195°29'	Disch. Rake Element
427	PT	6.181	8.280	227°49'	Disch. Rake Element
429	PT	6.181	8.280	260° 8'	Disch. Rake Element
431	PT	6.181	8.440	20°47'	Disch. Rake Element
433	PT	6.181	8.440	52°57'	Disch. Rake Element

TABLE I (concluded)

ITEM NUMBER	TYPE SENSOR	LOCATION			REMARKS
		AXIAL	RADIAL	CIRCUMFERENTIAL	
435	PT	6.181	8.440	195°29'	Disch. Rake Element
437	PT	6.181	8.440	227°49'	Disch. Rake Element
439	PT	6.181	8.440	260° 8'	Disch. Rake Element
441	Ref.				Not Used
443	Ref.				Ambos.
445	Ref.				15 PSIG Reference
447	Ref.				30 PSIG Reference
700	XPT	-0.25	OD	67°16'	Flush MTD. Kistler
701	XPT	0.00	OD	75°28'	Flush MTD. Kistler
702	XPT	0.25	OD	60°	Flush MTD. Kistler
703	XPT	0.50	OD	68°49'	Flush MTD. Kistler
704	XPT	0.75	OD	53°51'	Flush MTD. Kistler
705	XPT	1.00	OD	62°16'	Flush MTD. Kistler
706	XPT	1.25	OD	49° 8'	Flush MTD. Kistler
707	XPT	1.50	OD	59°23'	Flush MTD. Kistler
708					
709					
710	Prox.	1.25	OD	39°	Bentley Tran dncer

TABLE II

CALIBRATION OF SAMPLE THERMOCOUPLES

BATH SET PT °C[A]	°F[B]	AVG. OF 9 SAMPLES °F	MAX. SPREAD ± °F
65	148.1	148.4	0.1
100	211.4	210.9	0.1
150	300.8	301.4	0.4
175	346.5	346.4	0.5

A Oil Bath Set Pt.
B Mueller bridge readout converted to temperature.

TABLE III

CALIBRATION OF TEMPERATURE READOUT ELECTRONICS

SET PT. Avg+ °F	PRINTER OUTPUT Avg* °F	MAX. SPREAD ± °F
148.2	148.3	0.2
210.7	210.7	0.2
301.7	301.7	0.3
345.4	345.5	0.4

+ Average of two calibrated T/C's.
* Average of eight channels.

TABLE IV

MASS AVERAGED COMPRESSOR PERFORMANCE

Test I.D.	RPI	FLOW (LB/SEC)	ROTOR PRESSURE RATIO	ROTOR EFFICIENCY	STAGE PRESSURE RATIO	STAGE EFFICIENCY
21203[illegible]	[illegible]2.8	11.850	1.2310	.9330	1.1840	.7540
21203[illegible]	[illegible]	11.220	1.2391	.9190	1.2150	.8340
21203[illegible]	[illegible]2.2	10.220	1.2501	.9070	1.2330	.8490
21203[illegible]	[illegible]	9.460	1.2551	.8760	1.2388	.8230
21203[illegible]	[illegible]	8.910	1.2540	.8600	1.2340	.7970
21203[illegible]	[illegible]	8.620	1.2550	.8550	1.2340	.7980
21203[illegible]	10[illegible]	13.040	1.4034	.9100	1.3710	.8350
21203[illegible]	10[illegible]	12.310	1.4160	.8980	1.3840	.8290
21203[illegible]	10[illegible]	11.260	1.4160	.8680	1.3810	.8020
21203[illegible]	10[illegible]	13.170	1.4100	.9100	1.3720	.8340
21203[illegible]	10[illegible]	13.450	1.4041	.9210	1.3518	.8138
21203[illegible]	[illegible]	13.790	1.3991	.9250	1.3020	.7280
21203[illegible]	[illegible]	15.940	1.[illegible]	.9100	1.5400	.7958
21203[illegible]	[illegible]	15.[illegible]	1.[illegible]	.9118	1.4910	.7358
21203[illegible]	[illegible]	15.630	1.6294	.9100	1.4400	.6688
21203[illegible]	[illegible]	15.010	1.6404	.9010	1.5690	.8160
21203[illegible]	[illegible]	14.570	1.6[illegible]31	.8600	1.5778	.8060
21203[illegible]	[illegible]	13.870	1.6[illegible]74	.9520	1.5738	.7870
21207[illegible]	1[illegible]	17.640	1.9193	.8300	1.7230	.7328
21207[illegible]	1[illegible]	17.600	1.9130	.8880	1.7018	.7118
21207[illegible]	1[illegible]	17.[illegible]	1.9130	.8990	1.7230	.7310
21207[illegible]	1[illegible]	17.420	1.9209	.9050	1.7840	.7770
21207[illegible]	1[illegible]	17.270	1.9213	.9040	1.8040	.7928
21207[illegible]	1[illegible]	16.[illegible]10	1.9191	.8650	1.8100	.7840
21207[illegible]	1[illegible]	19.960	2.2771	.8790	1.9640	.7868
21207[illegible]	1[illegible]	19.870	[illegible].2781	.8750	1.9620	.7810
21207[illegible]	1[illegible]	19.730	2.2790	.8750	2.0080	.7270
21207[illegible]	16[illegible]	19.690	2.2751	.8740	2.0520	.7538
30113[illegible]	17[illegible]	20.729	2.4795	.8672	2.1497	.7157
30113[illegible]	17[illegible]	20.501	2.4815	.8662	2.1865	.7317
30113[illegible]	17[illegible]	21.039	2.4792	.8694	2.1000	.6932
30113[illegible]	17[illegible]	20.760	2.4739	.8690	2.1239	.7066
30113[illegible]	17[illegible]	21.900	2.6950	.8460	2.2860	.6690
30113[illegible]	17[illegible]	21.800	2.6951	.8460	2.3060	.6980
30113[illegible]	16[illegible]	21.750	2.6970	.8450	2.3240	.7030
30113[illegible]	16[illegible]	21.[illegible]30	2.6961	.8470	2.2560	.6730
30123[illegible]	13[illegible]	23.8[illegible]0	2.9991	.8450	2.4270	.6610
30123[illegible]	13[illegible]	23.950	2.9871	.8450	2.4530	.6730
30123[illegible]	14[illegible]	23.740	2.9970	.8430	2.4920	.6620
30123[illegible]	20[illegible]	25.[illegible]59	[illegible].3021	.8441	2.6994	.6709
30123[illegible]	20[illegible]	25.633	3.3[illegible]1	.8427	2.7076	.6737
30123[illegible]	20[illegible]	25.737	3.[illegible]31	.8456	2.[illegible]	.6568
30123[illegible]	20[illegible]	26.043	3.[illegible]21	.8458	2.6820	.6652
30124[illegible]	20[illegible]	26.401	3.[illegible]	.8455	2.7410	.6603
30124[illegible]	20[illegible]	26.208	3.4711	.8429	2.7731	.6660

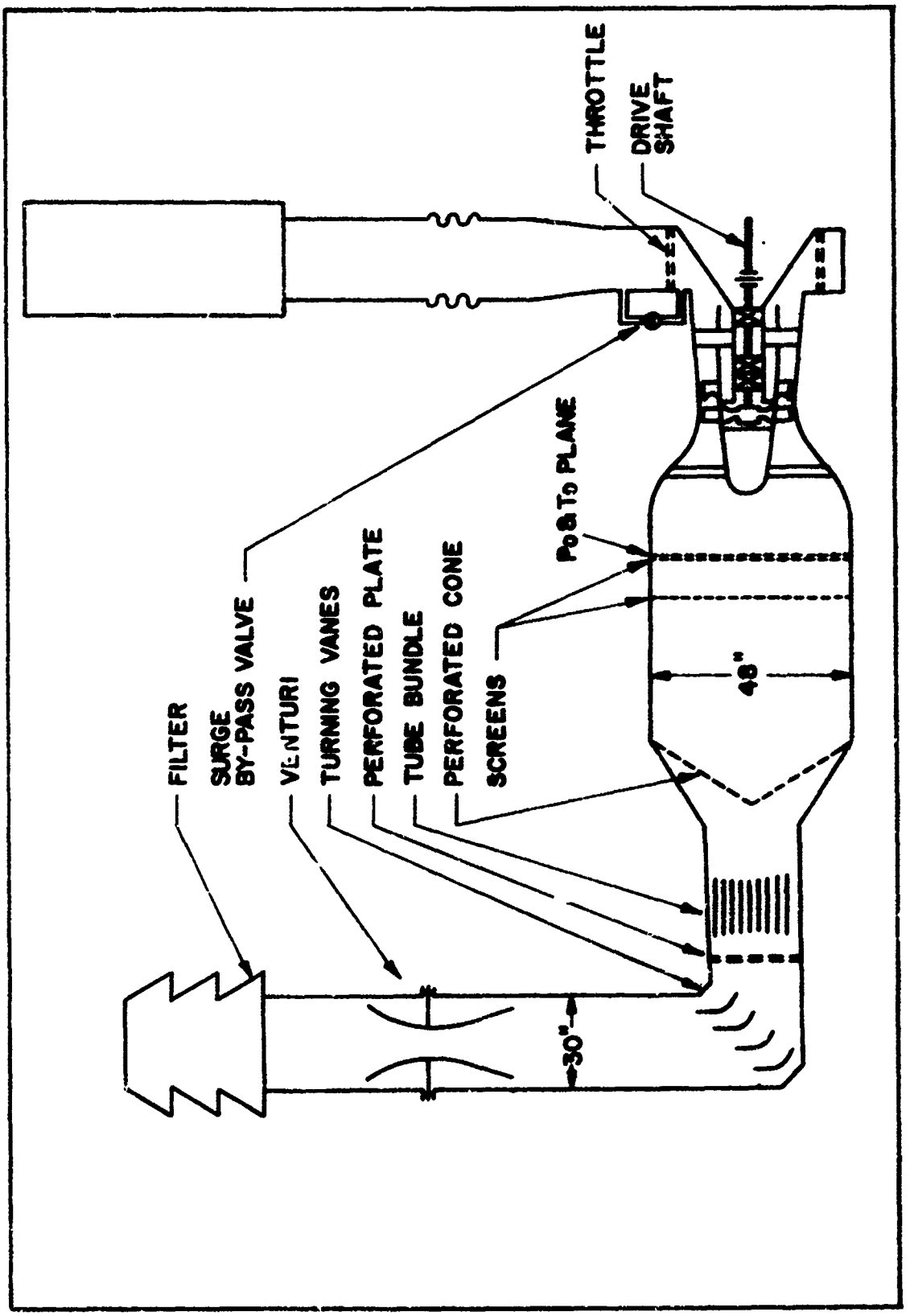


FIGURE 1. COMPRESSOR FACILITY FLOW PATH

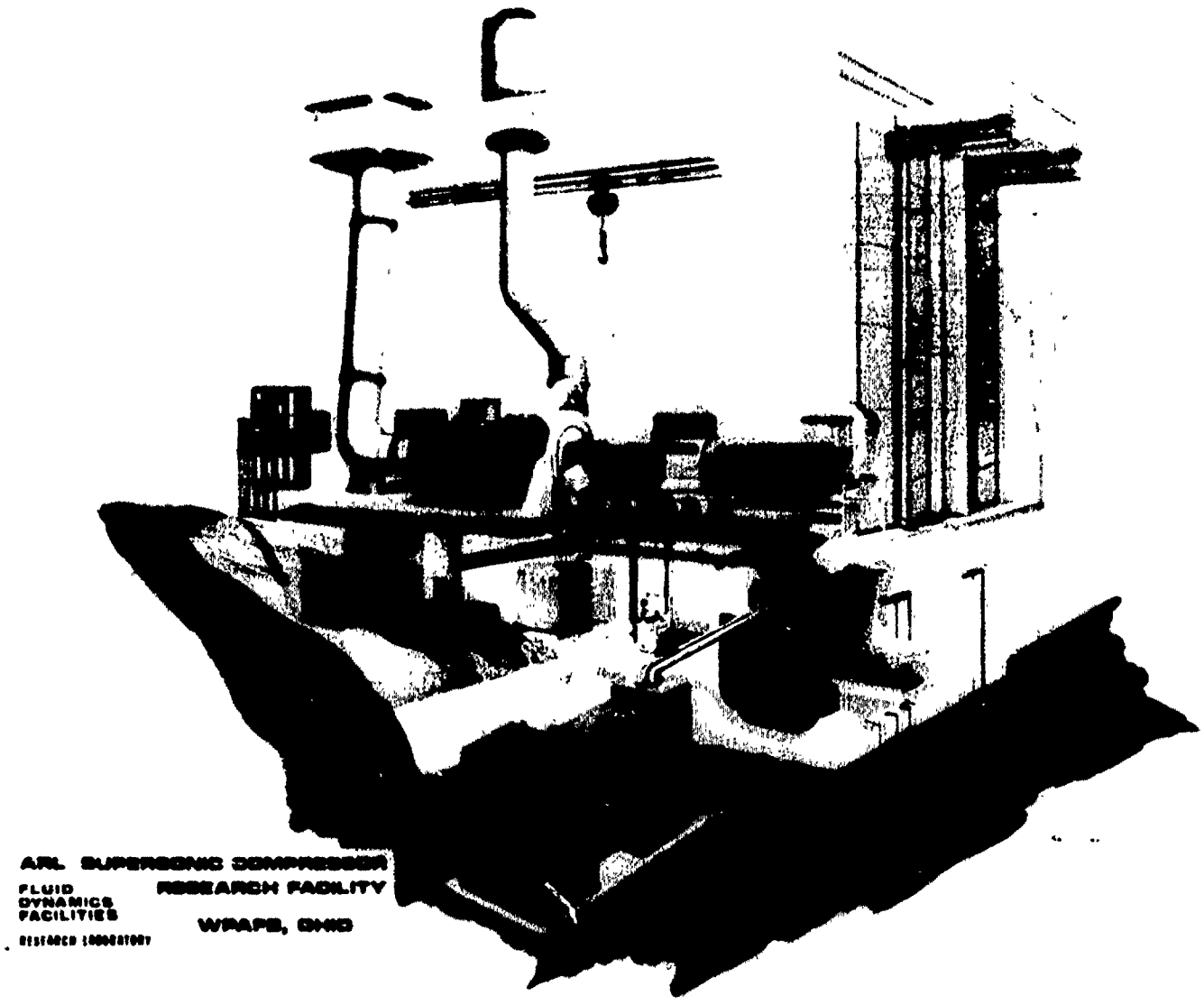


FIGURE 2. TEST FACILITY

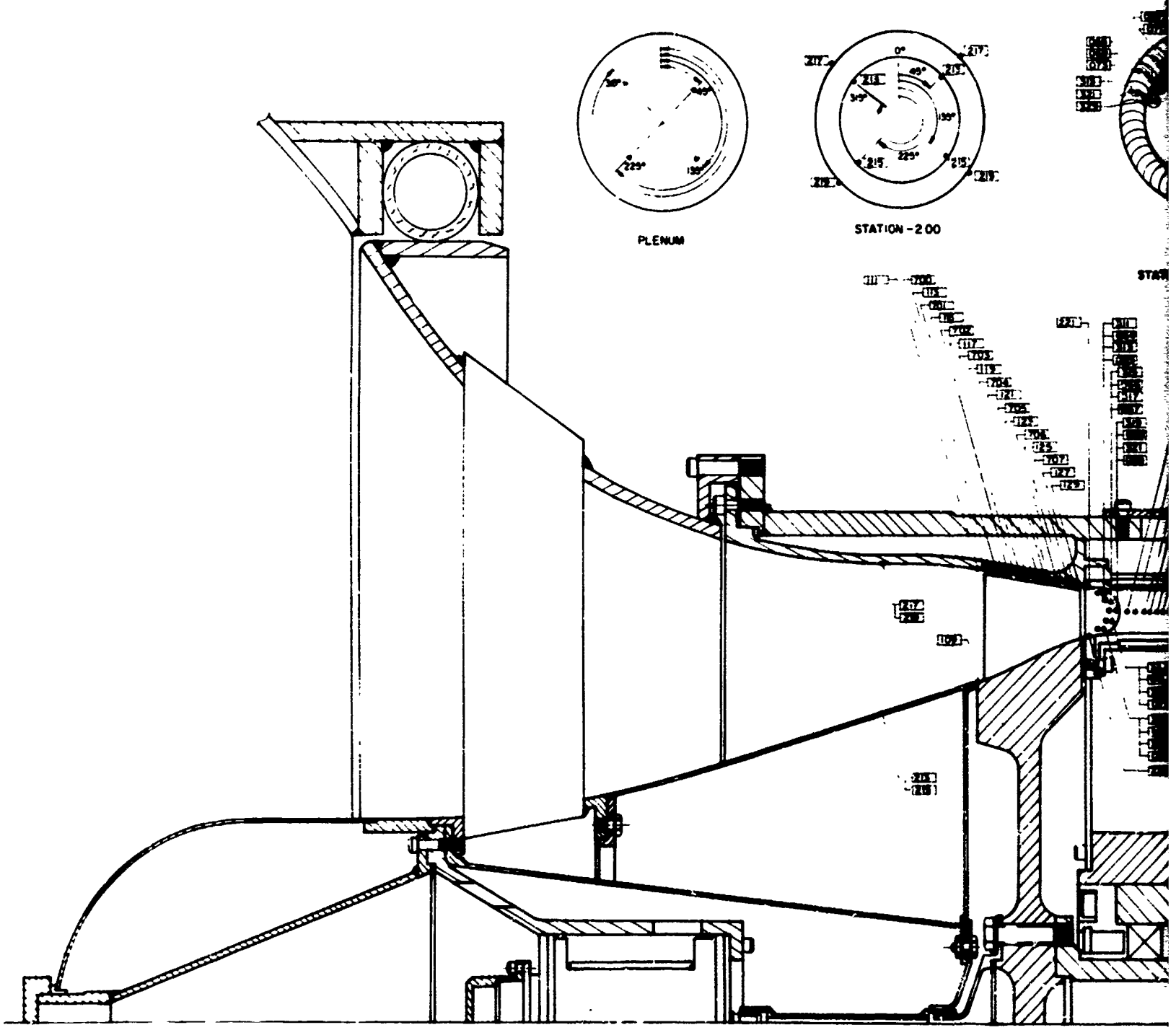
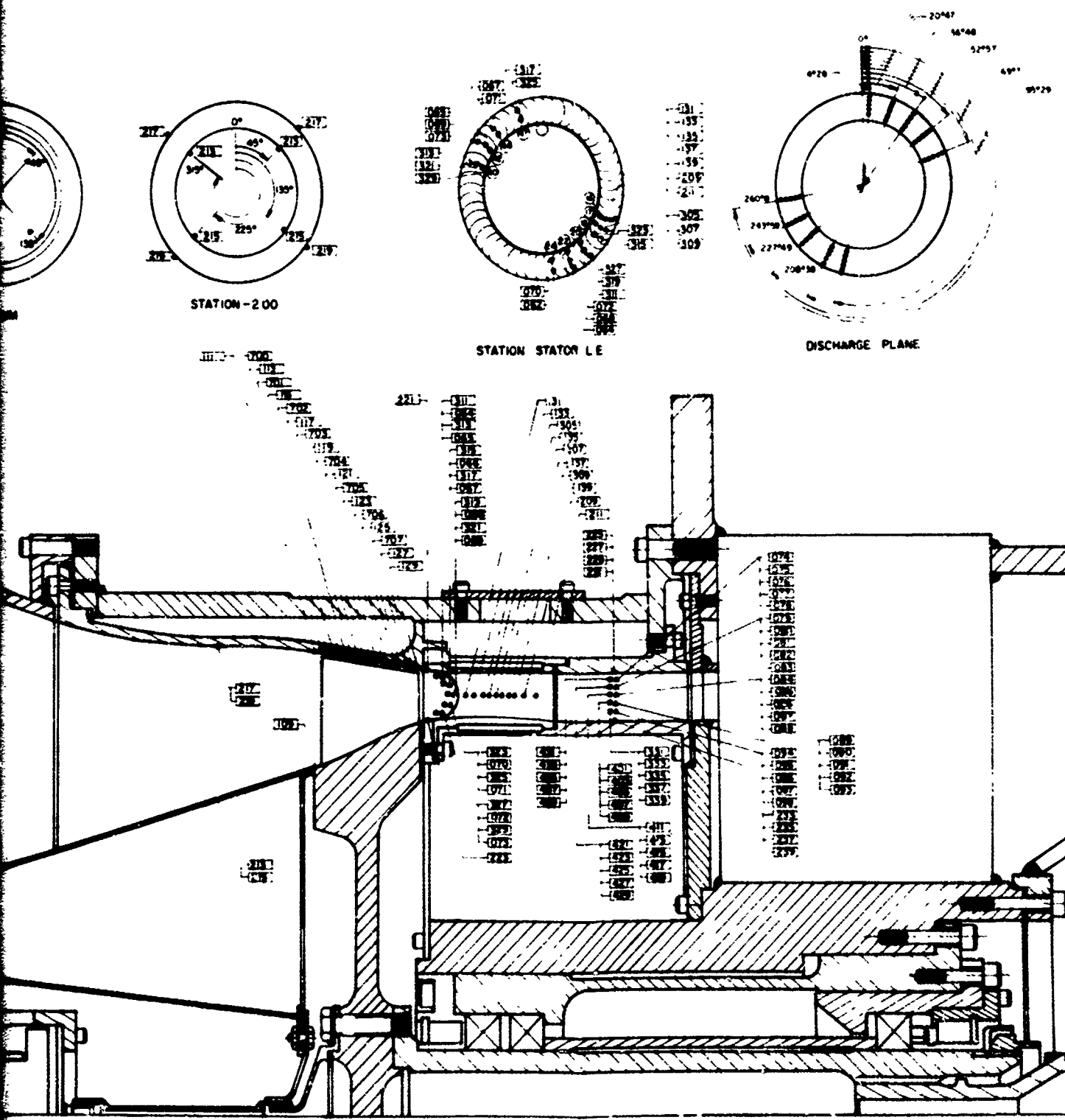


FIGURE 3. COMPRESSOR CROSS SECTION WITH INSTRUMENTA
LOCATIONS



3. COMPRESSOR CROSS SECTION WITH INSTRUMENTATION LOCATIONS

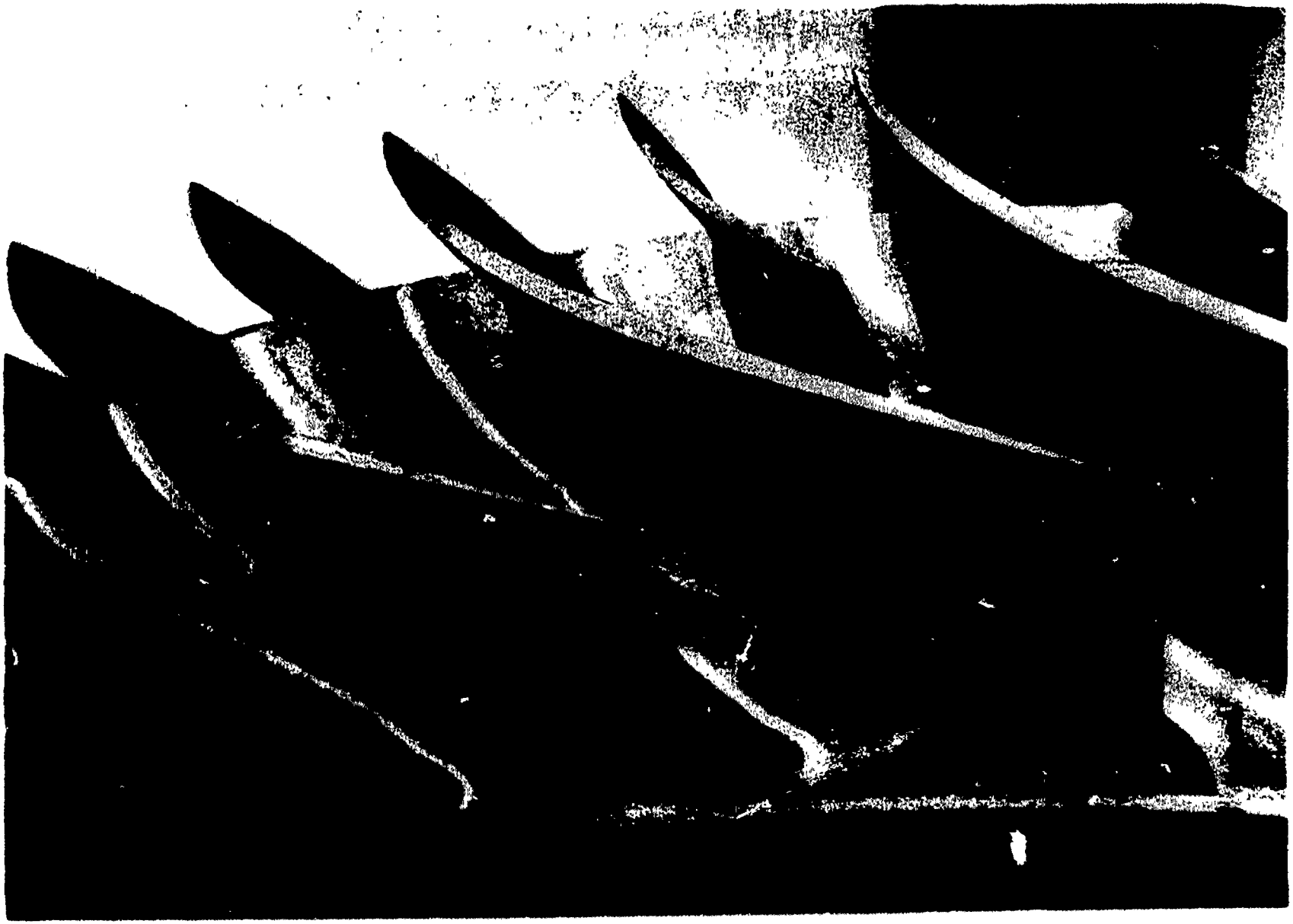


FIGURE 4. ROTOR WITH SPLITTER VANES

FIGURE 5. VEHICLE INSTRUMENTATION BULKHEAD

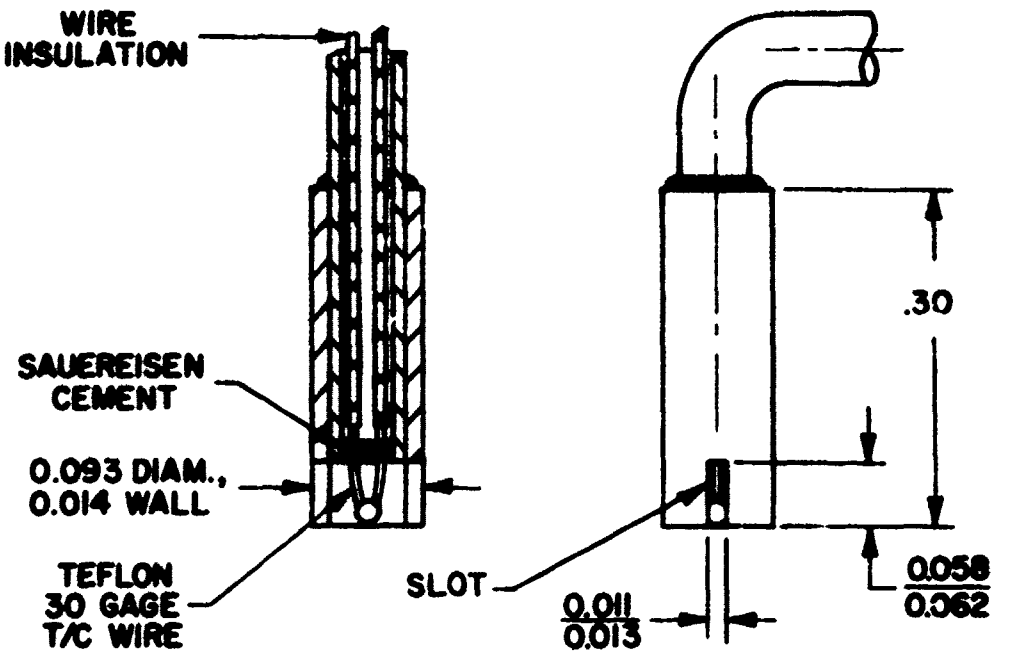


FIGURE 6. SLOT VENTED TEMPERATURE PROBE DESIGN

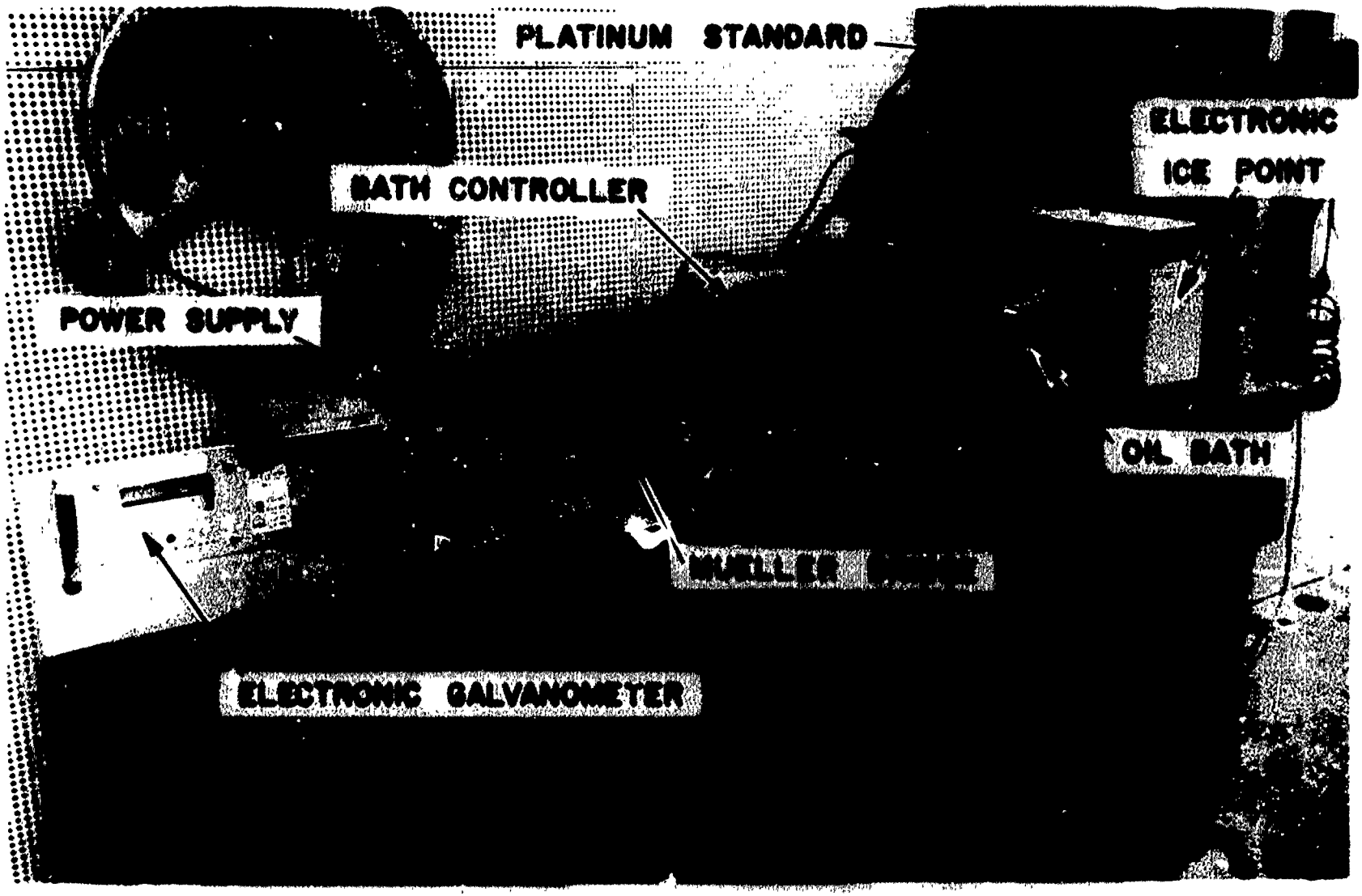


FIGURE 7. TEMPERATURE CALIBRATION SETUP

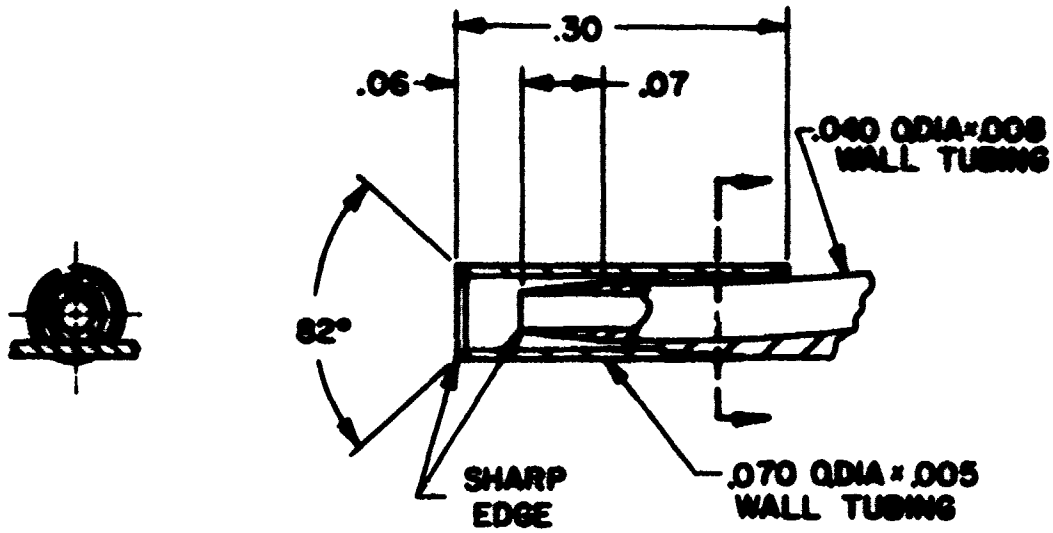


FIGURE 8. KIEL STAGNATION TUBE DESIGN

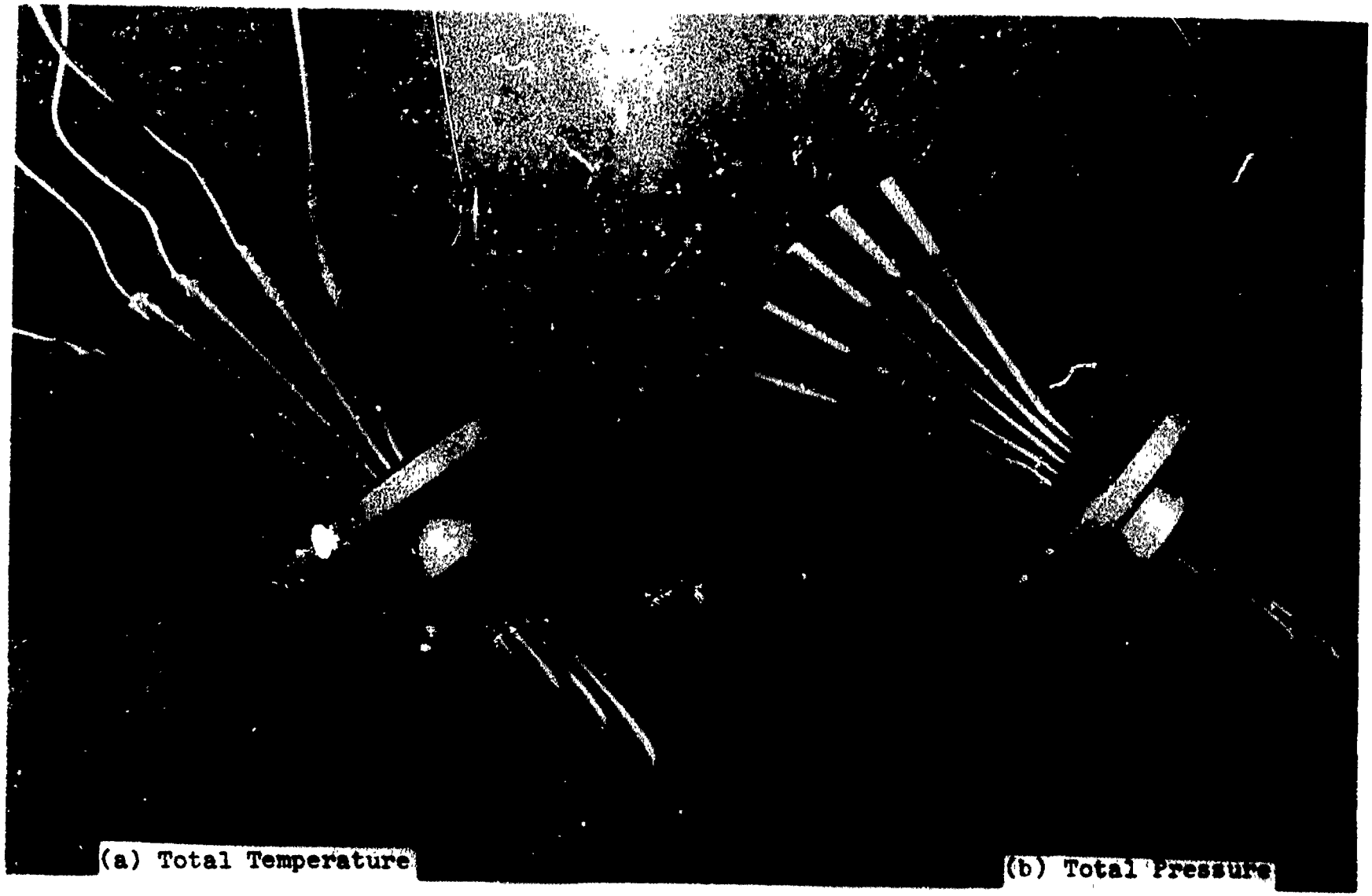


FIGURE 9. INSTRUMENTATION RAKES

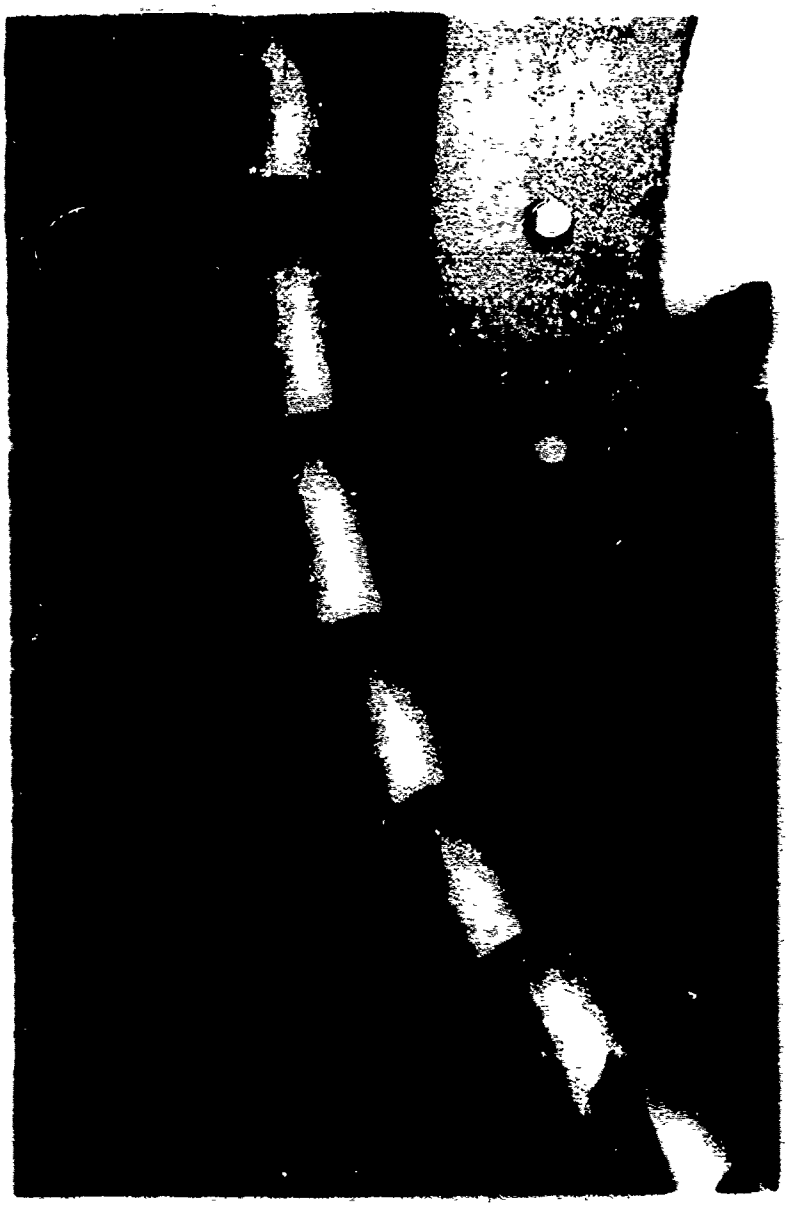


FIGURE 10. VANE-MOUNTED INSTRUMENTATION

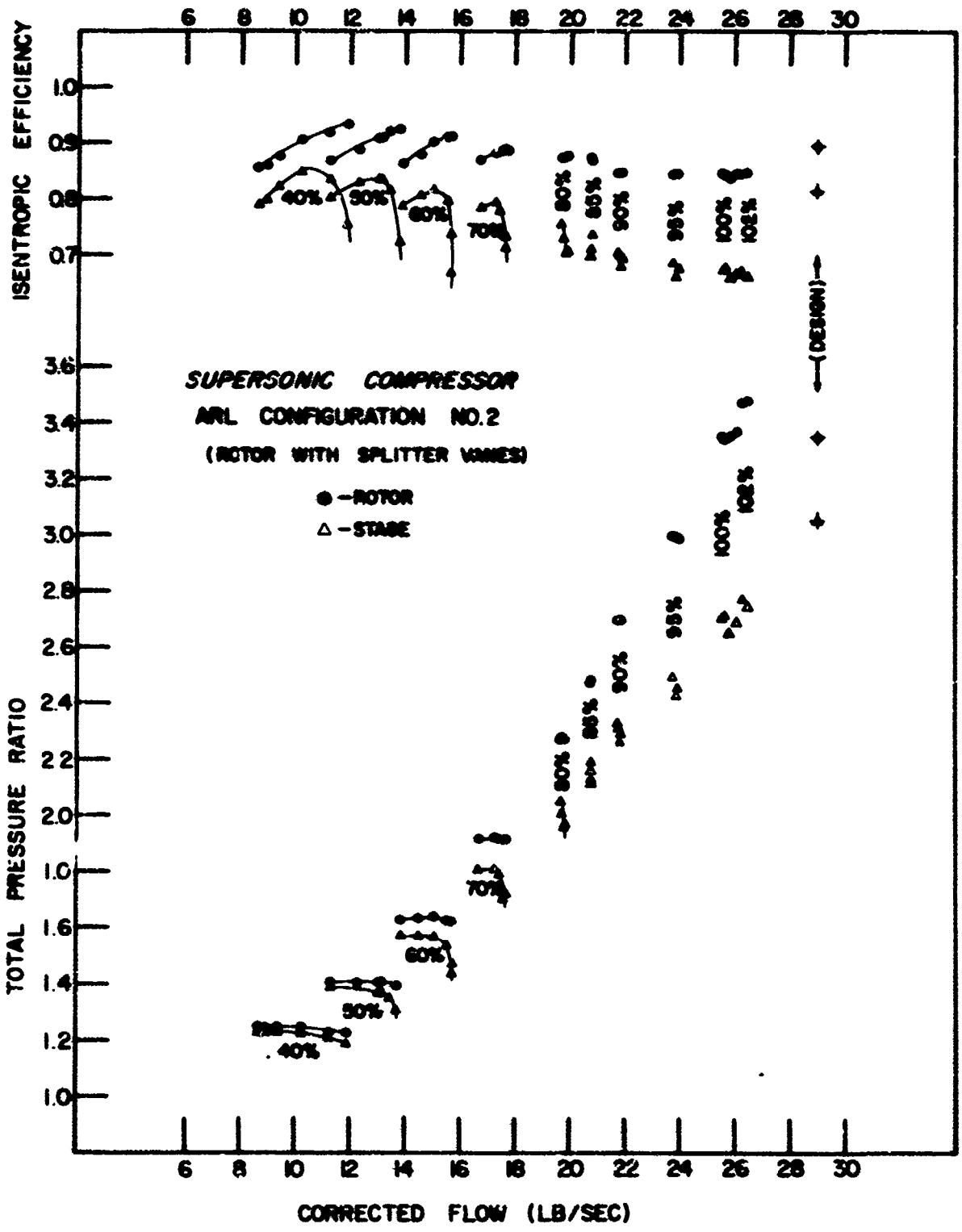


FIGURE 11. COMPRESSOR PERFORMANCE MAP

TABLE V

IDENTIFICATION OF SYMBOLS
FOR 40%-SPEED ACROSS-BLADE FIGURES

TEST IDENTIFICATION	SYMBOL
212050109840	ⓓ
212050213440	▽
212050315040	+
212050415940	×
212050516240	◇
212050616440	▽

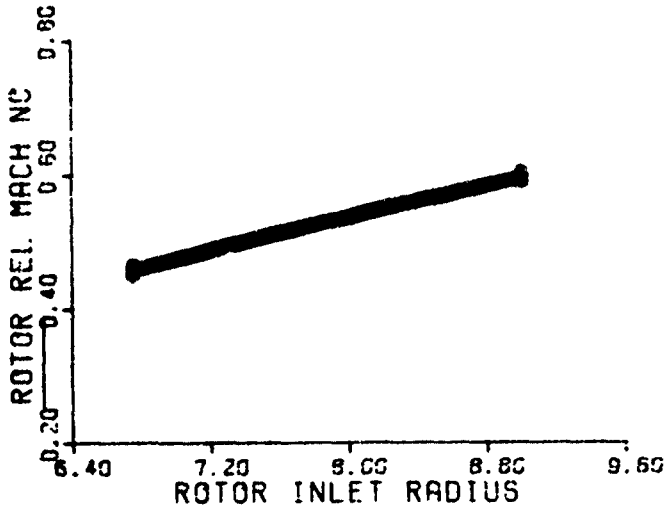


FIGURE 12. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (40% SPEED)

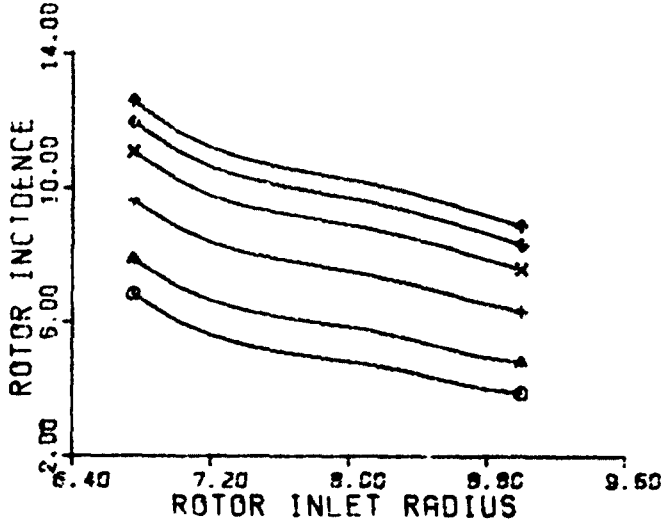


FIGURE 13. ROTOR INCIDENCE VS INLET RADIUS (40% SPEED)

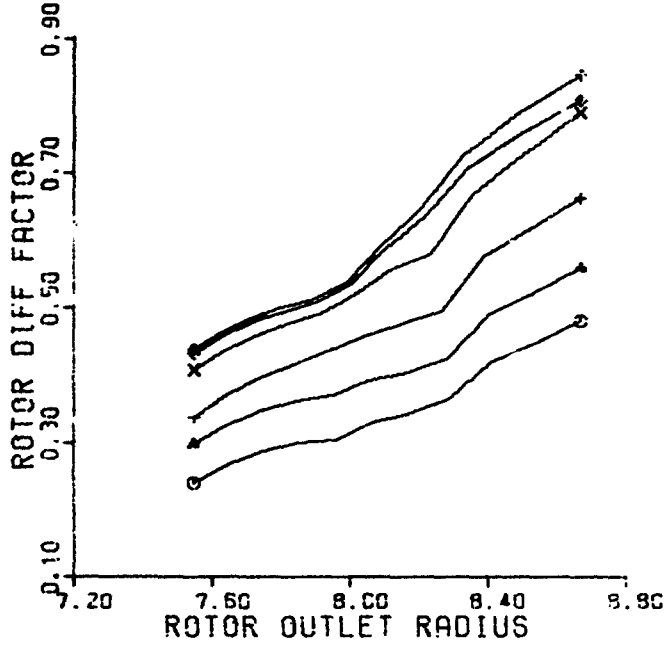


FIGURE 14. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (40% SPEED)

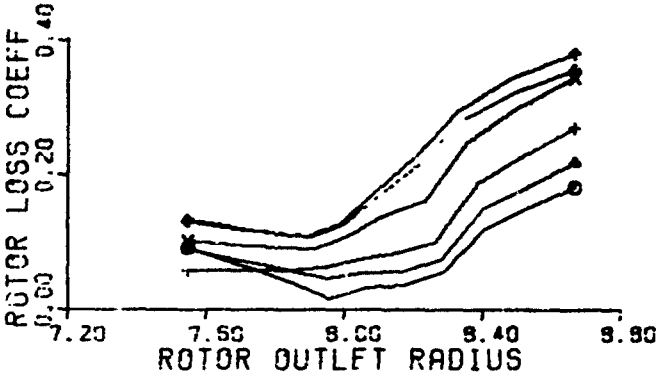


FIGURE 15. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (40% SPEED)

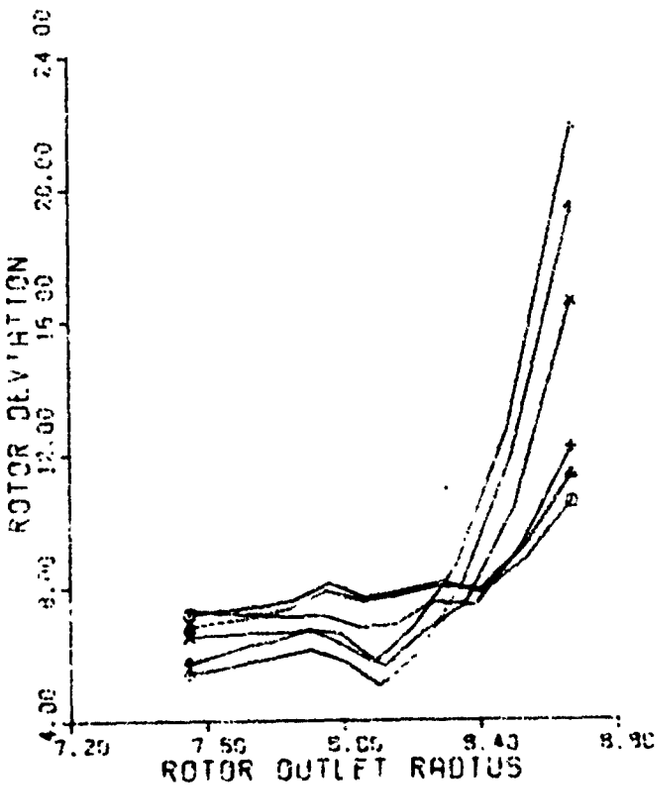


FIGURE 16. ROTOR DEVIATION VS OUTLET RADIUS (40% SPEED)

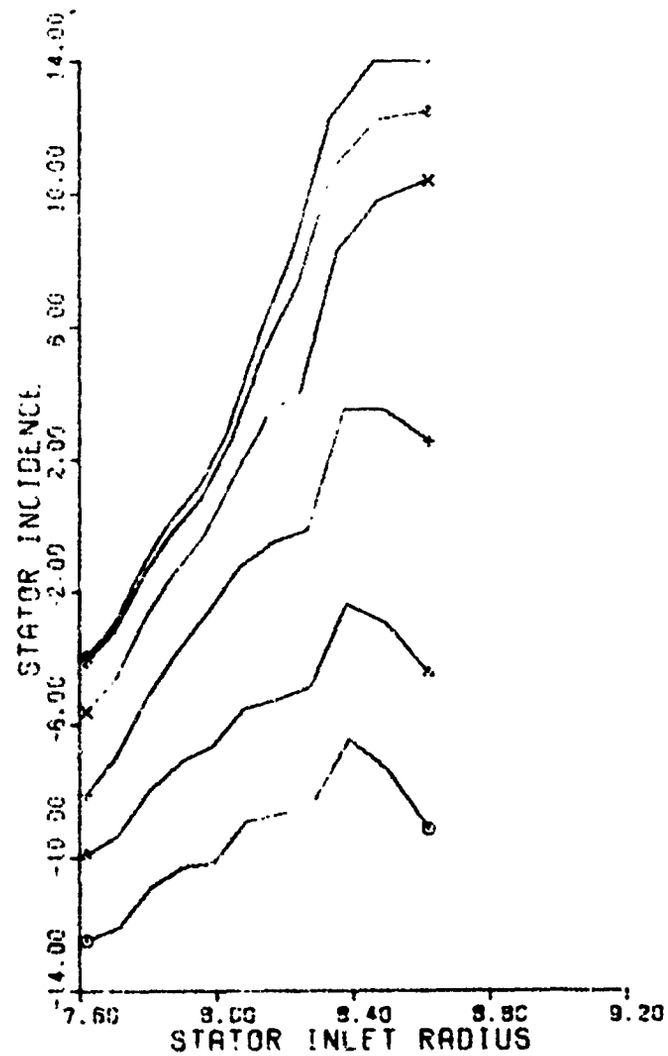


FIGURE 17. STATOR INCIDENCE VS INLET RADIUS (40% SPEED)

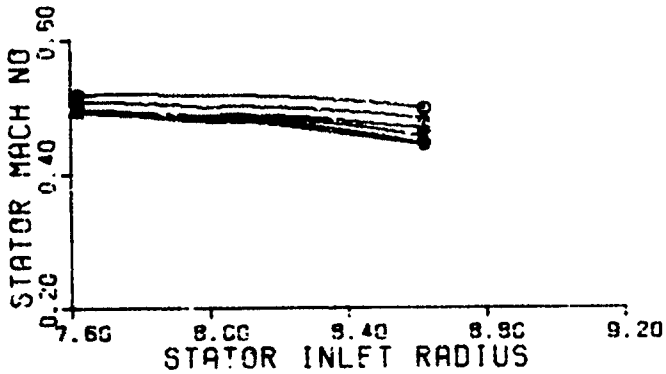


FIGURE 18. STATOR MACH NUMBER VS INLET RADIUS (40% SPEED)

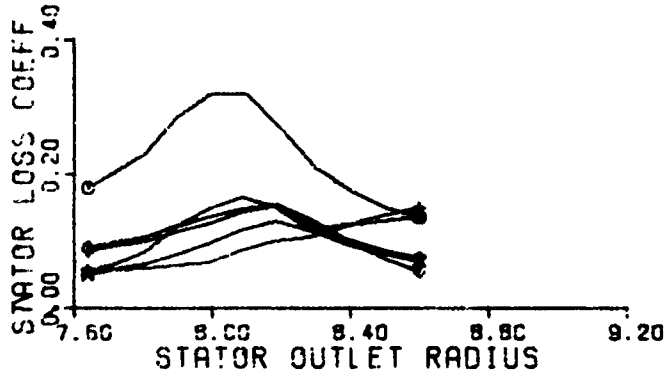


FIGURE 19. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (40% SPEED)

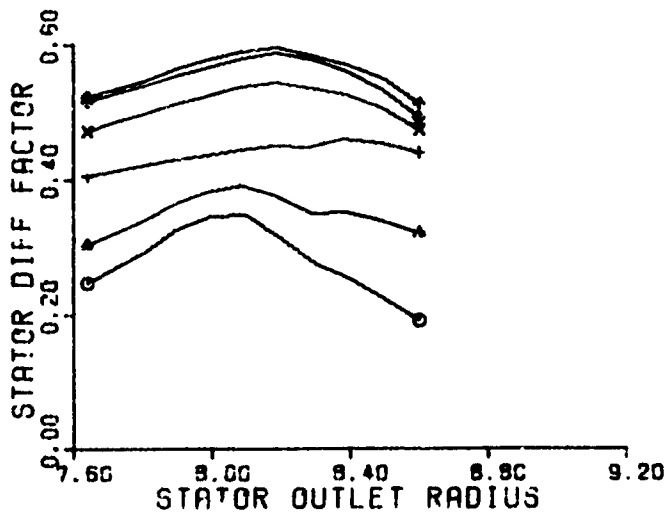


FIGURE 20. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (40% SPEED)

TABLE VI

IDENTIFICATION OF SYMBOLS
FOR 50%-SPEED ACROSS-BLADE FIGURES

TEST IDENTIFICATION	SYMBOL
212050615050	
212050815750	
212050916250	
212051015050	
212051114250	
212051212250	

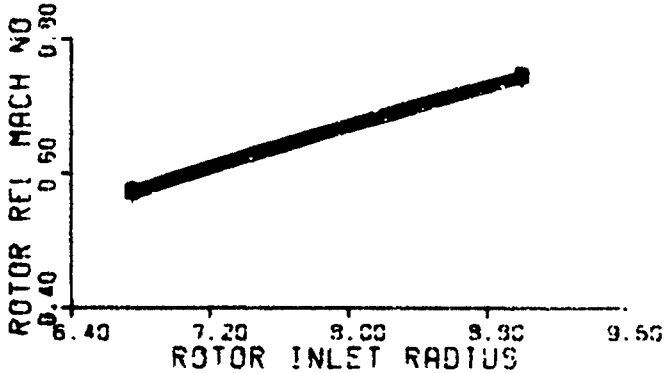


FIGURE 21. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (50% SPEED)

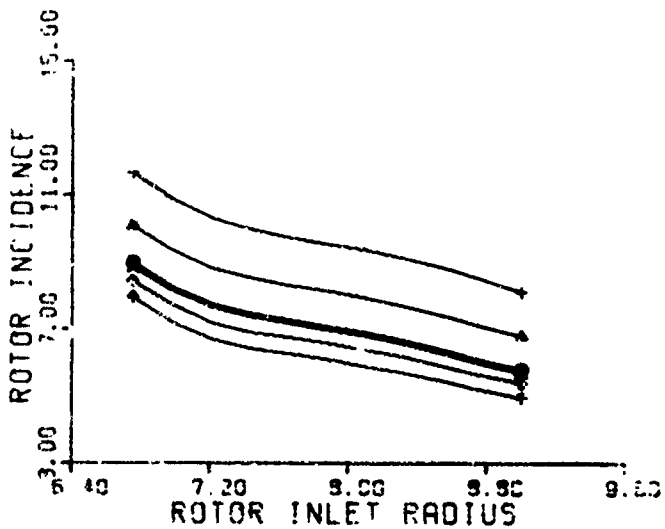


FIGURE 22. ROTOR INCIDENCE VS INLET RADIUS (50% SPEED)

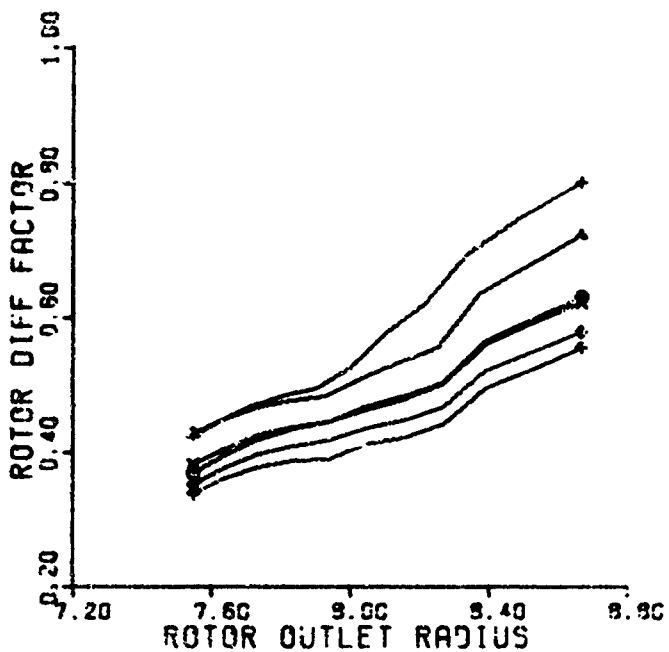


FIGURE 23. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (50% SPEED)

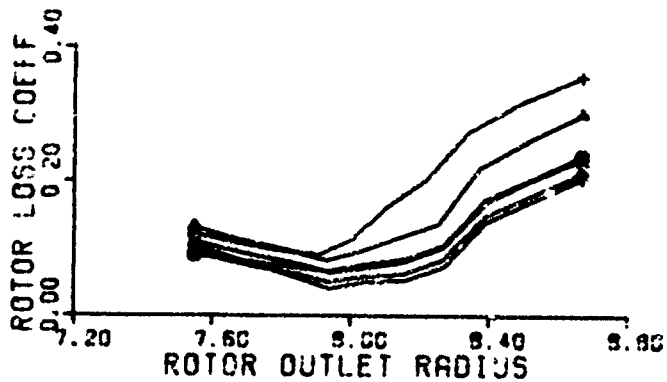


FIGURE 24. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (50% SPEED)

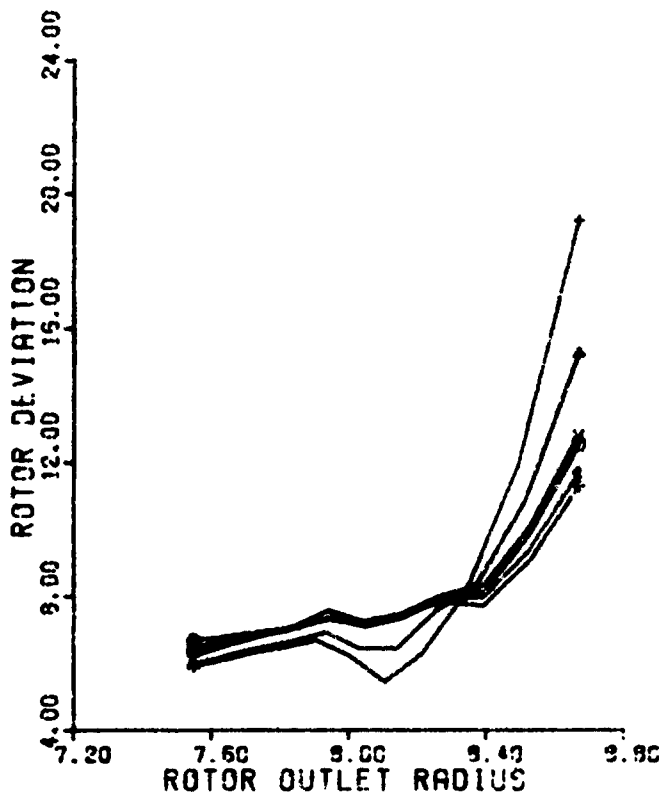


FIGURE 25. ROTOR DEVIATION VS OUTLET RADIUS (50% SPEED)

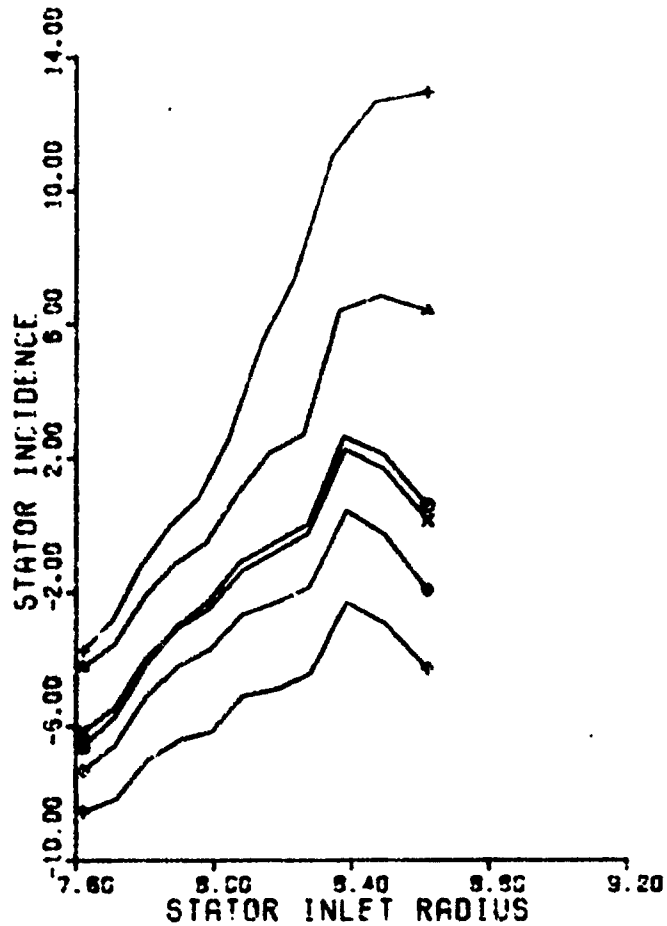


FIGURE 26. STATOR INCIDENCE VS INLET RADIUS (50% SPEED)

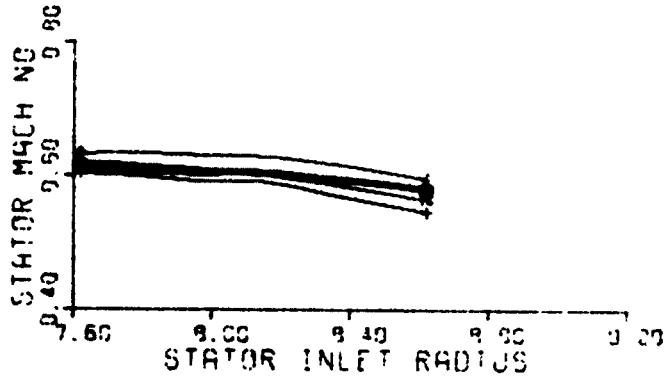


FIGURE 27. STATOR MACH NUMBER VS INLET RADIUS (50% SPEED)

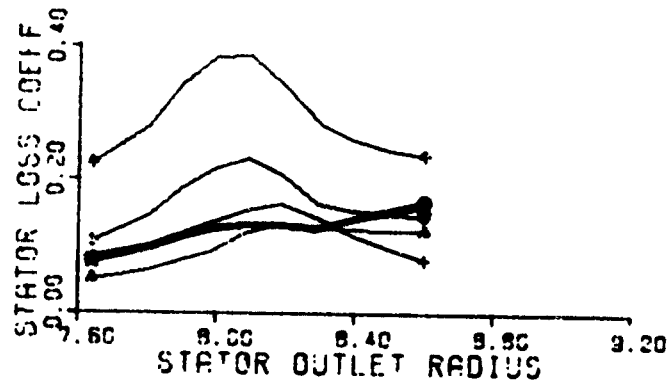


FIGURE 28. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (50% SPEED)

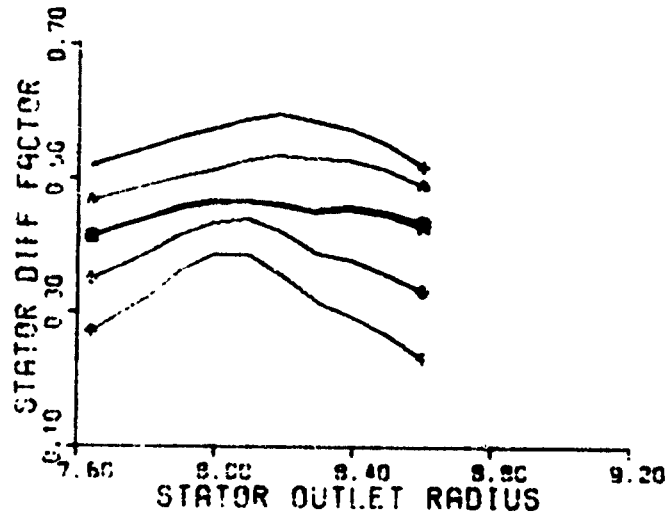


FIGURE 29. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (50% SPEED)

TABLE VII

IDENTIFICATION OF SYMBOLS
FOR 60%-SPEED ACROSS-BLADE FIGURES

TEST IDENTIFICATION	SYMBOL
212051415060	⊙
212051514360	▽
212051612960	+
212051715560	×
212051815960	◇
212051916360	⊕

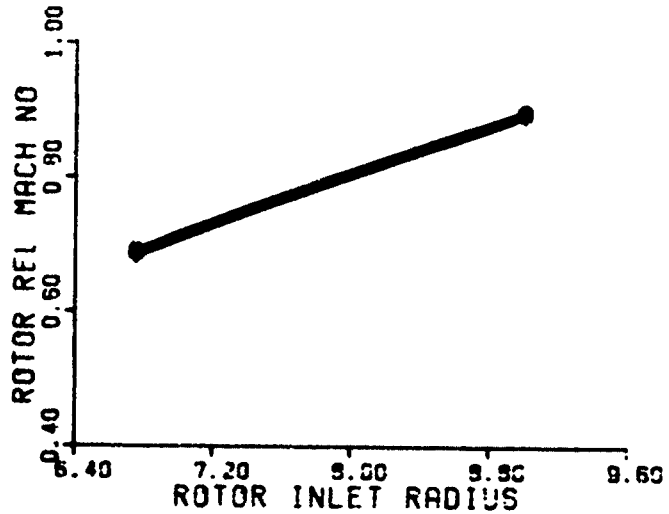


FIGURE 30. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (60% SPEED)

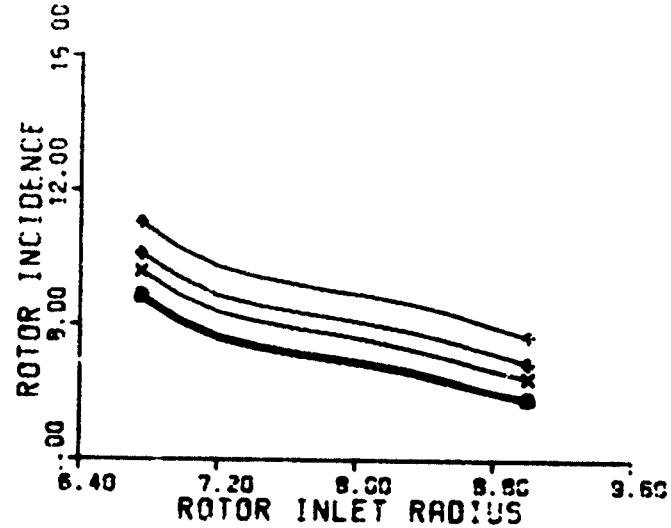


FIGURE 31. ROTOR INCIDENCE VS INLET RADIUS (60% SPEED)

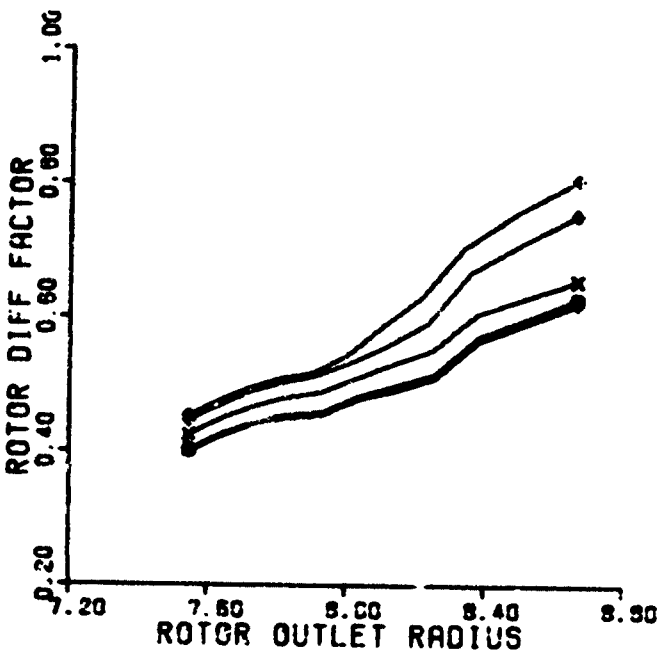


FIGURE 32. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (60% SPEED)

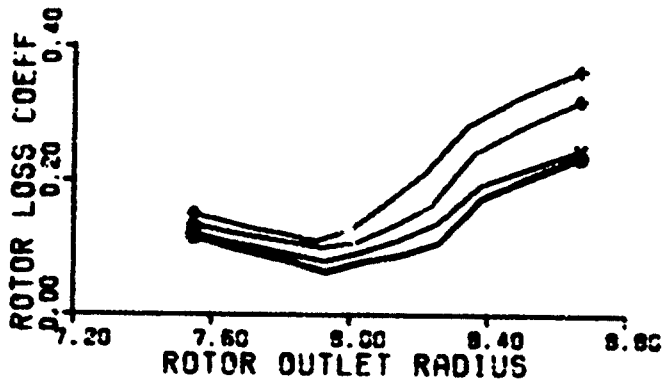


FIGURE 33. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (80% SPEED)

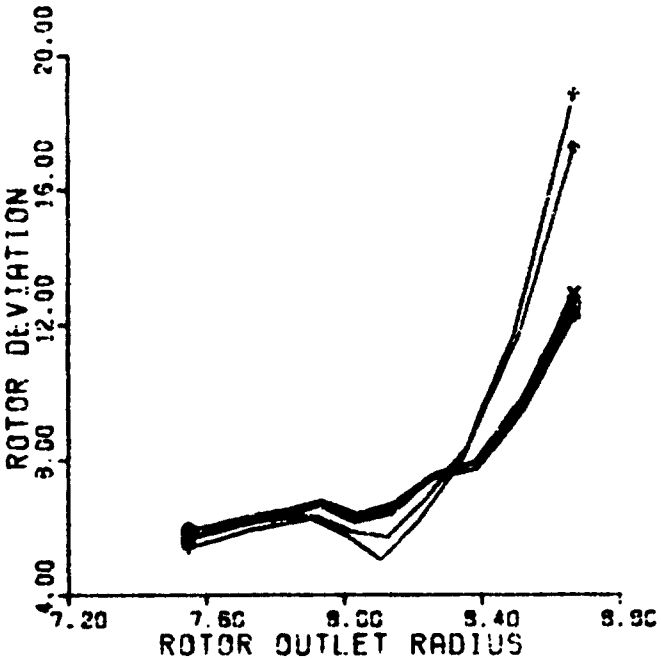


FIGURE 34. ROTOR DEVIATION VS OUTLET RADIUS (60% SPEED)

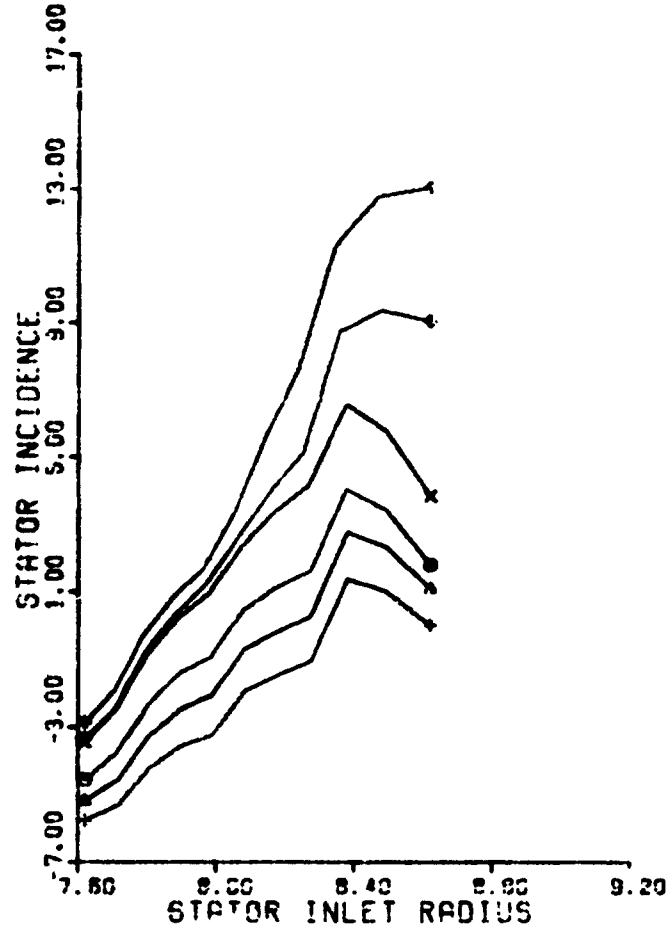


FIGURE 35. STATOR INCIDENCE VS INLET RADIUS (60% SPEED)

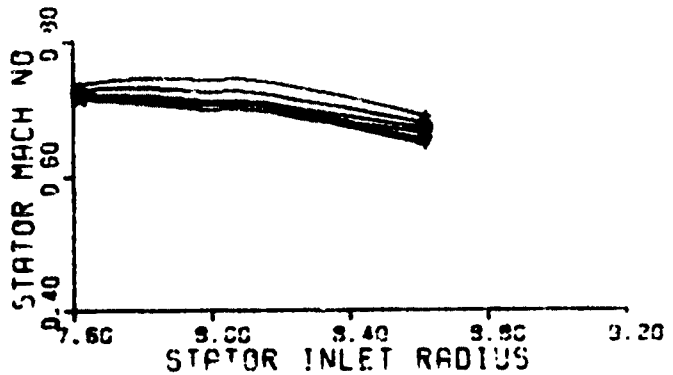


FIGURE 36. STATOR MACH NUMBER VS INLET RADIUS (60% SPEED)

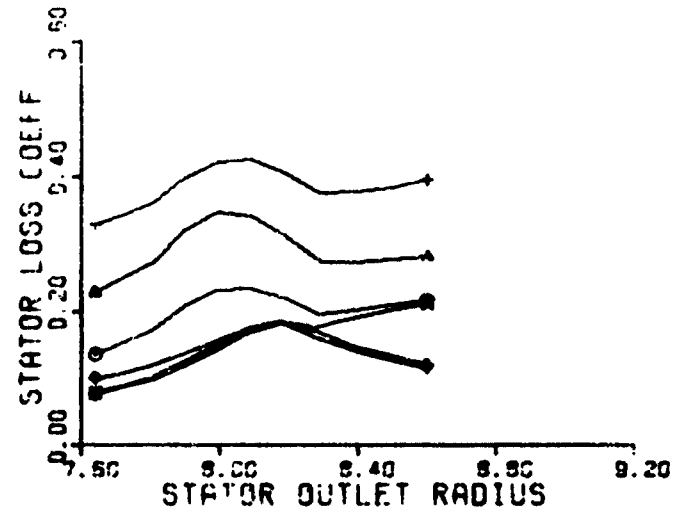


FIGURE 37. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (60% SPEED)

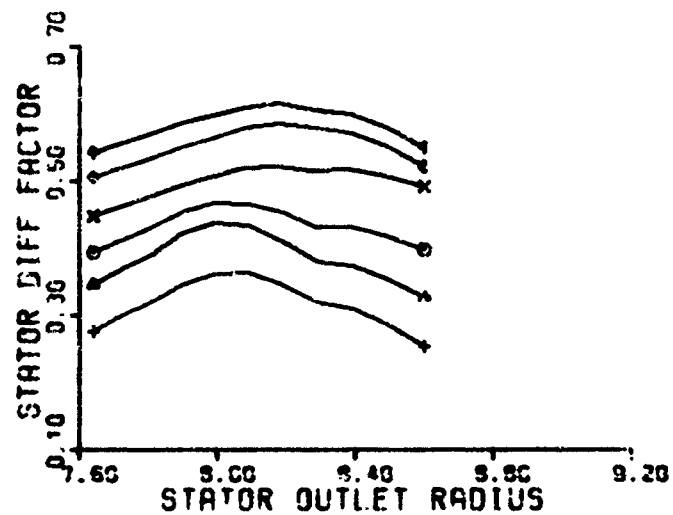


FIGURE 38. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (60% SPEED)

TABLE VIII

IDENTIFICATION OF SYMBOLS FOR 706-SPEED ACROSS-BLADE FIGURES

TEST IDENTIFICATION	SYMBOL
212070215070	○
212070314770	▽
212070615070	+
212070715670	×
212070815970	◇
212070916170	▽

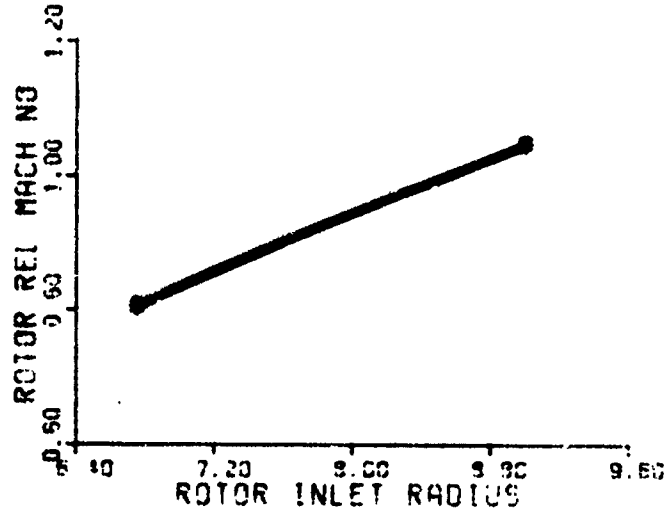


FIGURE 39. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (70% SPEED)

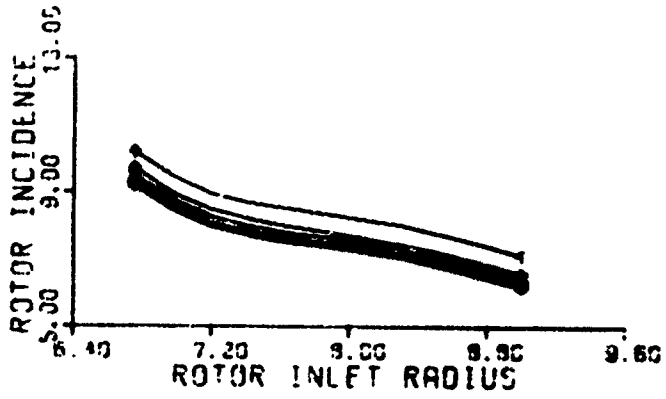


FIGURE 40. ROTOR INCIDENCE VS INLET RADIUS (70% SPEED)

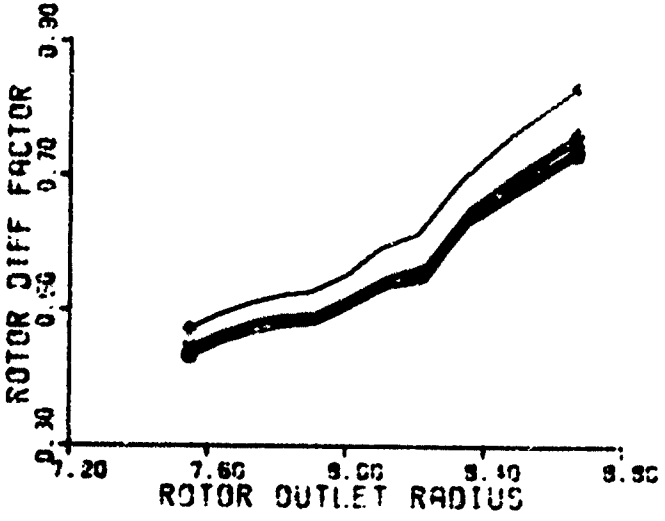


FIGURE 41. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (70% SPEED)

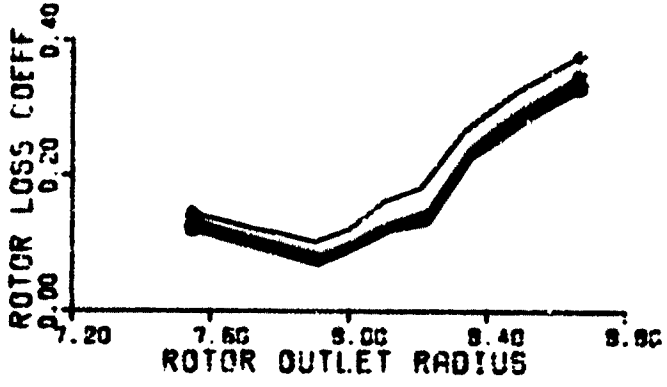


FIGURE 42. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (70% SPEED)

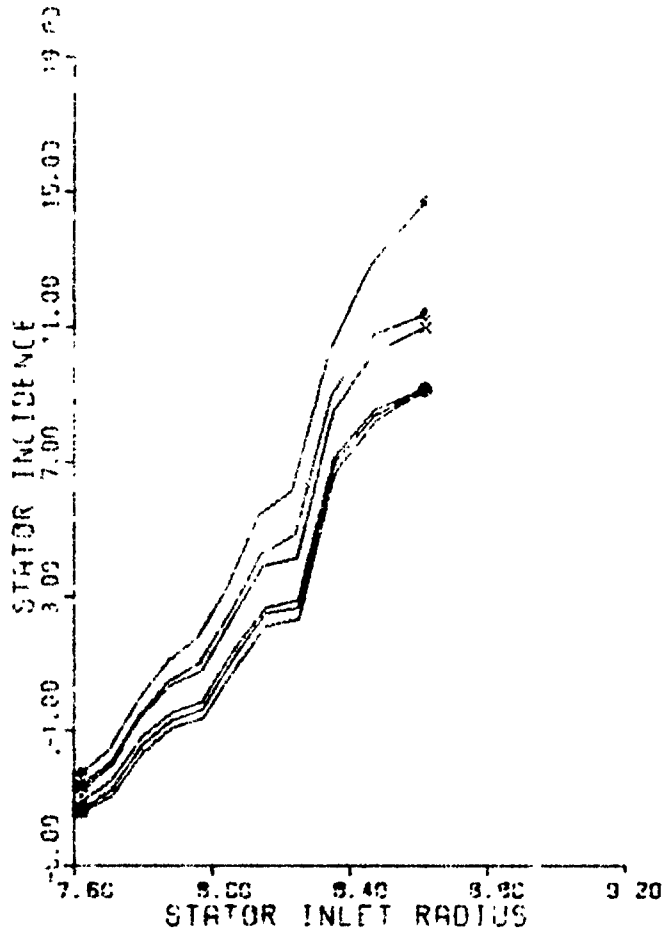


FIGURE 44. STATOR INCIDENCE VS INLET RADIUS (70% SPEED)

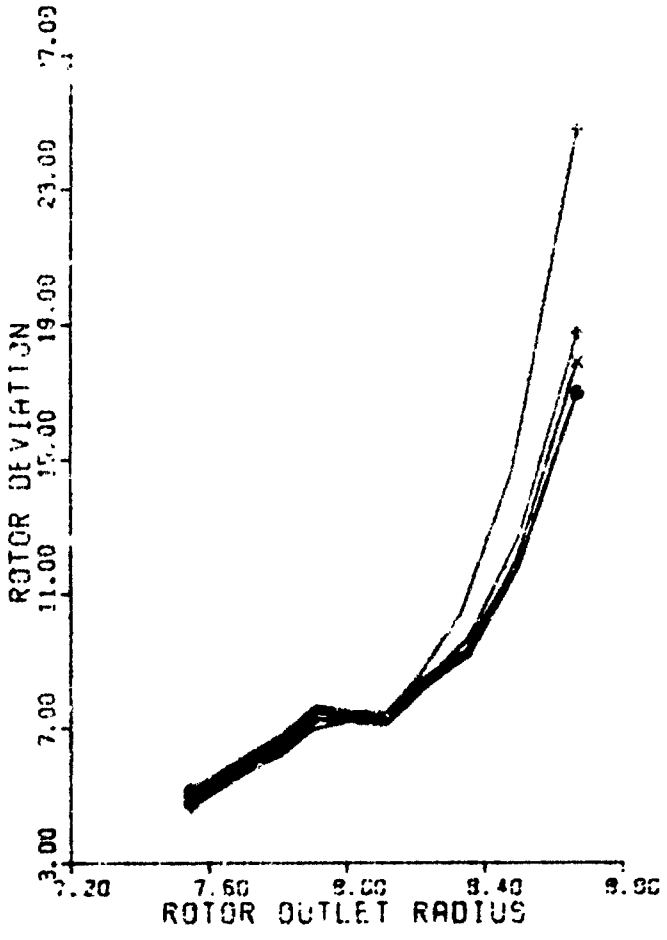


FIGURE 43. ROTOR DEVIATION VS OUTLET RADIUS (70% RADIUS)

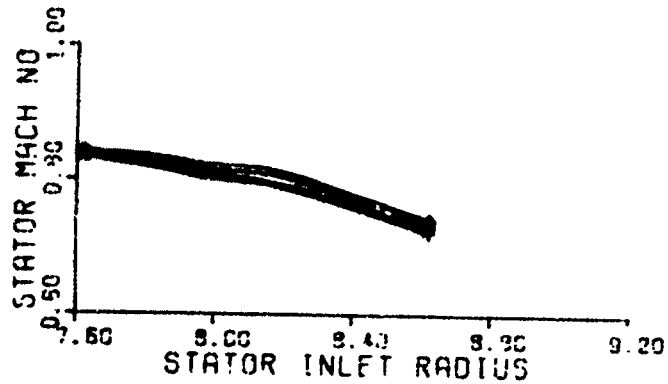


FIGURE 45. STATOR MACH NUMBER VS INLET RADIUS (70% SPEED)

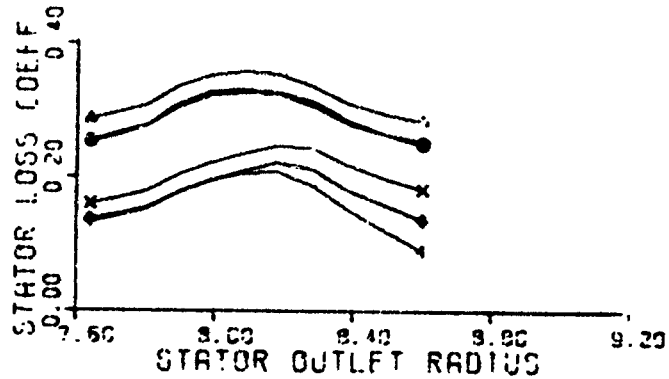


FIGURE 46. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (70% SPEED)

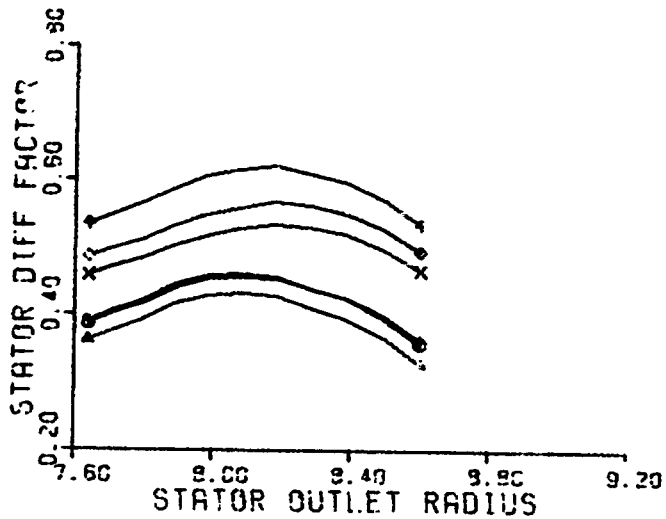


FIGURE 47 STATOR DIFFUSION FACTOR VS OUTLET RADIUS (70% SPEED)

TABLE IX

IDENTIFICATION OF SYMBOLS
FOR 80%-SPEED ACROSS-BLADE FIGURES

TEST IDENTIFICATION	SYMBOL
212071015080	ⓘ
212071315080	▽
212071415580	+
212071515980	×

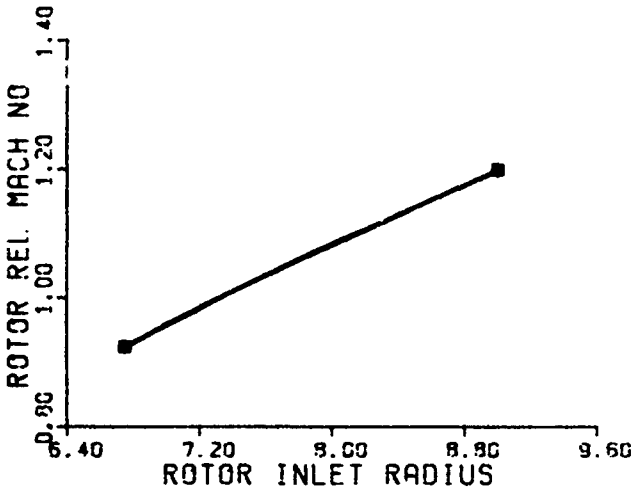


FIGURE 48. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (80% SPEED)

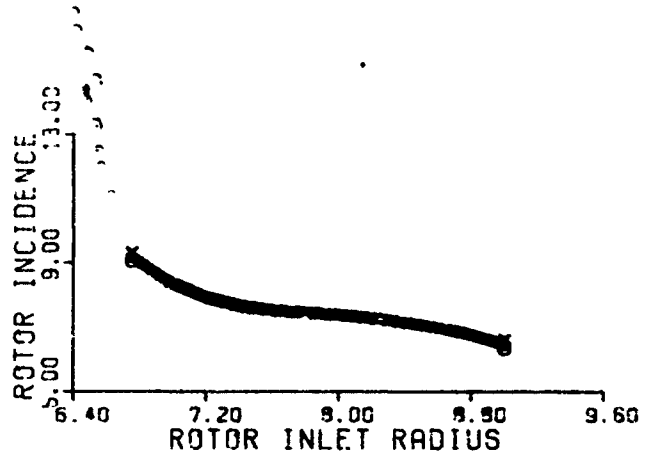


FIGURE 49 ROTOR INCIDENCE VS INLET RADIUS (80% SPEED)

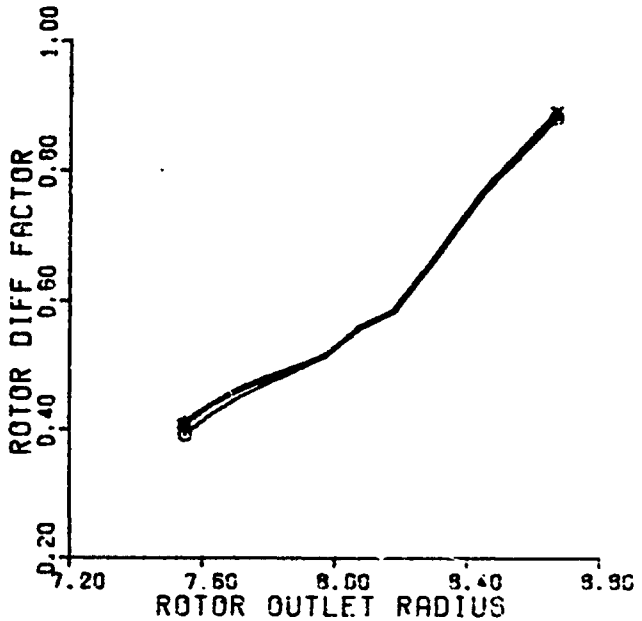


FIGURE 50 ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (80% SPEED)

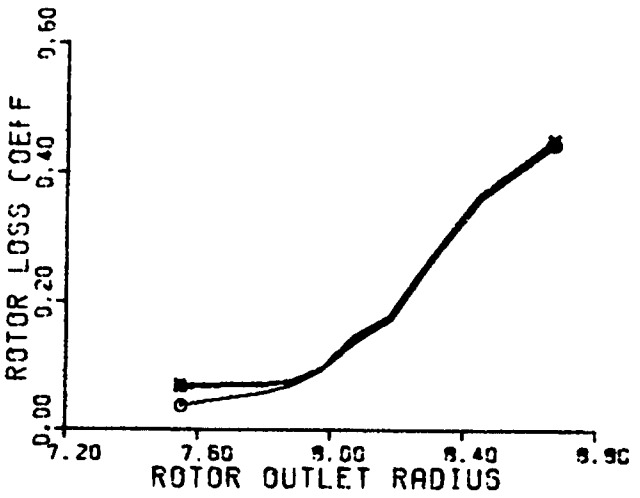


FIGURE 51. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (80% SPEED)

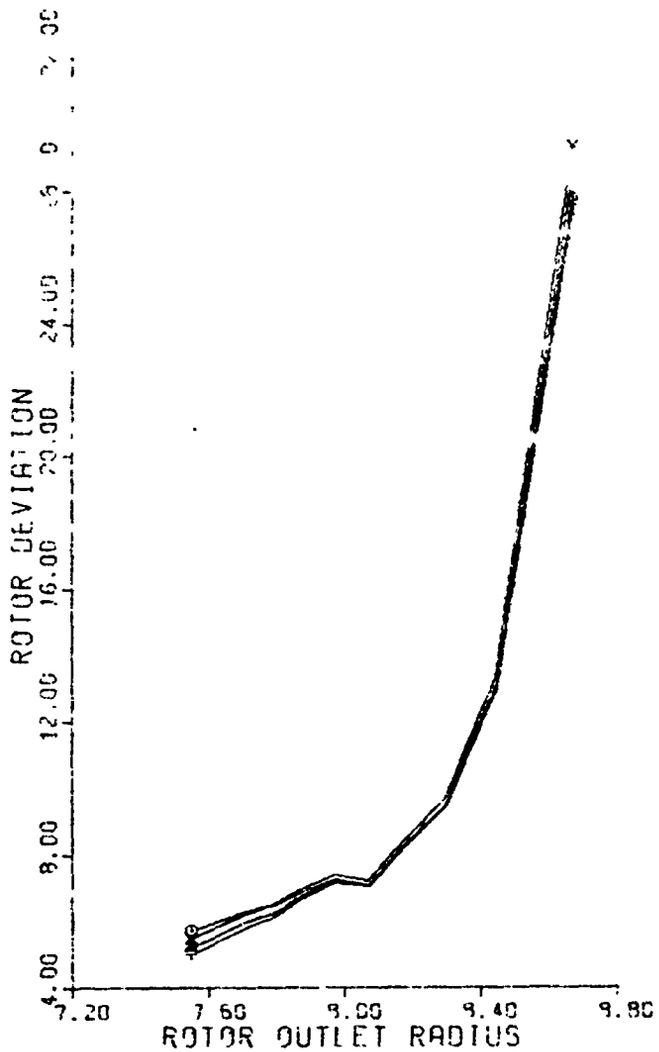


FIGURE 52. ROTOR DEVIATION VS OUTLET RADIUS (80% SPEED)

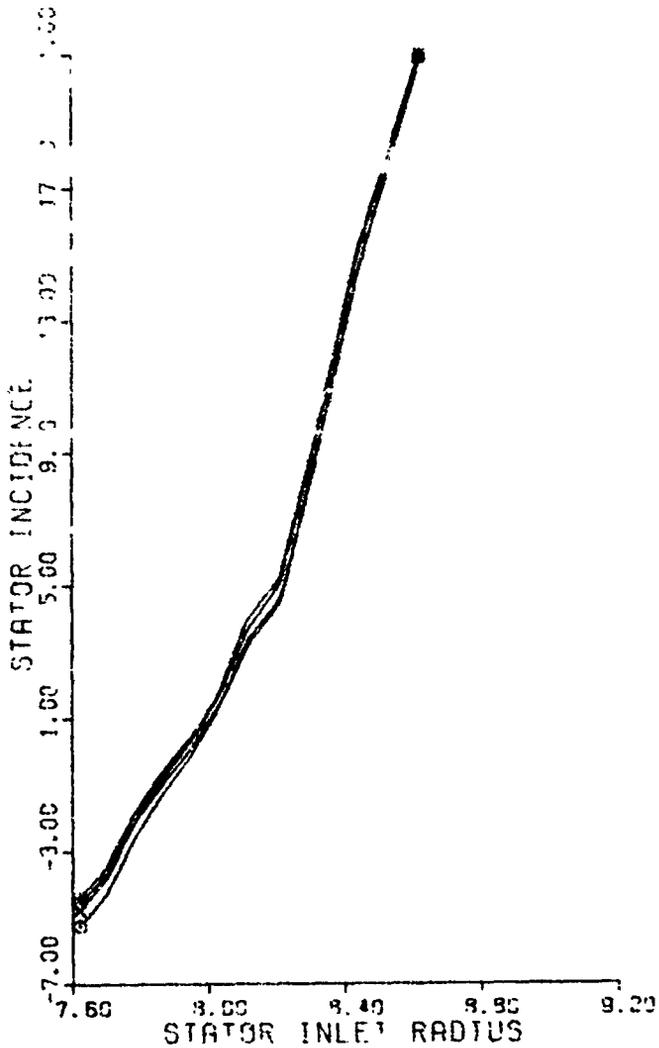


FIGURE 53. STATOR INCIDENCE VS INLET RADIUS (80% SPEED)

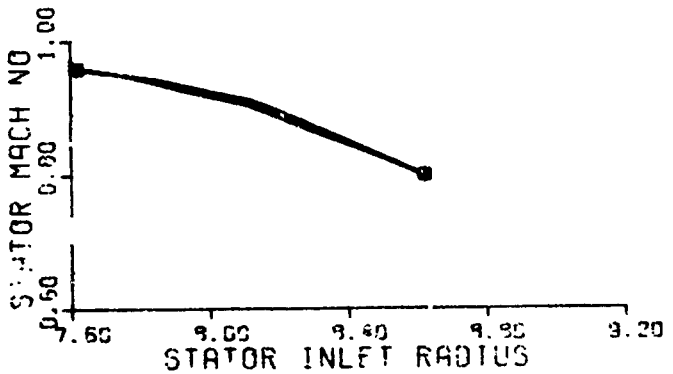


FIGURE 54. STATOR MACH NUMBER VS INLET RADIUS (80% SPEED)

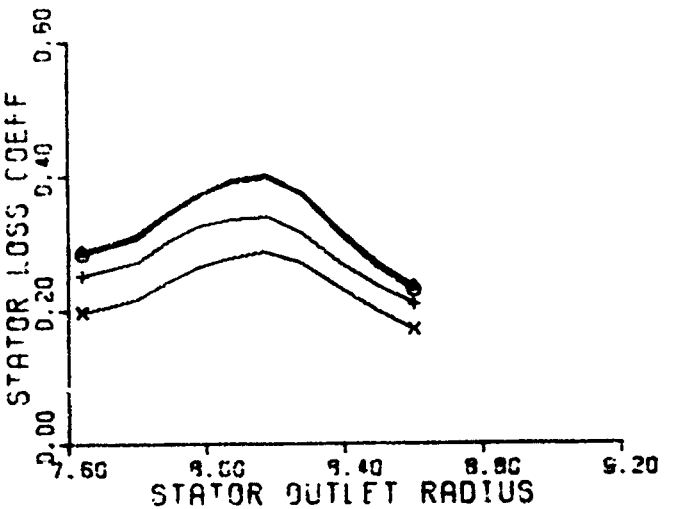


FIGURE 55. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (80% SPEED)

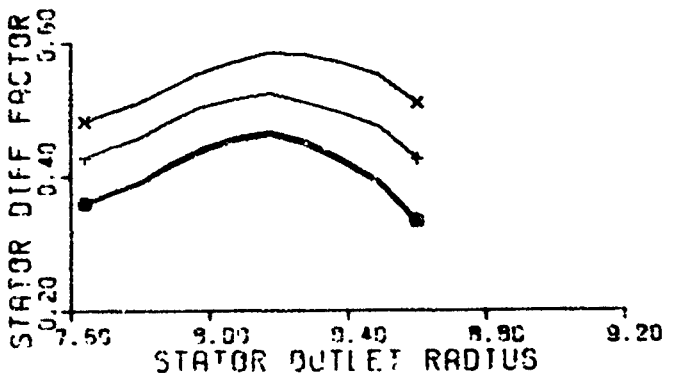


FIGURE 56. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (80% SPEED)

TABLE X

IDENTIFICATION OF SYMBOLS
FOR 85%-SPEED ACROSS-BLADE FIGURES

TEST IDENTIFICATION	SYMBOL
301180915685	
301181015885	
301180615085	
301180815385	

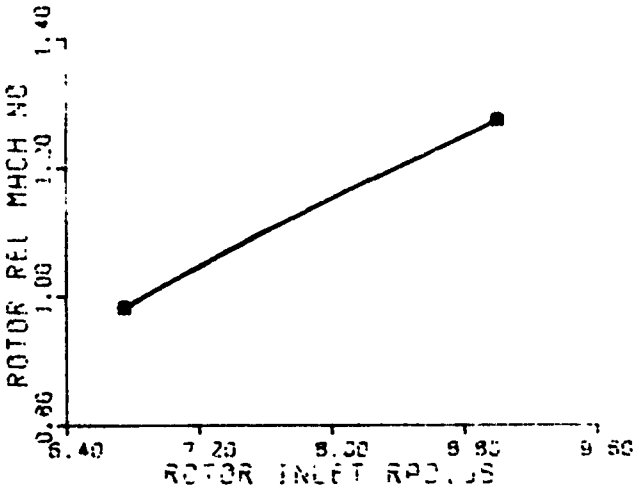


FIGURE 57. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (85% SPEED)

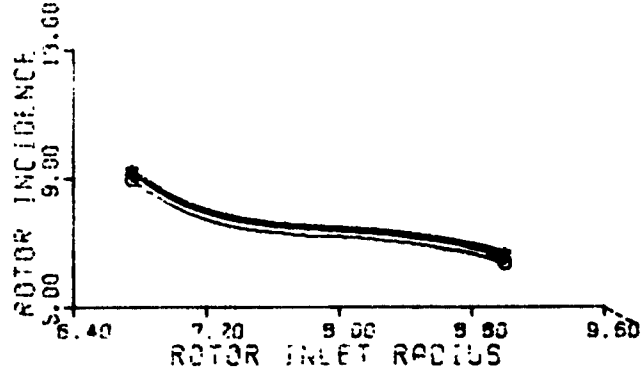
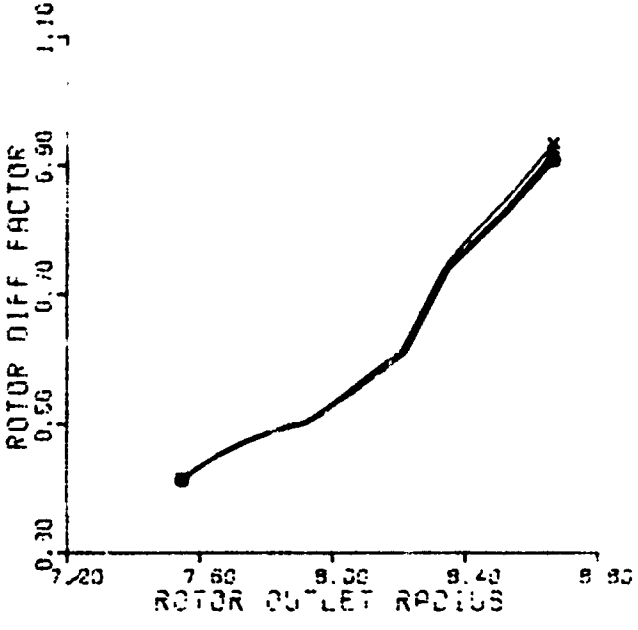


FIGURE 58. ROTOR INCIDENCE VS INLET RADIUS (85% SPEED)



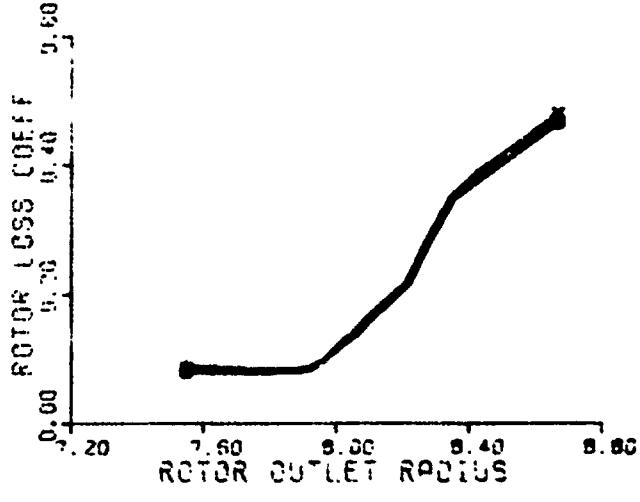


FIGURE 60. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (85% SPEED)

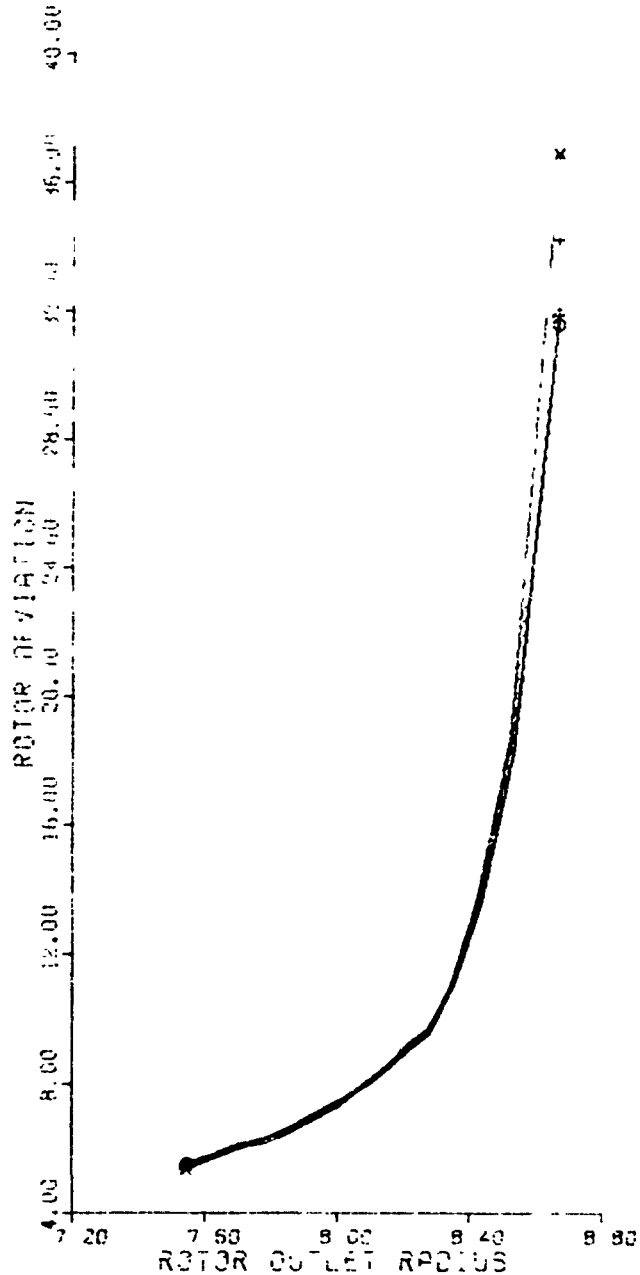


FIGURE 61. ROTOR DEVIATION VS OUTLET RADIUS (85% SPEED)

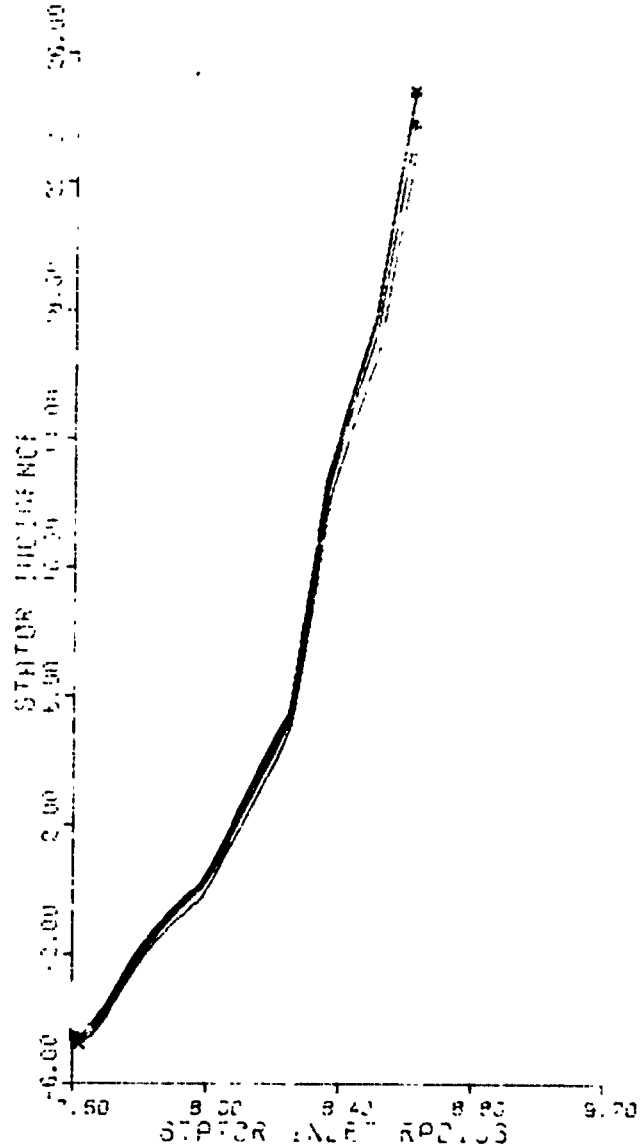


FIGURE 62. STATOR INCIDENCE VS INLET RADIUS (85% SPEED)

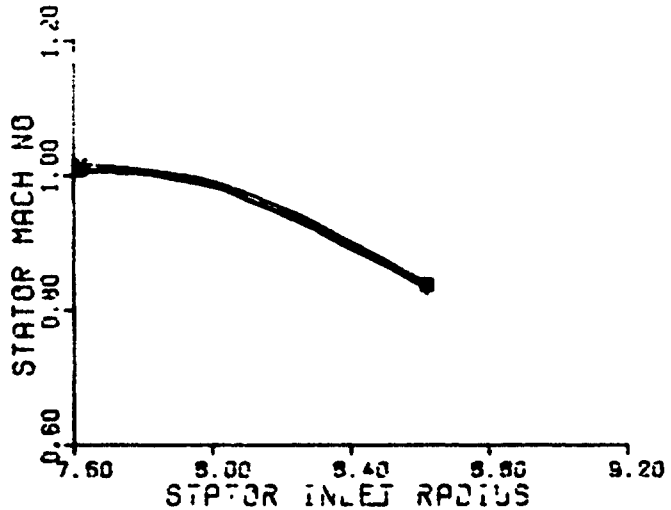


FIGURE 63. STATOR MACH NUMBER VS INLET RADIUS (85% SPEED)

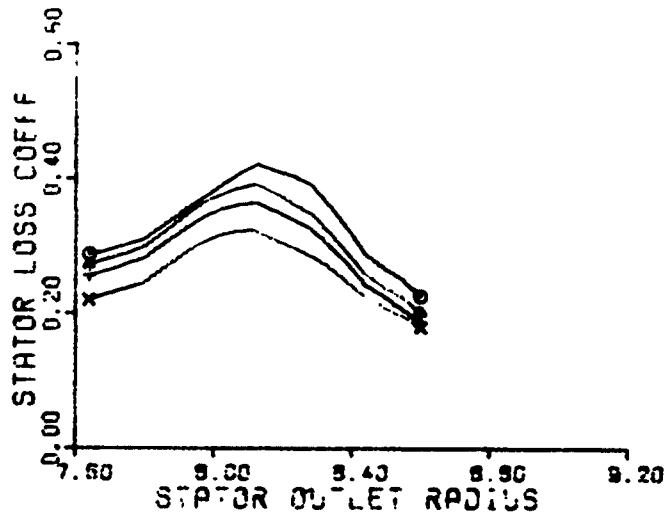


FIGURE 64. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (85% SPEED)

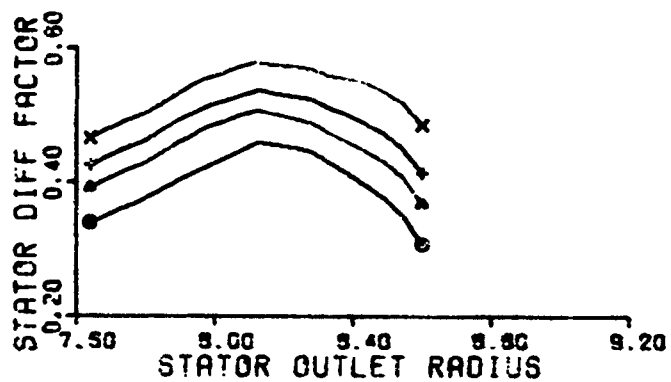


FIGURE 65. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (85% SPEED)

TABLE XI

IDENTIFICATION OF SYMBOLS
FOR 90%-SPEED ACROSS-BLADE FIGURES

TEST IDENTIFICATION	SYMBOL
301181515590	ⓘ
301181615790	▽
301181715690	+
301181415290	×

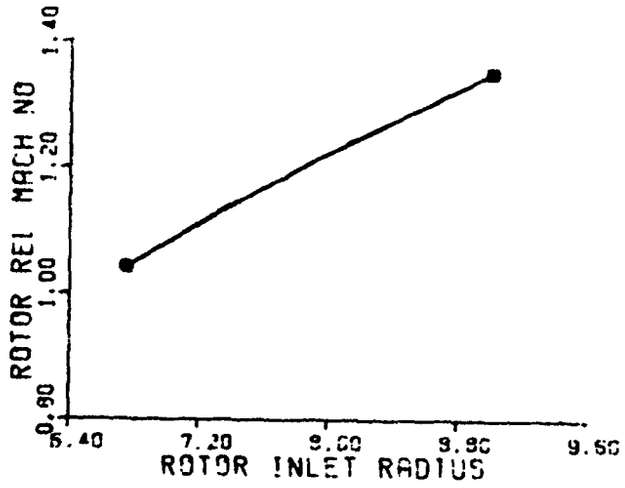


FIGURE 66. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (90% SPEED)

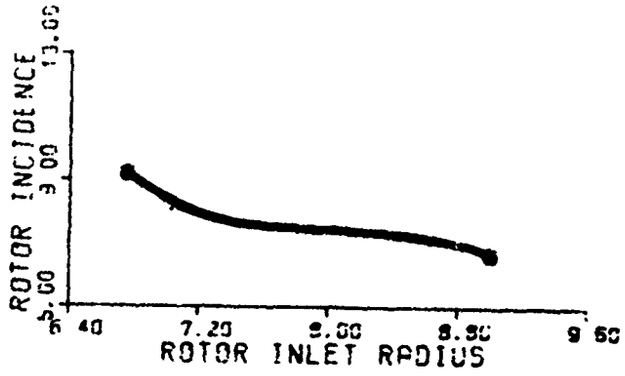


FIGURE 67. ROTOR INCIDENCE VS INLET RADIUS (90% SPEED)

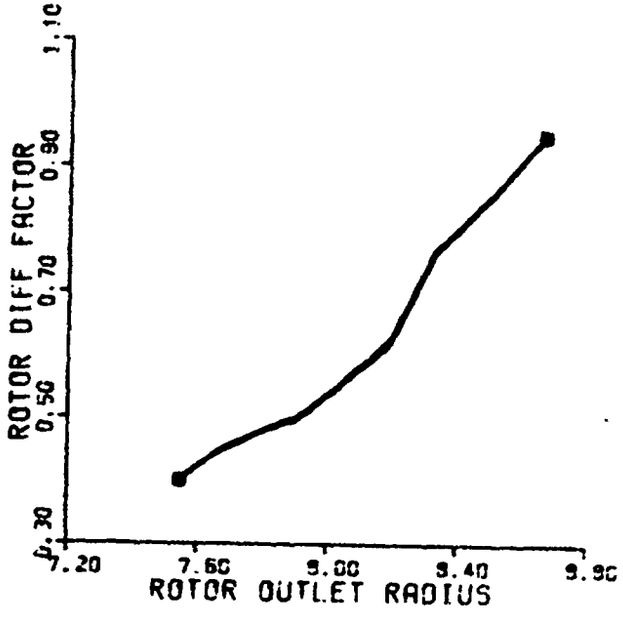


FIGURE 68. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (90% SPEED)

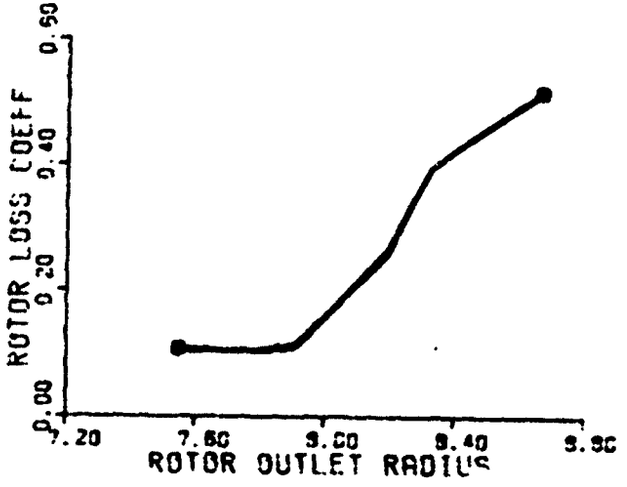


FIGURE 69. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (90% SPEED)

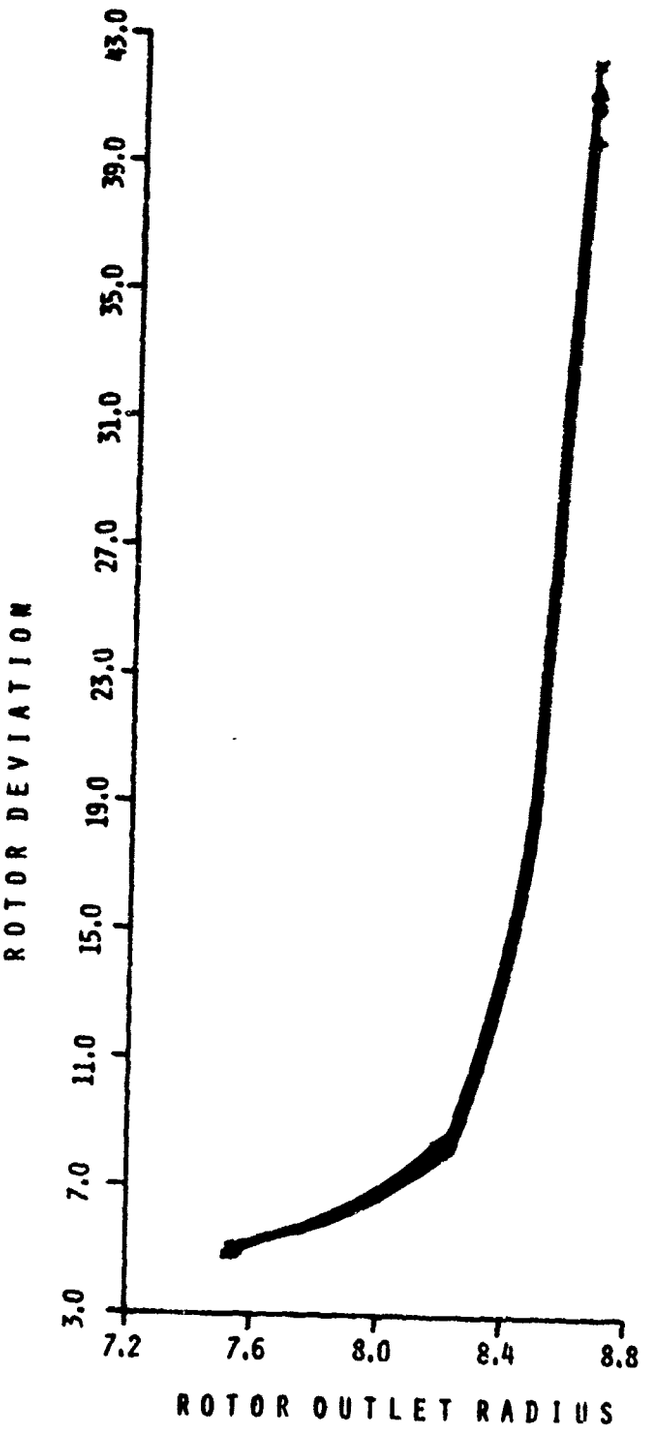


FIGURE 70. ROTOR DEVIATION VS OUTLET RADIUS (90% SPEED)

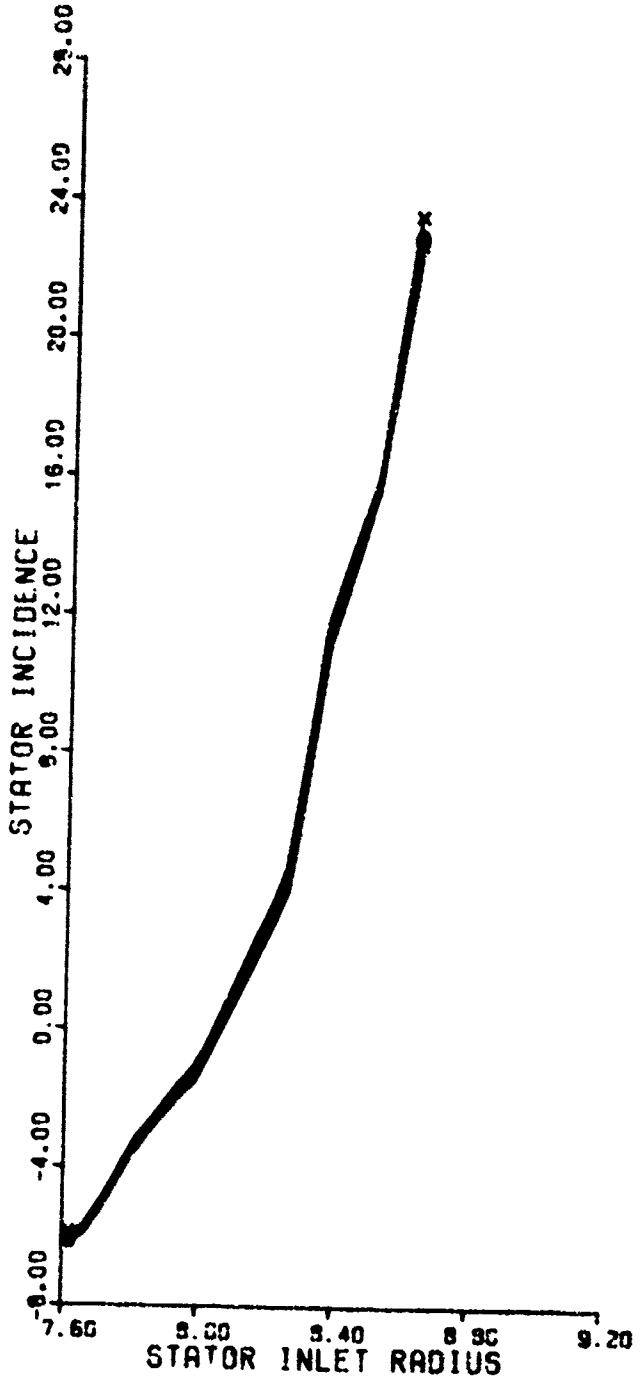


FIGURE 71. STATOR INCIDENCE VS INLET RADIUS (90% SPEED)

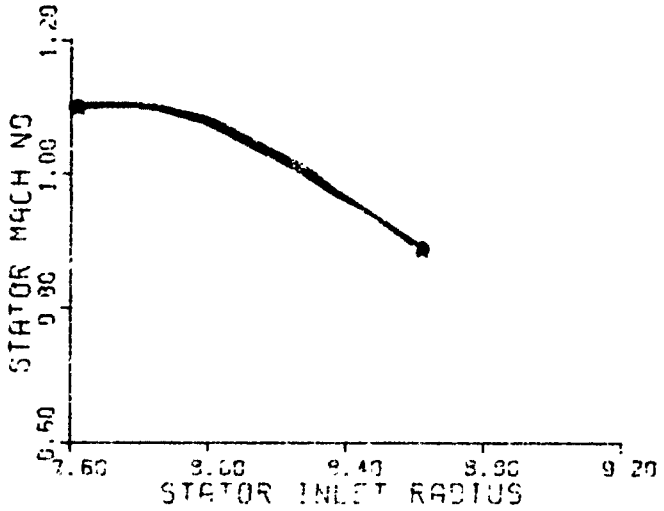


FIGURE 72. STATOR MACH NUMBER VS INLET RADIUS (90% SPEED)

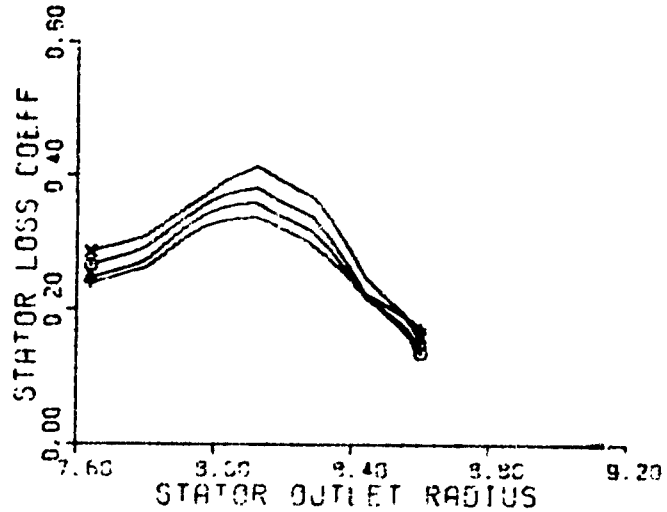


FIGURE 73. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (90% SPEED)

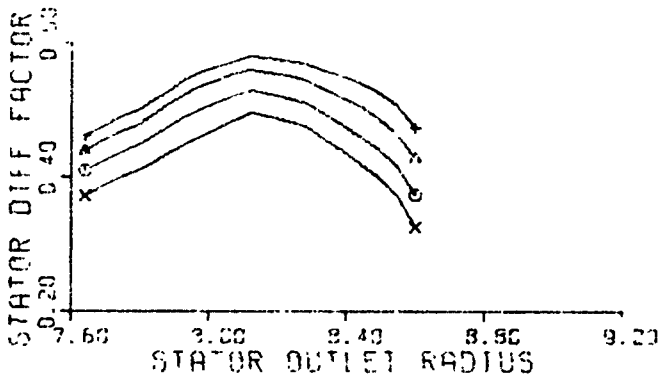


FIGURE 74. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (90% SPEED)

TABLE XII

IDENTIFICATION OF SYMBOLS
FOR 95%-SPEED ACROSS-BLADE FIGURES

TEST IDENTIFICATION	SYMBOL
301230615095	○
301230415395	▽
301230515695	+

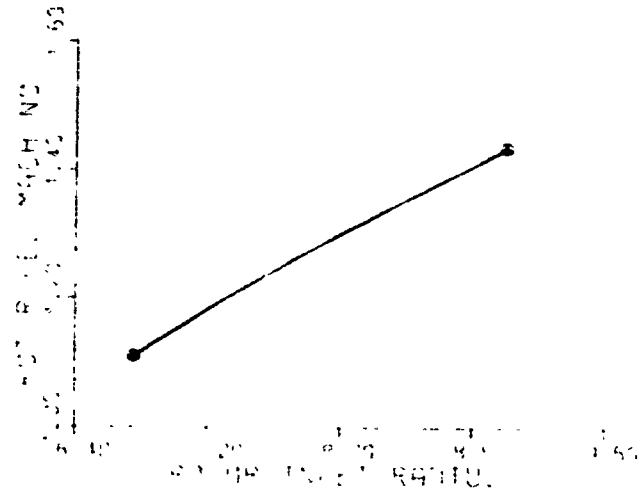


FIGURE 75. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (95% SPEED)

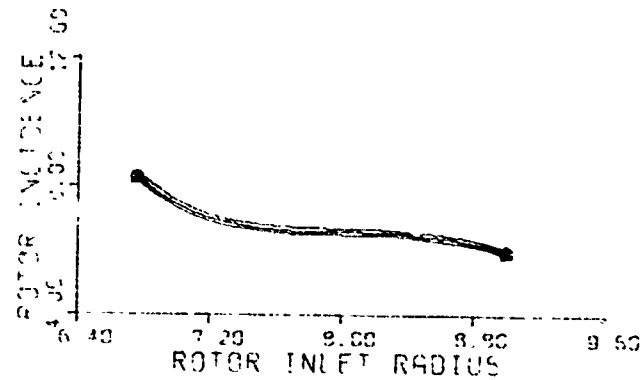


FIGURE 76. ROTOR INCIDENCE VS INLET RADIUS (95% SPEED)

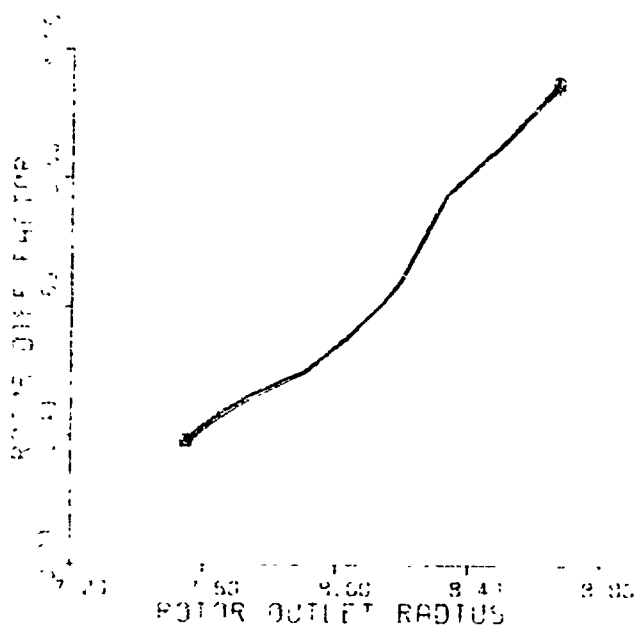


FIGURE 77. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (95% SPEED)

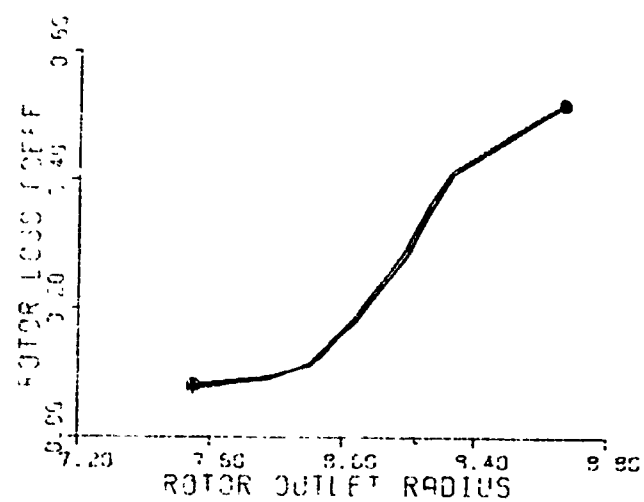


FIGURE 78. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (95% SPEED)

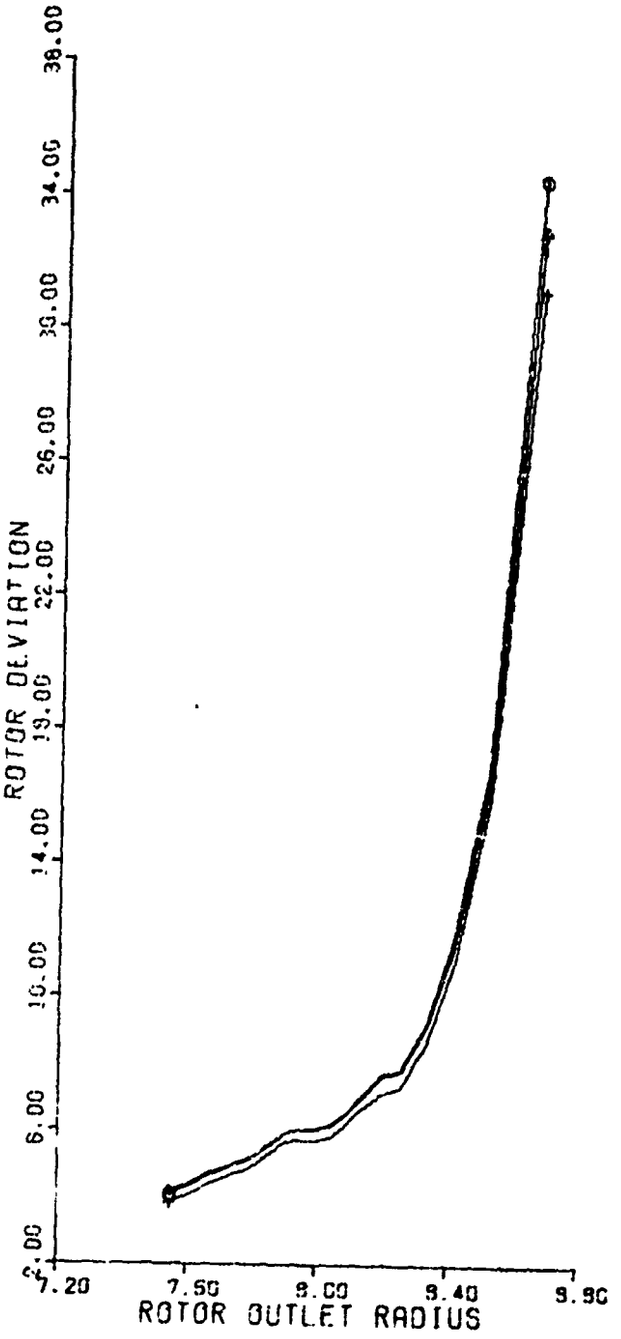


FIGURE 79. ROTOR DEVIATION VS OUTLET RADIUS (95% SPEED)

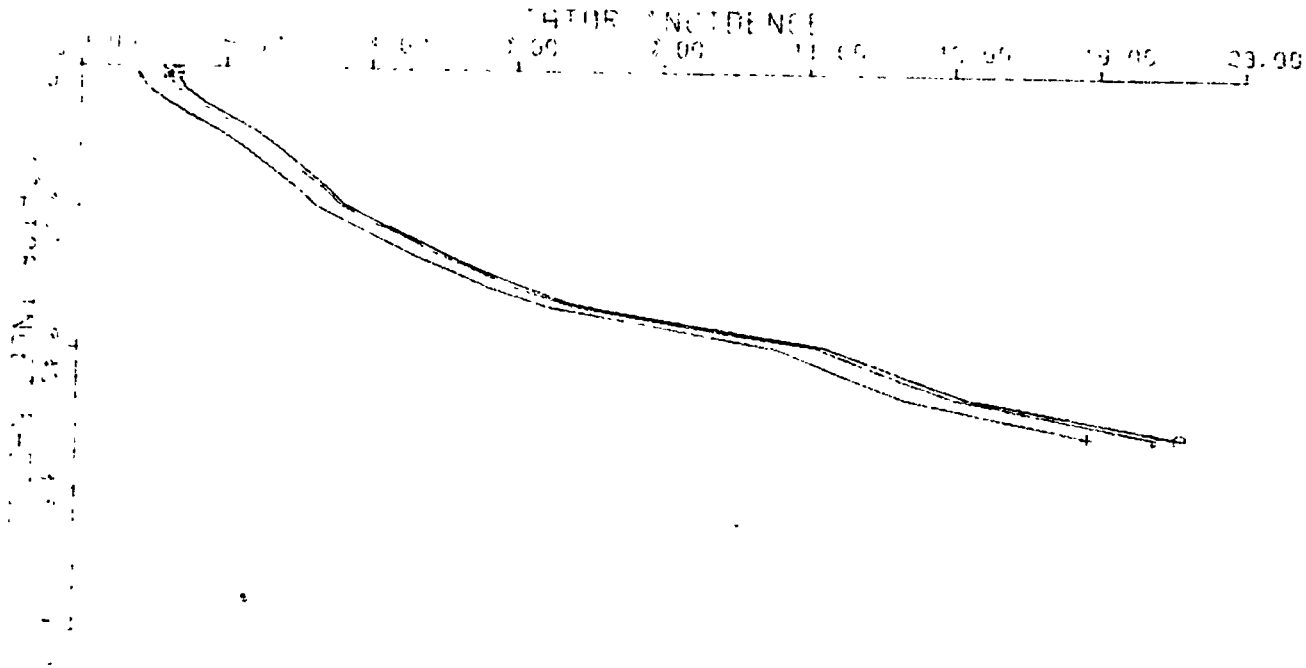


FIGURE 80. STATOR INCIDENCE VS INLET RADIUS
(95% SPEED)

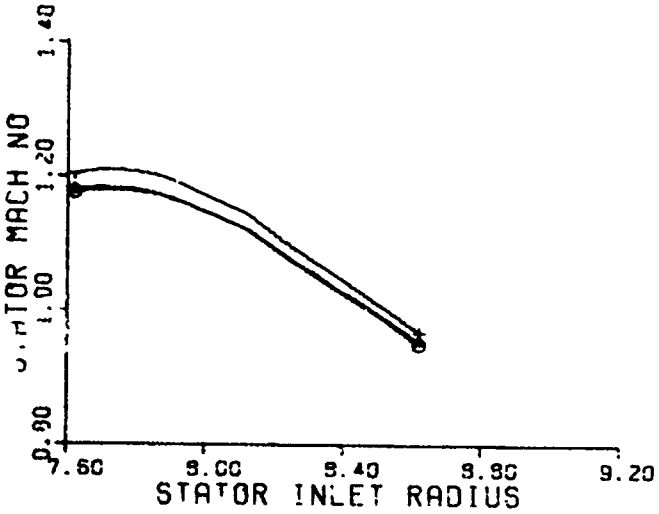


FIGURE 81. STATOR MACH NUMBER VS INLET RADIUS (95% SPEED)

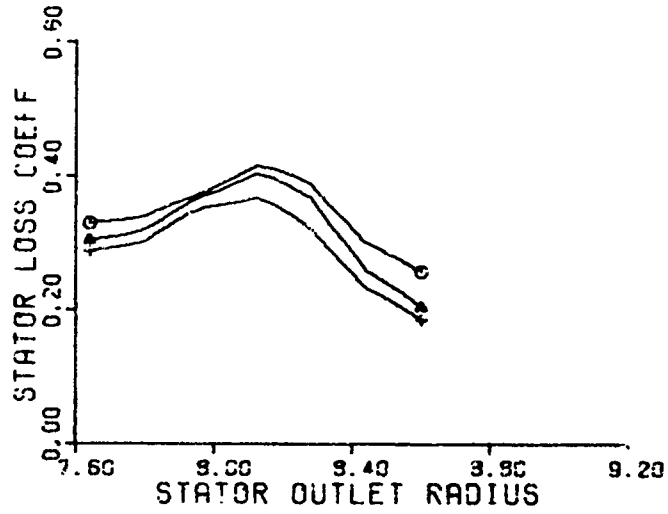


FIGURE 82. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (95% SPEED)

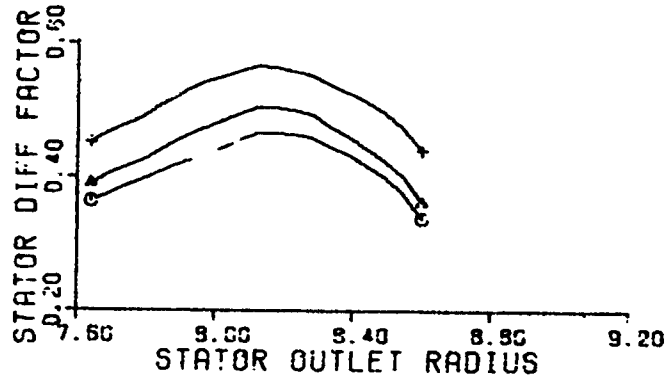


FIGURE 83. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (95% SPEED)

TABLE XIII

IDENTIFICATION OF SYMBOLS
FOR 100%-SPEED ACROSS-BLADE FIGURES

TEST IDENTIFICATION	SYMBOL
301231515600	ⓘ
301231615700	▽
301231315200	+
301231415400	×

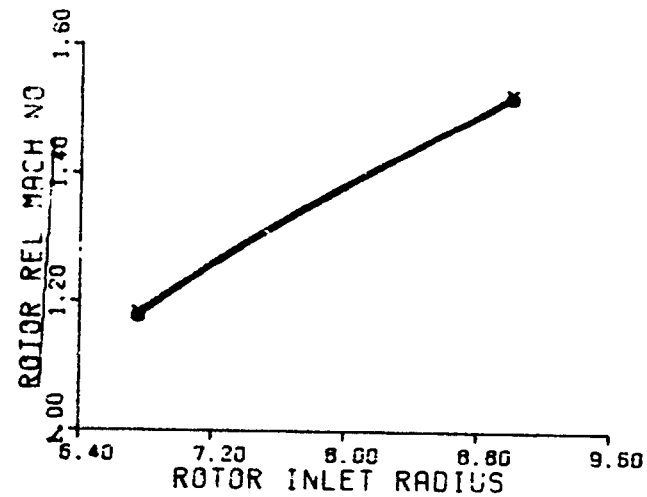


FIGURE 84. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (100% SPEED)

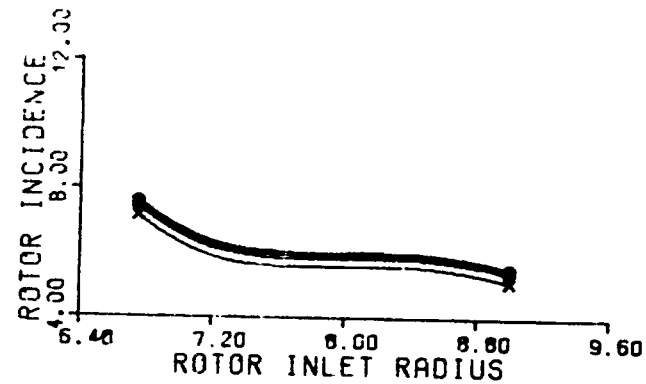


FIGURE 85. ROTOR INCIDENCE VS INLET RADIUS (100% SPEED)

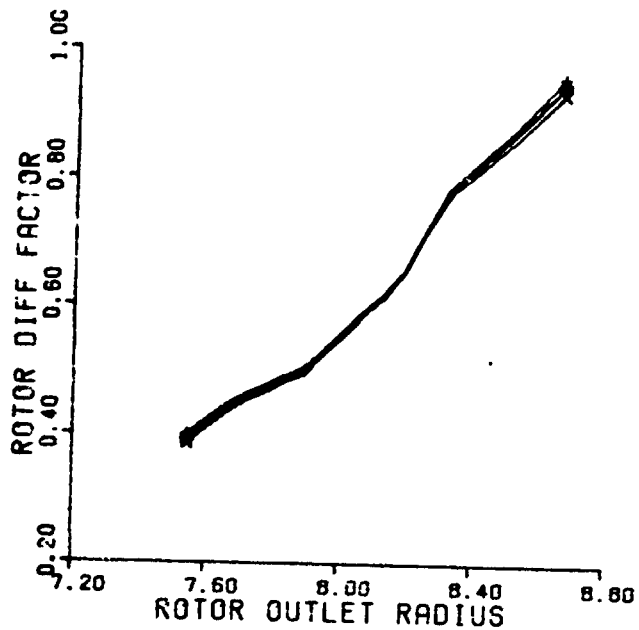


FIGURE 86. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (100% SPEED)

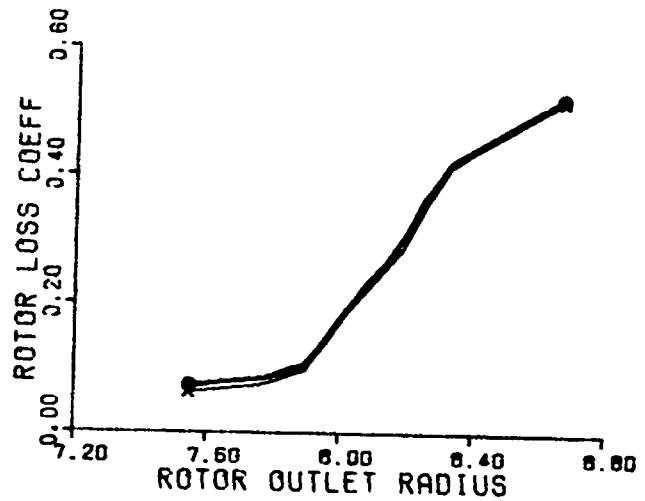


FIGURE 87. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (100% SPEED)

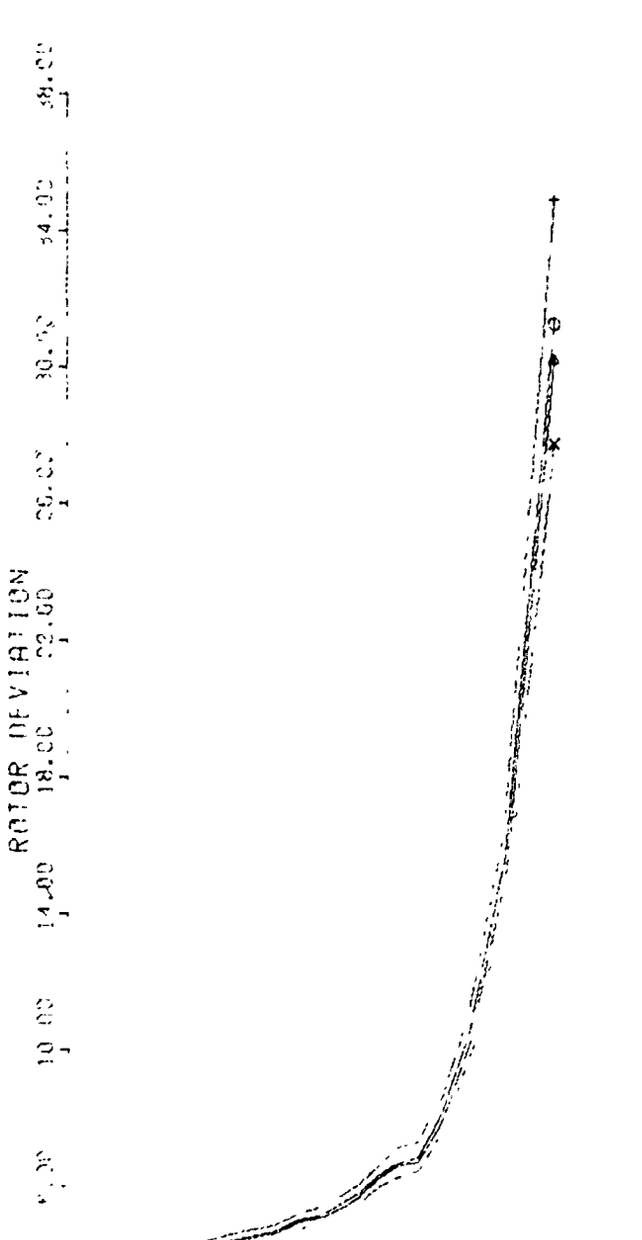


FIGURE 88. ROTOR DEVIATION VS OUTLET RADIUS (100% SPEED)

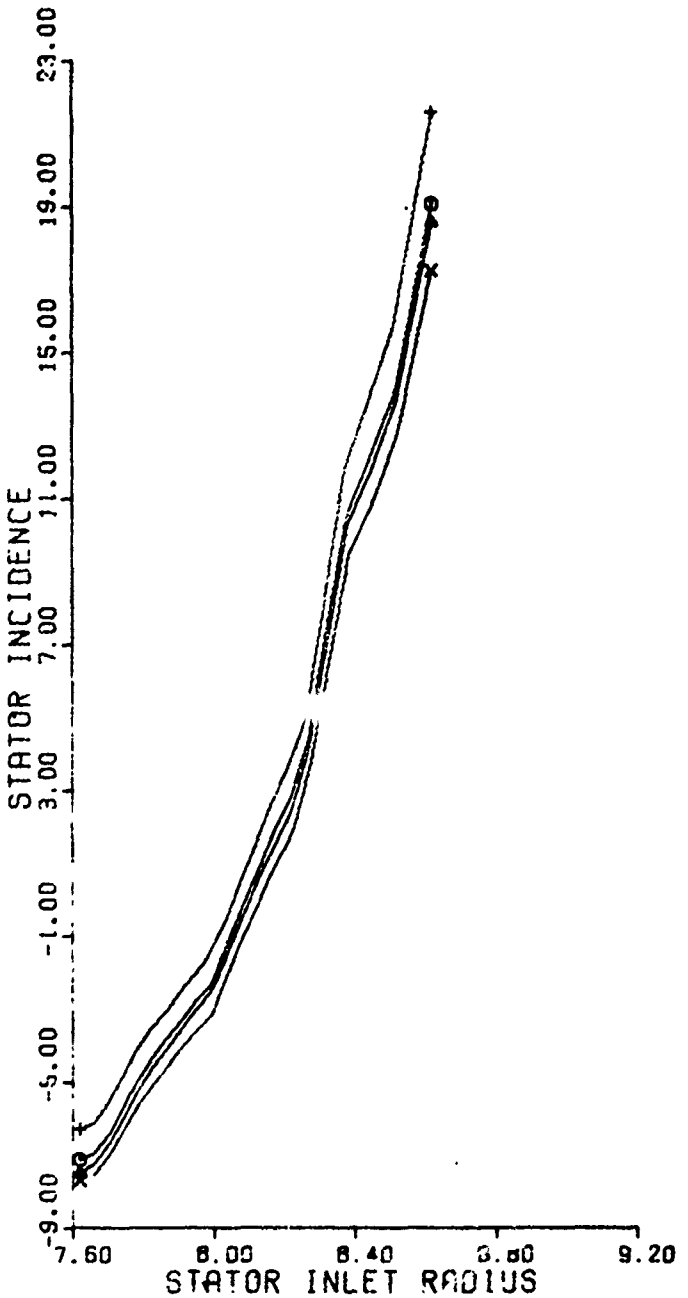


FIGURE 89. STATOR INCIDENCE VS INLET RADIUS (100% SPEED)

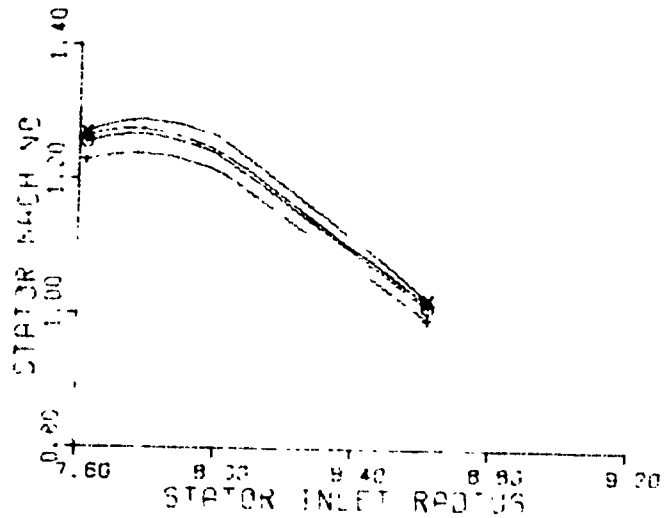


FIGURE 90. STATOR MACH NUMBER VS INLET RADIUS (100% SPEED)

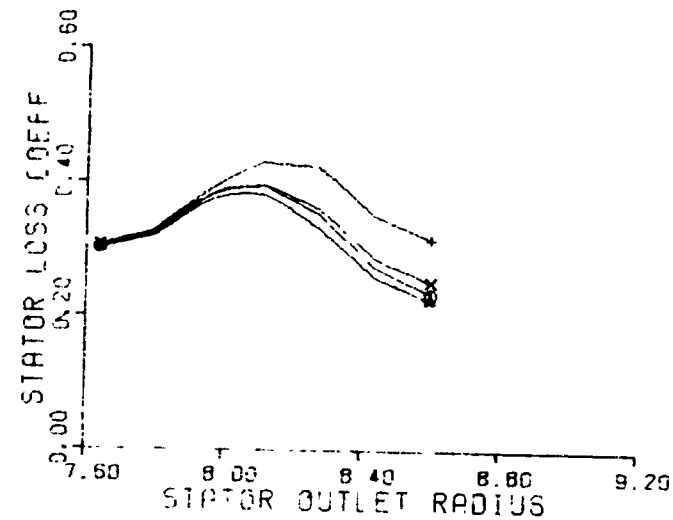


FIGURE 91. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (100% SPEED)

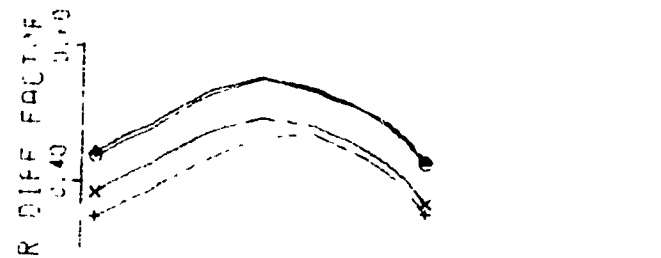


FIGURE 92. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (100% SPEED)

TABLE XIV

IDENTIFICATION OF SYMBOLS
FOR 102%-SPEED ACROSS-BLADE FIGURES

TEST IDENTIFICATION	SYMBOL
301240815302	ⓘ
301240915602	▽

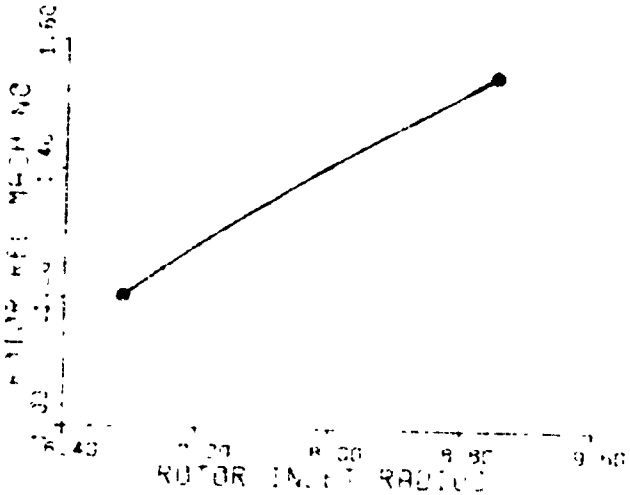


FIGURE 93. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (102% SPEED)

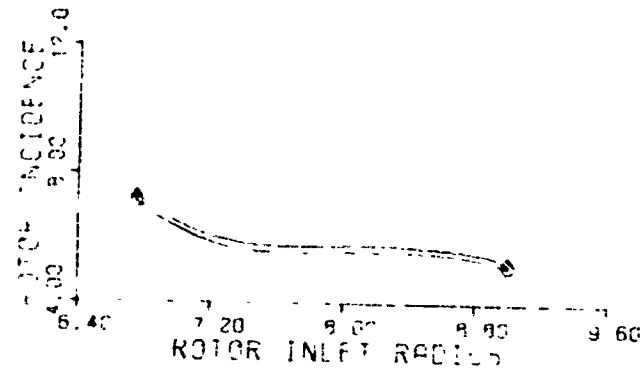


FIGURE 94. ROTOR INCIDENCE VS INLET RADIUS (102% SPEED)

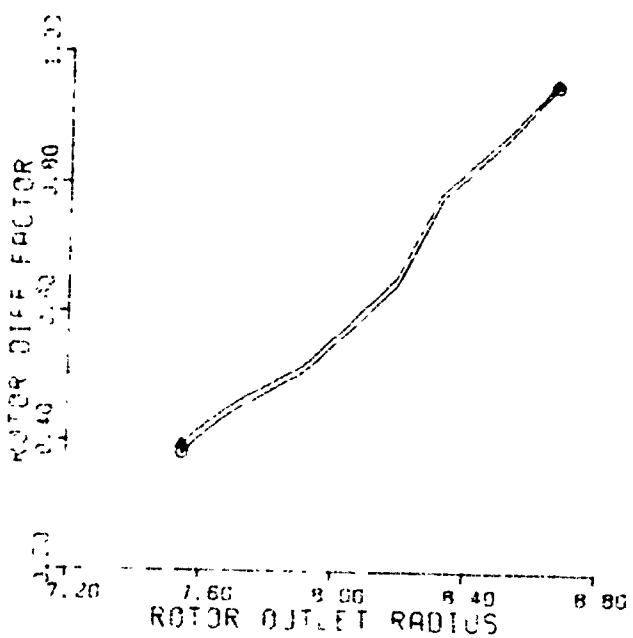


FIGURE 95. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (102% SPEED)

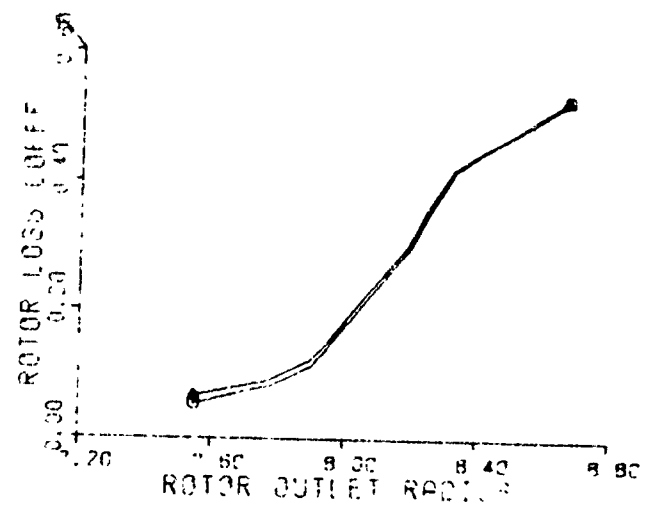


FIGURE 96. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (102% SPEED)

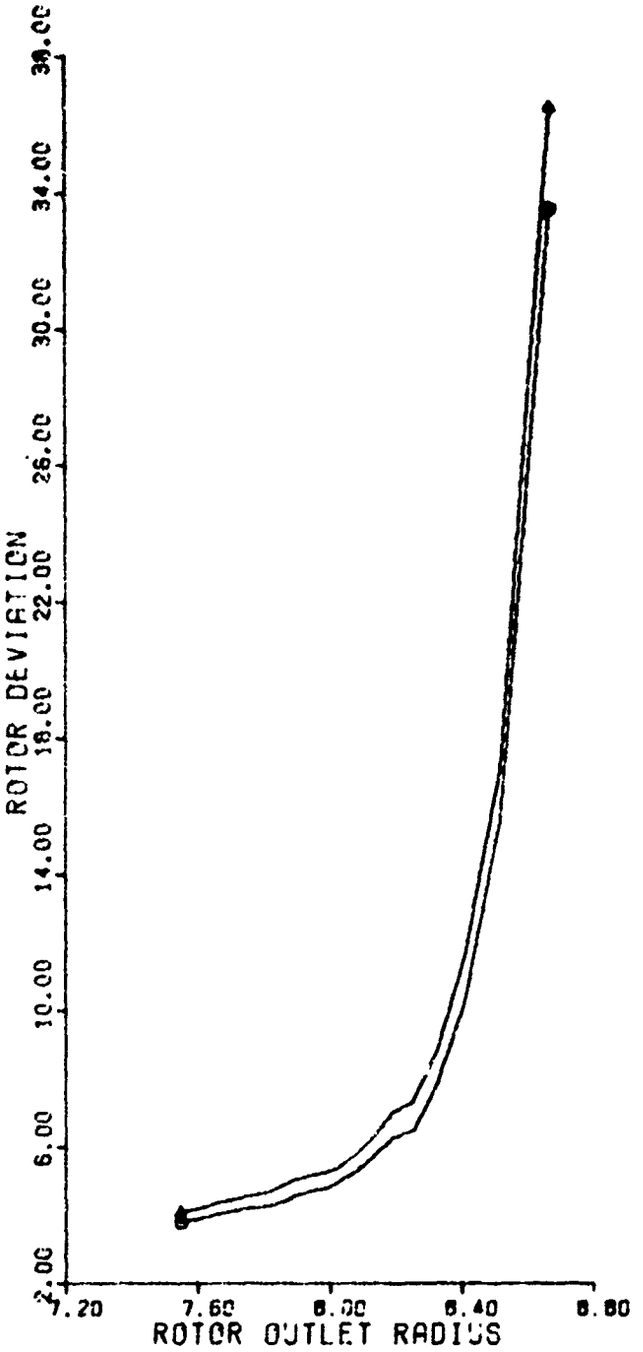


FIGURE 97. ROTOR DEVIATION VS OUTLET RADIUS (102% SPEED)

FIGURE 98. STATOR INCIDENCE VS INLET RADIUS (102% SPEED)

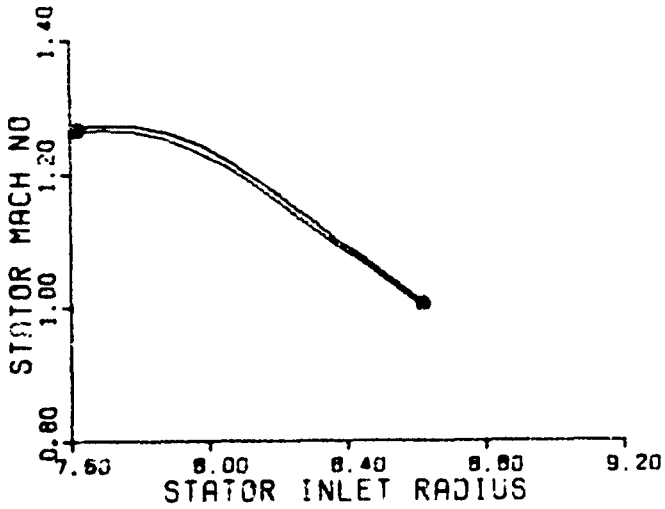


FIGURE 99. STATOR MACH NUMBER VS INLET RADIUS (102% SPEED)

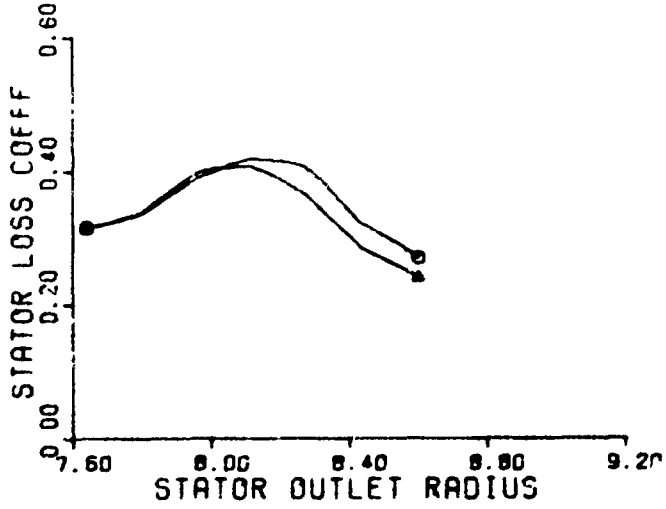


FIGURE 100. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (102% SPEED)

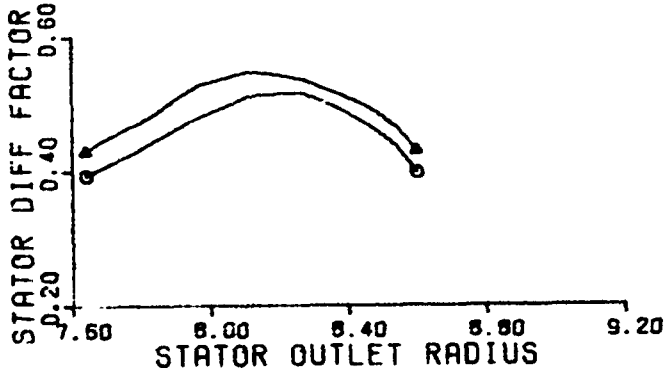


FIGURE 101. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (102% SPEED)

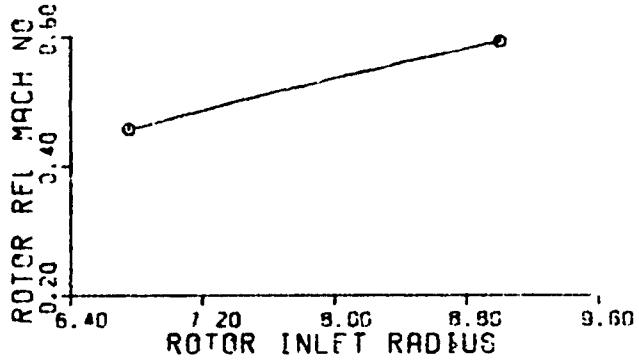


FIGURE 102. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 40% SPEED)

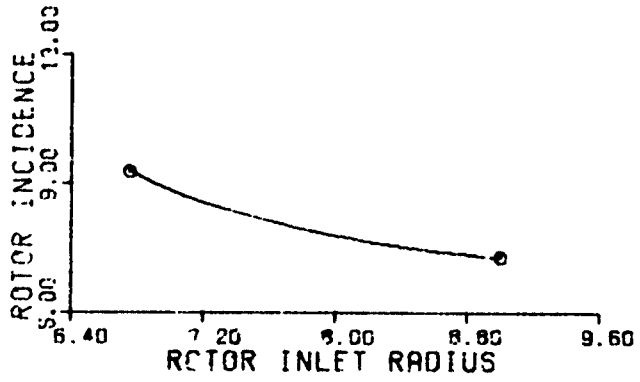


FIGURE 103. ROTOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 40% SPEED)

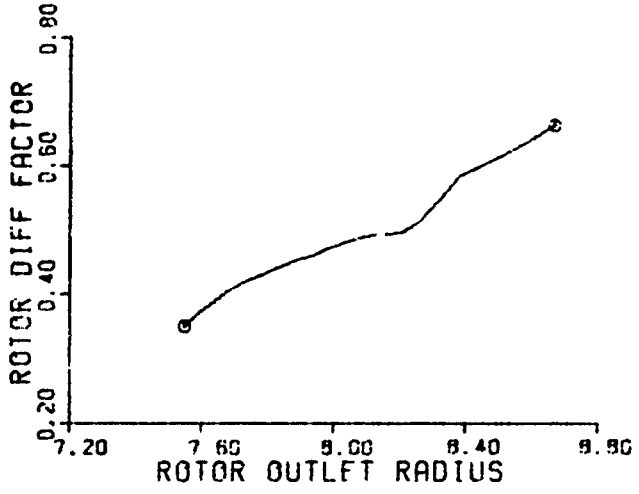


FIGURE 104. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 40% SPEED)

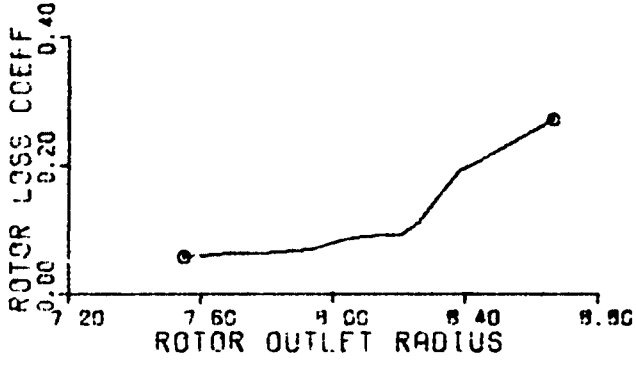


FIGURE 105. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 40% SPEED)

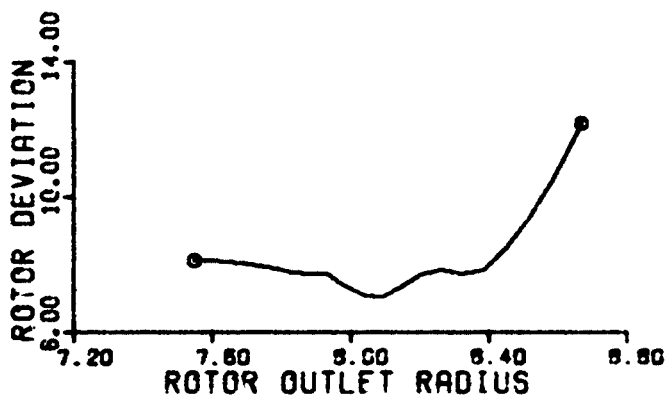


FIGURE 106. ROTOR DEVIATION VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 40% SPEED)

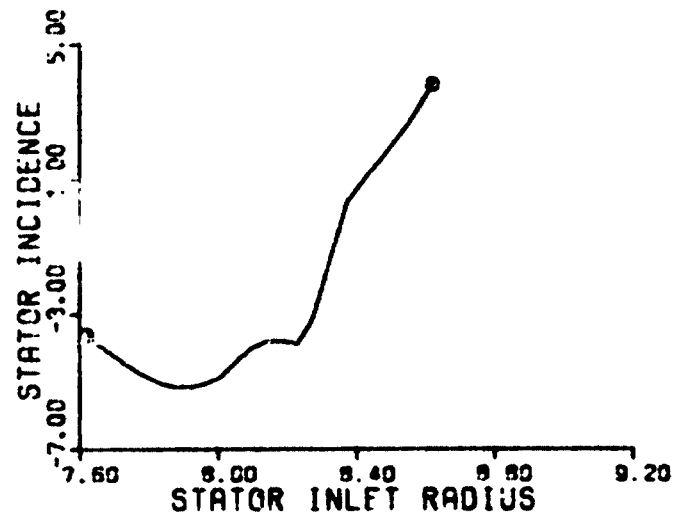


FIGURE 107. STATOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 40% SPEED)

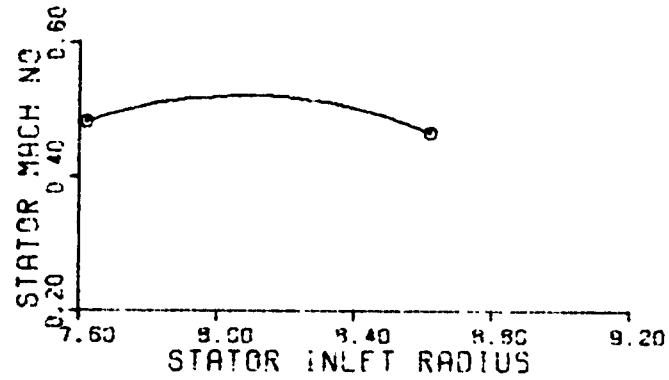


FIGURE 108. STATOR MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 40% SPEED)

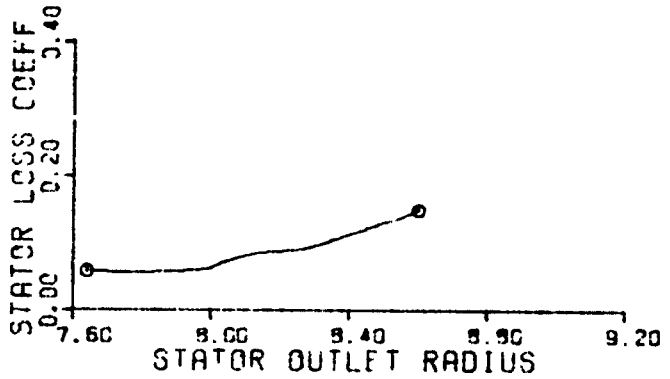


FIGURE 109. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 40% SPEED)

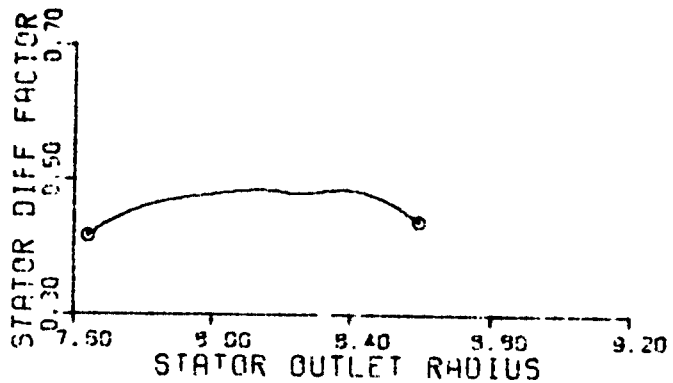


FIGURE 110. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 40% SPEED)

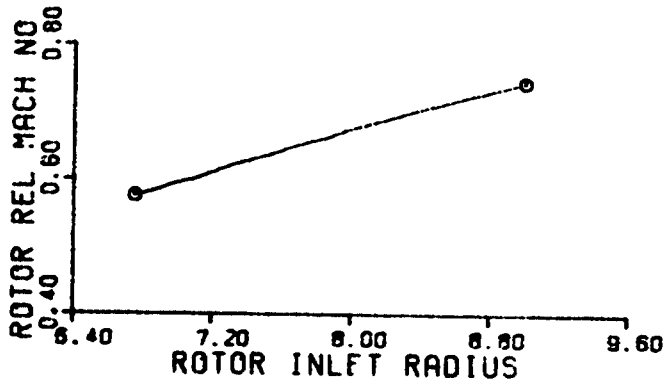


FIGURE 111. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (WITHIN BLADE ANALYSIS, 50% SPEED)

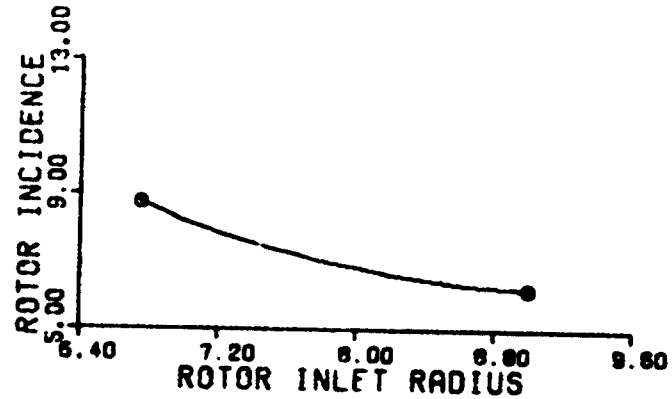


FIGURE 112. ROTOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 50% SPEED)

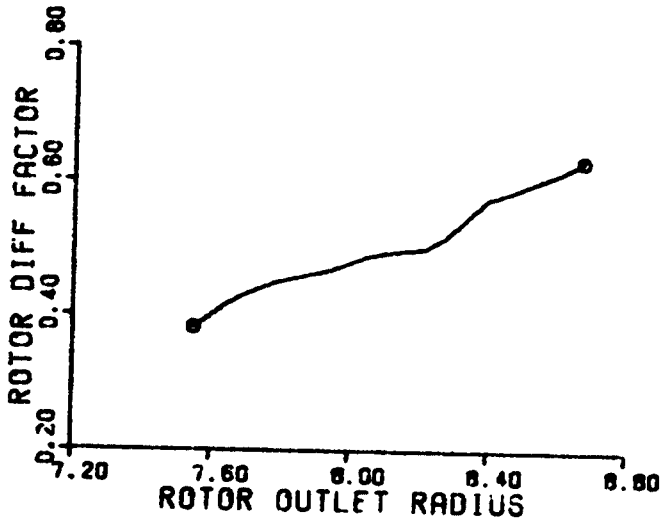


FIGURE 113. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 50% SPEED)

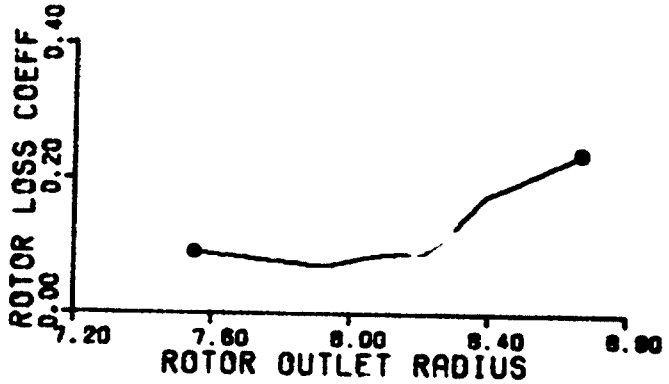


FIGURE 114. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 50% SPEED)

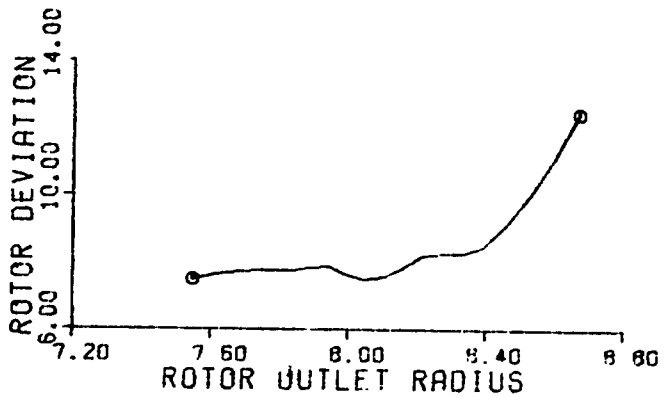


FIGURE 115. ROTOR DEVIATION VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 50% SPEED)

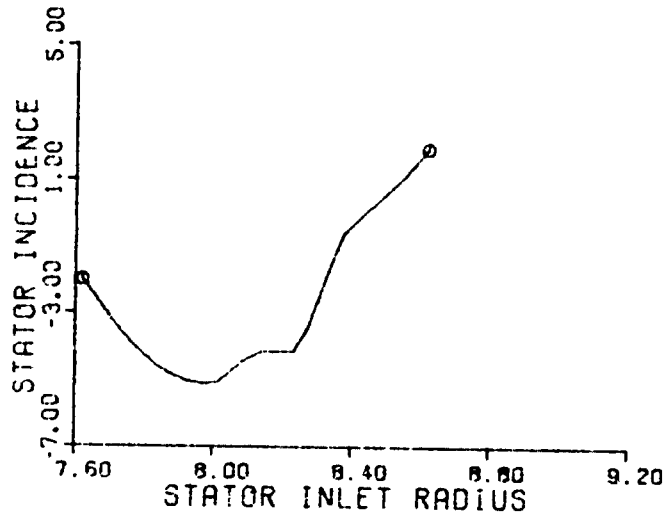


FIGURE 116. STATOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 50% SPEED)

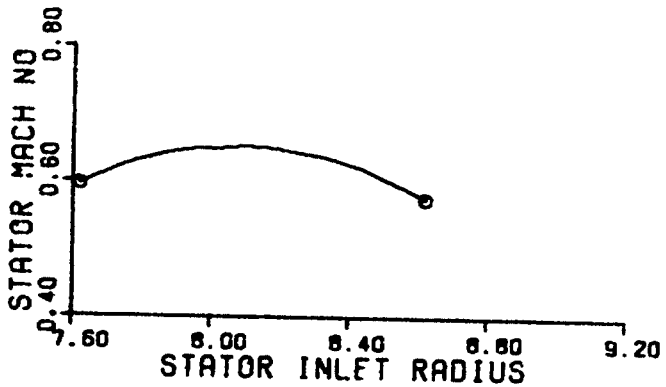


FIGURE 117. STATOR MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 50% SPEED)

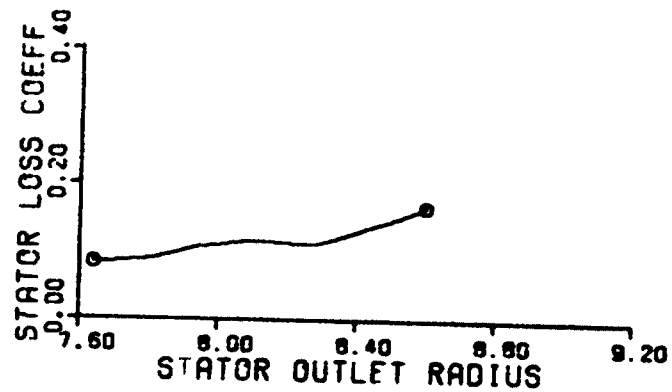


FIGURE 118. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 50% SPEED)

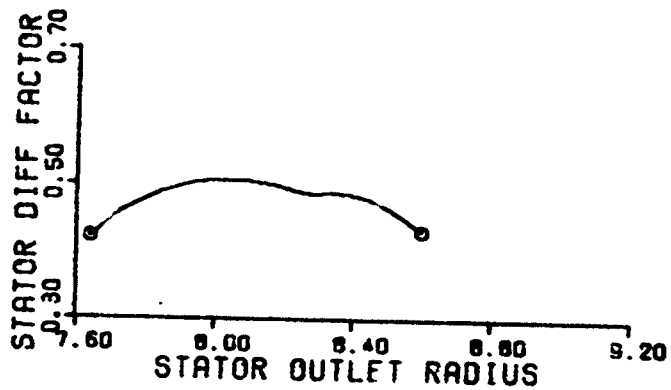


FIGURE 119. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 50% SPEED)

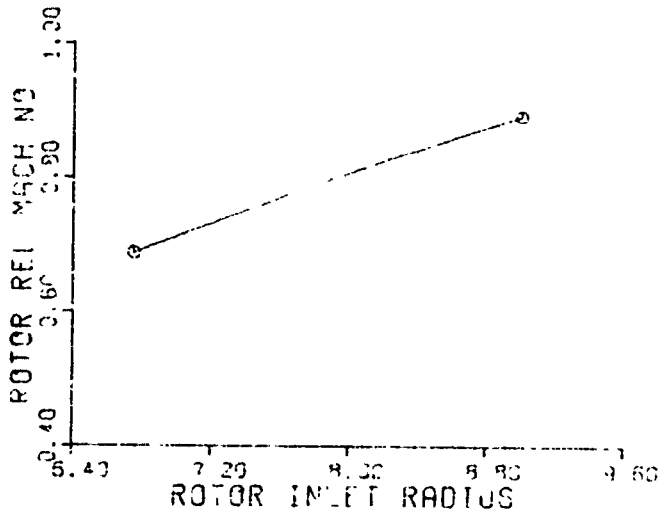


FIGURE 120. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 60% SPEED)

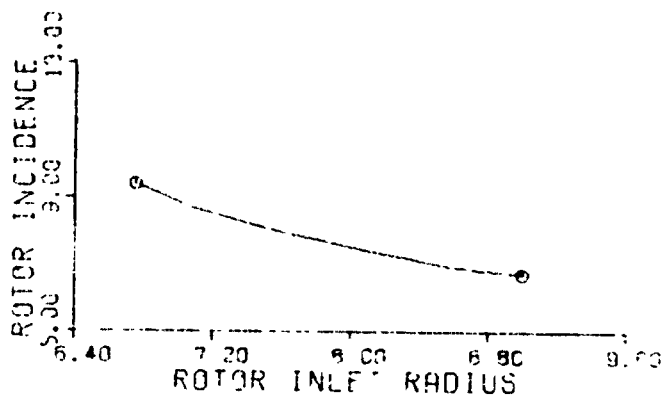


FIGURE 121. ROTOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 60% SPEED)

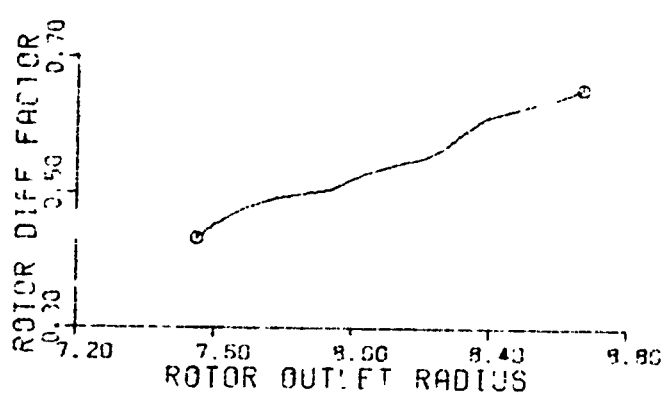


FIGURE 122. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 60% SPEED)

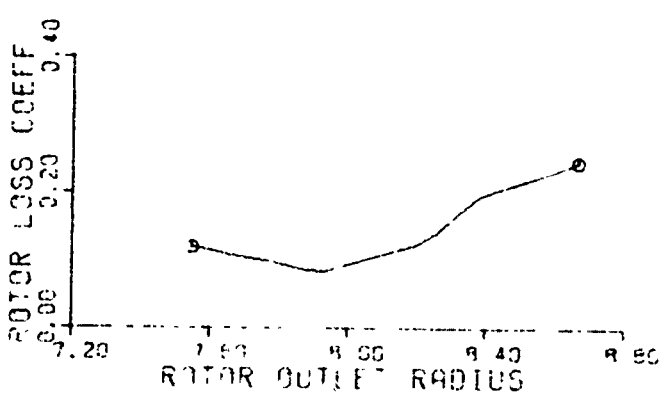


FIGURE 123. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 60% SPEED)

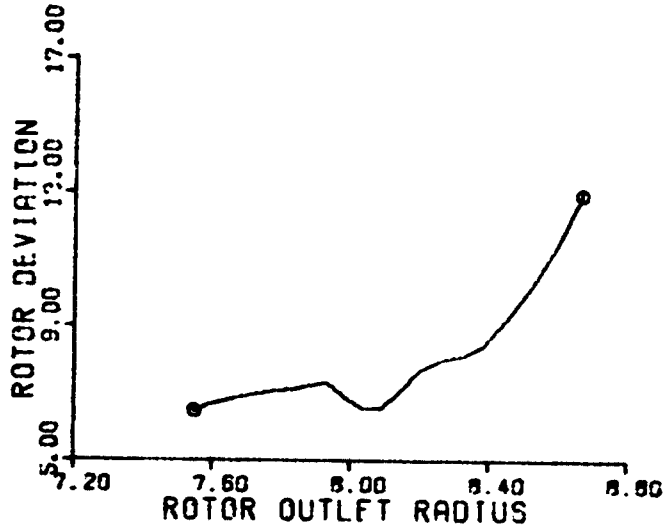


FIGURE 124. ROTOR DEVIATION VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 60% SPEED)

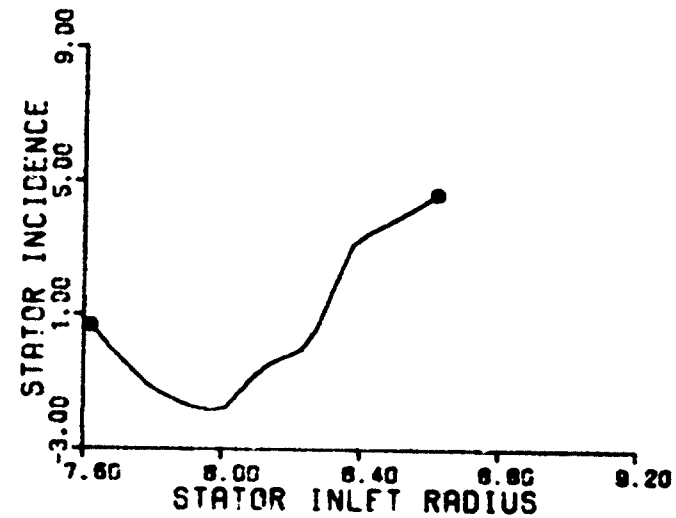


FIGURE 125. STATOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 60% SPEED)

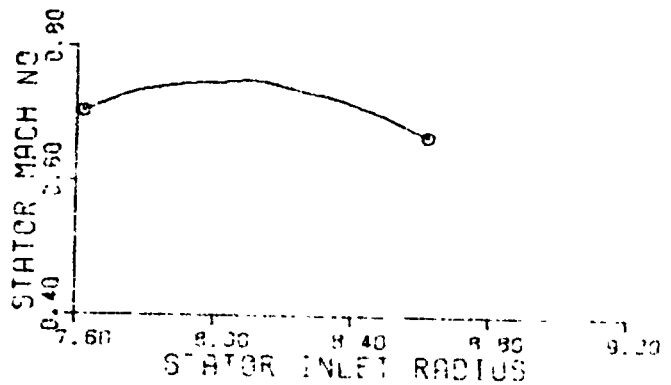


FIGURE 126. STATOR MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 60% SPEED)

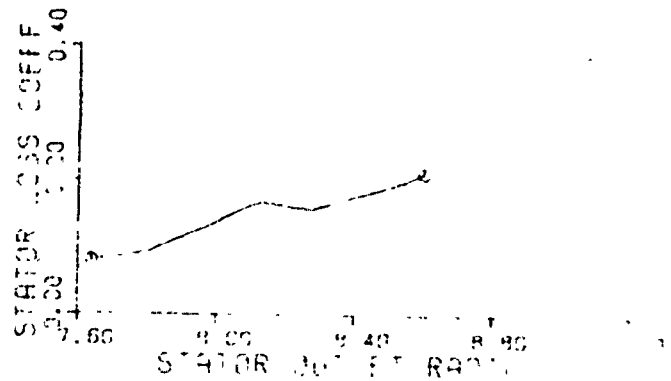


FIGURE 127. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 60% SPEED)

FIGURE 128. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 60% SPEED)

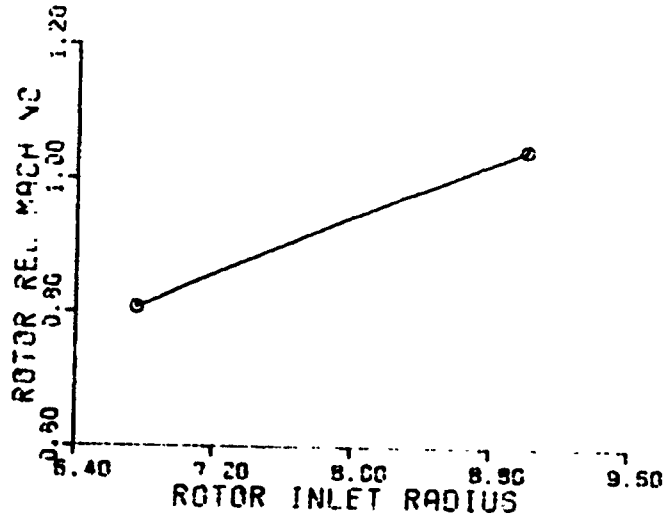


FIGURE 129. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 70% SPEED)

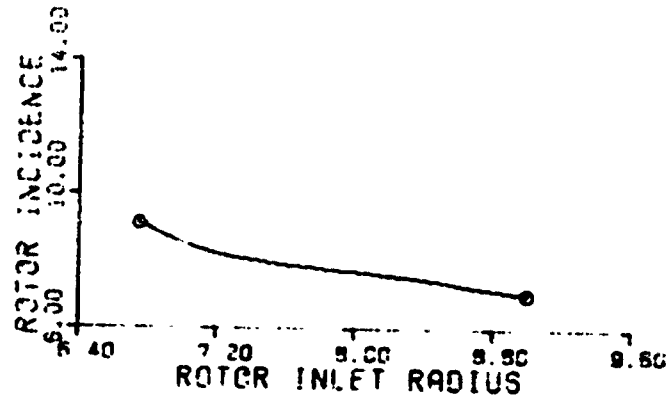


FIGURE 130. ROTOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 70% SPEED)

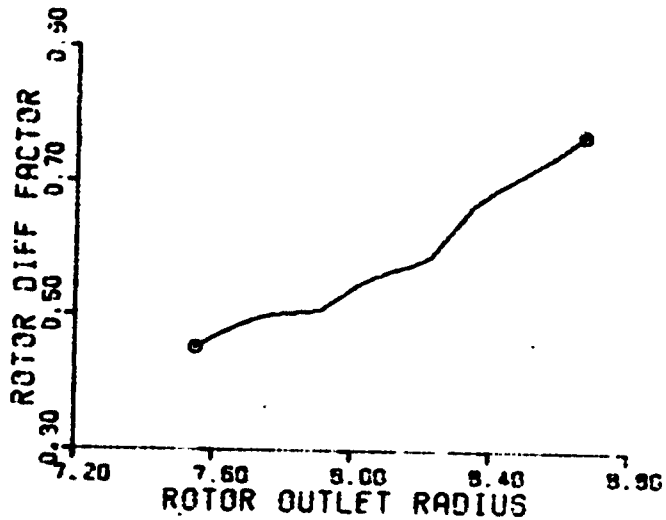


FIGURE 131. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 70% SPEED)

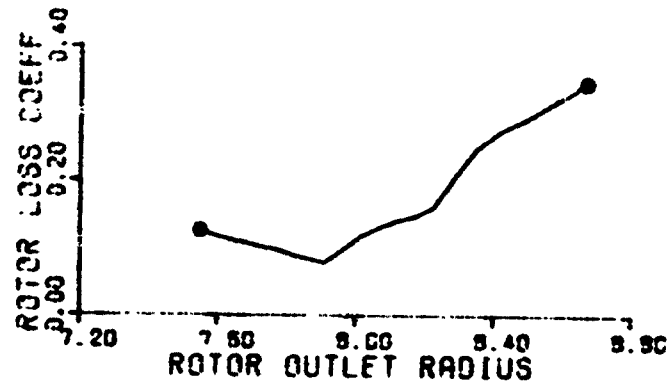


FIGURE 132. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 70% SPEED)

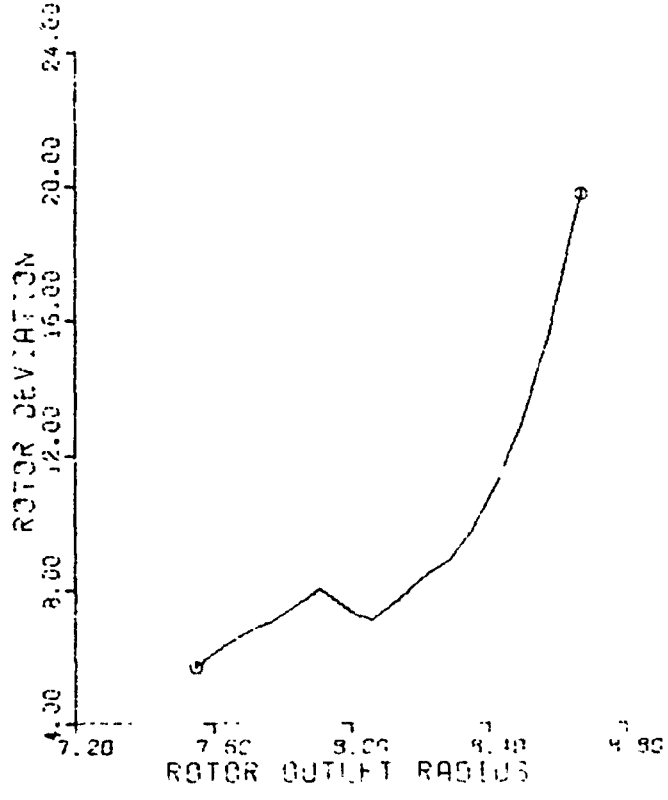


FIGURE 133. ROTOR DEVIATION VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 70% SPEED)

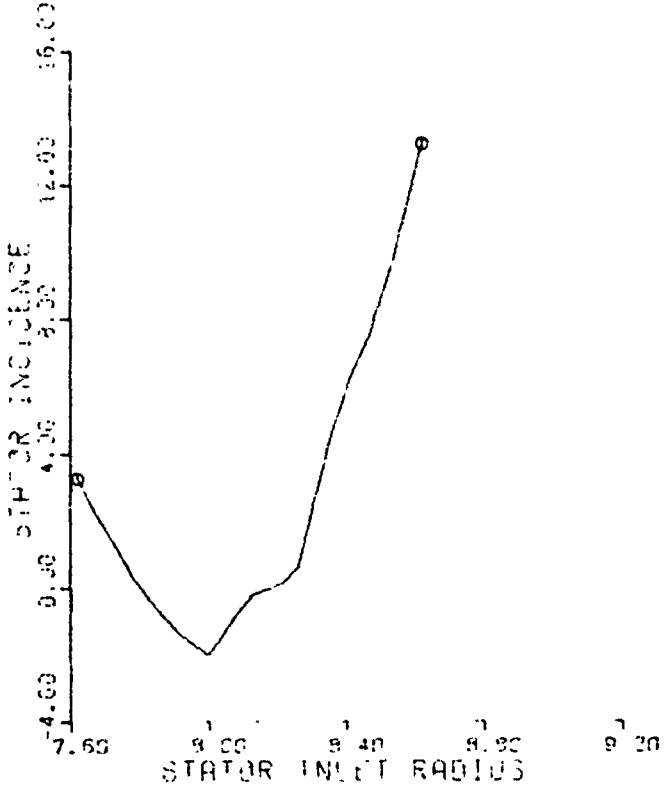


FIGURE 134. STATOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 70% SPEED)

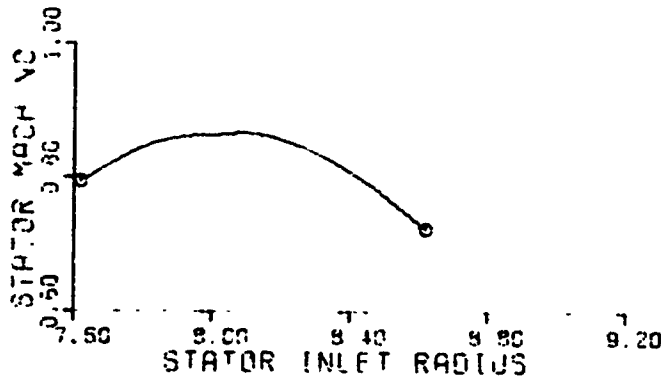


FIGURE 135. STATOR MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 70% SPEED)

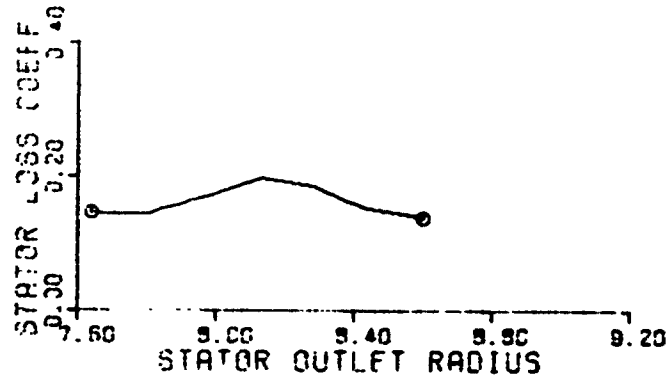


FIGURE 136. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 70% SPEED)

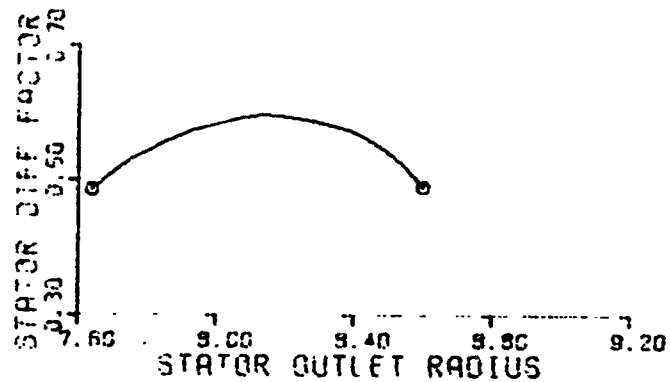


FIGURE 137. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 70% SPEED)

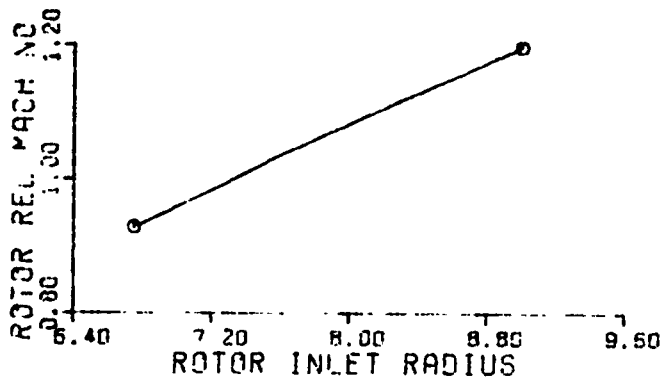


FIGURE 138. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 80% SPEED)

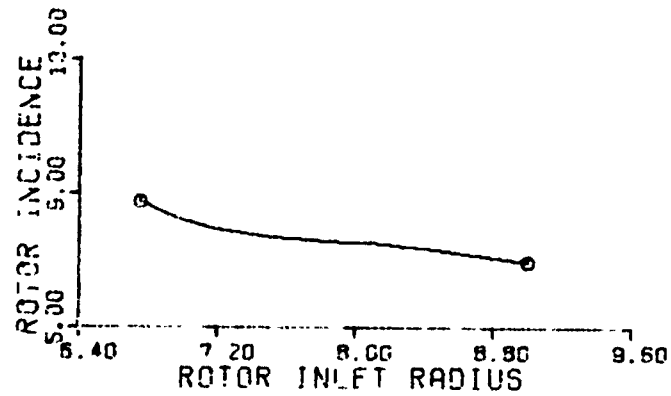


FIGURE 139. ROTOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 80% SPEED)

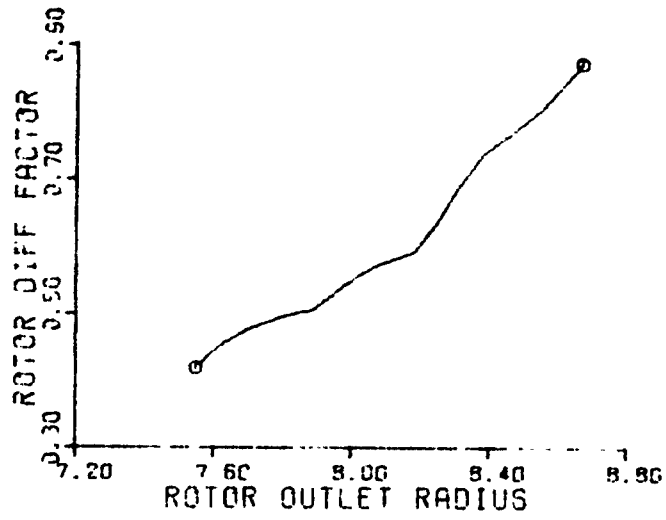


FIGURE 140. ROTOR DIFFUSION FACTOR VS CUTLET RADIUS (WITHIN-BLADE ANALYSIS, 80% SPEED)

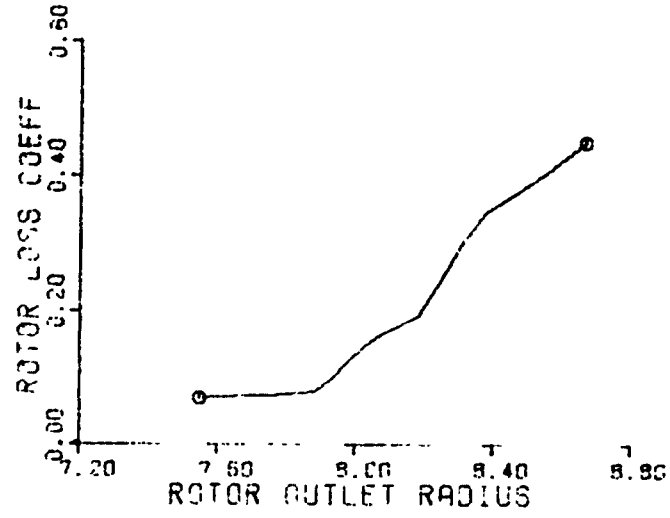


FIGURE 141. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 80% SPEED)

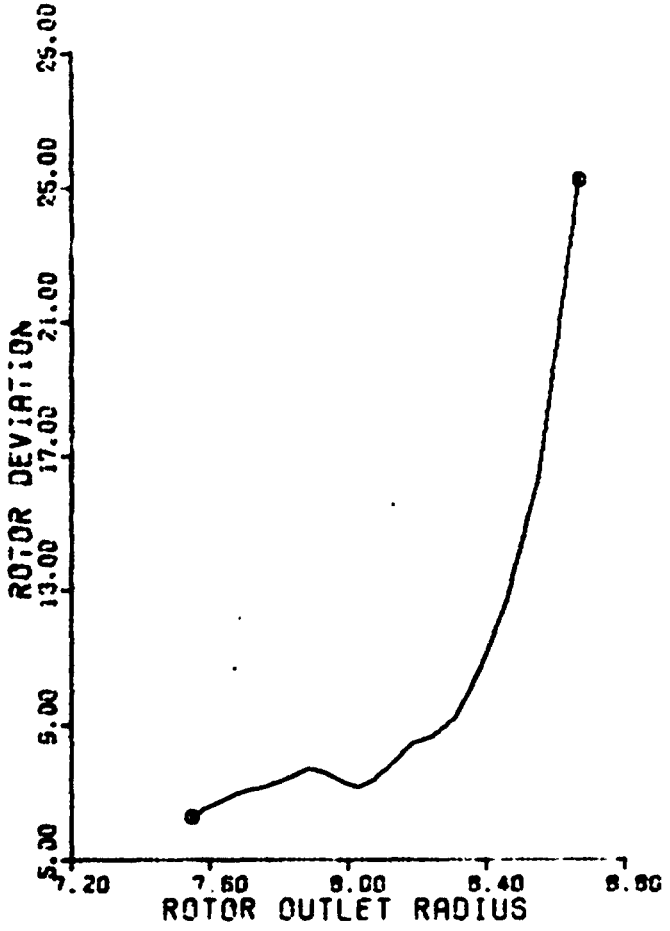


FIGURE 142. ROTOR DEVIATION VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 80% SPEED)

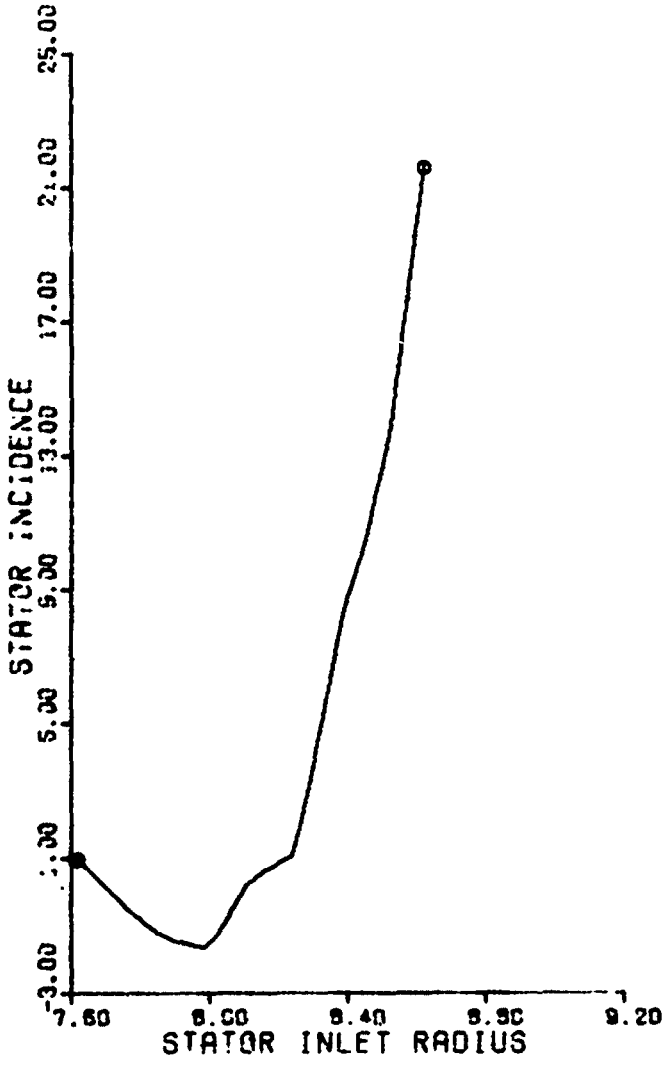


FIGURE 143. STATOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 80% SPEED)

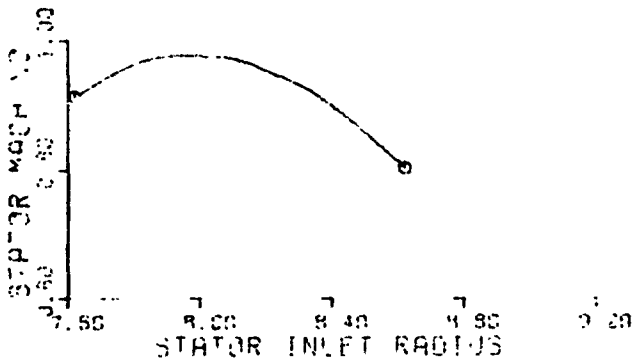


FIGURE 144. STATOR MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 80% SPEED)

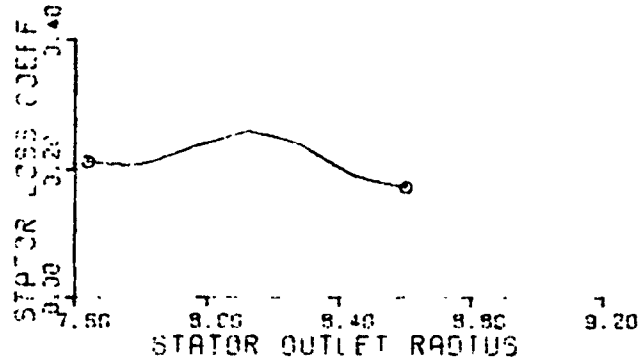


FIGURE 145. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 80% SPEED)

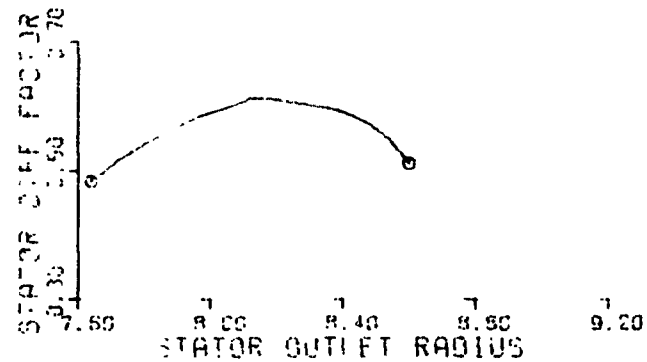


FIGURE 146. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 80% SPEED)

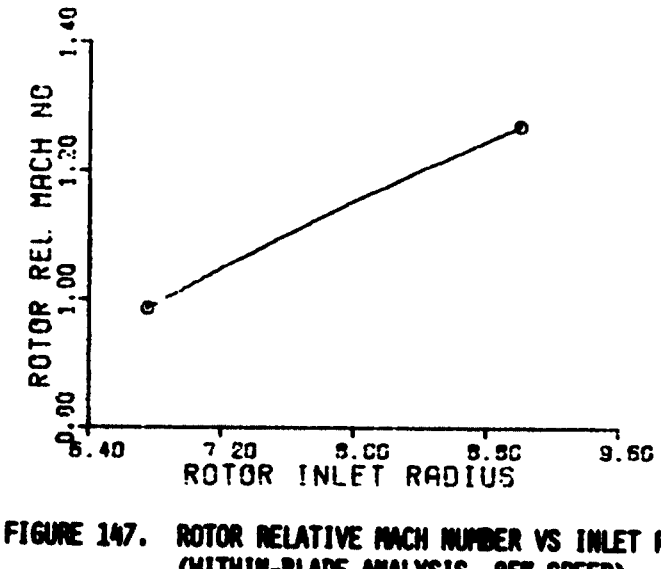


FIGURE 147. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 85% SPEED)

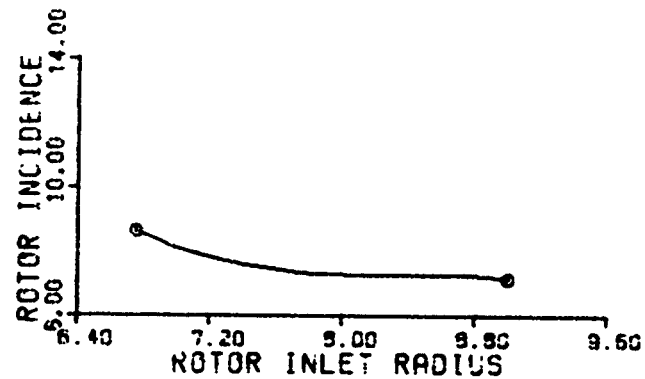


FIGURE 148. ROTOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 85% SPEED)

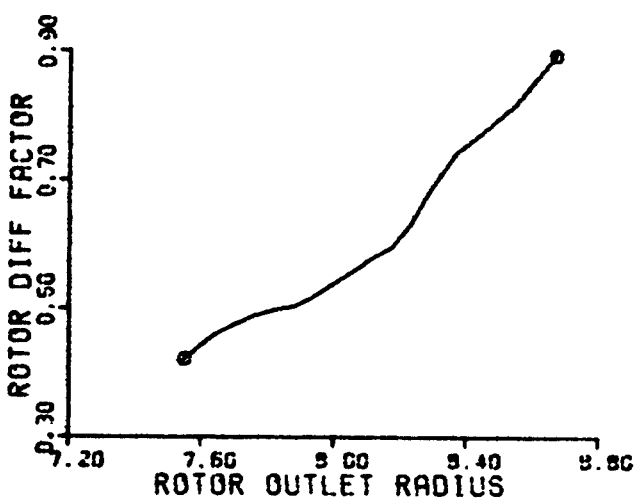


FIGURE 149. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 85% SPEED)

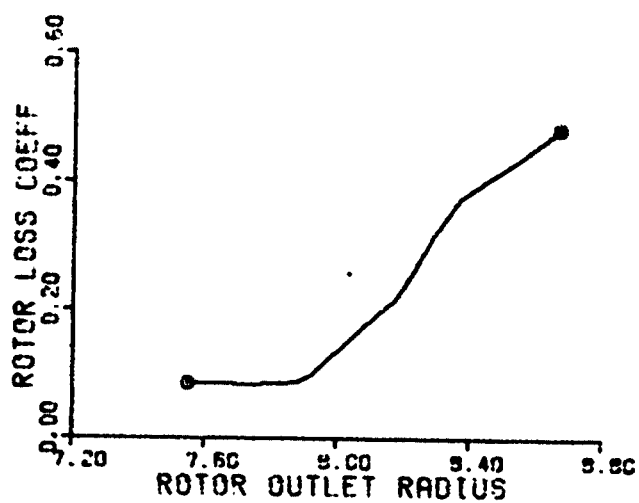


FIGURE 150. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 85% SPEED)

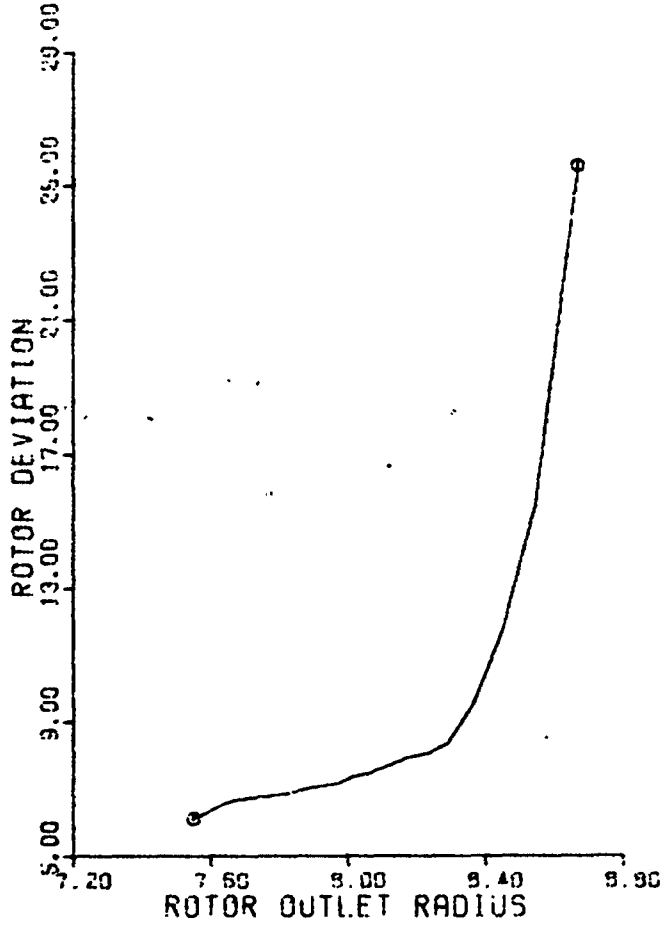


FIGURE 151. ROTOR DEVIATION VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 85% SPEED)

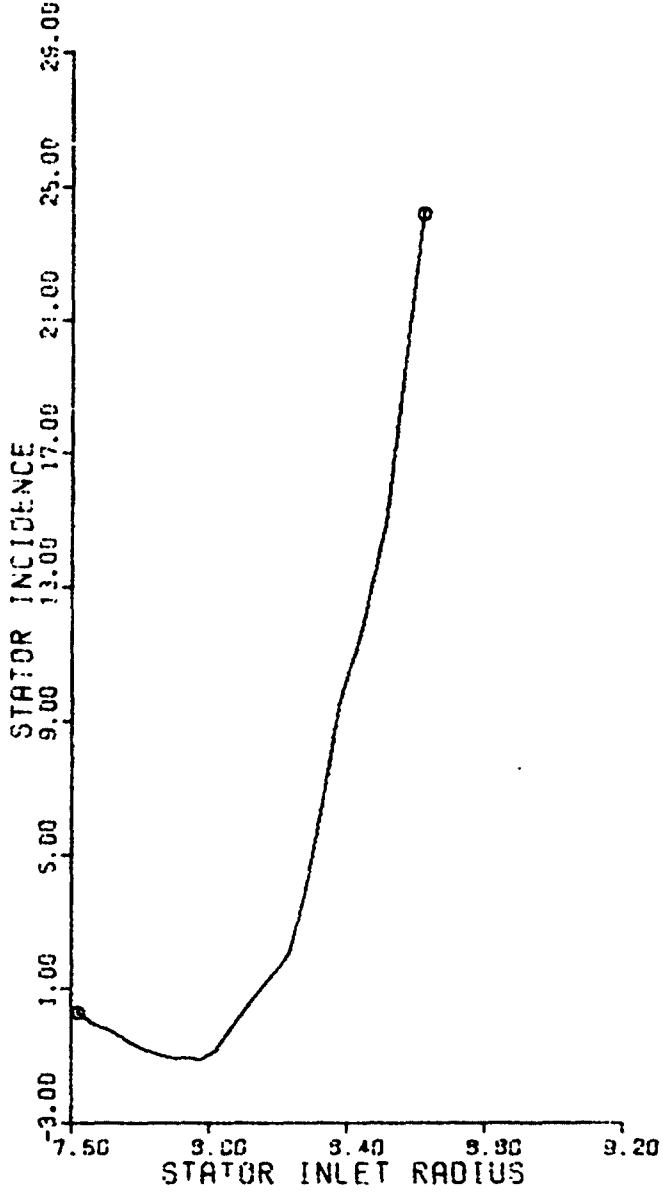


FIGURE 152. STATOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 85% SPEED)

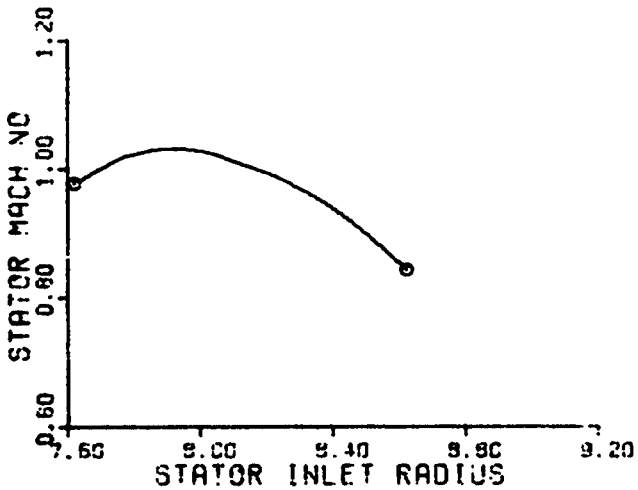


FIGURE 153. STATOR MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 85% SPEED)

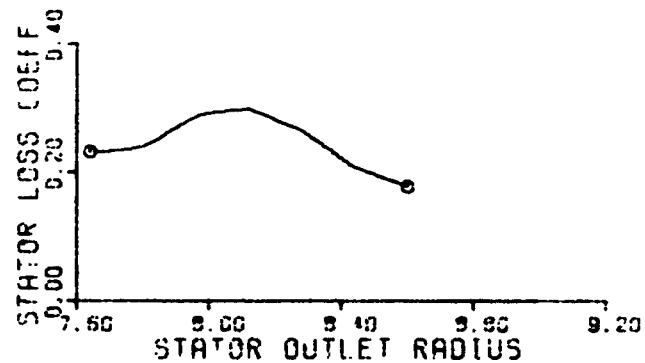


FIGURE 154. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 85% SPEED)

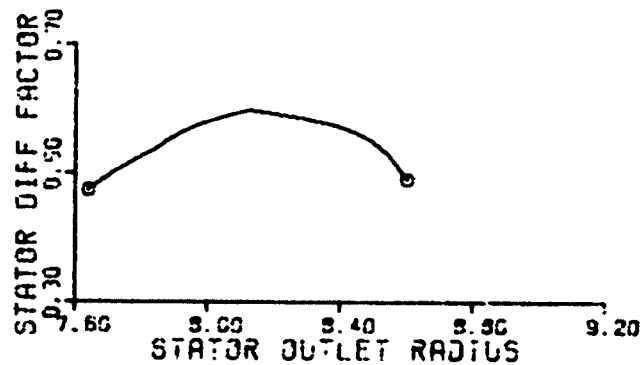


FIGURE 155. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 85% SPEED)

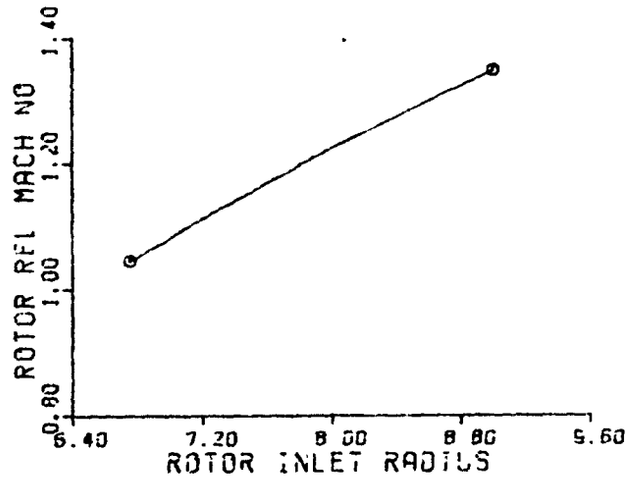


FIGURE 156. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 90% SPEED)

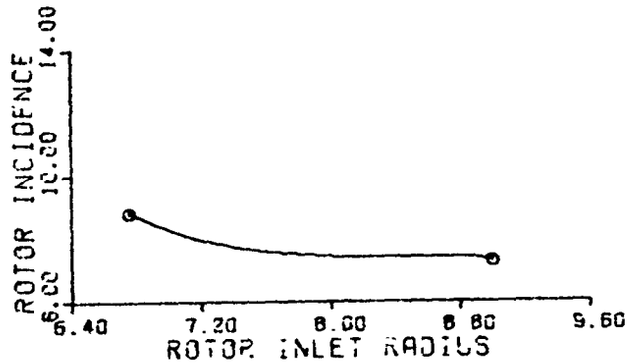


FIGURE 157. ROTOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 90% SPEED)

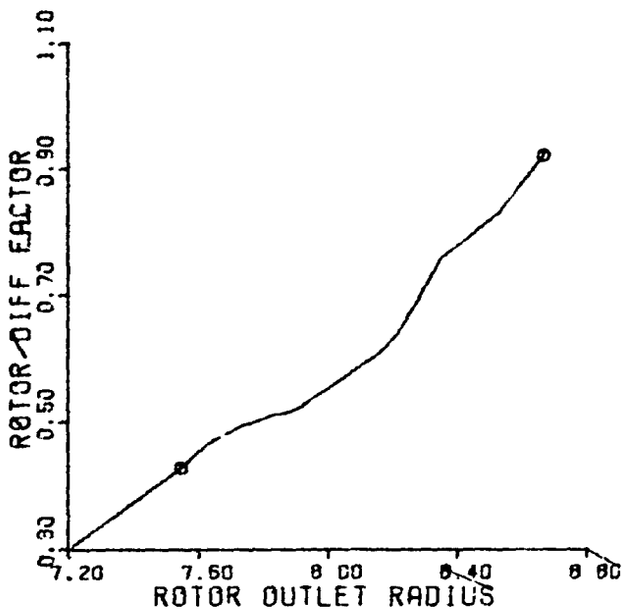


FIGURE 158. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 90% SPEED)

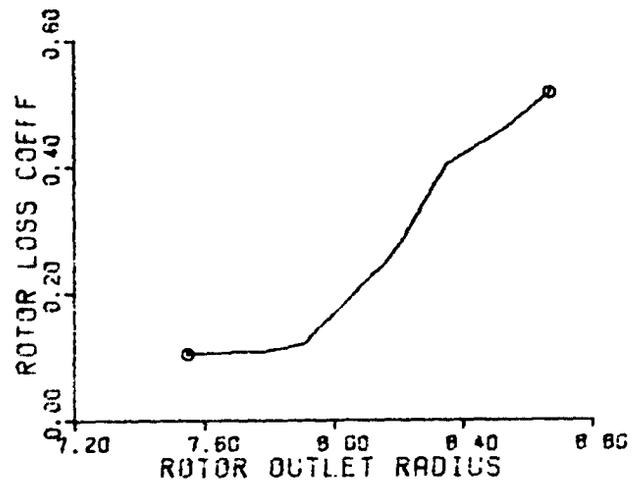


FIGURE 159. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 90% SPEED)

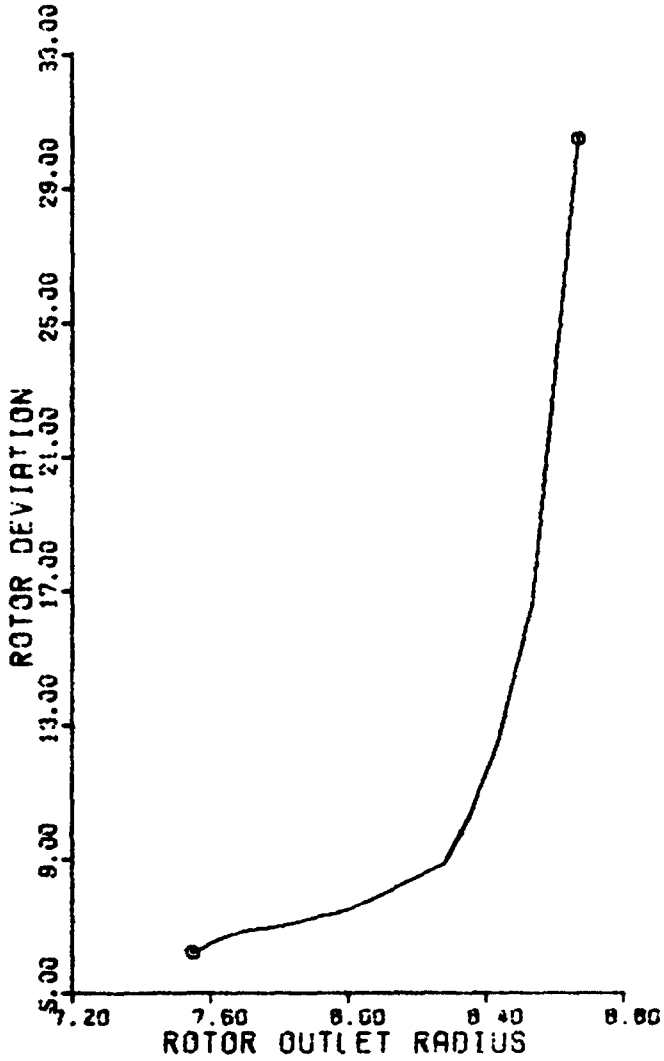


FIGURE 160. ROTOR DEVIATION VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 90% SPEED)

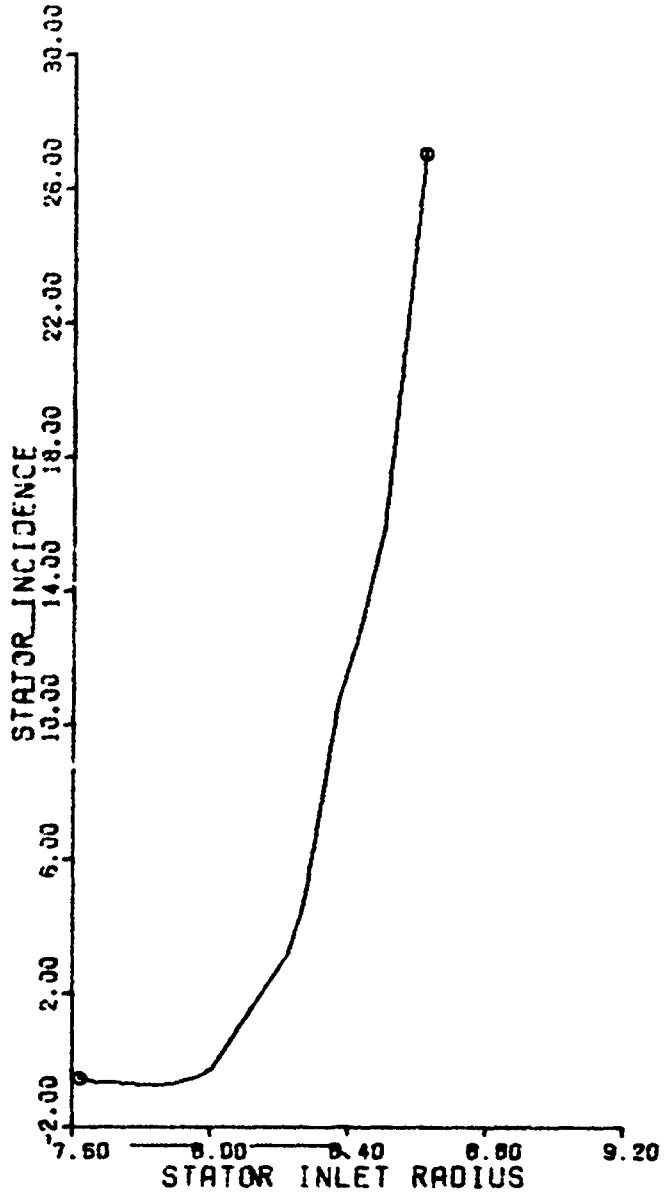


FIGURE 161. STATOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS. 90% SPEED)

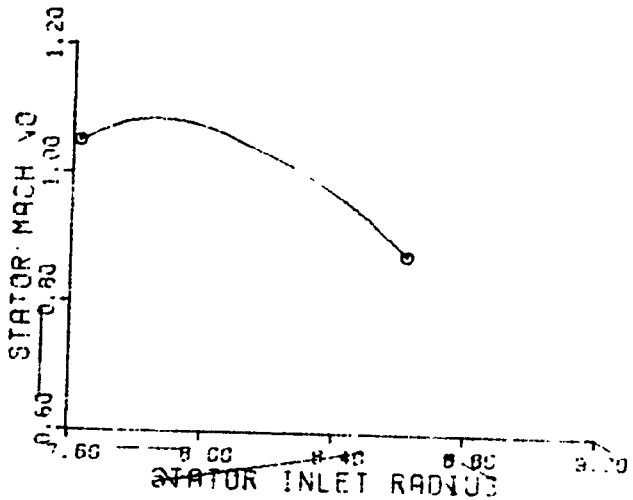


FIGURE 162. STATOR MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 90% SPEED)

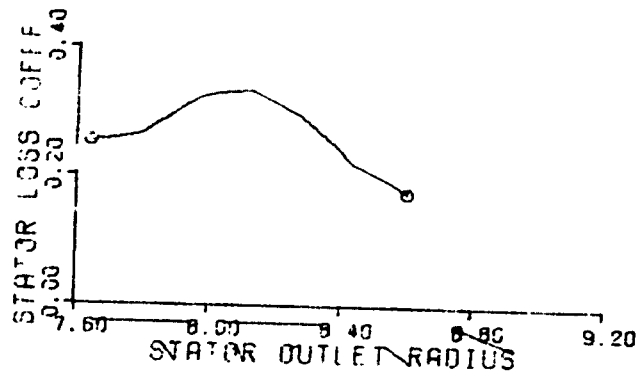


FIGURE 163. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 90% SPEED)

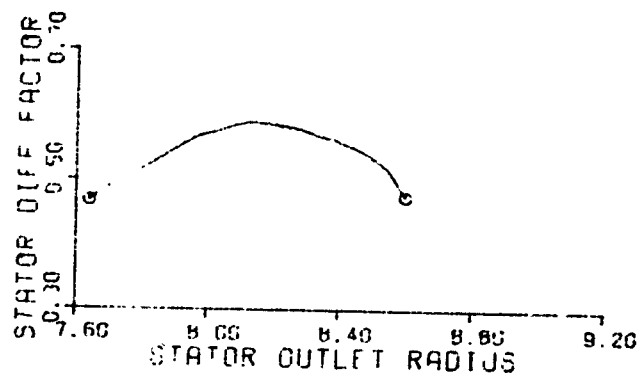


FIGURE 164. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 90% SPEED)

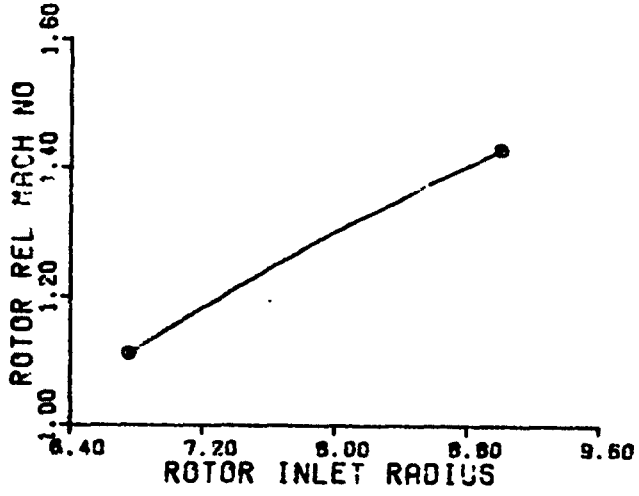


FIGURE 165. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 95% SPEED)

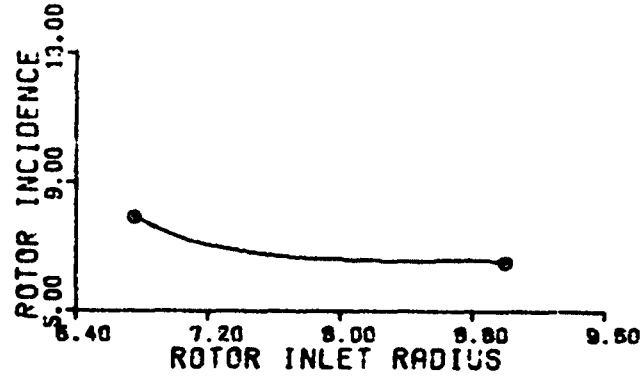


FIGURE 166. ROTOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 95% SPEED)

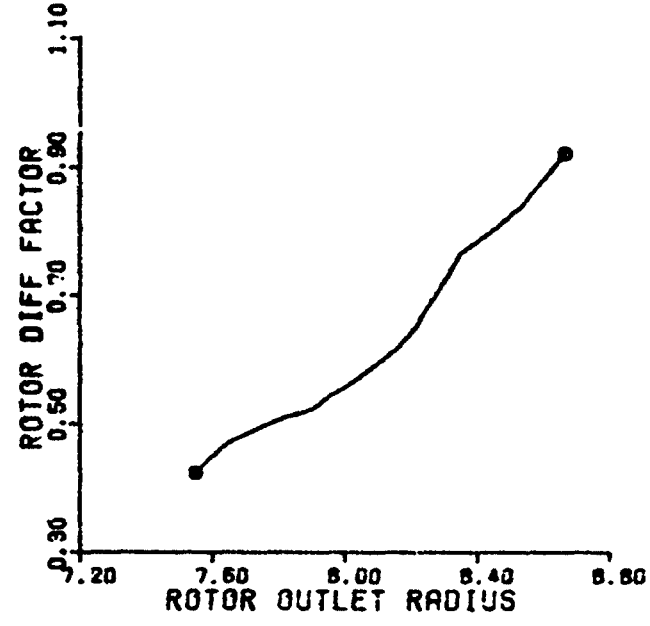


FIGURE 167. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 95% SPEED)

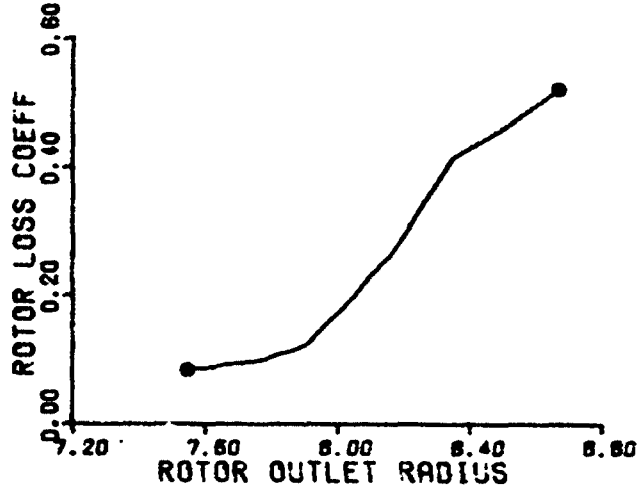


FIGURE 168. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 95% SPEED)

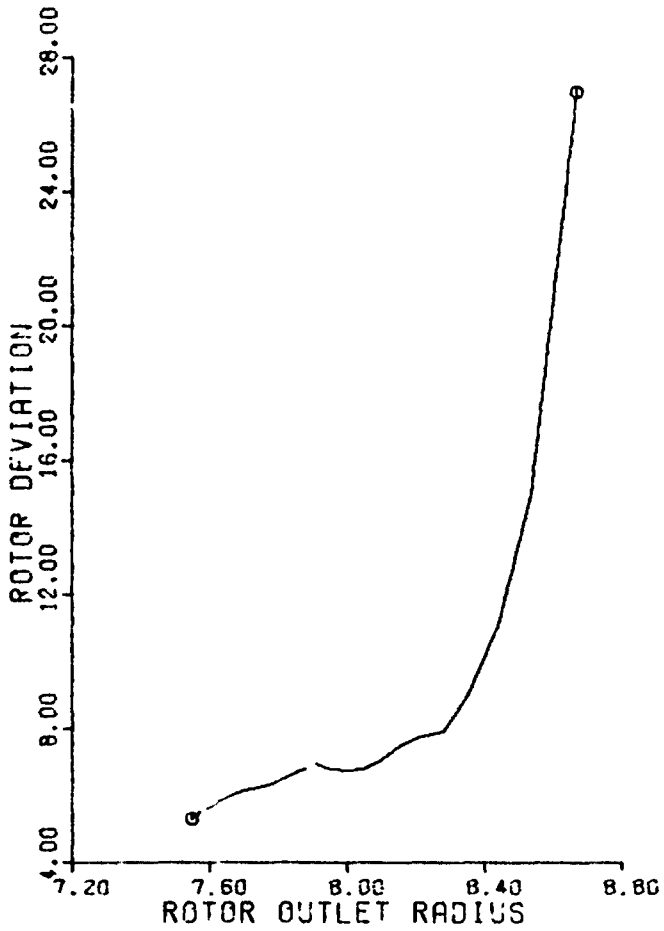


FIGURE 169. ROTOR DEVIATION VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 95% SPEED)

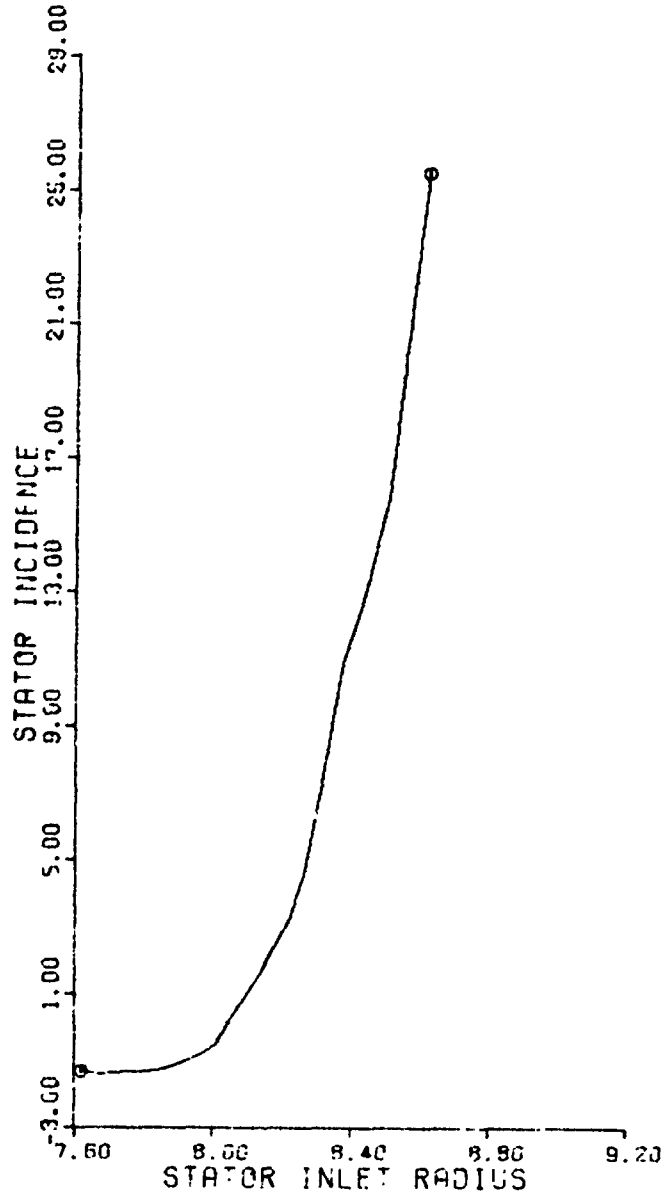


FIGURE 170. STATOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 95% SPEED)

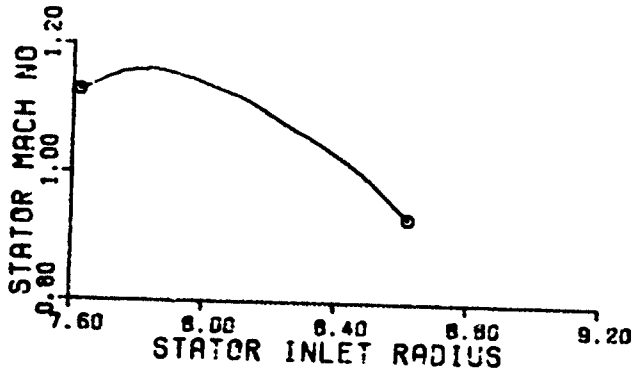


FIGURE 171. STATOR MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 95% SPEED)

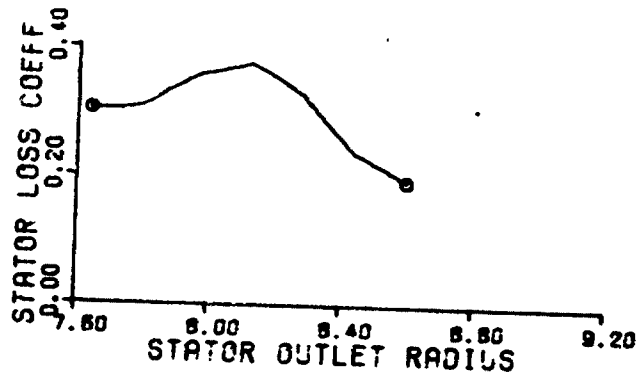


FIGURE 172. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 95% SPEED)

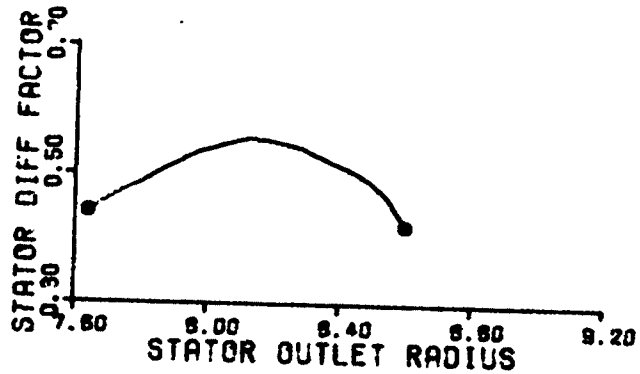


FIGURE 173. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 95% SPEED)

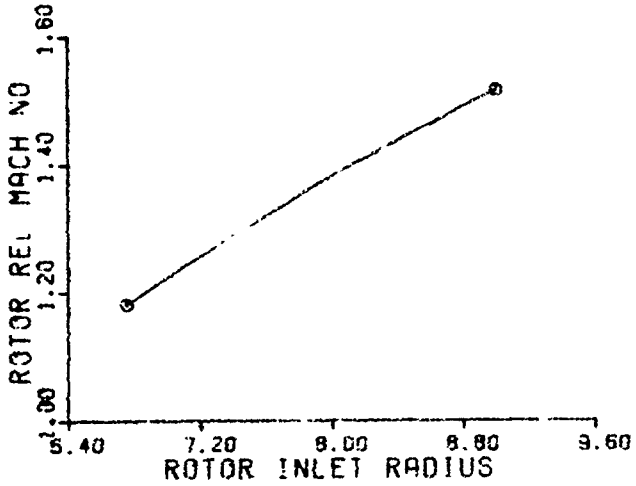


FIGURE 174. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 100% SPEED)

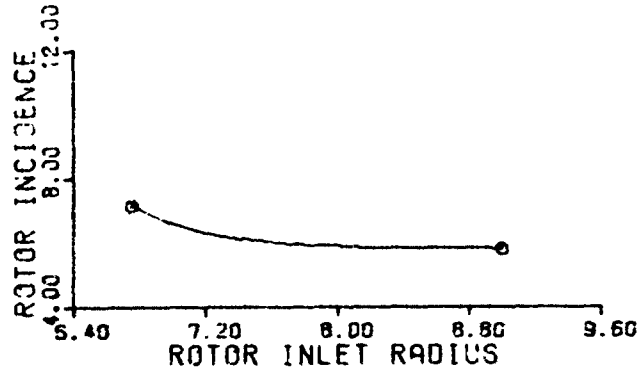


FIGURE 175. ROTOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 100% SPEED)

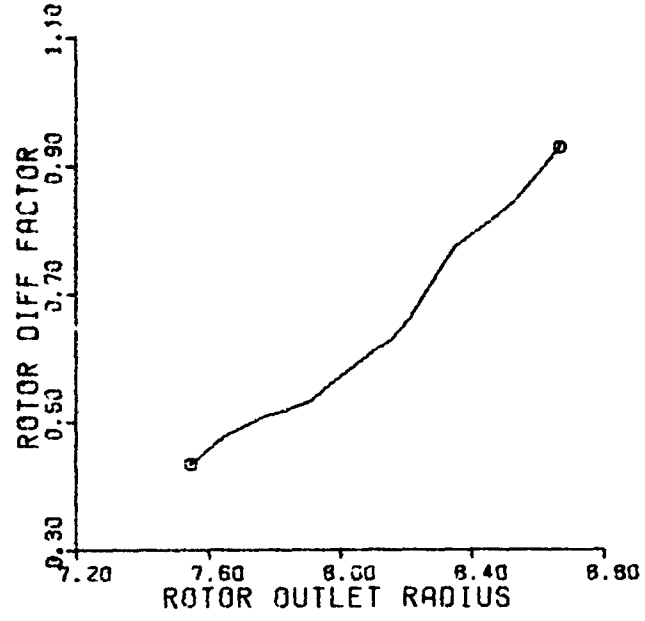


FIGURE 176. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 100% SPEED)

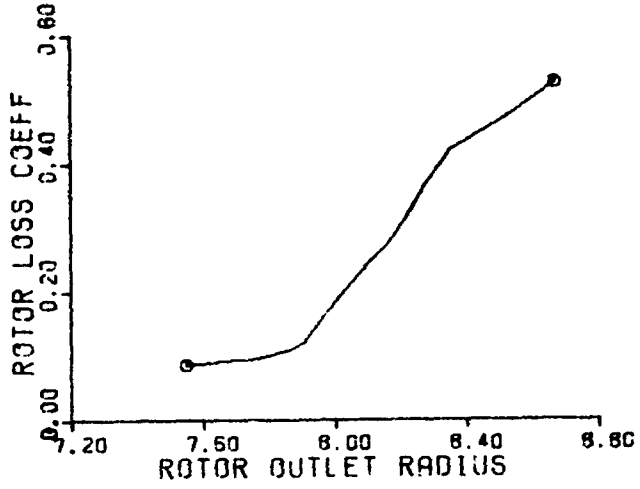


FIGURE 177. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 100% SPEED)

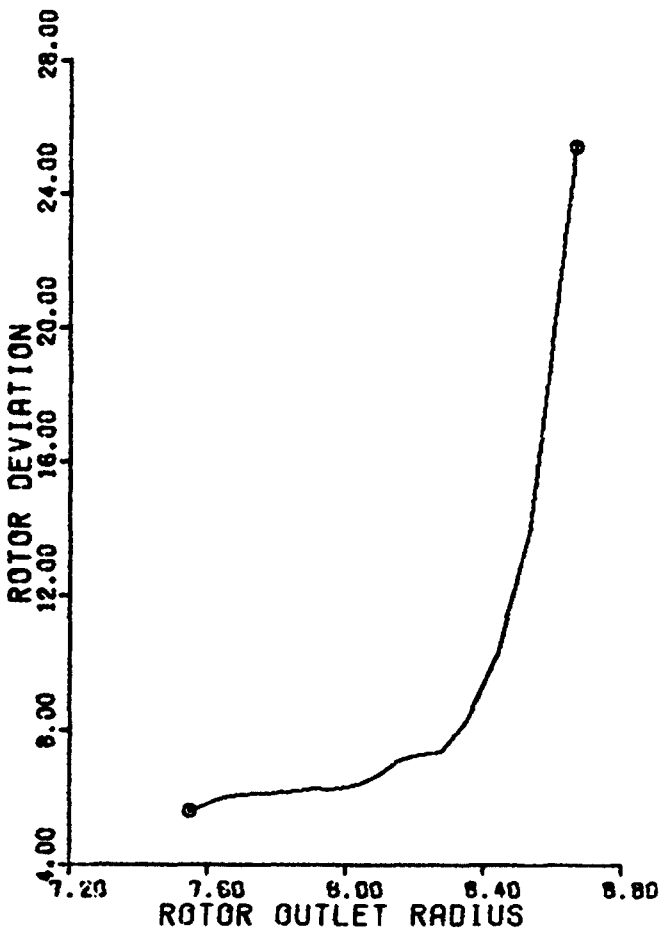


FIGURE 178. ROTOR DEVIATION VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 100% SPEED)

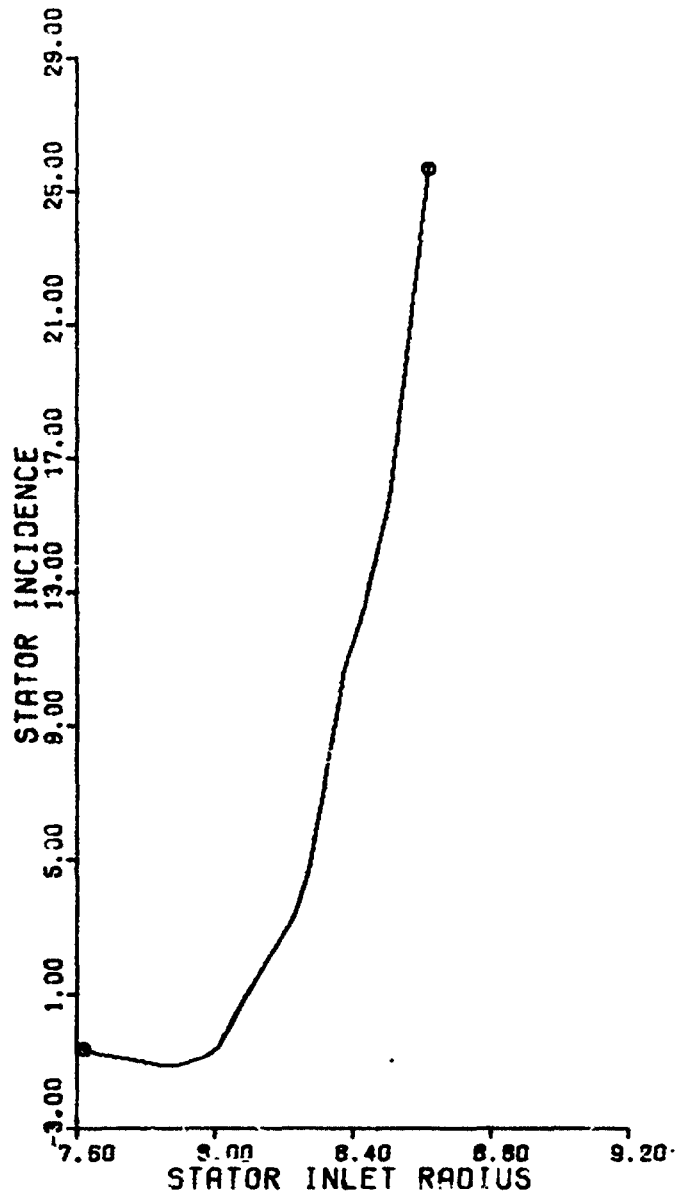


FIGURE 179. STATOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ALALYSIS, 100% SPEED)

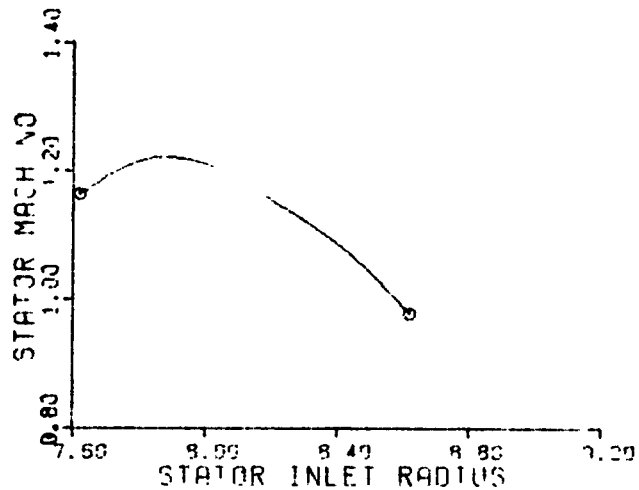


FIGURE 180. STATOR MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 100% SPEED)

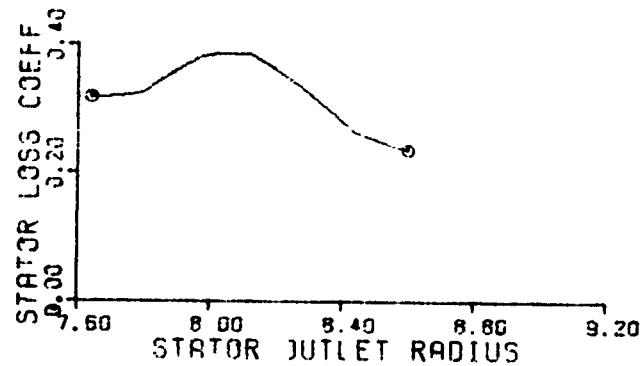


FIGURE 181. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 100% SPEED)

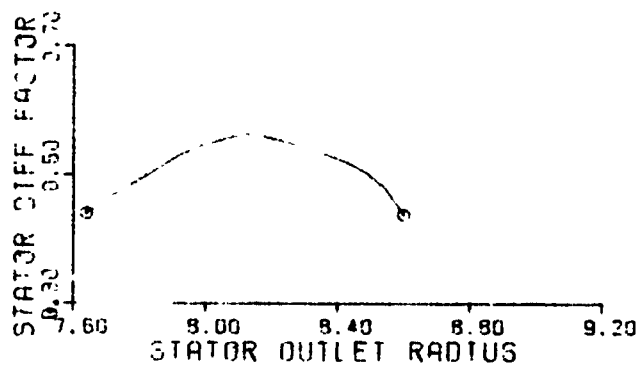


FIGURE 182. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 100% SPEED)

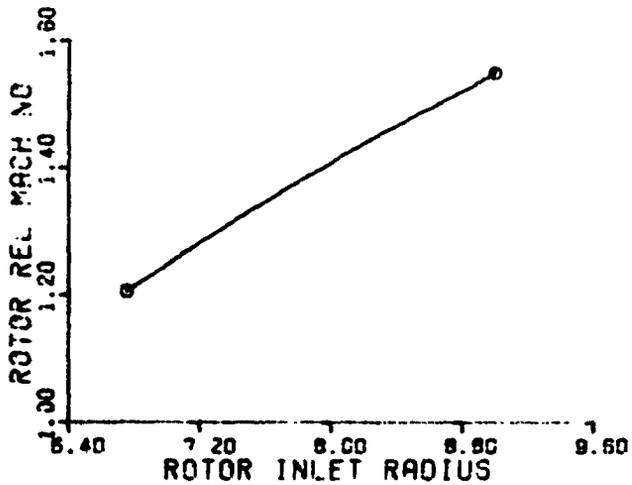


FIGURE 183. ROTOR RELATIVE MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 102% SPEED)

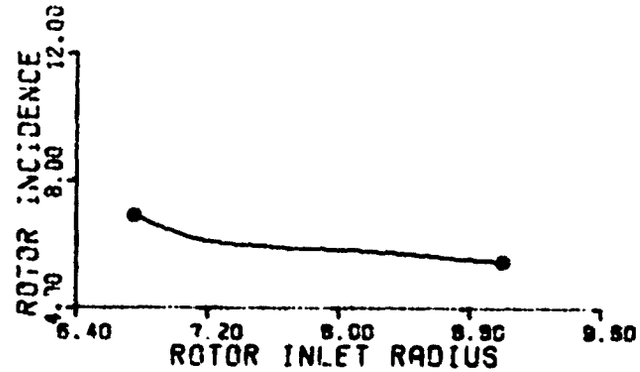


FIGURE 184. ROTOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 102% SPEED)

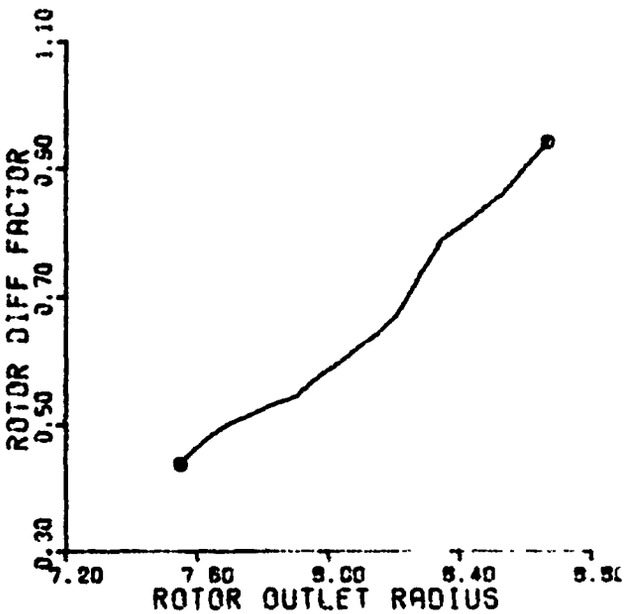


FIGURE 185. ROTOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 102% SPEED)

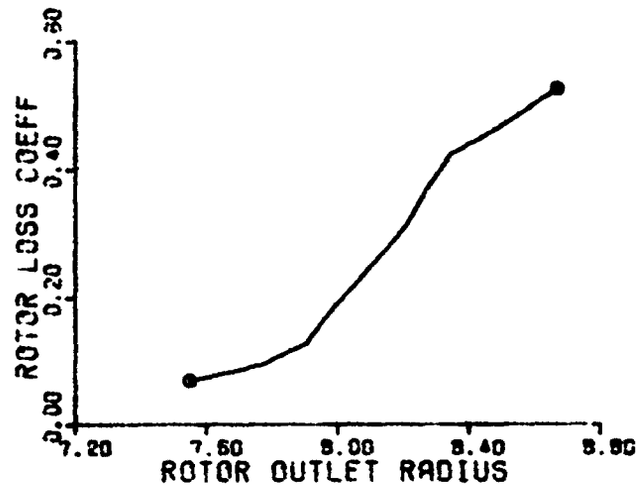


FIGURE 186. ROTOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 102% SPEED)

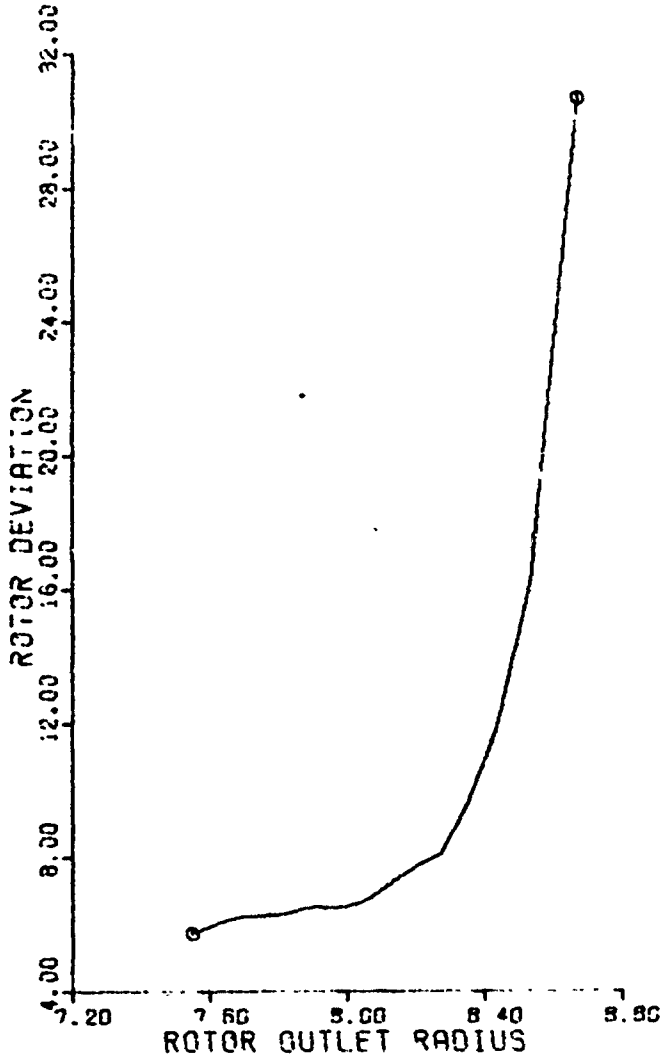


FIGURE 187. ROTOR DEVIATION VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 102% SPEED)

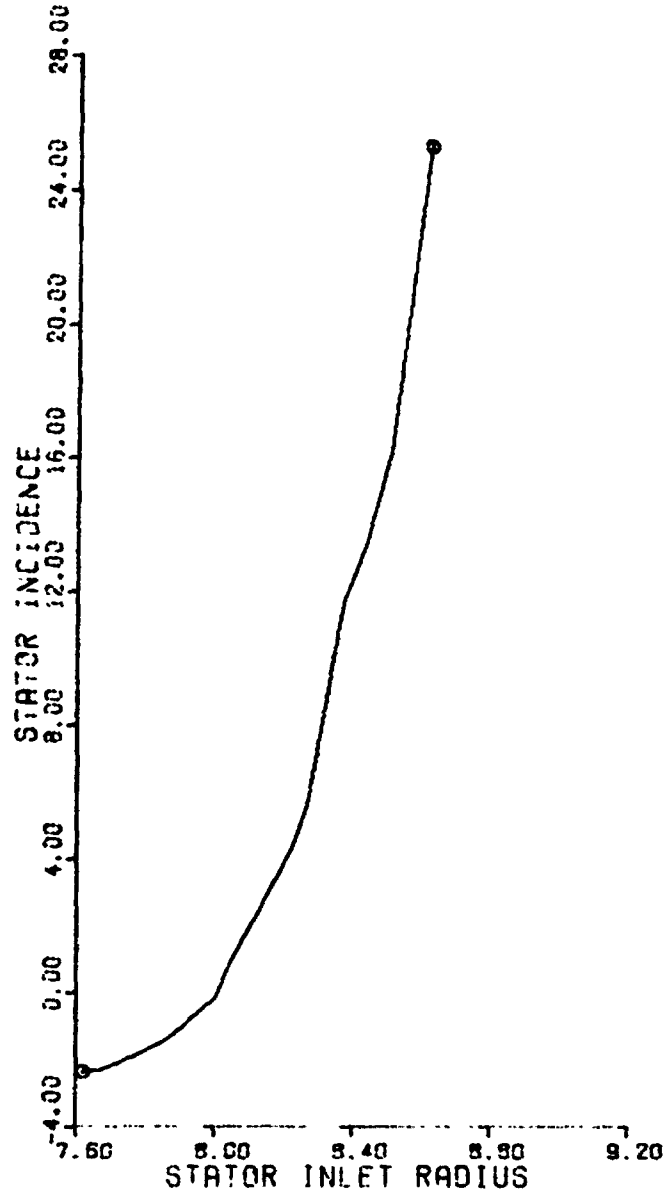


FIGURE 188. STATOR INCIDENCE VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 102% SPEED)

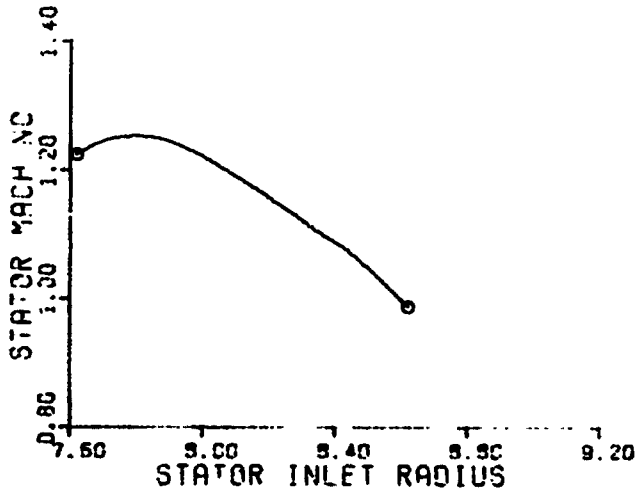


FIGURE 189 STATOR MACH NUMBER VS INLET RADIUS (WITHIN-BLADE ANALYSIS, 102% SPEED)

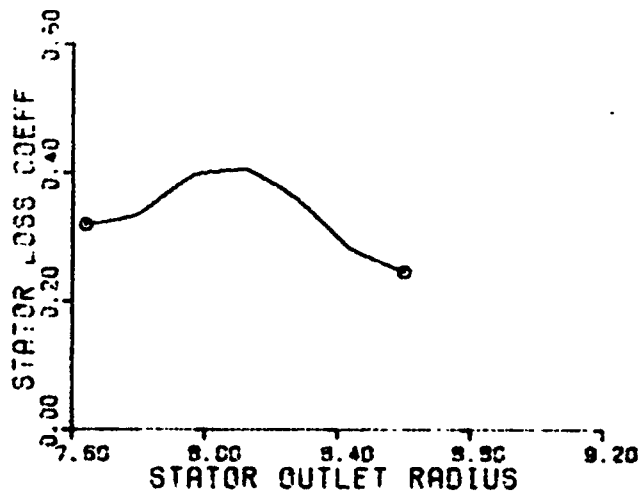


FIGURE 190. STATOR LOSS COEFFICIENT VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 102% SPEED)

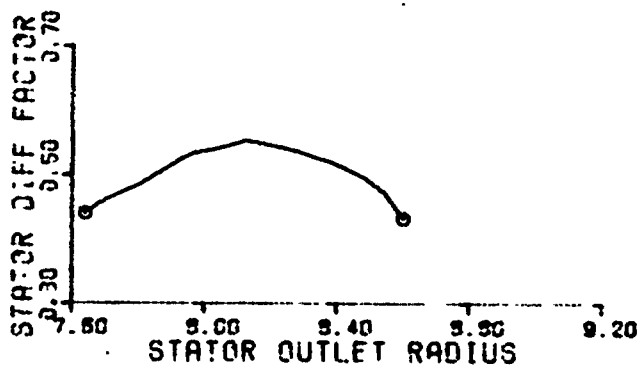


FIGURE 191. STATOR DIFFUSION FACTOR VS OUTLET RADIUS (WITHIN-BLADE ANALYSIS, 102% SPEED)

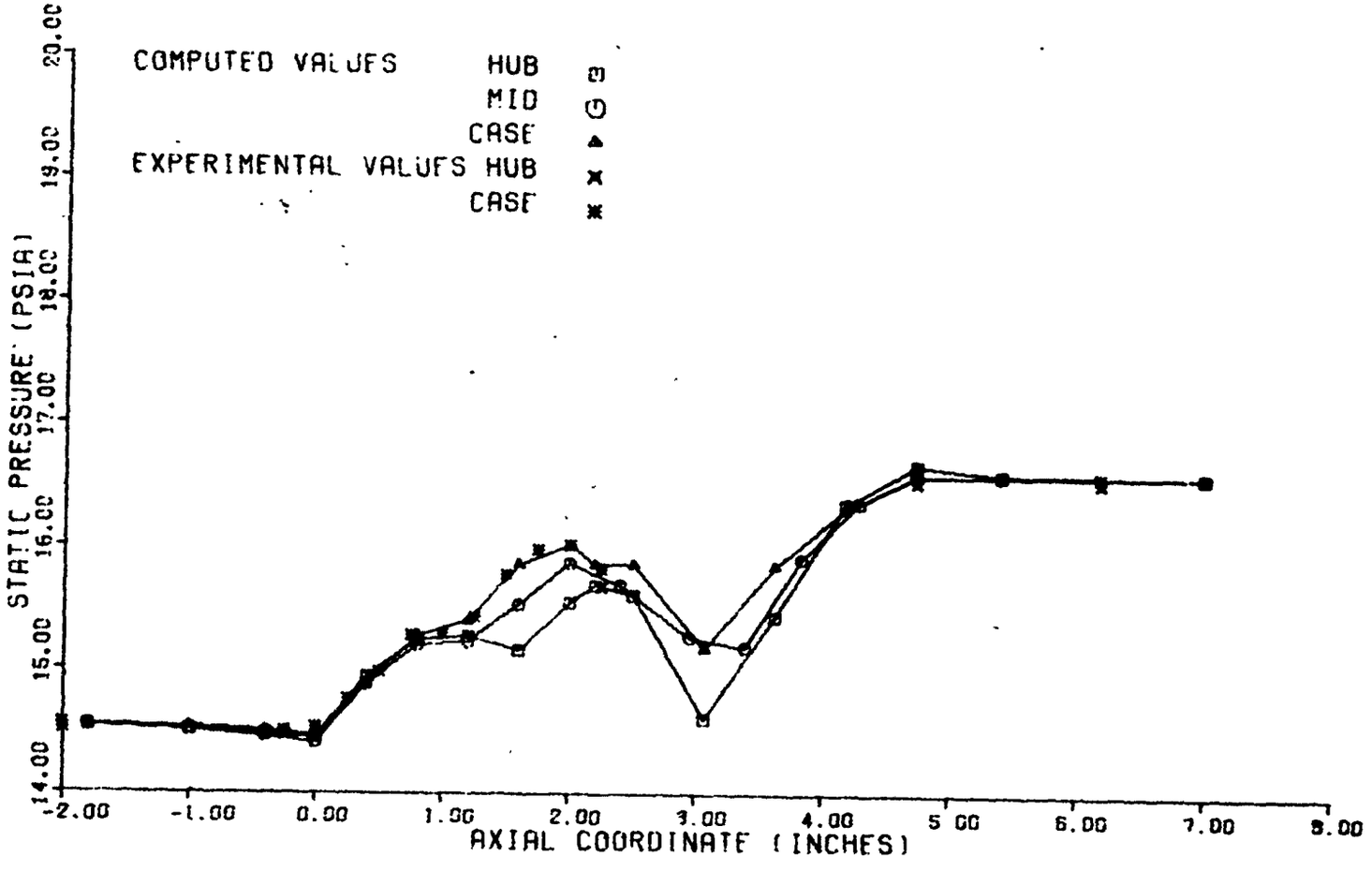


FIGURE 192. AXIAL STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 40% SPEED)

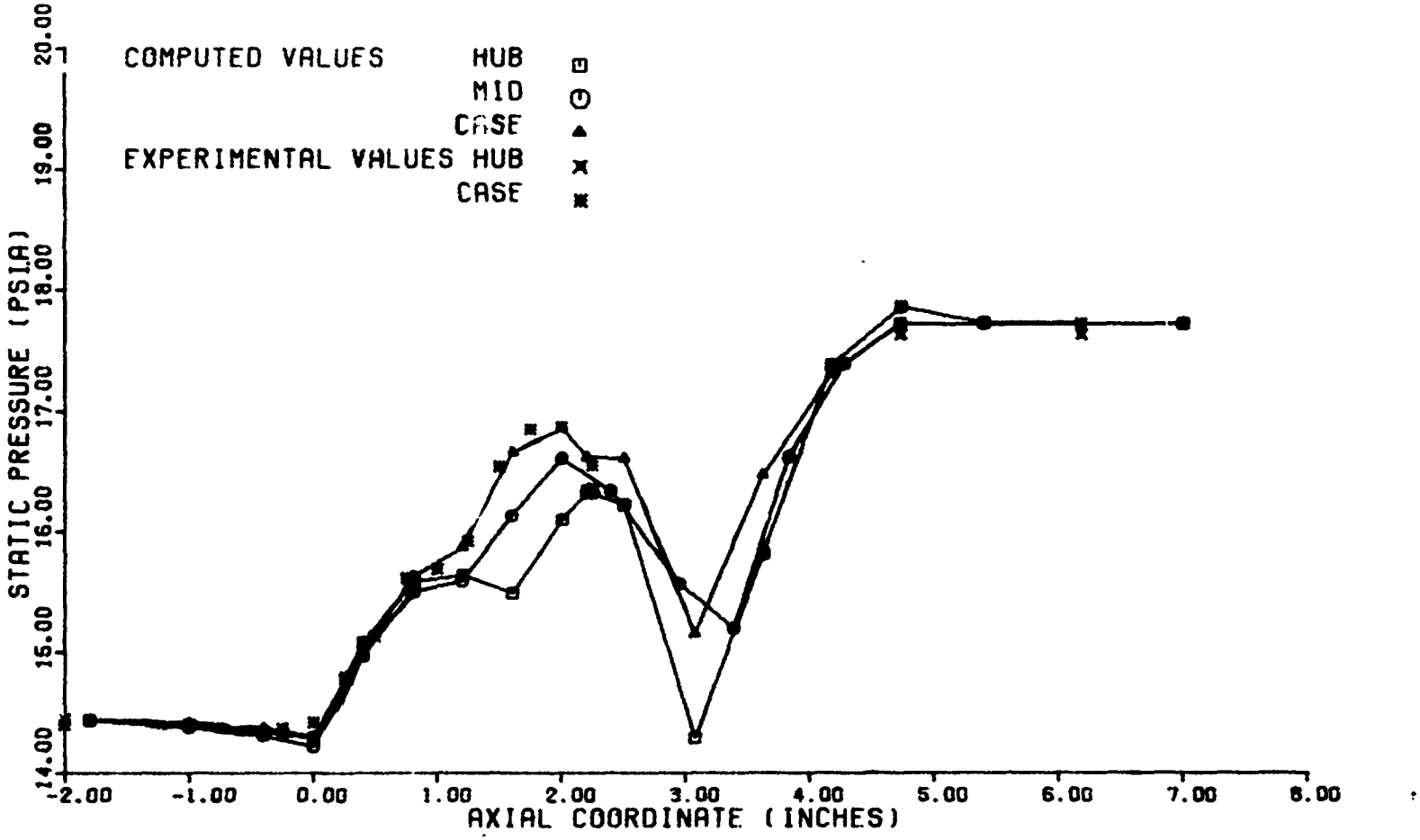


FIGURE 193. AXIAL STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 50% SPEED)

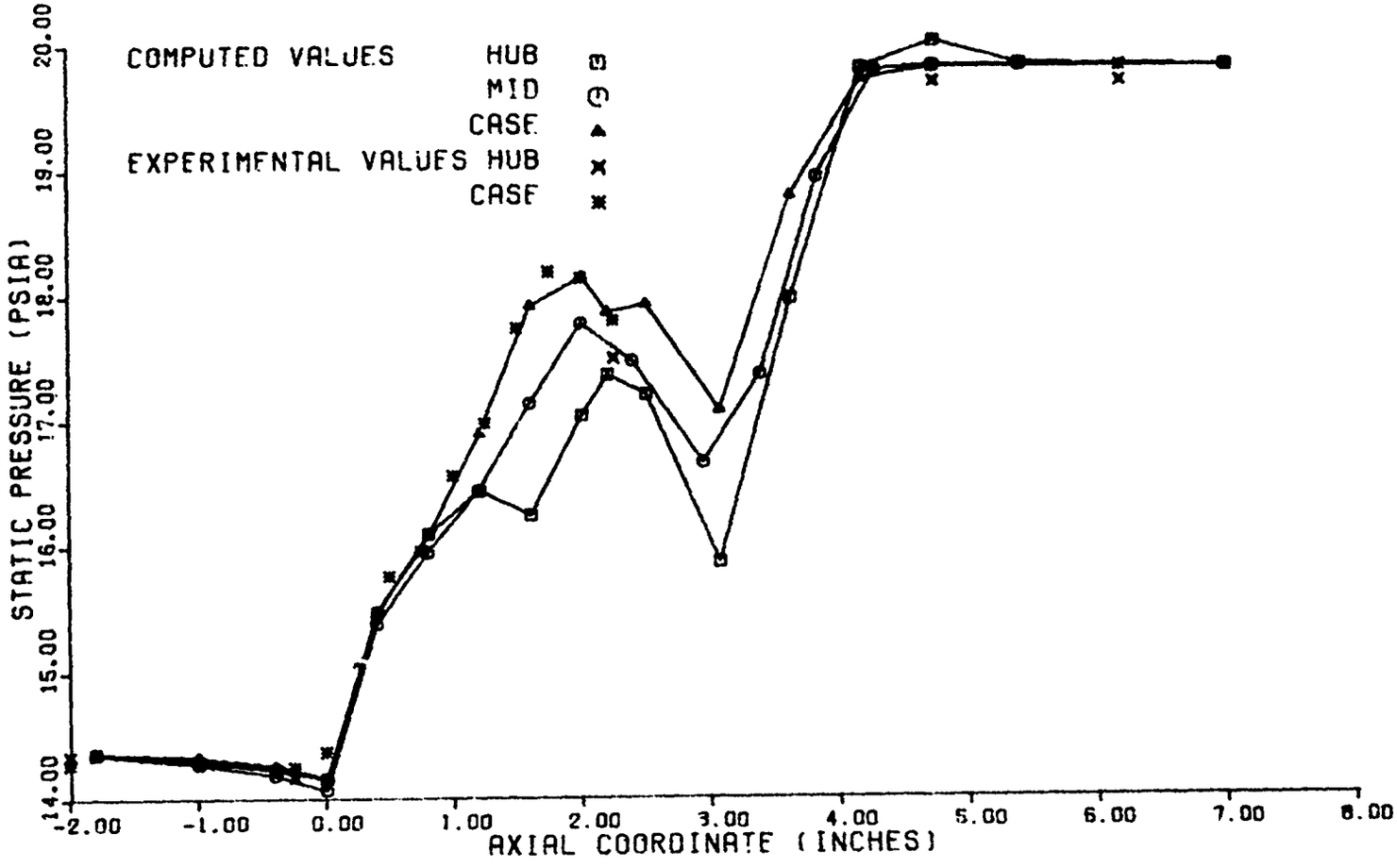


FIGURE 194. AXIAL STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 60% SPEED)

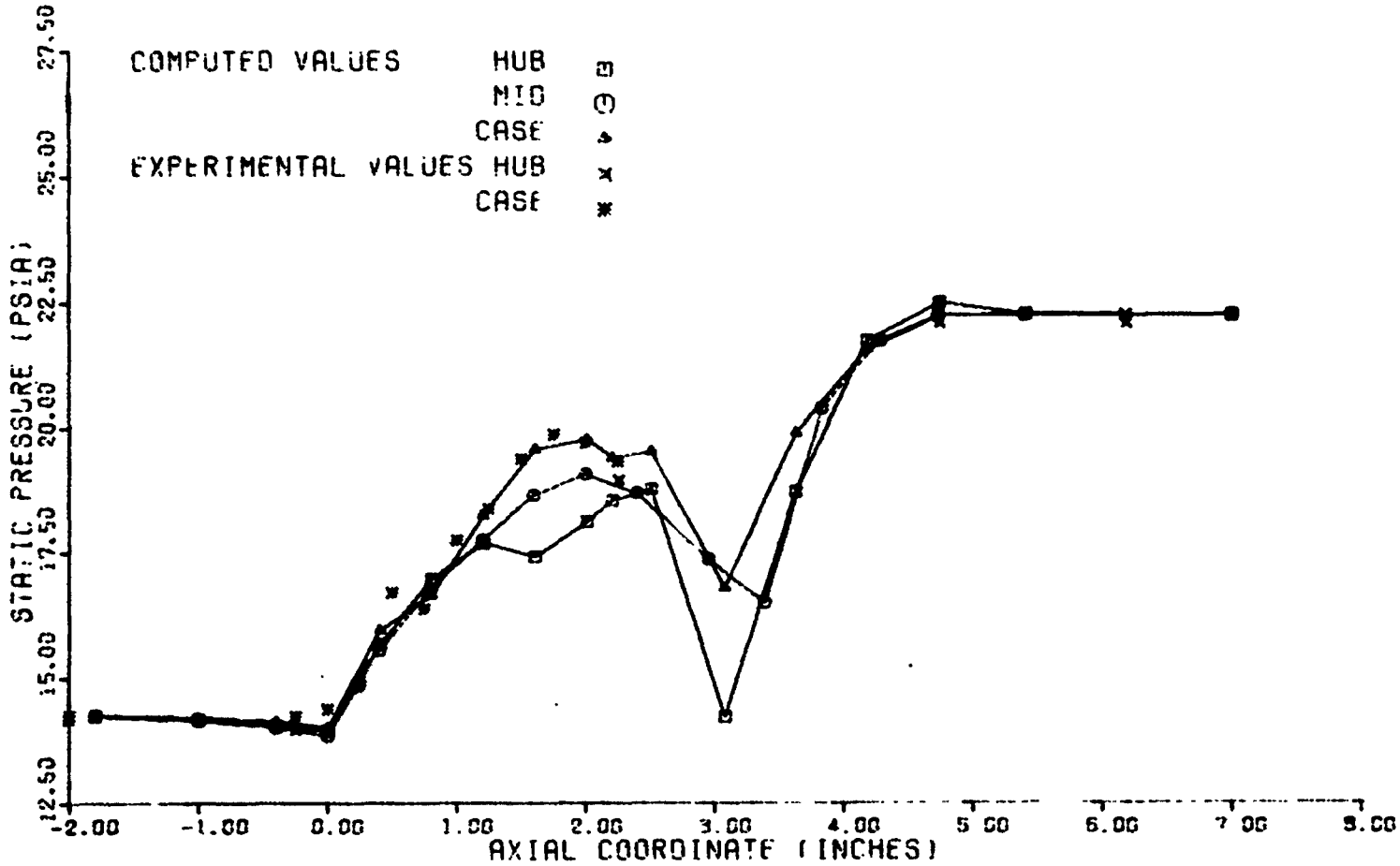


FIGURE 195. AXIAL STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 70% SPEED)

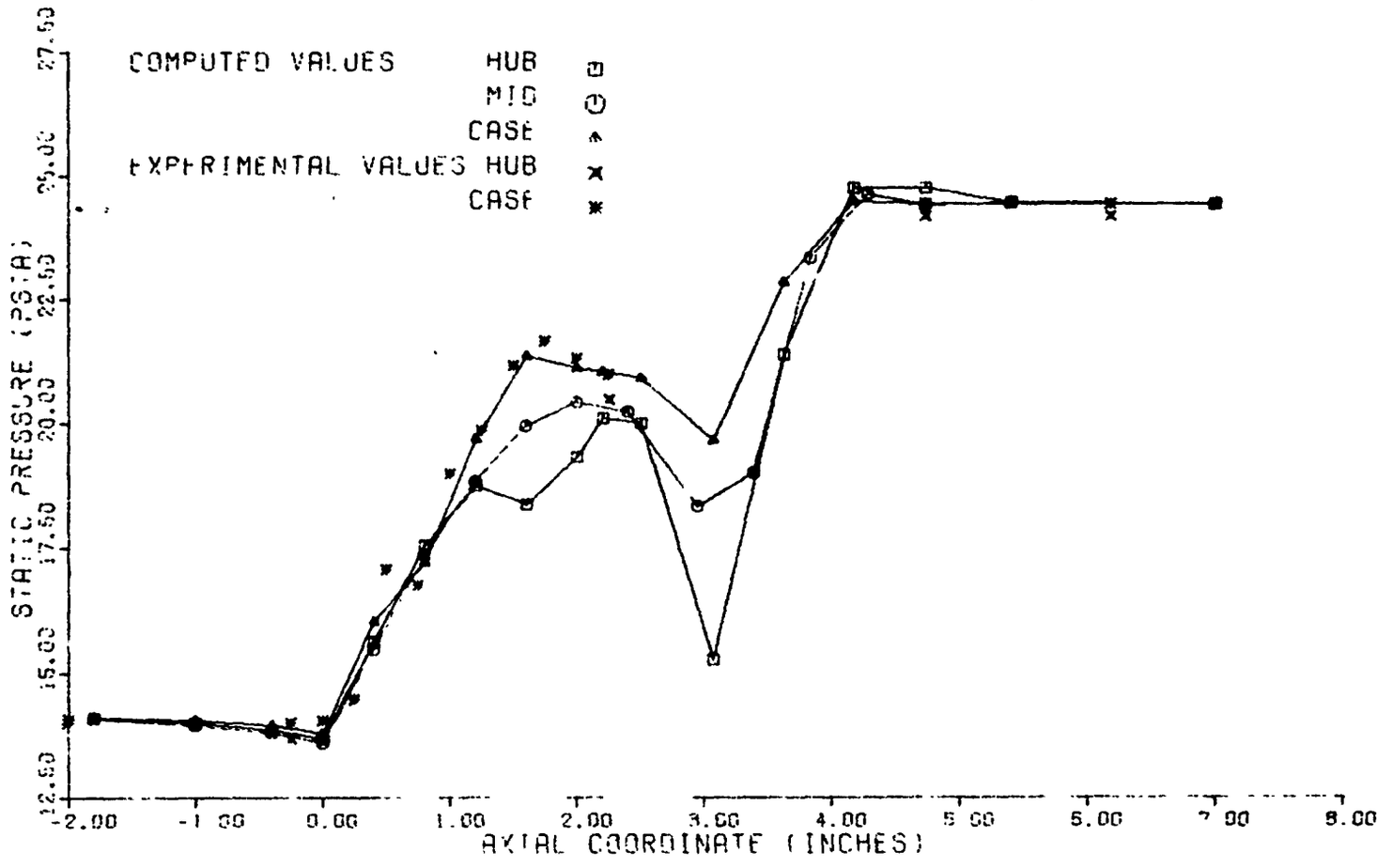


FIGURE 196. AXIAL STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 80% SPEED)

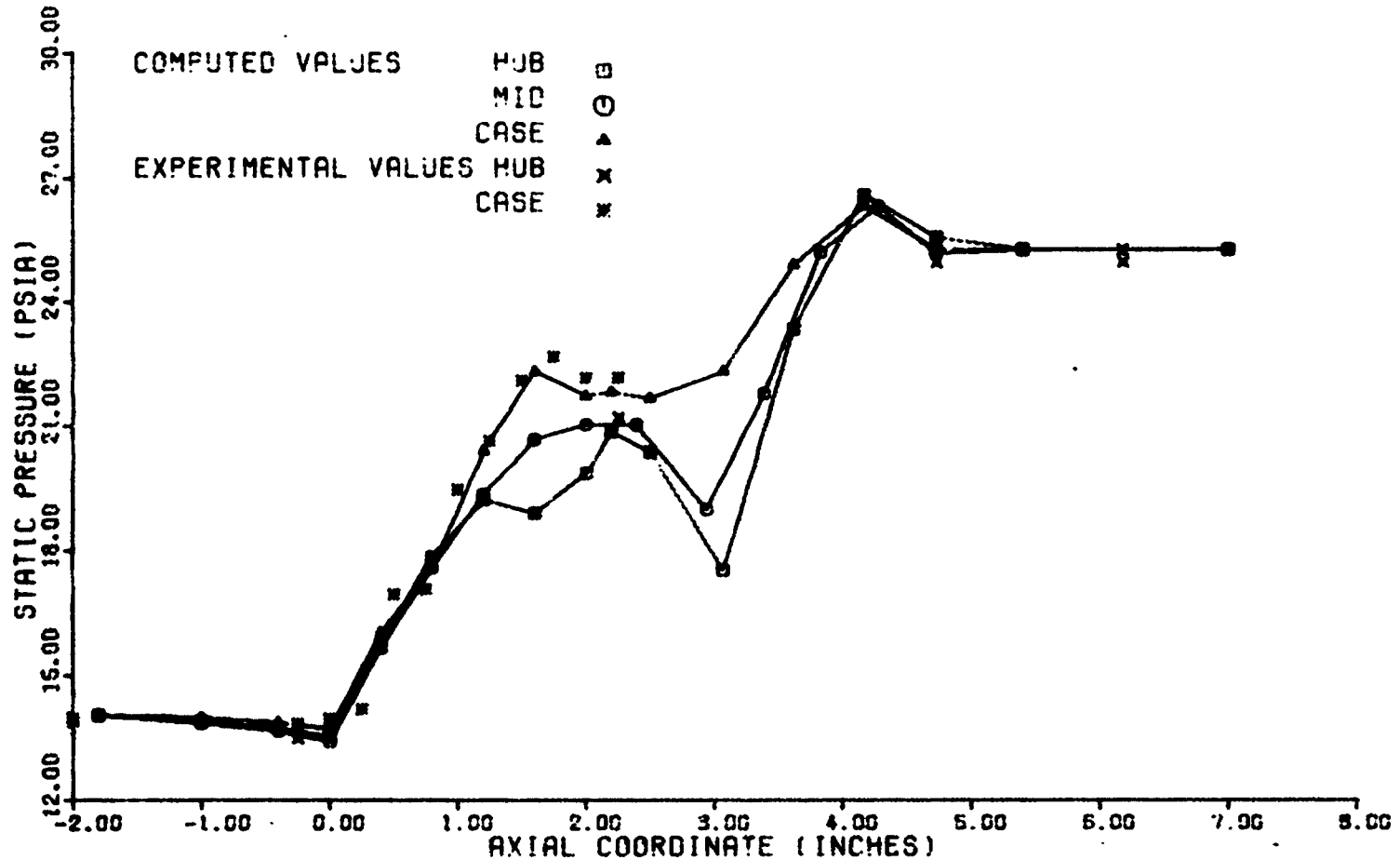


FIGURE 197. AXIAL STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 85% SPEED)

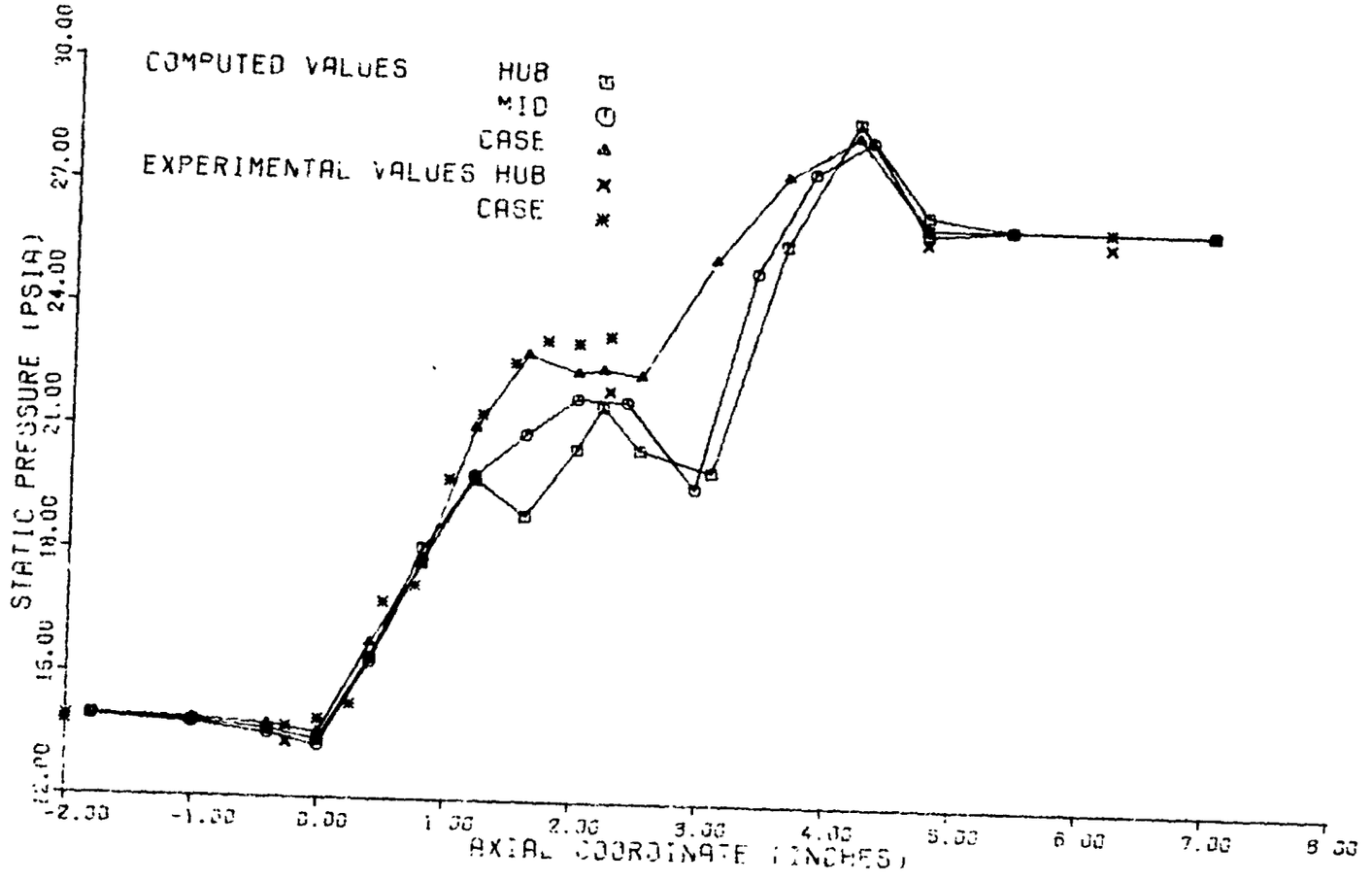


FIGURE 198. AXIAL STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 90% SPEED)

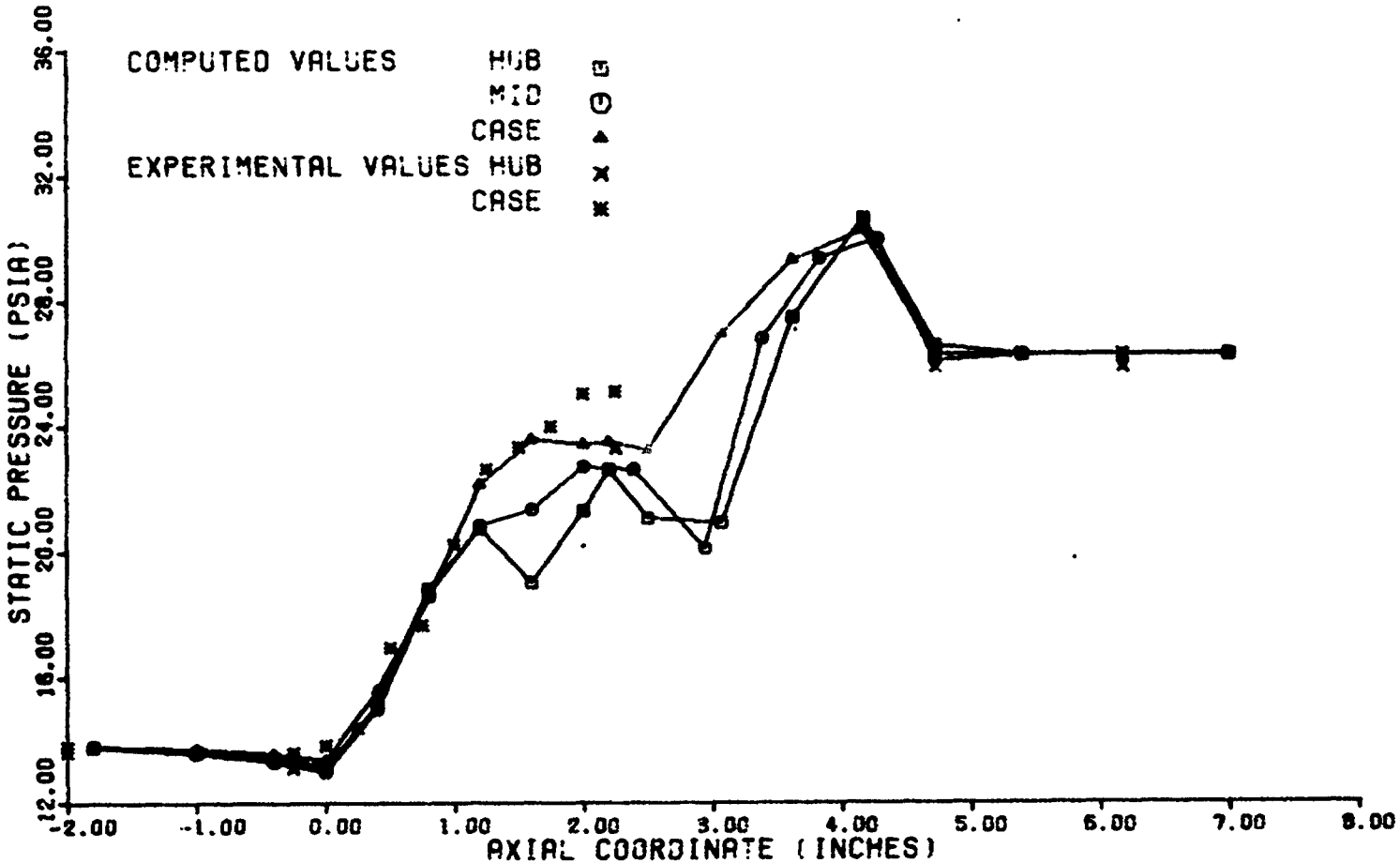


FIGURE 199. AXIAL STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 95% SPEED)

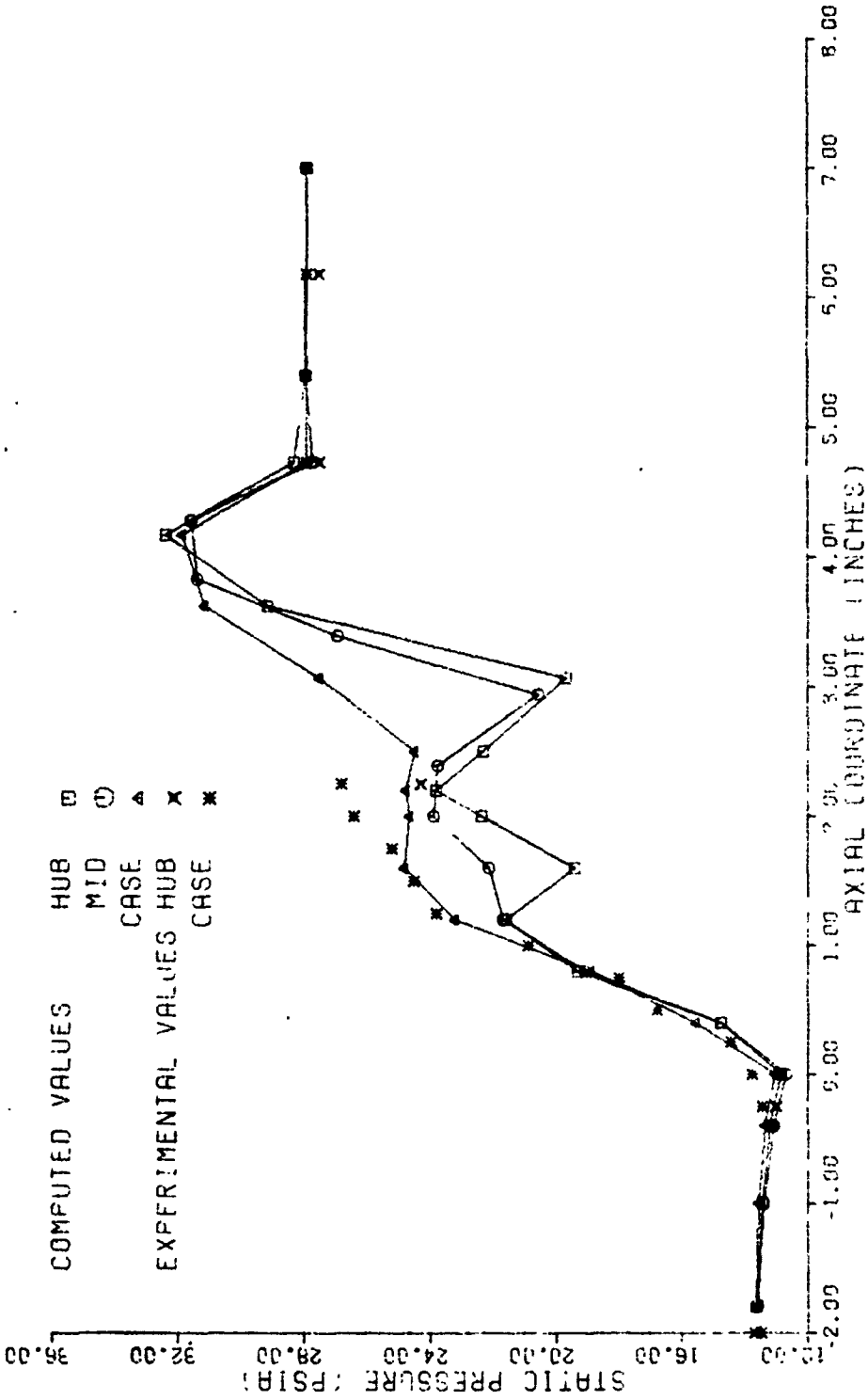


FIGURE 200. AXIAL STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 100% SPEED)

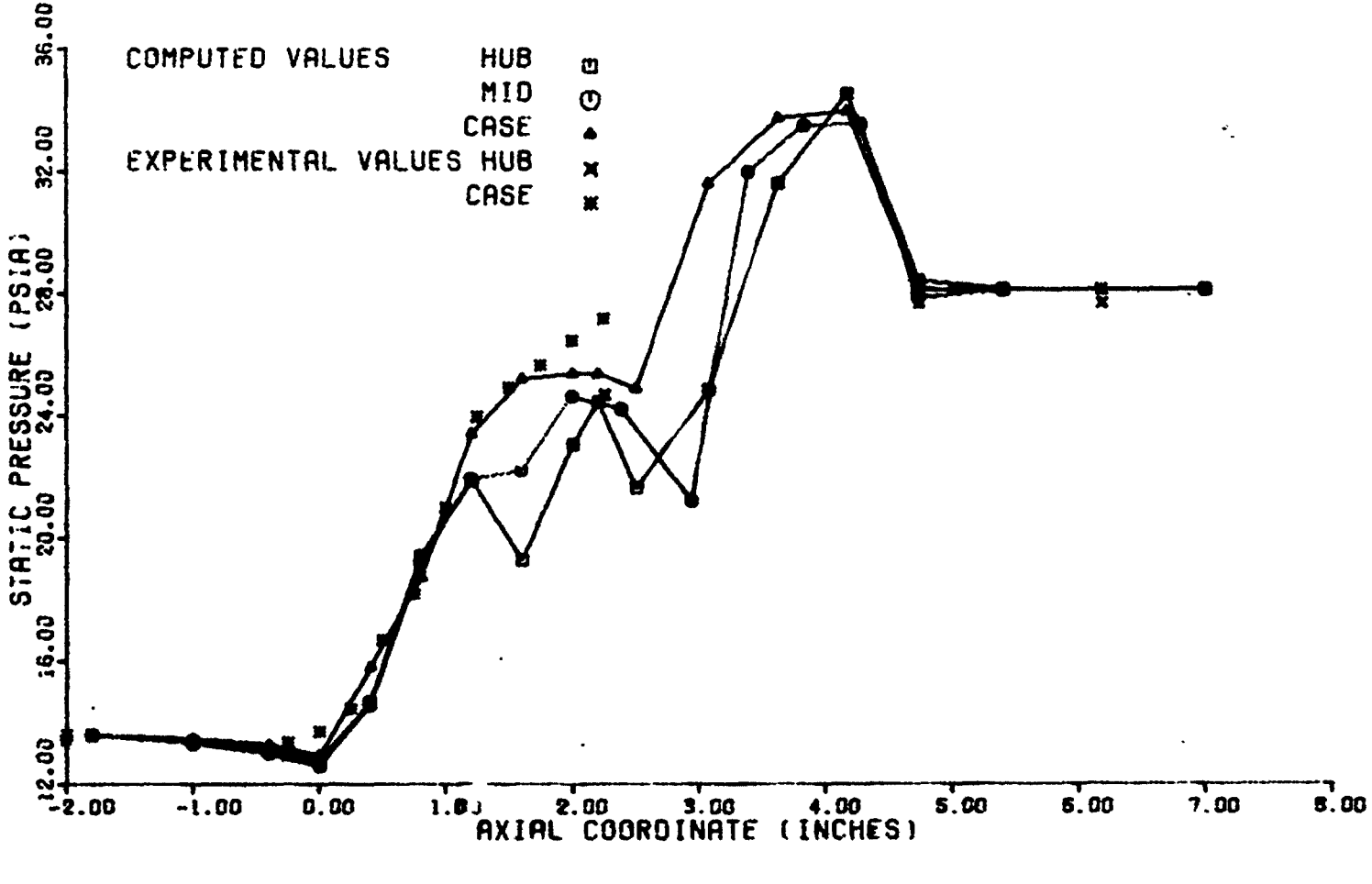


FIGURE 201. AXIAL STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 102% SPEED)

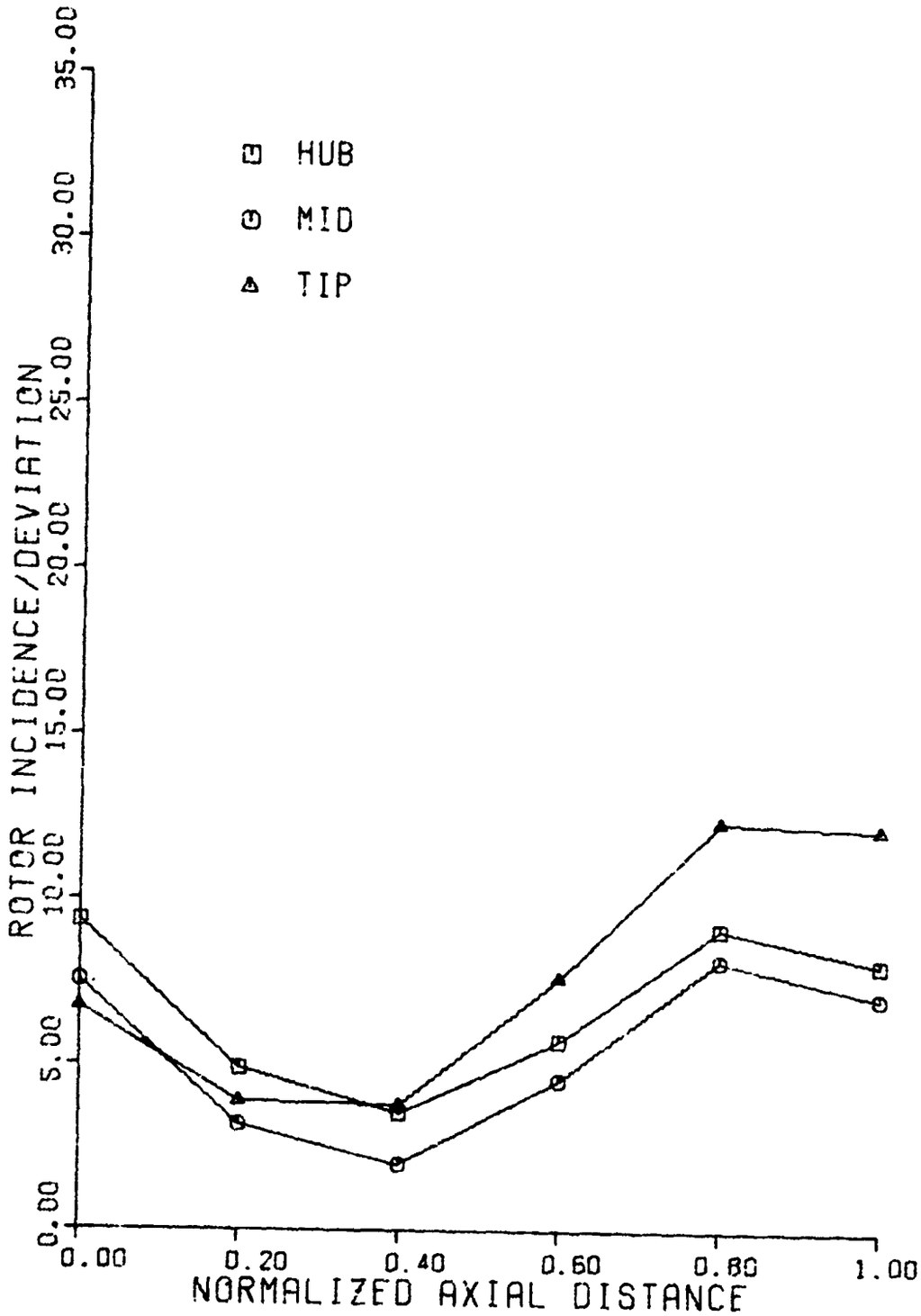


FIGURE 202. ROTOR WITHIN-BLADE DEVIATION ANGLE DISTRIBUTION (40% SPEED POINT)

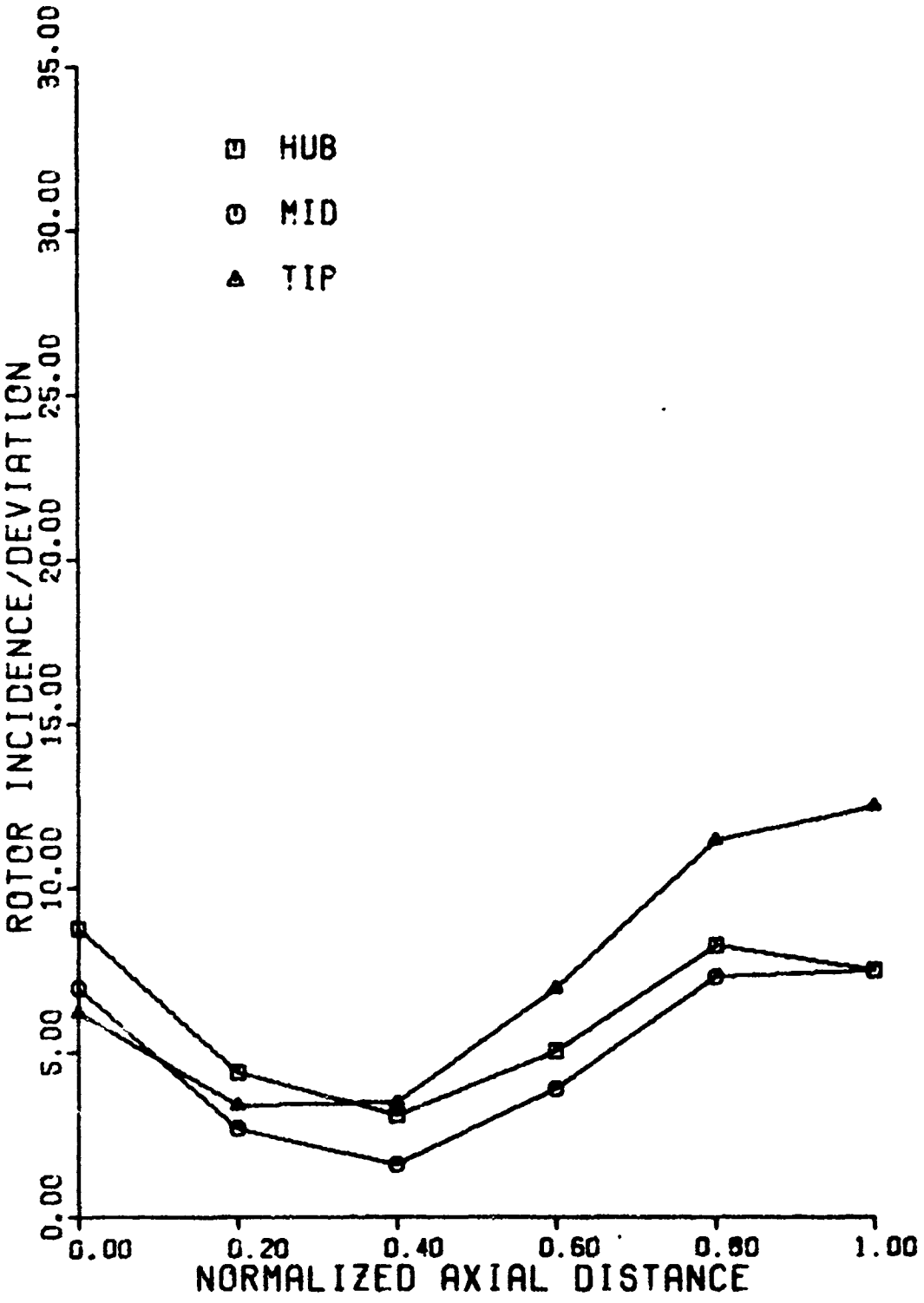


FIGURE 203. ROTOR WITHIN-BLADE DEVIATION ANGLE DISTRIBUTION (50% SPEED POINT)

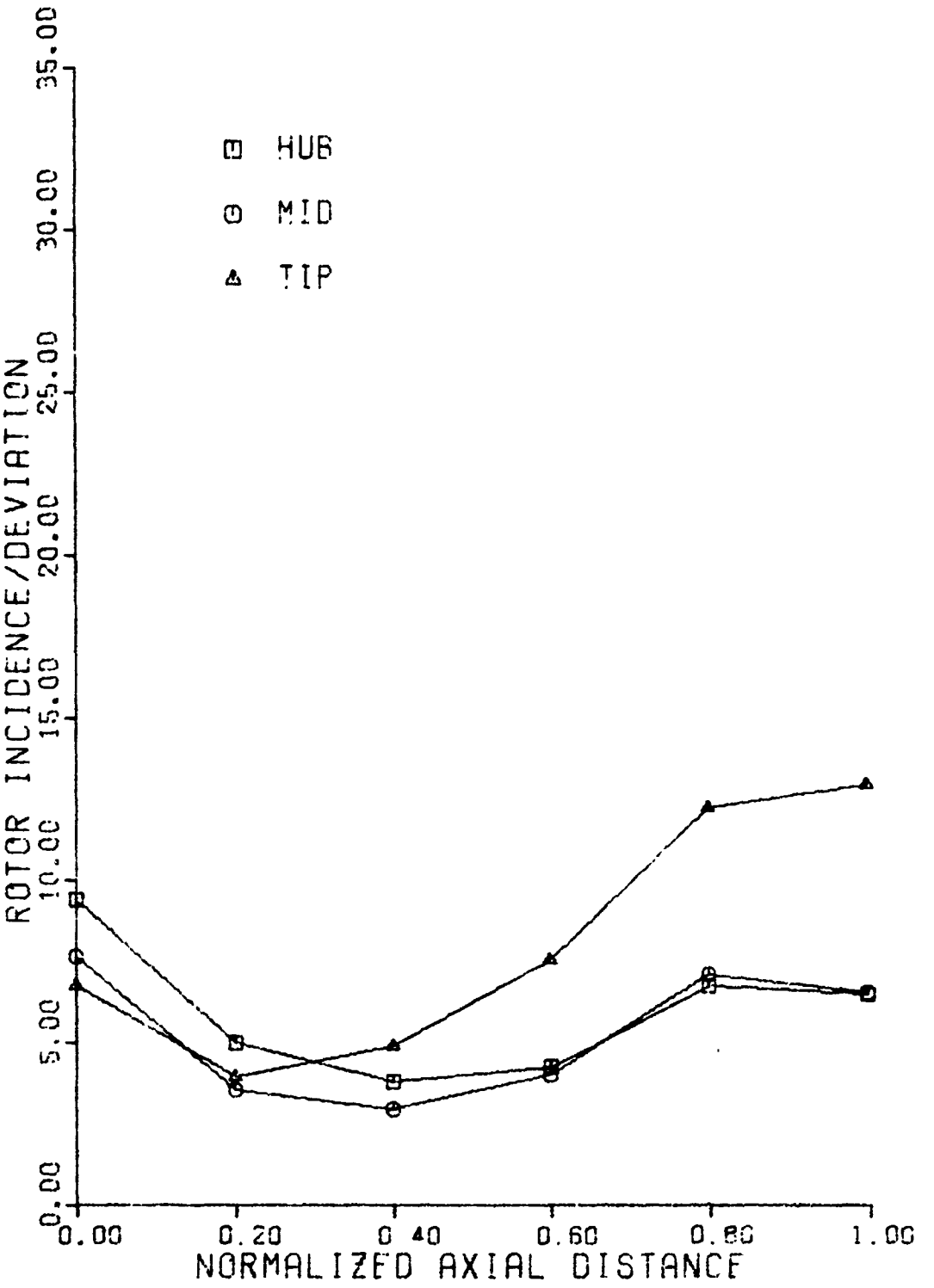


FIGURE 204. ROTOR WITHIN-BLADE DEVIATION ANGLE DISTRIBUTION (60% SPEED POINT)

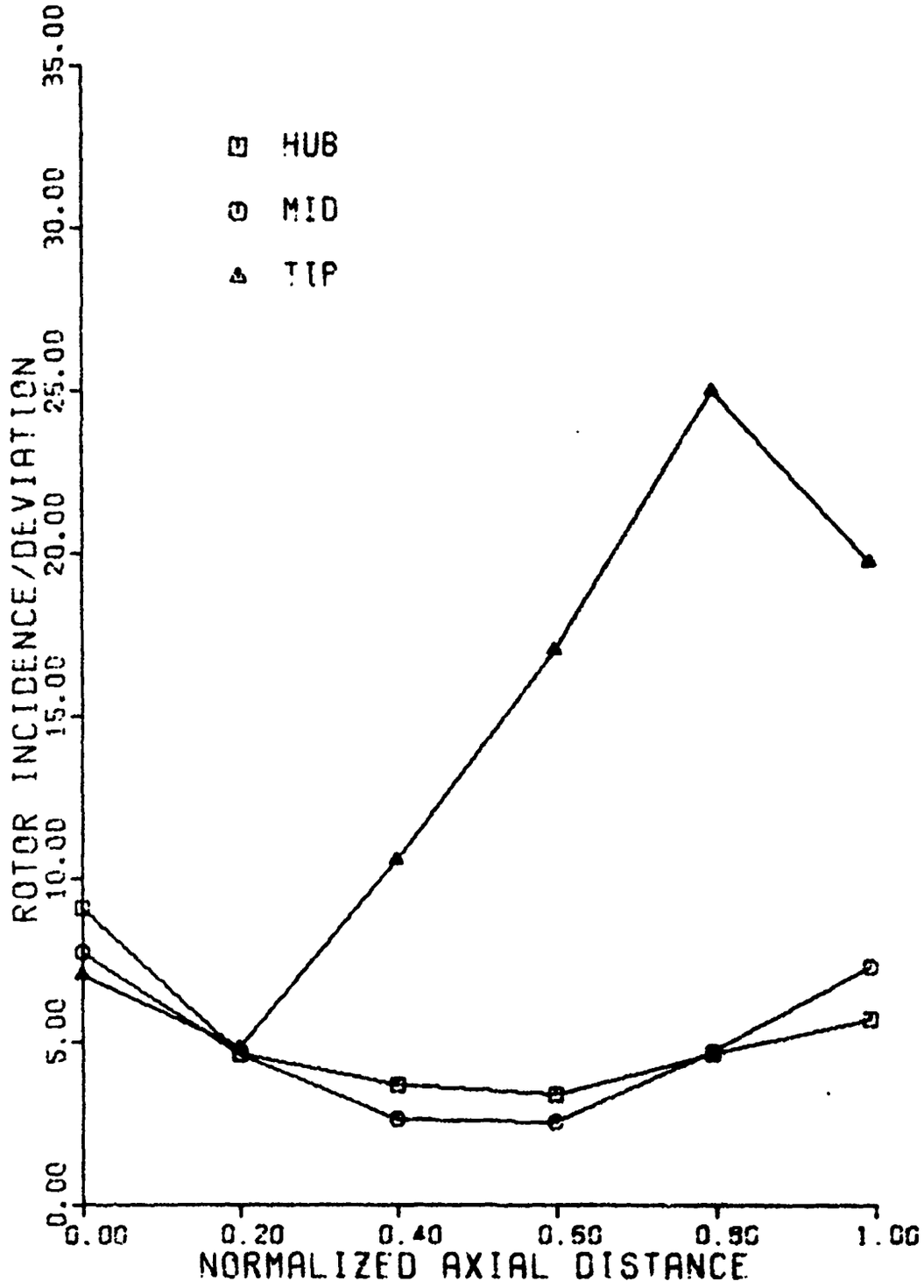


FIGURE 205. ROTOR WITHIN-BLADE DEVIATION ANGLE DISTRIBUTION (70% SPEED POINT)

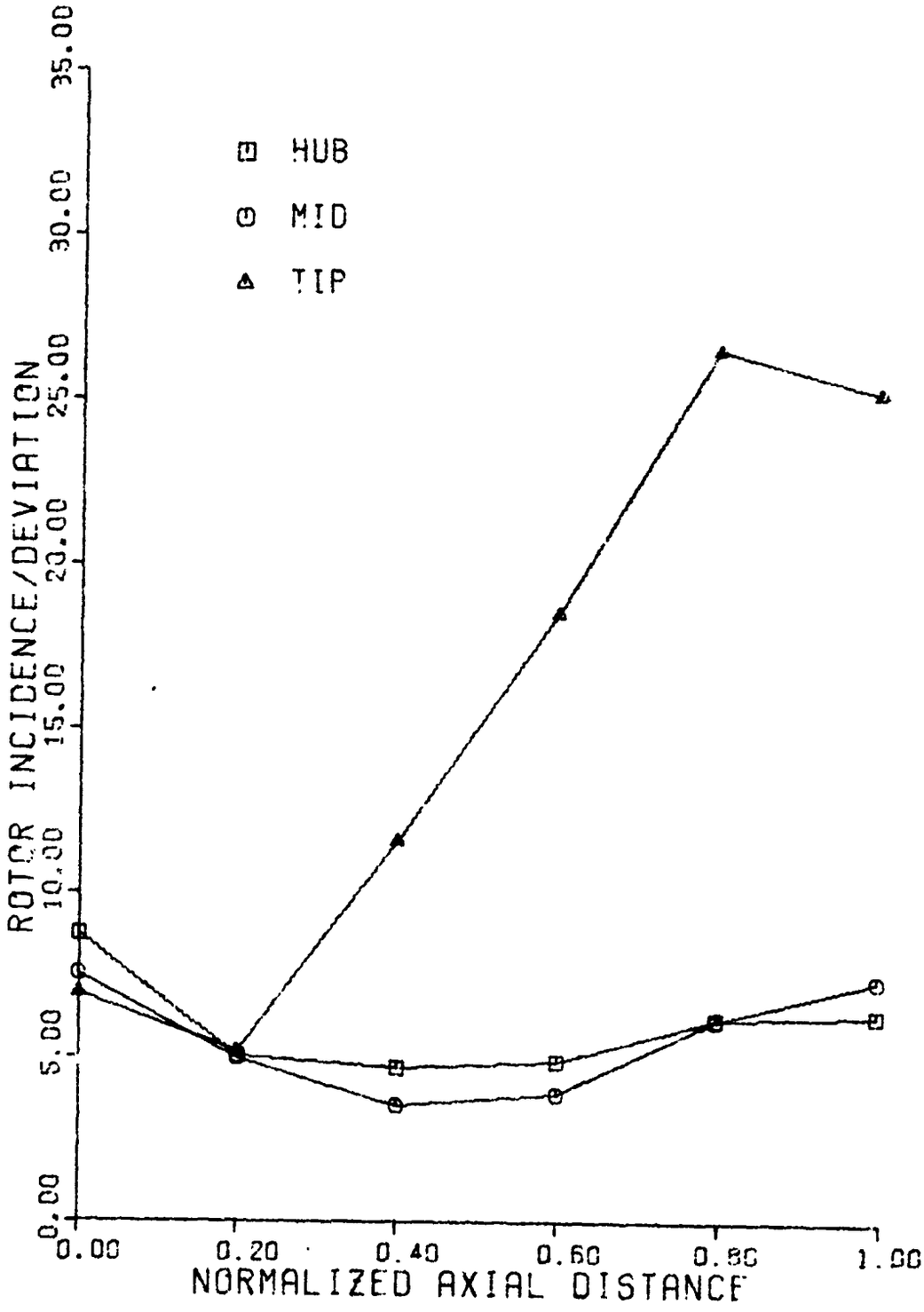


FIGURE 206. ROTOR WITHIN-BLADE DEVIATION ANGLE DISTRIBUTION (80% SPEED POINT)

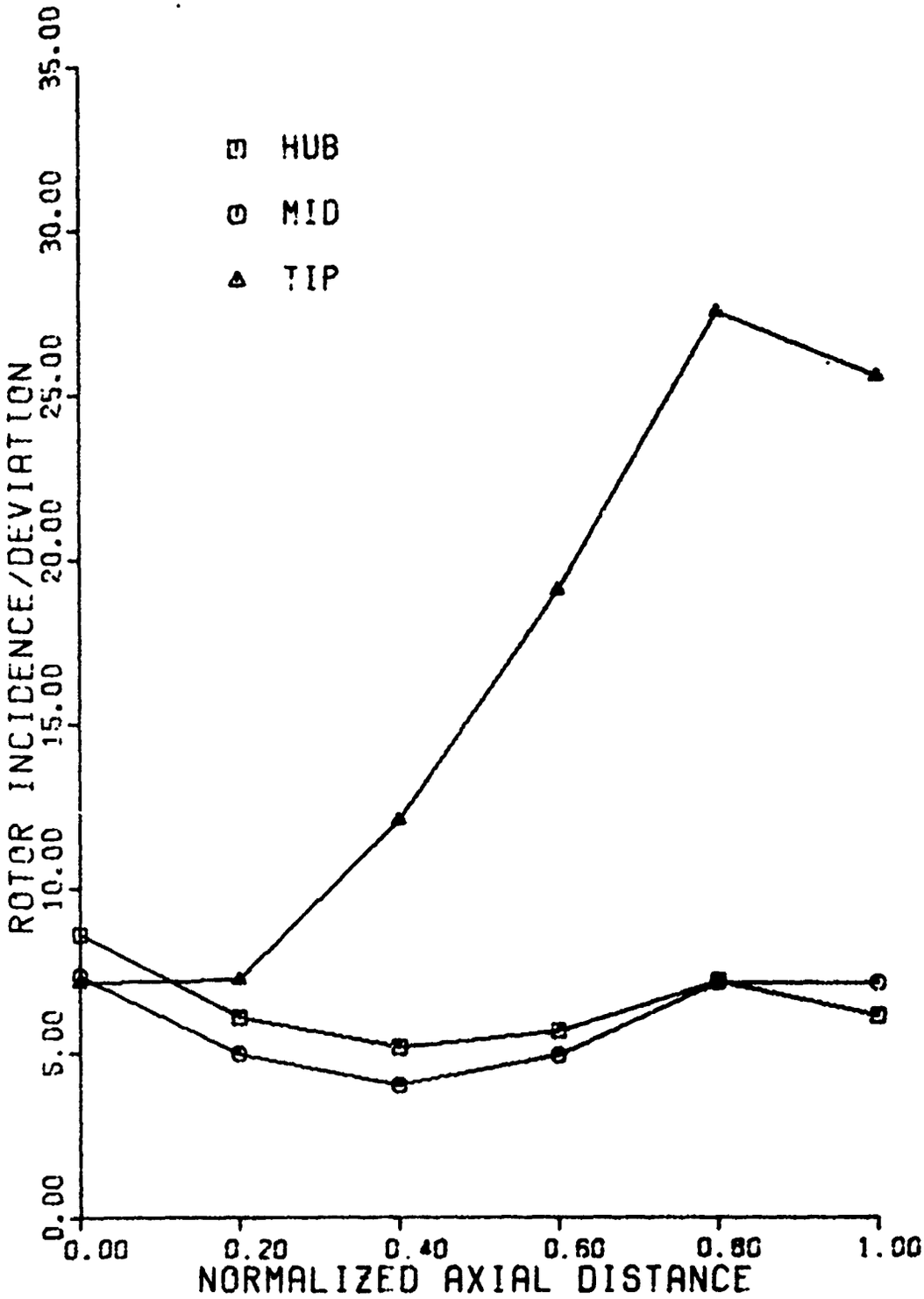


FIGURE 207. ROTOR WITHIN-BLADE DEVIATION ANGLE DISTRIBUTION (85% SPEED POINT)

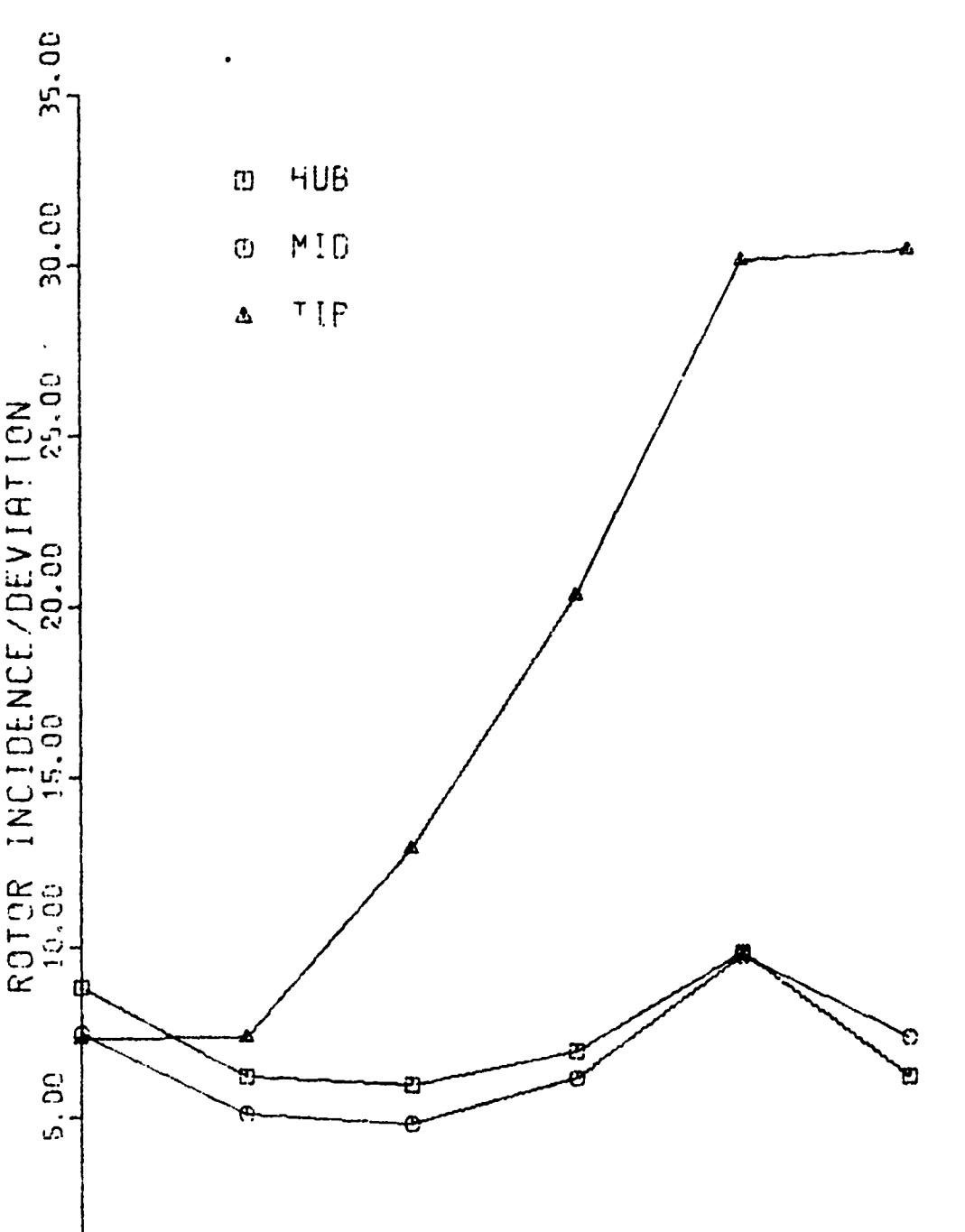


FIGURE 208. ROTOR WITHIN-BLADE DEVIATION ANGLE DISTRIBUTION 90% SPEED POINT)

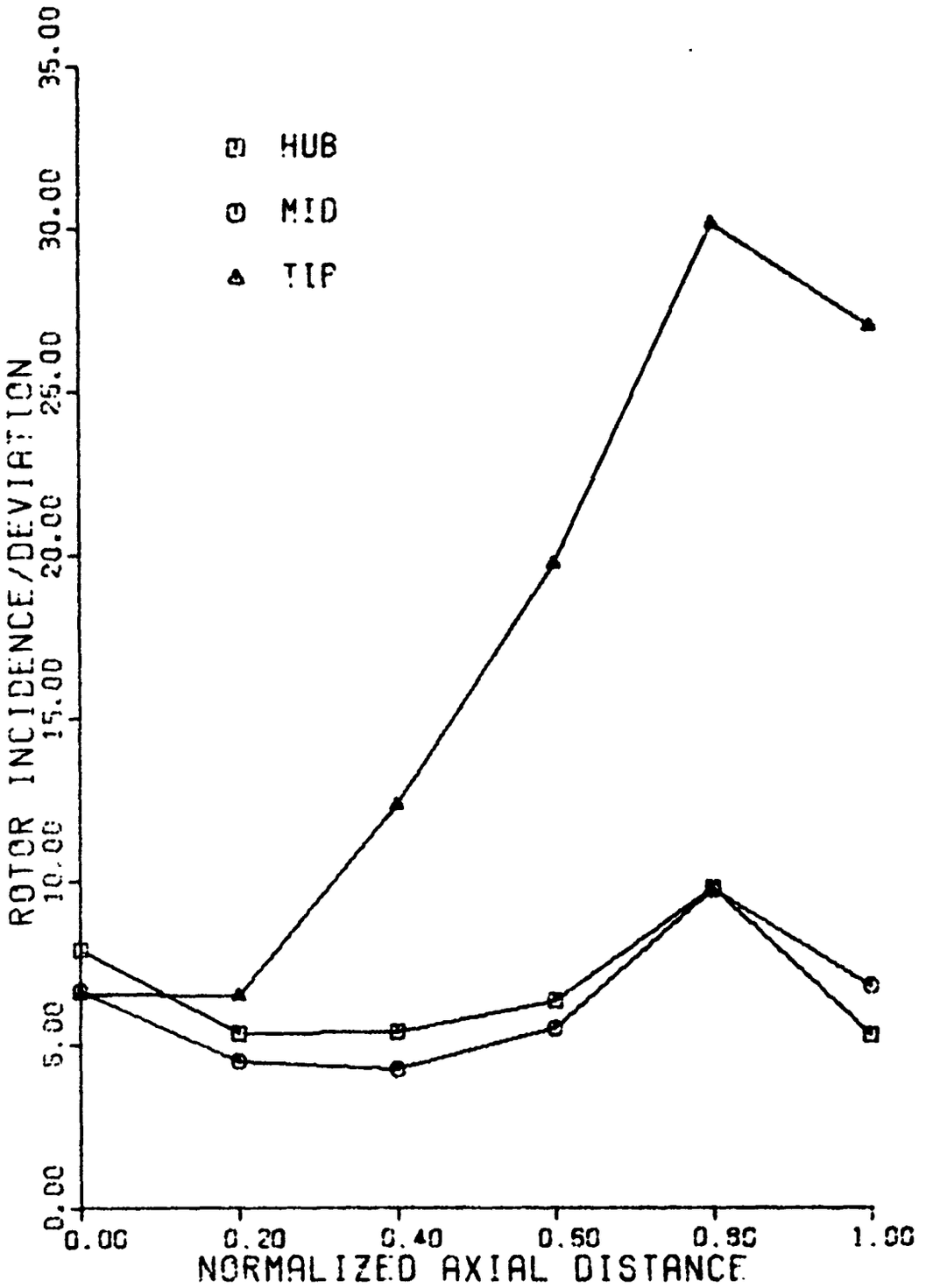


FIGURE 209. ROTOR WITHIN-BLADE DEVIATION ANGLE DISTRIBUTION (95% SPEED POINT)

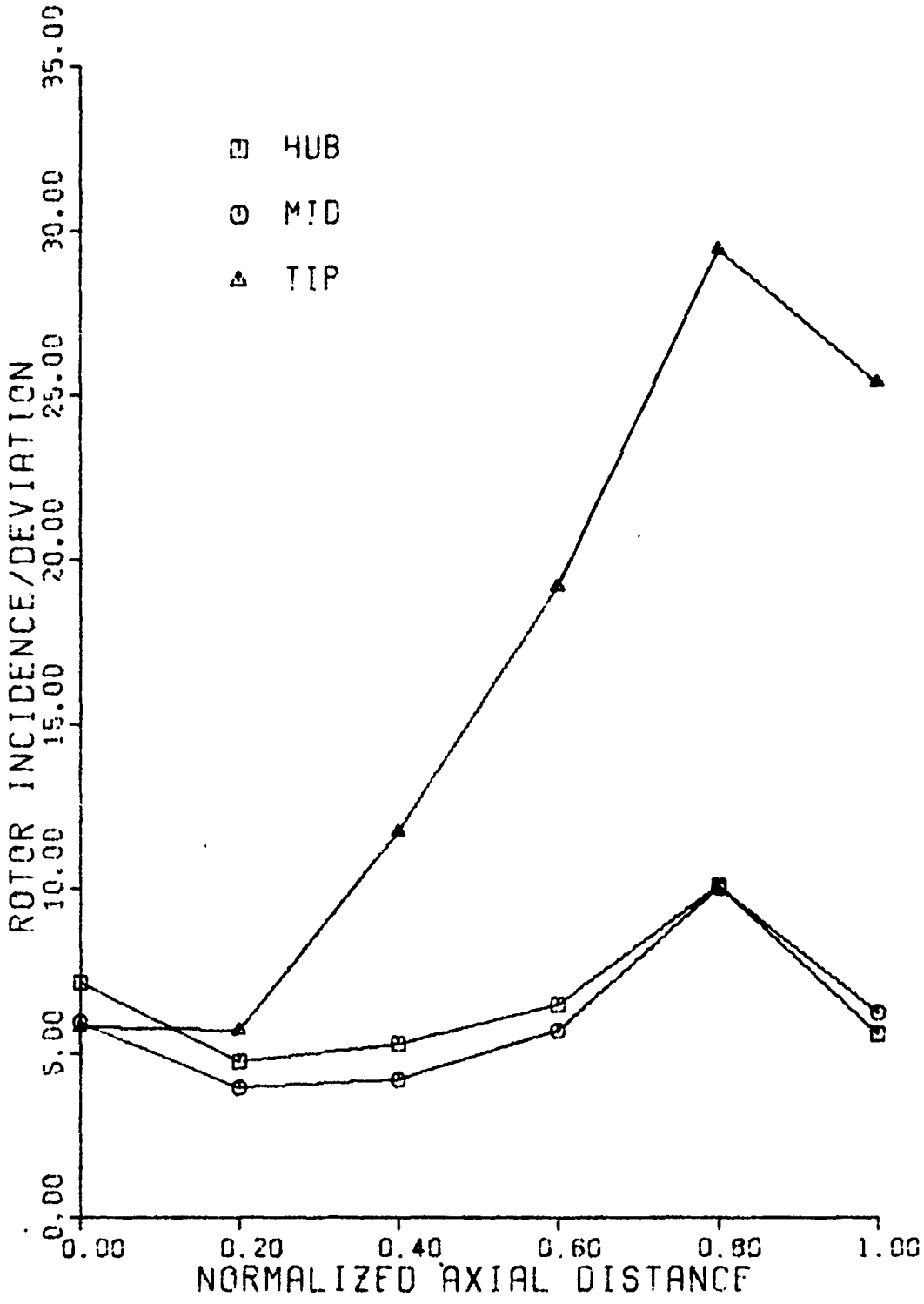


FIGURE 210. ROTOR WITHIN-BLADE DEVIATION ANGLE DISTRIBUTION (100% SPEED POINT)

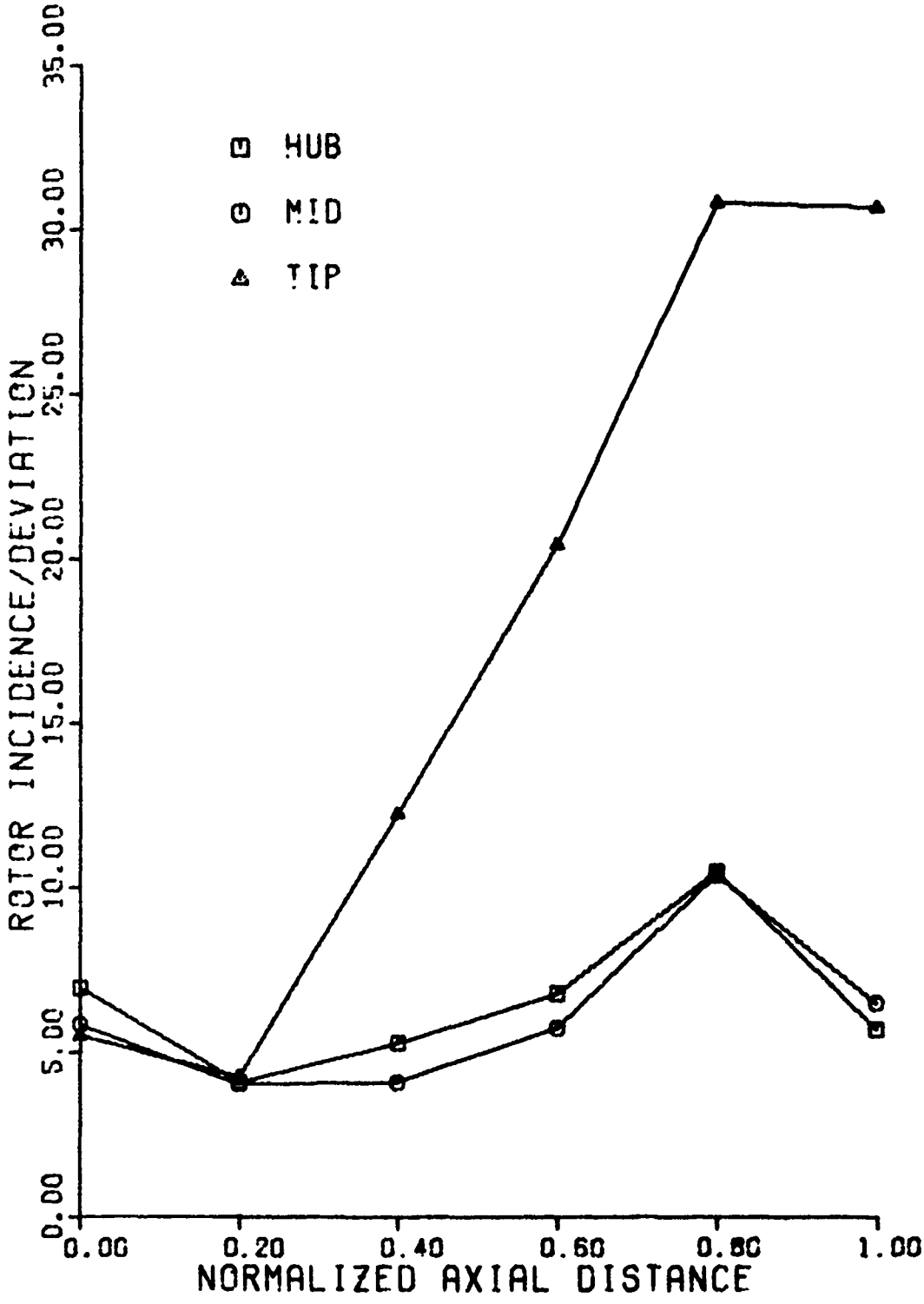


FIGURE 211. ROTOR WITHIN-BLADE DEVIATION ANGLE DISTRIBUTION (102% SPEED POINT)

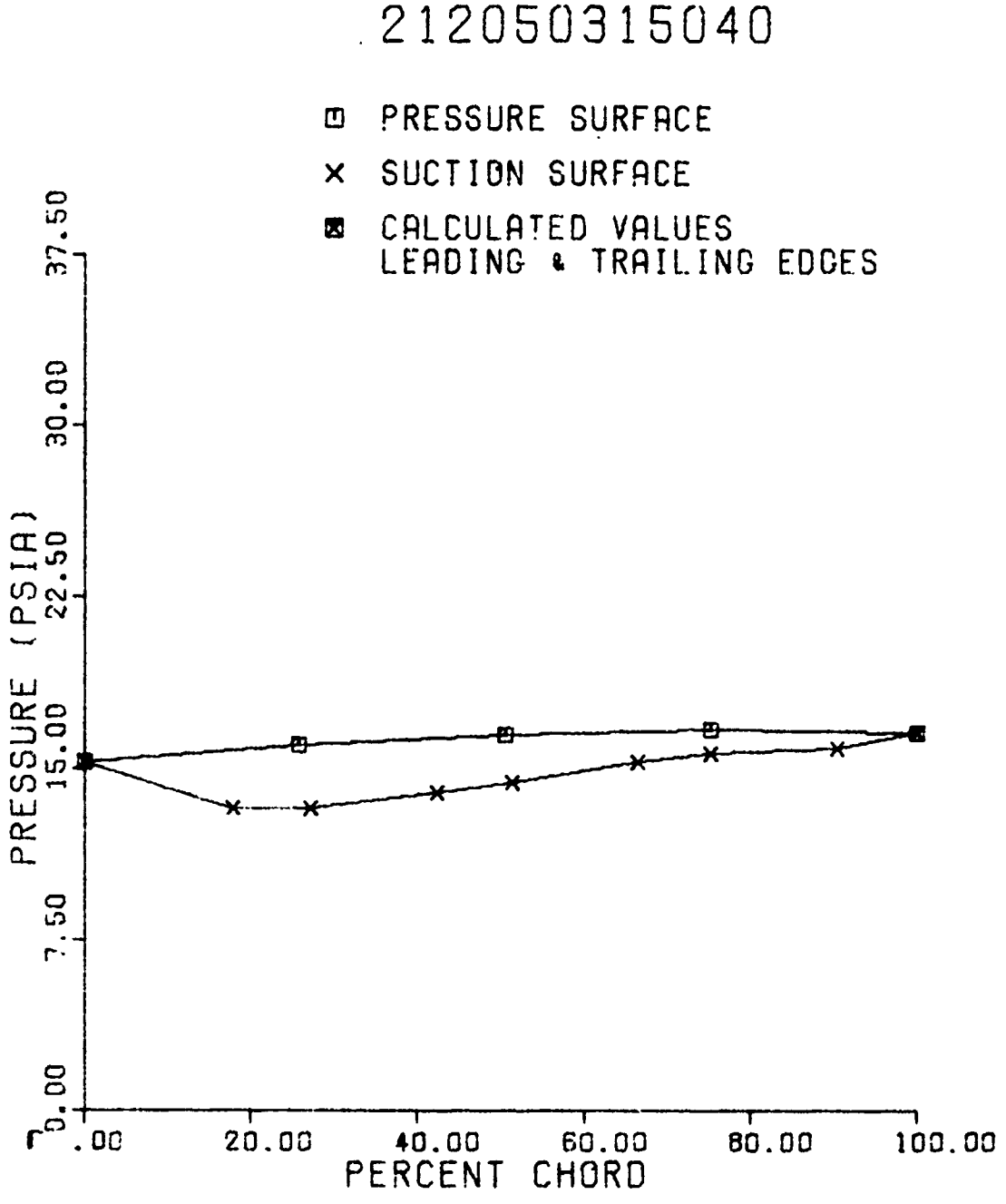


FIGURE 212. STATOR MID-SPAN SURFACE STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 40% SPEED)

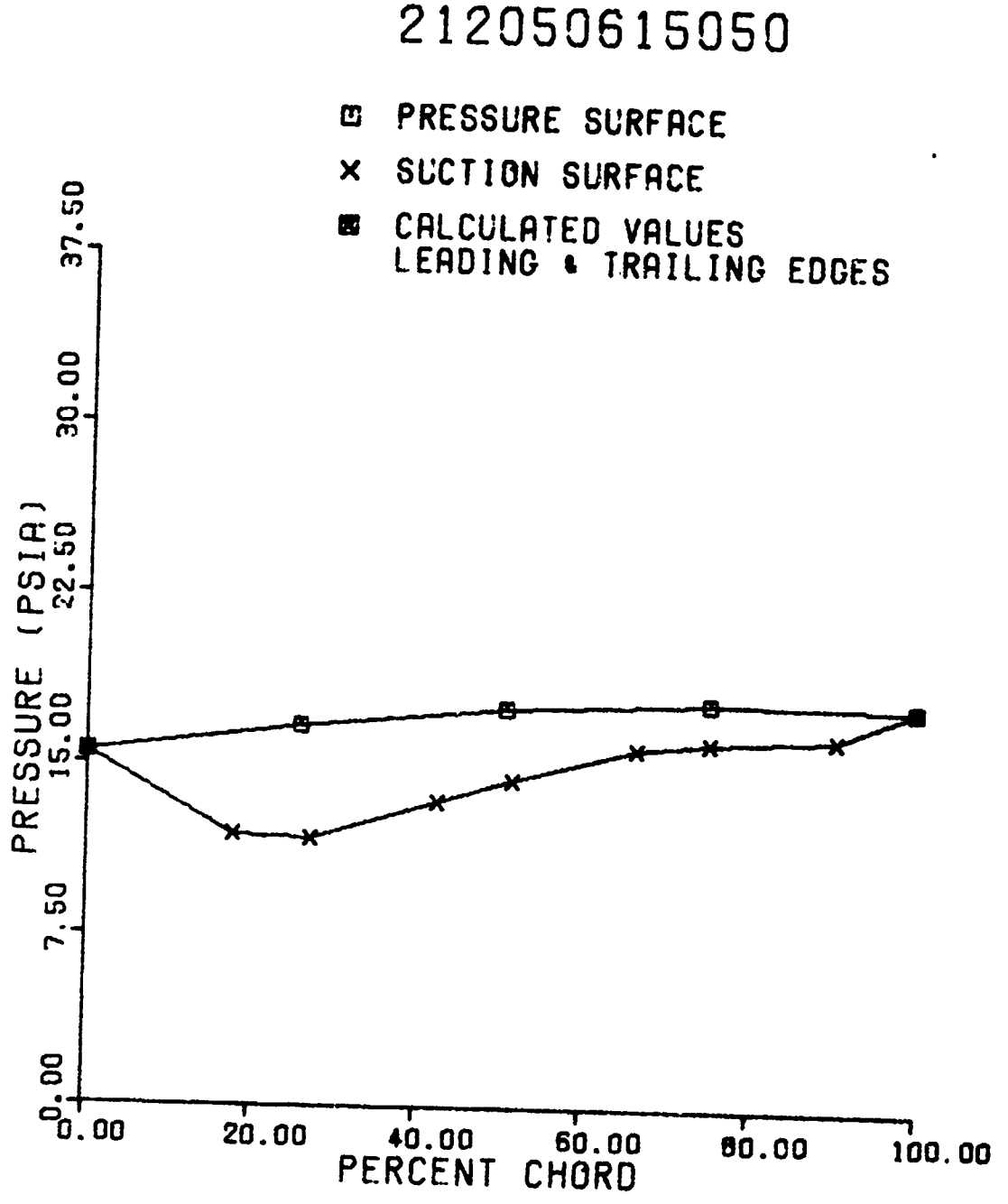


FIGURE 213. STATOR MID-SPAN SURFACE STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 50% SPEED)

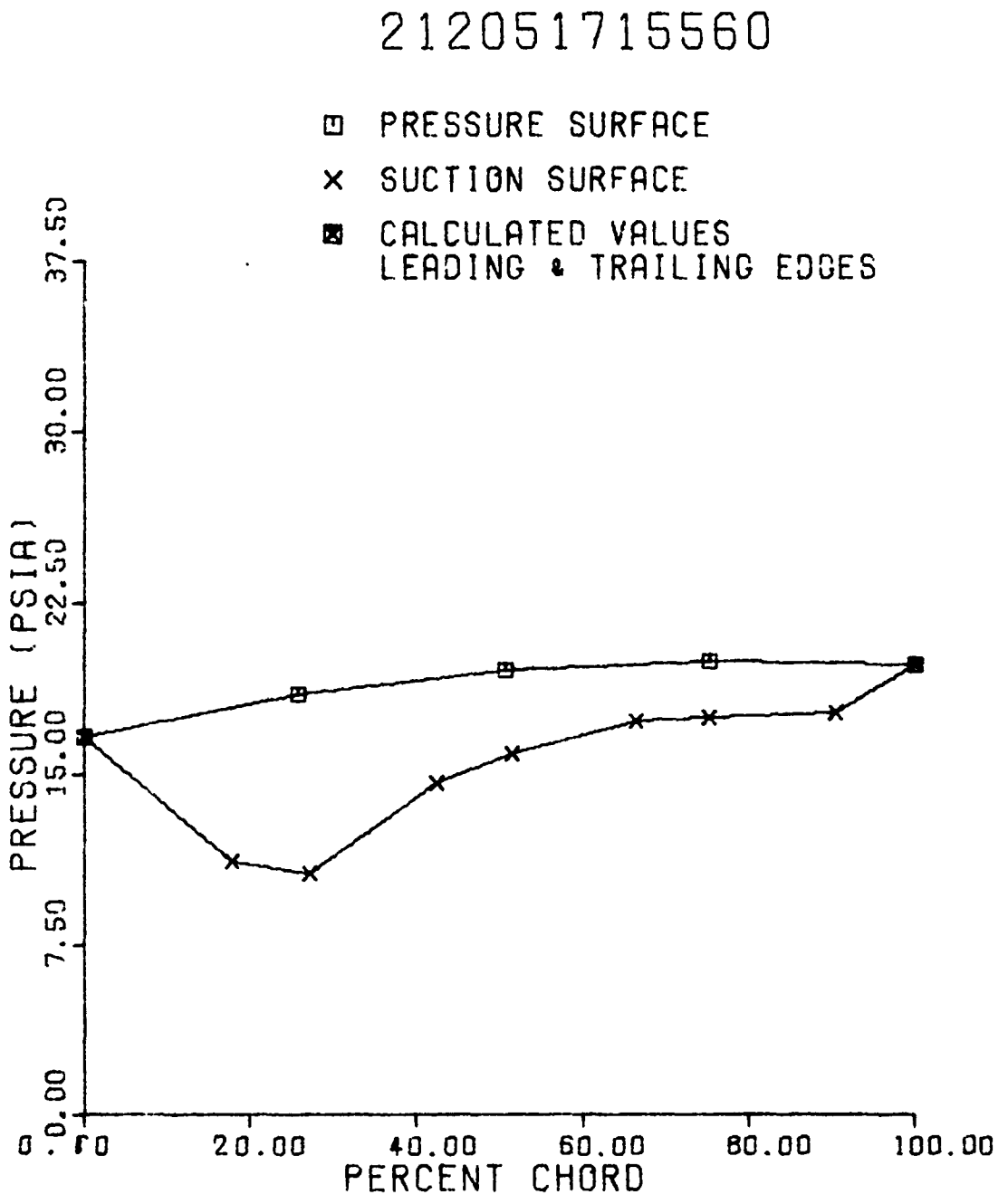


FIGURE 214. STATOR MID-SPAN SURFACE STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 60% SPEED)

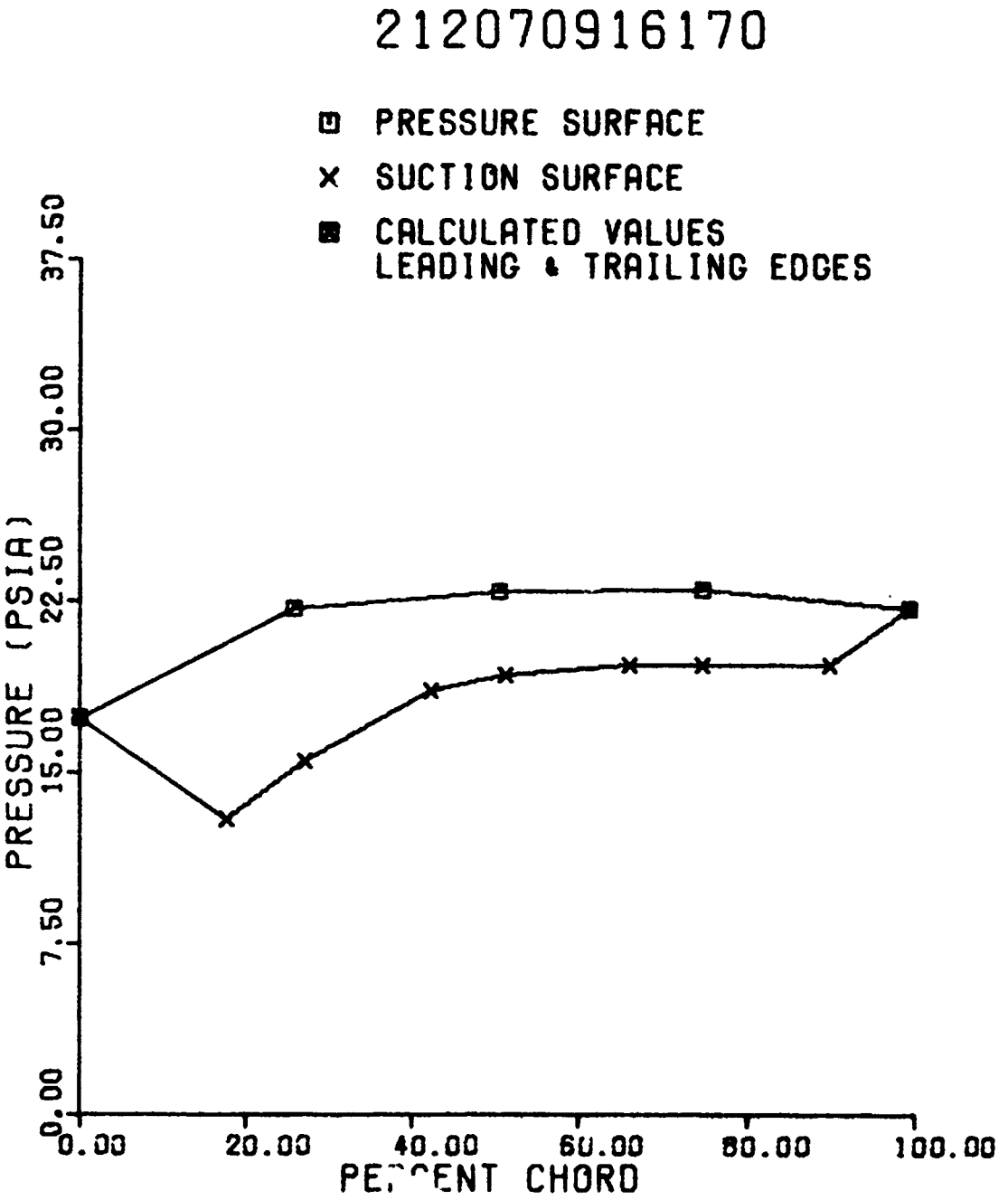


FIGURE 215. STATOR MID-SPAN SURFACE STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 70% SPEED)

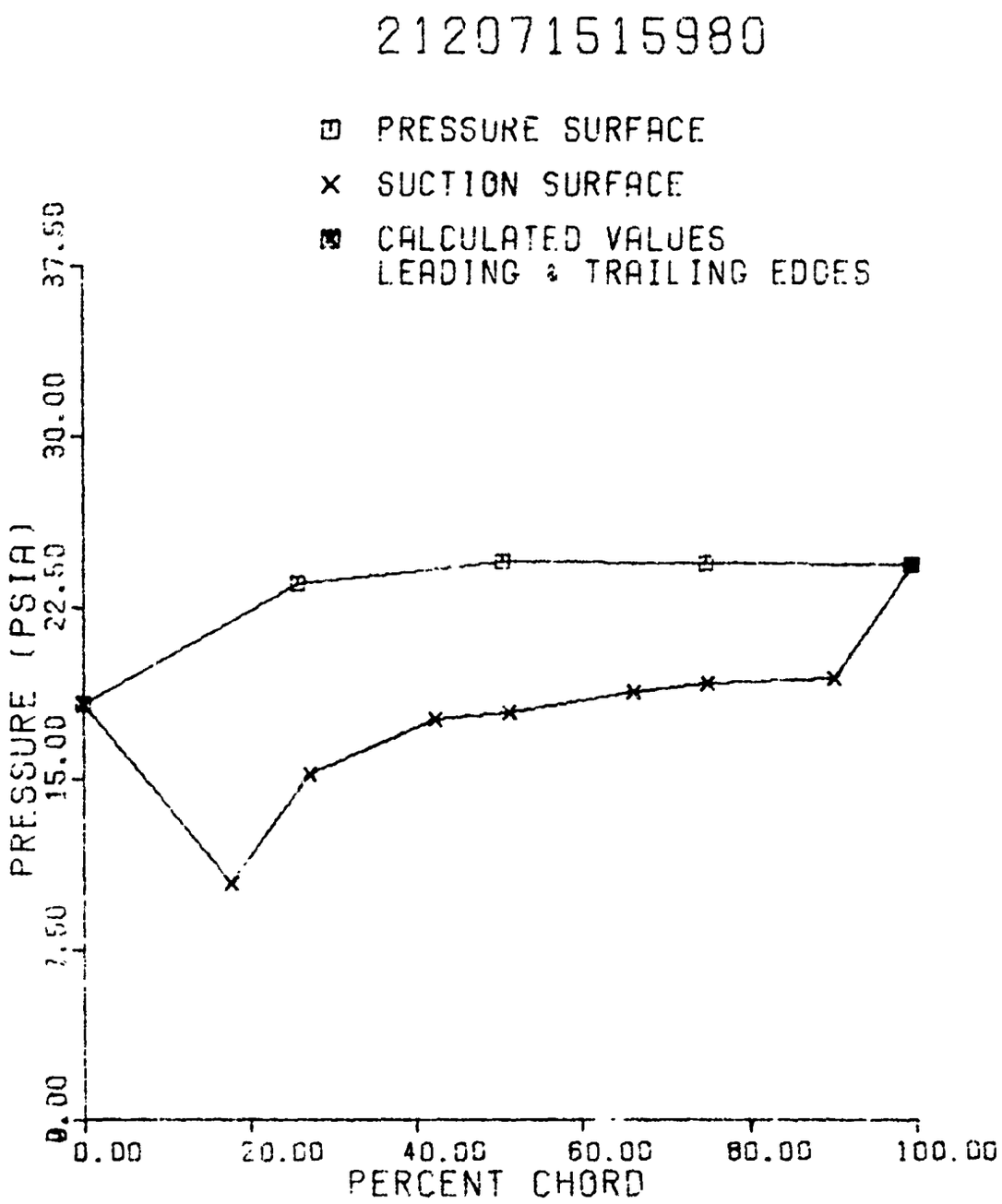


FIGURE 216. STATOR MID-SPAN SURFACE STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 80% SPEED)

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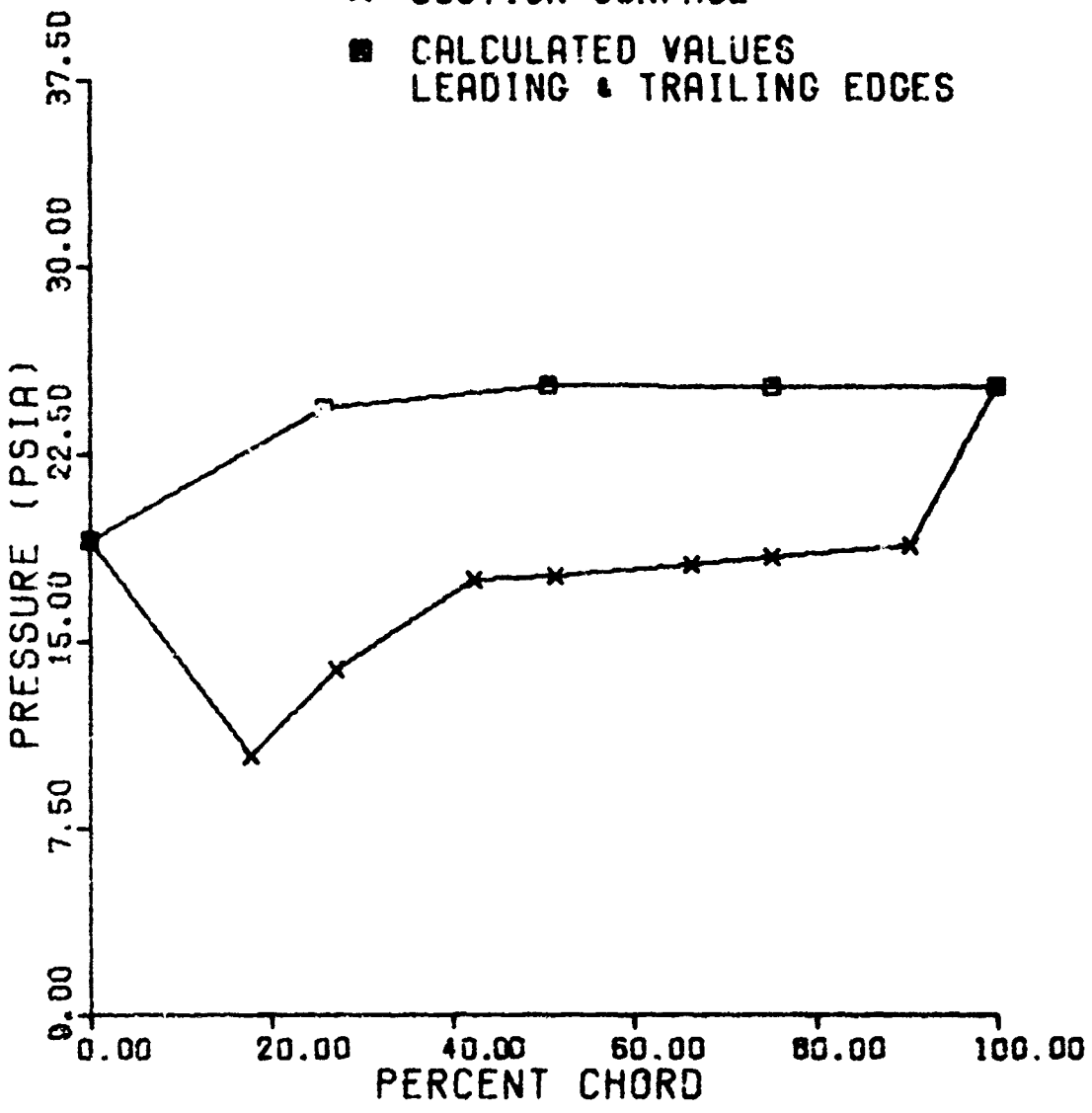

FIGURE 217. STATOR MID-SPAN SURFACE STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 85% SPEED)

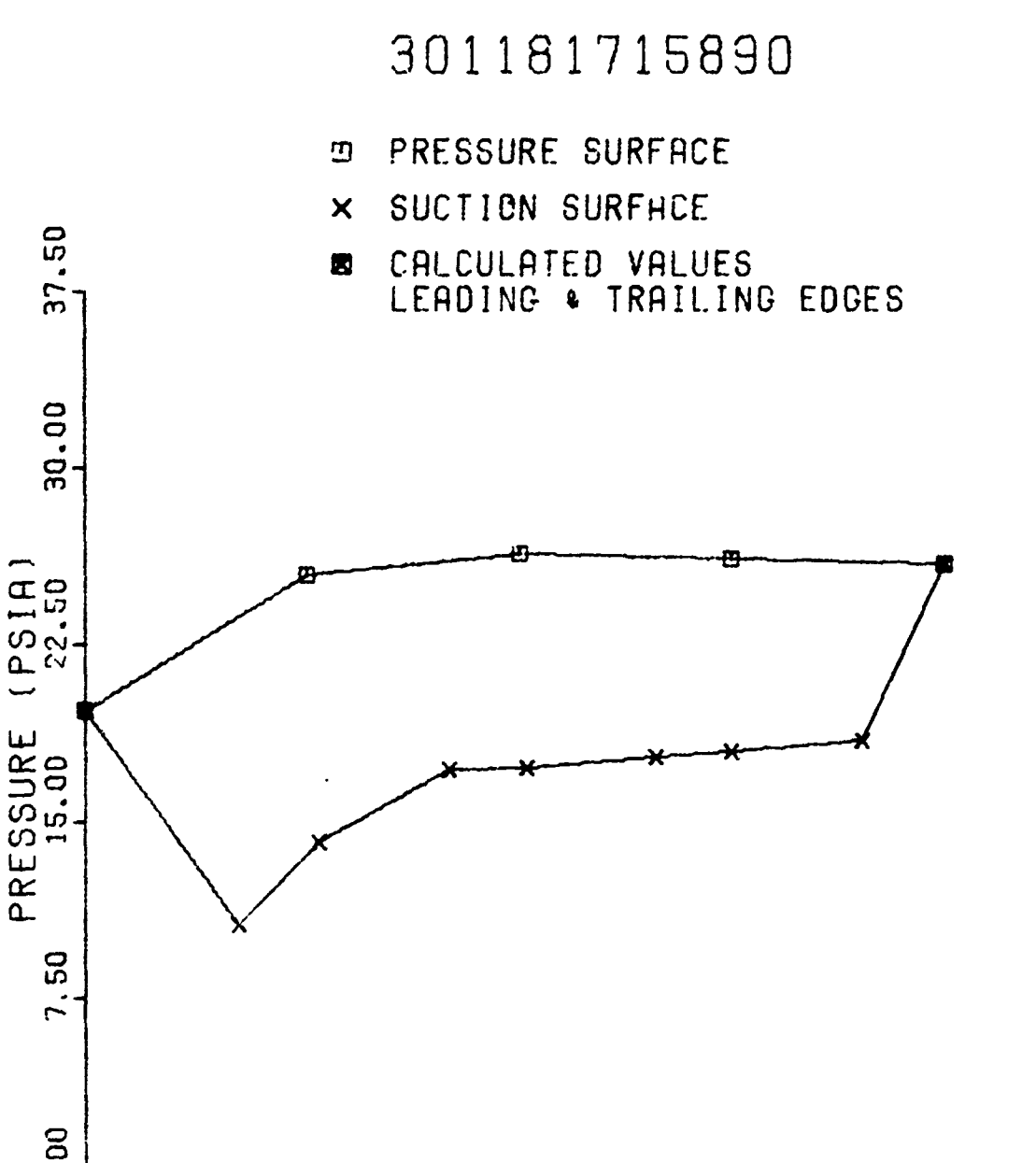

FIGURE 218. STATOR MID-SPAN SURFACE STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 90% SPEED)

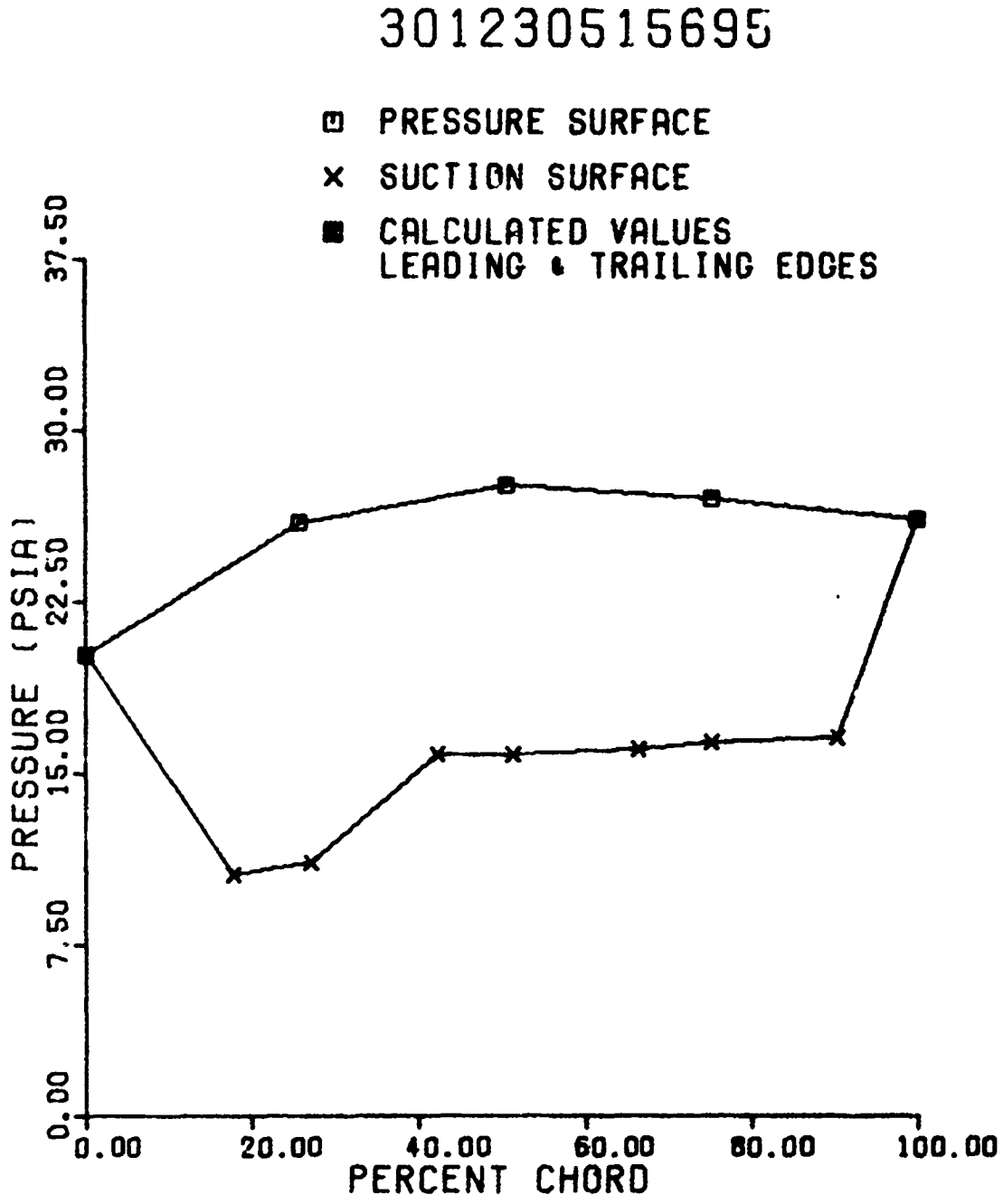

FIGURE 219. STATOR MID-SPAN SURFACE STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 95% SPEED)

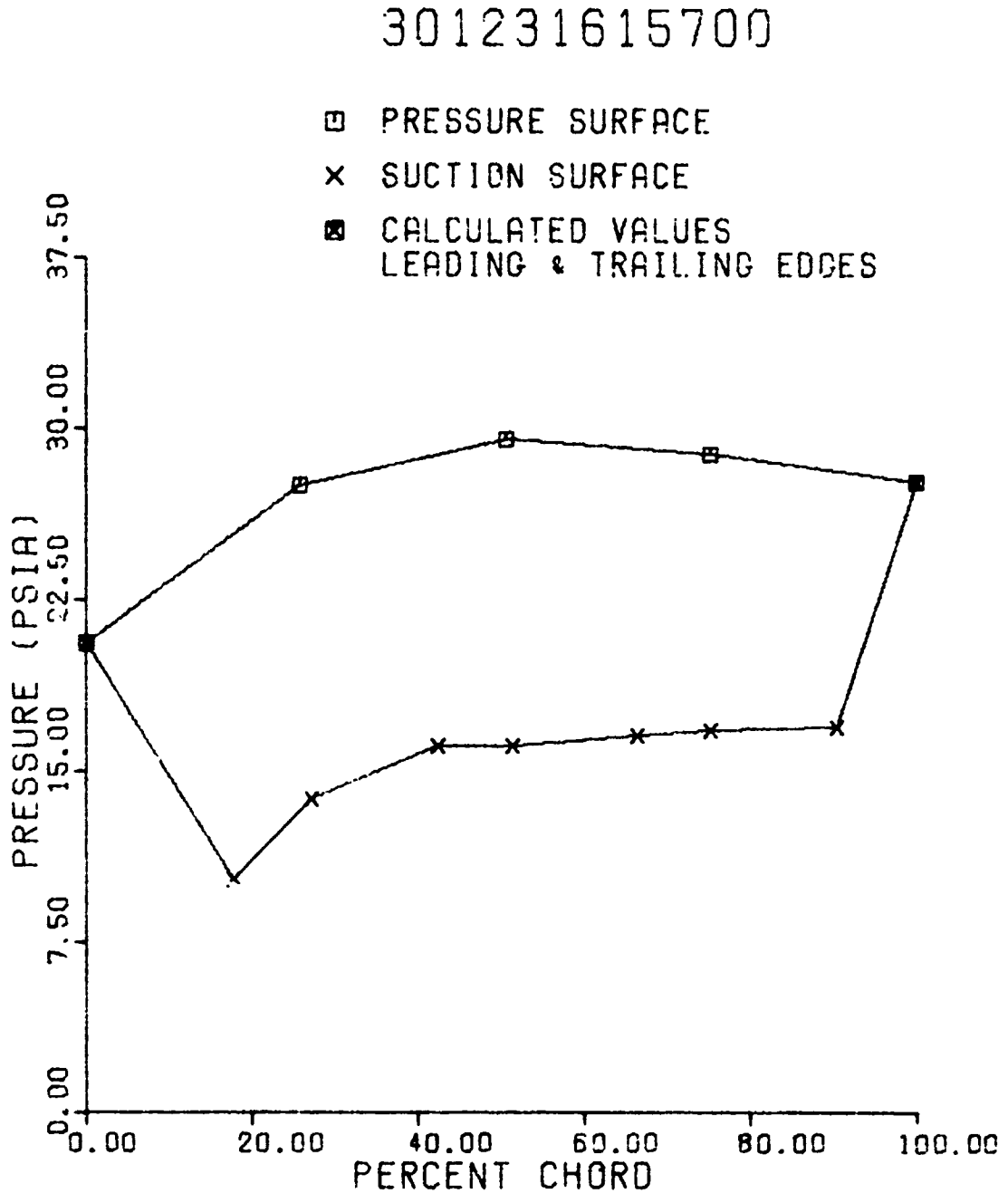

FIGURE 220. STATOR MID-SPAN SURFACE STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 100% SPEED)

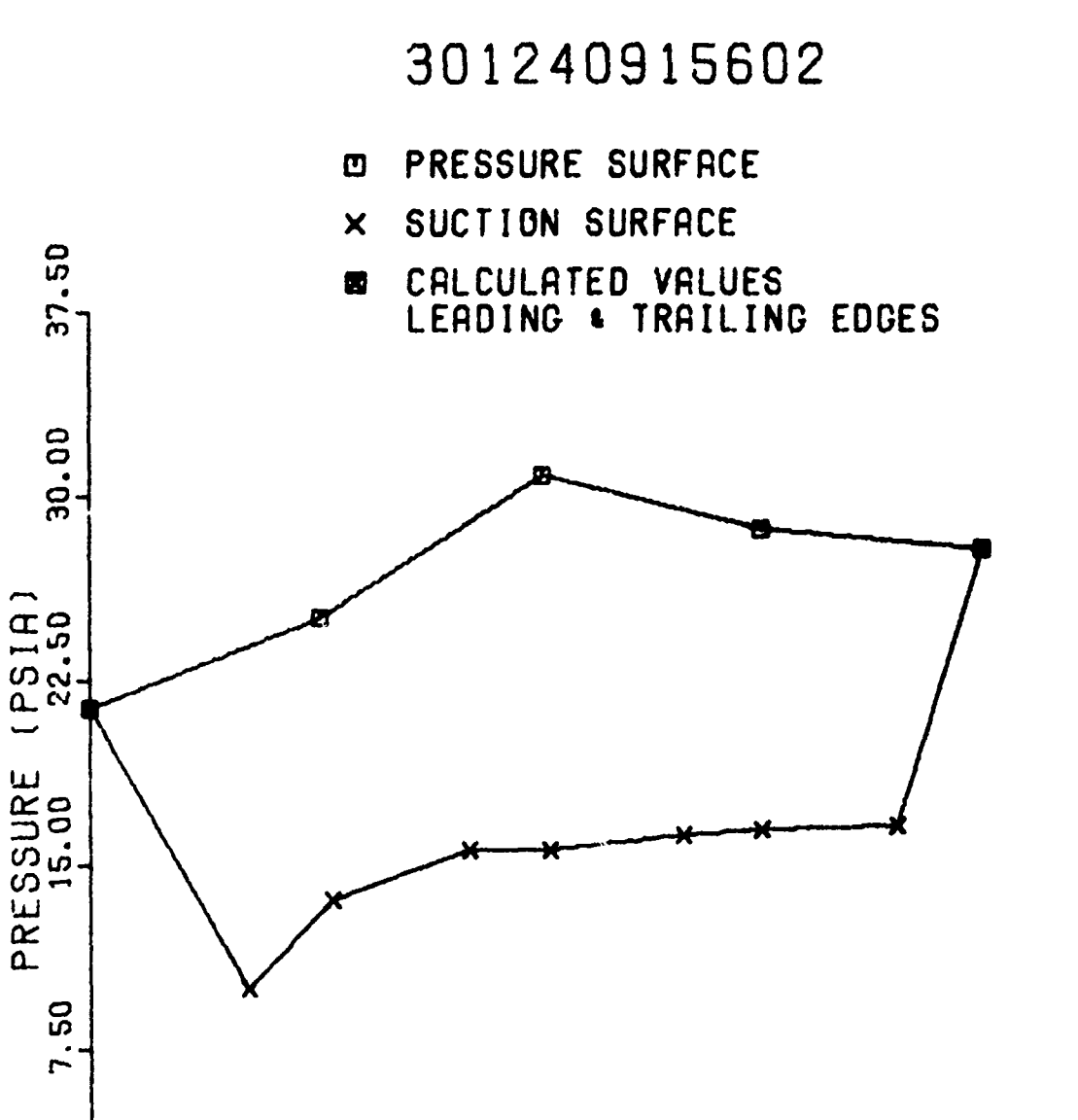

FIGURE 221. STATOR MID-SPAN SURFACE STATIC PRESSURE DISTRIBUTION (WITHIN-BLADE ANALYSIS, 102% SPEED)

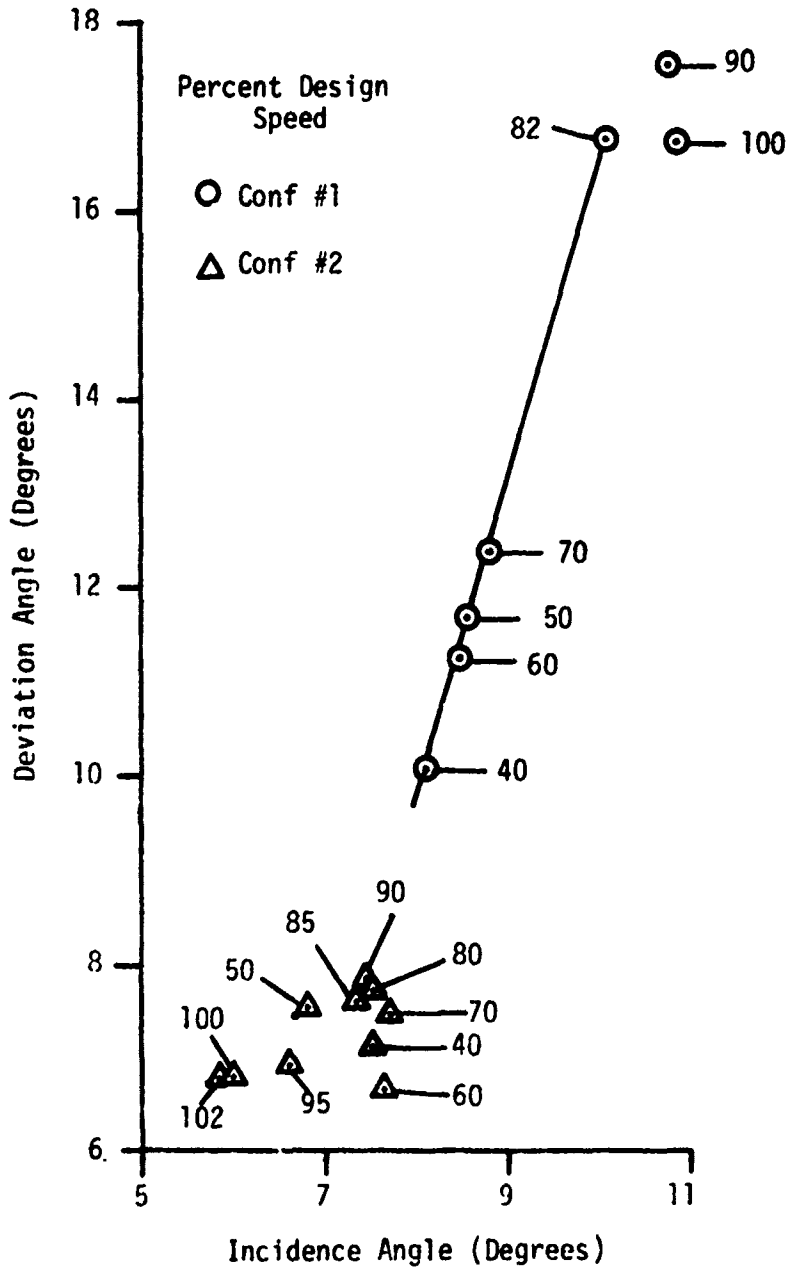

FIGURE 222. ROTOR MID-RADIUS DEVIATION VS INCIDENCE ANGLE

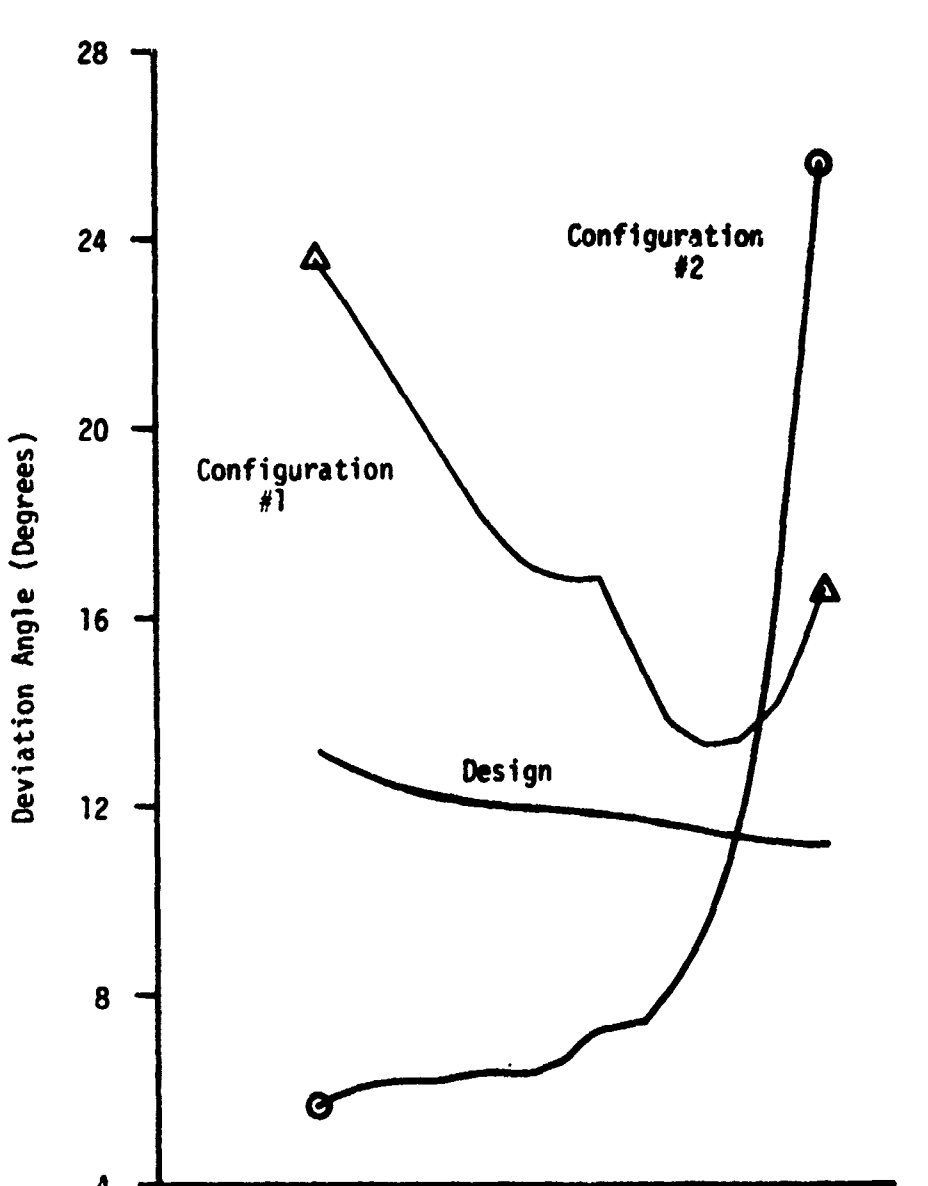

FIGURE 223. ROTOR DEVIATION ANGLE DISTRIBUTION

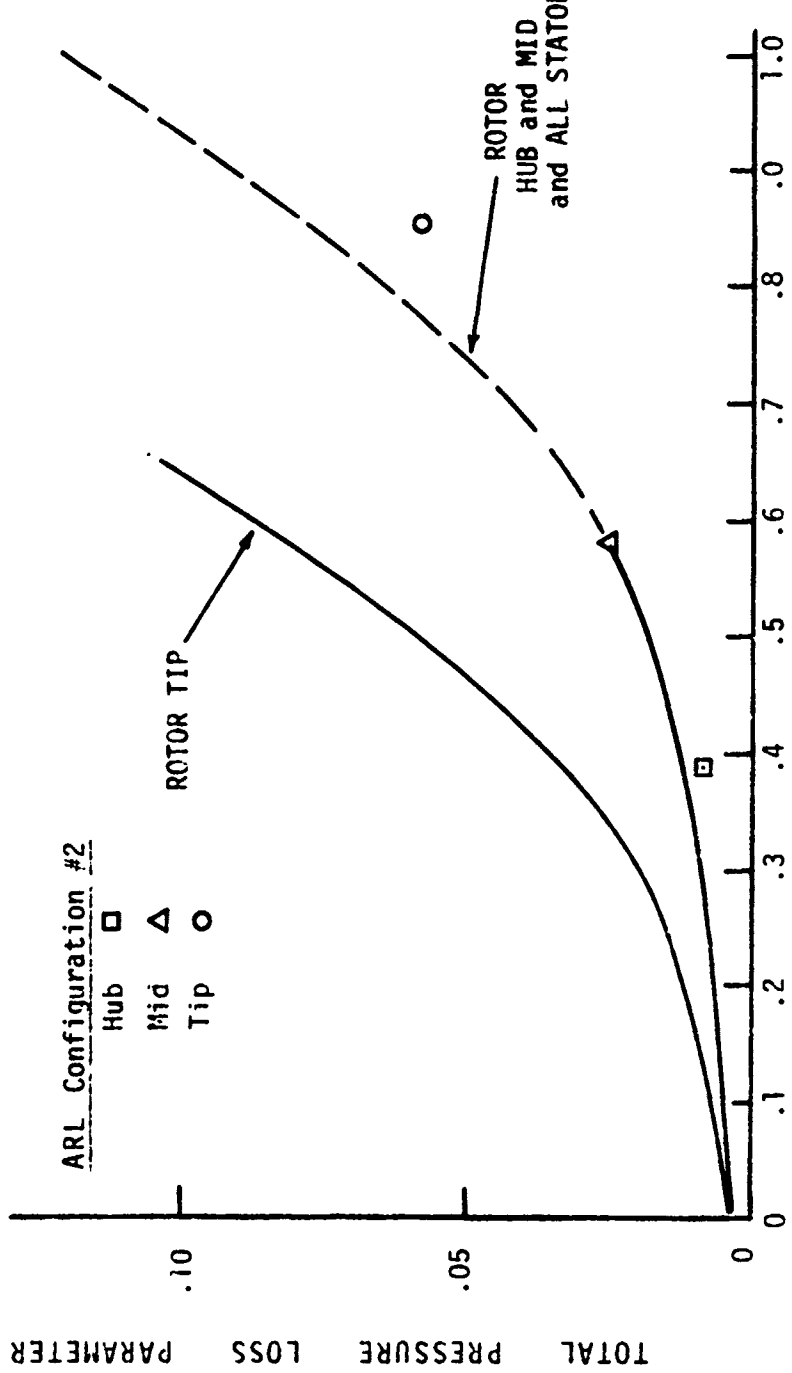

FIGURE 224. NACA COMPRESSOR LOSS CORRELATION WITH ARL CONFIGURATION #2 SUPERIMPOSED

APPENDIX A

PHASE II WITHIN-BLADE ANALYSES (COMPUTER PRINTOUTS)

This appendix presents the aerodynamic results (in the form of computer printouts) of the Phase II within-blade analyses for the ten test points selected for that analysis. The printout of input data which precedes the material presented herein has been removed in order to keep the number of pages to a minimum. The input data used in each of these analyses are presented in Appendix B.

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1. TEST POINT 212050315040 (40%)

STATION 1 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES			TEMPERATURES		PRESSURES		MACH NO	ANGLES		RADIUS OF CURVATURE	SPECIFIC WEIGHT
		AXIAL	TANGENTIAL	TOTAL	TOTAL	STATIC	TOTAL	STATIC		WHIRL	SLOPE		
1	9.0000	137.59	0.00	137.59	519.000	517.119	14.696	14.541	.1232	0.00	20.93	0.000	.0757
2	9.2250	137.59	0.00	137.59	519.000	517.119	14.696	14.541	.1232	0.00	19.73	0.000	.0757
3	9.4500	137.59	0.00	137.59	519.000	517.119	14.696	14.541	.1232	0.00	18.53	0.000	.0757
4	9.6750	137.59	0.00	137.59	519.000	517.119	14.696	14.541	.1232	0.00	17.31	0.000	.0757
5	9.9000	137.59	0.00	137.59	519.000	517.119	14.696	14.541	.1232	0.00	16.09	0.000	.0757
6	10.1250	137.59	0.00	137.59	519.000	517.119	14.696	14.541	.1232	0.00	14.87	0.000	.0757
7	10.3500	137.59	0.00	137.59	519.000	517.119	14.696	14.541	.1232	0.00	13.65	0.000	.0757
8	10.5750	137.59	0.00	137.59	519.000	517.119	14.696	14.541	.1232	0.00	12.44	0.000	.0757
9	10.8000	137.59	0.00	137.59	519.000	517.119	14.696	14.541	.1232	0.00	11.23	0.000	.0757
10	11.0250	137.59	0.00	137.59	519.000	517.119	14.696	14.541	.1232	0.00	10.03	0.000	.0757
11	11.2500	137.59	0.00	137.59	519.000	517.119	14.696	14.541	.1232	0.00	8.86	0.000	.0757
12	11.4750	137.59	0.00	137.59	519.000	517.119	14.696	14.541	.1232	0.00	7.71	0.000	.0757
13	11.7000	137.59	0.00	137.59	519.000	517.119	14.696	14.541	.1232	0.00	6.59	0.000	.0757
14	11.9250	137.59	0.00	137.59	519.000	517.119	14.696	14.541	.1232	0.00	5.51	0.000	.0757
15	12.1500	137.59	0.00	137.59	519.000	517.119	14.696	14.541	.1232	0.00	4.48	0.000	.0757
16	12.3750	137.59	0.00	137.59	519.000	517.119	14.696	14.541	.1232	0.00	3.51	0.000	.0757
17	12.6000	137.59	0.00	137.59	519.000	517.119	14.696	14.541	.1232	0.00	2.62	0.000	.0757
18	12.8250	137.59	0.00	137.59	519.000	517.119	14.696	14.541	.1232	0.00	1.80	0.000	.0757
19	13.0500	137.59	0.00	137.59	519.000	517.119	14.696	14.541	.1232	0.00	1.05	0.000	.0757
20	13.2750	137.59	0.00	137.59	519.000	517.119	14.696	14.541	.1232	0.00	.48	0.000	.0757
21	13.5000	137.59	0.00	137.59	519.000	517.119	14.696	14.541	.1232	0.00	0.00	0.000	.0757

STATION 2 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES			TEMPERATURES		PRESSURES		MACH NO	ANGLES		RADIUS OF CURVATURE	SPECIFIC WEIGHT
		AXIAL	TANGENTIAL	TOTAL	TOTAL	STATIC	TOTAL	STATIC		WHIRL	SLOPE		
1	9.3750	149.74	0.00	149.74	519.000	516.353	14.696	14.313	.1333	0.00	20.93	-205.758	.0756
2	9.5133	149.41	0.00	149.41	519.000	516.337	14.696	14.313	.1334	0.00	19.68	-134.989	.0756
3	9.6917	149.01	0.00	149.01	519.000	516.822	14.696	14.312	.1334	0.00	18.33	-107.736	.0755
4	9.7333	148.92	0.00	148.92	519.000	516.808	14.696	14.310	.1334	0.00	17.08	-92.645	.0755
5	9.8250	148.72	0.00	148.72	519.000	516.790	14.696	14.309	.1335	0.00	15.64	-81.934	.0755
6	9.9583	148.43	0.00	148.43	519.000	516.765	14.696	14.308	.1337	0.00	14.20	-73.078	.0755
7	10.1417	148.03	0.00	148.03	519.000	516.726	14.696	14.307	.1339	0.00	13.04	-65.124	.0755
8	10.3250	147.64	0.00	147.64	519.000	516.688	14.696	14.305	.1343	0.00	12.08	-57.773	.0755
9	10.5083	147.25	0.00	147.25	519.000	516.653	14.696	14.306	.1346	0.00	10.83	-51.306	.0755
10	10.6917	146.85	0.00	146.85	519.000	516.621	14.696	14.306	.1350	0.00	9.58	-44.843	.0755
11	10.8750	146.47	0.00	146.47	519.000	516.591	14.696	14.306	.1353	0.00	8.34	-39.324	.0755
12	11.0583	146.09	0.00	146.09	519.000	516.565	14.696	14.306	.1355	0.00	7.12	-34.446	.0755
13	11.2417	145.71	0.00	145.71	519.000	516.542	14.696	14.307	.1357	0.00	5.92	-30.173	.0755
14	11.4250	145.37	0.00	145.37	519.000	516.523	14.696	14.308	.1358	0.00	4.75	-26.451	.0755
15	11.6083	145.07	0.00	145.07	519.000	516.508	14.696	14.309	.1359	0.00	3.62	-23.215	.0755
16	11.7917	144.83	0.00	144.83	519.000	516.497	14.696	14.311	.1360	0.00	2.53	-20.397	.0755
17	11.9750	144.62	0.00	144.62	519.000	516.489	14.696	14.312	.1361	0.00	1.50	-17.929	.0756
18	12.1583	144.46	0.00	144.46	519.000	516.484	14.696	14.313	.1362	0.00	.53	-15.754	.0756
19	12.3417	144.34	0.00	144.34	519.000	516.482	14.696	14.313	.1362	0.00	-.37	-13.821	.0756
20	12.5250	144.27	0.00	144.27	519.000	516.482	14.696	14.313	.1362	0.00	-1.16	-12.086	.0756
21	12.7083	144.21	0.00	144.21	519.000	516.482	14.696	14.313	.1362	0.00	-1.91	-10.518	.0756

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STATION 3 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGL	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	9.0810	151.22	0.00	151.22	518.638	516.332	14.69	14.483	.1445	0.00	20.54	-93.831	.0754
2	9.1233	152.04	0.000	152.04	518.638	516.511	14.693	14.481	.1452	0.000	19.33	-173.438	.0754
3	9.8432	152.94	0.000	152.94	518.638	516.488	14.693	14.479	.1460	0.000	18.10	-524.767	.0754
4	9.9763	153.90	0.000	153.90	518.638	516.460	14.693	14.476	.1469	0.000	16.86	18057.961	.0754
5	7.0918	154.86	0.000	154.86	518.638	516.434	14.693	14.474	.1478	0.000	15.59	2566.613	.0754
6	7.2128	155.78	0.000	155.78	518.638	516.409	14.693	14.471	.1486	0.000	14.29	-1352.339	.0754
7	7.3328	156.62	0.000	156.62	518.638	516.388	14.693	14.469	.1493	0.000	12.97	-312.648	.0754
8	7.4522	157.35	0.000	157.35	518.638	516.365	14.693	14.467	.1500	0.000	11.63	-145.127	.0754
9	7.5710	157.96	0.000	157.96	518.638	516.349	14.693	14.465	.1505	0.000	10.26	-85.246	.0754
10	7.6911	158.35	0.000	158.35	518.638	516.338	14.693	14.464	.1509	0.000	8.87	-56.746	.0754
11	7.8103	158.53	0.000	158.53	518.638	516.333	14.693	14.464	.1511	0.000	7.47	-40.910	.0754
12	7.9290	158.43	0.000	158.43	518.638	516.334	14.693	14.464	.1510	0.000	6.07	-31.166	.0754
13	8.0474	158.17	0.000	158.17	518.638	516.343	14.693	14.465	.1507	0.000	4.67	-24.741	.0754
14	8.1638	157.57	0.001	157.57	518.638	516.359	14.693	14.466	.1502	0.000	3.28	-20.286	.0754
15	8.2810	156.58	0.000	156.58	518.638	516.384	14.693	14.469	.1494	0.000	1.91	-17.077	.0754
16	8.4133	155.49	0.000	155.49	518.638	516.417	14.693	14.472	.1483	0.000	.57	-14.704	.0754
17	8.5354	154.20	0.000	154.00	518.638	516.458	14.693	14.476	.1470	0.000	-.73	-12.948	.0754
18	8.9622	152.22	0.000	152.22	518.638	516.506	14.693	14.481	.1454	0.000	-1.99	-11.508	.0754
19	8.7393	150.19	0.000	150.19	518.638	516.561	14.693	14.486	.1435	0.000	-3.20	-10.398	.0754
20	8.9133	147.81	0.000	147.81	518.638	516.623	14.693	14.492	.1414	0.000	-4.36	-9.473	.0754
21	9.0500	145.21	0.00	145.21	518.638	516.690	14.693	14.499	.1391	0.00	-5.47	-8.698	.0754

STATION 4 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGL	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.7510	172.17	0.00	172.17	518.638	516.230	14.693	14.454	.1543	0.00	20.32	-389.054	.0753
2	6.8042	174.00	0.000	174.00	518.638	516.177	14.693	14.446	.1569	0.000	19.24	-387313.253	.0754
3	6.9737	175.84	0.000	175.84	518.638	516.124	14.693	14.443	.1578	0.000	18.10	4665.475	.0754
4	7.0915	177.66	0.000	177.66	518.638	516.071	14.693	14.438	.1593	0.000	16.90	2866.981	.0754
5	7.2034	179.42	0.000	179.42	518.638	516.018	14.693	14.433	.1609	0.000	15.64	2755.575	.0754
6	7.3144	181.10	0.000	181.10	518.638	515.968	14.693	14.428	.1624	0.000	14.31	+37.691	.0754
7	7.4240	182.63	0.000	182.63	518.638	515.922	14.693	14.423	.1638	0.000	12.92	-1626.763	.0754
8	7.5341	184.01	0.000	184.01	518.638	515.880	14.693	14.419	.1650	0.000	11.47	-202.521	.0754
9	7.6430	185.14	0.000	185.14	518.638	515.845	14.693	14.416	.1660	0.000	9.96	-94.284	.0754
10	7.7517	186.09	0.000	186.09	518.638	515.819	14.693	14.413	.1668	0.000	8.42	-57.624	.0754
11	7.8592	186.83	0.000	186.83	518.638	515.803	14.693	14.412	.1673	0.000	6.83	-40.131	.0754
12	7.9639	186.72	0.000	186.72	518.638	515.797	14.693	14.411	.1673	0.000	5.23	-30.012	.0754
13	8.0730	186.52	0.000	186.52	518.638	515.803	14.693	14.412	.1673	0.000	3.60	-23.409	.0754
14	8.1877	185.91	0.000	185.91	518.638	515.822	14.693	14.414	.1667	0.000	1.96	-18.778	.0754
15	8.2935	184.86	0.000	184.86	518.638	515.854	14.693	14.417	.1658	0.000	.34	-15.554	.0754
16	8.4135	183.37	0.000	183.37	518.638	515.900	14.693	14.421	.1644	0.000	-1.26	-13.446	.0754
17	8.5241	181.44	0.000	181.44	518.638	515.957	14.693	14.427	.1627	0.000	-2.79	-12.127	.0754
18	8.9330	179.23	0.000	179.23	518.638	516.023	14.693	14.433	.1607	0.000	-4.26	-11.233	.0754
19	8.7572	176.72	0.000	176.72	518.638	516.093	14.693	14.441	.1584	0.000	-5.66	-10.639	.0754
20	8.8773	173.95	0.000	173.95	518.638	516.179	14.693	14.449	.1559	0.000	-7.00	-10.298	.0754
21	9.0000	171.00	0.00	171.00	518.638	516.263	14.693	14.457	.1533	0.00	-8.25	-10.317	.0754

BLADE DATA

LOCATION	BLADE-ANGLES SECTION	LEAN	FLOW ANGL	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-60.937	0.070	-70.210	9.343	0.0000	490.3	.0574	513.24	16.983	537.815	1.00	0.000	1.0000	1.0000
2	-61.311	0.436	-70.334	8.983	0.0000	488.5	.0592	518.56	16.756	538.471	1.000	0.000	1.0000	1.0000
3	-61.573	0.573	-70.331	8.824	0.0000	490.1	.0597	520.91	16.327	539.132	1.000	0.000	1.0000	1.0000
4	-62.018	0.418	-70.317	8.644	0.0000	504.1	.0607	534.96	16.300	539.799	1.000	0.000	1.0000	1.0000
5	-62.307	0.303	-70.319	8.488	0.0000	512.0	.0609	543.08	16.373	540.470	1.000	0.000	1.0000	1.0000
6	-62.536	0.999	-70.323	8.278	0.0000	520.3	.0611	551.08	17.048	541.146	1.000	0.000	1.0000	1.0000
7	-62.854	0.497	-70.329	8.070	0.0000	529.3	.0613	560.08	17.123	541.827	1.000	0.000	1.0000	1.0000
8	-63.135	0.813	-70.331	7.911	0.0000	536.1	.0613	566.81	17.194	542.514	1.000	0.000	1.0000	1.0000
9	-63.419	0.913	-70.331	7.811	0.0000	[illegible]	.0615	[illegible]	17.277	543.209	1.000	0.000	1.0000	1.0000
10	-63.715	1.014	-70.328	7.711	0.0000	551.0	.0616	582.41	17.322	543.910	1.000	0.000	1.0000	1.0000
11	-64.026	1.170	-70.327	7.615	0.0000	554.3	.0618	585.91	17.435	544.621	1.000	0.000	1.0000	1.0000
12	-64.329	1.316	-70.322	7.515	0.0000	557.1	.0620	589.01	17.510	545.343	1.000	0.000	1.0000	1.0000
13	-64.713	1.716	-70.302	7.414	0.0000	560.4	.0620	592.32	17.599	546.078	1.000	0.000	1.0000	1.0000
14	-65.092	2.263	-70.303	7.314	0.0003	562.6	.0685	611.57	17.783	546.827	1.000	0.000	1.0000	1.0000
15	-65.449	2.938	-70.317	7.214	0.0000	568.0	.0549	625.94	17.950	547.592	1.000	0.000	1.0000	1.0000
16	-65.854	3.320	-70.340	7.114	0.0000	570.3	.0613	634.13	17.952	548.378	1.000	0.000	1.0000	1.0000
17	-66.396	3.997	-70.349	7.015	0.0000	574.0	.0677	640.38	18.047	549.185	1.000	0.000	1.0000	1.0000
18	-66.937	4.745	-70.349	6.915	0.0000	576.0	.0742	647.73	18.146	550.016	1.000	0.000	1.0000	1.0000
19	-67.345	4.729	-70.347	6.821	0.000	577.7	.0807	655.21	18.248	550.875	1.000	0.000	1.0000	1.0000
20	-67.628	4.598	-70.348	6.777	0.0000	578.7	.0874	662.56	18.350	551.763	1.000	0.000	1.0000	1.0000
21	-68.126	3.507	-70.340	6.734	0.0003	580.4	.0942	662.56	18.350	552.684	1.000	0.000	1.0000	1.0000

STATION 5 FLOW FIELD DESCRIPTION

STREAM-LIN	RADIUS	VELOCITIES AXIAL	TANGEN	TOTAL	TEMPERATURES TOTAL	STATIC	PRESSURES TOTAL	STATIC	MACH NO	ANGLES WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC HEIGHT
1	5.5973	201.13	31.11	216.83	529.296	521.396	15.333	14.343	.1332	21.98	22.32	6.139	.0771
2	5.8945	203.39	79.33	218.63	529.217	521.269	15.329	14.329	.1347	21.22	20.38	7.498	.0771
3	7.1097	200.77	77.17	219.79	529.103	521.161	15.332	14.317	.1350	20.57	19.42	9.445	.0770
4	7.2134	203.12	75.73	221.44	529.138	521.064	15.314	14.306	.1378	20.00	17.98	12.579	.0770
5	7.3157	210.93	74.53	223.53	529.155	520.992	15.311	14.297	.1395	19.52	16.34	18.070	.0769
6	7.4195	215.28	73.53	225.72	529.155	520.931	15.317	14.290	.1414	19.11	14.73	29.072	.0769
7	7.5153	219.73	73.14	227.94	529.200	520.894	15.323	14.285	.1434	18.79	13.11	58.212	.0769
8	7.6143	217.96	72.93	229.98	529.253	520.871	15.329	14.281	.1452	18.53	11.45	266.941	.0769
9	7.7124	219.33	72.73	231.95	529.312	520.862	15.331	14.280	.1469	18.31	9.77	-166.395	.0769
10	7.8034	221.10	72.74	233.95	529.394	520.869	15.334	14.278	.1487	18.19	8.07	-81.924	.0768
11	7.9001	222.45	72.88	235.44	529.456	520.877	15.334	14.275	.1504	18.09	6.37	-65.235	.0768
12	8.0023	223.03	73.04	236.74	529.514	520.887	15.335	14.275	.1520	17.96	4.66	-63.284	.0768
13	8.0937	223.19	73.15	237.63	529.530	520.876	15.332	14.275	.1534	17.73	2.95	-70.282	.0768
14	8.1970	222.63	73.27	237.39	529.524	520.885	15.333	14.276	.1533	17.81	1.22	-99.019	.0768
15	8.2937	221.19	70.59	232.17	529.505	521.126	15.322	14.296	.1507	17.69	-.49	-134.375	.0768
16	8.3959	219.96	71.44	229.96	529.799	521.380	15.321	14.277	.1481	18.10	-2.15	-286.938	.0768
17	8.4911	218.89	72.17	227.13	529.925	521.648	15.312	14.279	.1455	18.53	-3.73	18366.809	.0767
18	8.6025	212.09	71.57	223.83	529.994	521.800	15.293	14.280	.1393	18.65	-5.25	388.533	.0767
19	8.7034	206.62	71.35	220.07	529.983	521.865	15.267	14.283	.1352	18.81	-6.70	282.710	.0767
20	8.8208	204.18	70.36	215.87	529.911	522.147	15.275	14.285	.1324	19.02	-8.09	380.954	.0767
21	8.9349	199.34	69.36	211.23	529.853	522.354	15.251	14.488	.1442	19.31	-9.38	-1665.663	.0767

BLADE DATA

LOCATION	BLADE SECTION	ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-58.948	4.233	-63.351	4.303	.0116	490.8	.4071	456.37	16.750	538.662	1.044	.813	.9000	.9000
2	-59.425	4.231	-64.130	4.705	.0120	495.4	.4159	466.16	16.816	539.284	1.043	.813	.9000	.9000
3	-59.867	4.042	-64.370	4.503	.0124	500.3	.4243	475.53	16.882	539.887	1.043	.813	.9000	.9000
4	-60.260	3.639	-64.562	4.301	.0126	513.3	.4323	484.52	16.949	540.538	1.042	.813	.9000	.9000
5	-60.607	3.149	-64.709	4.102	.0128	520.6	.4401	493.17	17.016	541.154	1.042	.813	.9000	.9000
6	-60.920	2.780	-64.830	3.910	.0129	527.8	.4475	501.48	17.084	541.778	1.042	.813	.9000	.9000
7	-61.215	2.473	-64.942	3.728	.0134	534.8	.4546	509.37	17.151	542.402	1.042	.813	.9000	.9000
8	-61.503	2.150	-65.063	3.560	.0137	541.9	.4614	517.00	17.218	543.028	1.042	.813	.9000	.9000
9	-61.790	1.758	-65.202	3.412	.0142	548.8	.4680	524.37	17.286	543.656	1.042	.813	.9000	.9000
10	-62.086	1.325	-65.371	3.287	.0157	555.7	.4744	531.27	17.354	544.287	1.042	.813	.9000	.9000
11	-62.389	.834	-65.581	3.192	.0170	562.6	.4802	538.07	17.417	544.925	1.043	.813	.9000	.9000
12	-62.709	.451	-65.839	3.130	.0190	569.5	.4863	544.92	17.485	545.570	1.044	.813	.9000	.9000
13	-63.050	.001	-66.151	3.101	.0182	576.4	.4925	551.91	17.557	546.225	1.044	.813	.9000	.9000
14	-63.416	-.434	-66.520	3.103	.0185	583.3	.4987	558.91	17.630	546.892	1.044	.813	.9000	.9000
15	-63.811	-1.026	-66.947	3.135	.0224	590.3	.5040	564.85	17.693	547.573	1.043	.813	.9000	.9000
16	-64.238	-1.508	-67.435	3.196	.0304	597.4	.5081	569.61	17.743	548.274	1.042	.813	.9000	.9000
17	-64.695	-1.797	-67.982	3.287	.0384	604.7	.5123	574.43	17.795	548.998	1.042	.813	.9000	.9000
18	-65.172	-1.824	-68.579	3.407	.0421	612.2	.5178	580.69	17.865	549.749	1.041	.813	.9000	.9000
19	-65.664	-2.001	-69.215	3.551	.0459	619.8	.5234	587.04	17.936	550.529	1.041	.813	.9000	.9000
20	-66.170	-2.448	-69.897	3.717	.0499	627.6	.5290	593.47	18.011	551.346	1.039	.814	.9000	.9000
21	-66.694	-3.111	-70.634	3.900	.0544	635.7	.5347	599.96	18.086	552.187	1.038	.814	.7628	.7641

STATION 5 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.042 ISEN. EFF.= .901 POLY. EFF.= .902 DELTA T ON T = .813

STATION 6 FLOW FIELD DESCRIPTION

STREAMLINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.0794	237.79	150.55	281.44	531.263	524.696	15.932	15.253	.2503	32.34	24.47	68.453	.8782
2	7.1703	240.24	148.04	282.13	531.213	524.612	15.924	15.242	.2509	31.64	22.61	124.818	.8781
3	7.2603	242.08	145.83	283.15	531.182	524.536	15.913	15.231	.2518	31.00	20.78	241.281	.8781
4	7.3500	243.19	143.92	284.32	531.170	524.469	15.914	15.225	.2529	30.41	18.77	457.574	.8781
5	7.4390	247.74	142.30	285.70	531.177	524.410	15.912	15.213	.2541	29.87	16.83	-69.476	.8781
6	7.5249	250.30	140.90	287.23	531.204	524.363	15.913	15.207	.2555	29.39	14.91	-48.468	.8780
7	7.6109	252.06	140.13	288.89	531.268	524.349	15.915	15.201	.2578	29.01	13.01	-38.914	.8780
8	7.6961	254.34	139.36	290.45	531.344	524.350	15.920	15.198	.2584	28.67	11.15	-34.027	.8780
9	7.7808	256.69	138.81	291.92	531.432	524.372	15.925	15.196	.2596	28.48	9.33	-31.572	.8780
10	7.8652	257.85	139.63	292.85	531.572	524.462	15.930	15.196	.2605	28.30	7.55	-30.623	.8780
11	7.9495	258.56	138.76	293.45	531.705	524.566	15.934	15.198	.2618	28.22	5.82	-30.673	.8779
12	8.0341	258.87	138.48	293.55	531.809	524.665	15.935	15.208	.2610	28.13	4.12	-31.785	.8779
13	8.1132	258.80	137.53	293.07	531.863	524.743	15.940	15.205	.2606	27.99	2.45	-34.136	.8780
14	8.2048	258.09	136.47	291.95	531.900	524.834	15.940	15.210	.2596	27.87	.80	-38.491	.8780
15	8.2917	255.53	137.31	290.09	532.122	525.146	15.937	15.217	.2578	28.25	-.82	-45.758	.8779
16	8.3805	250.59	140.45	287.53	532.576	525.723	15.932	15.225	.2554	29.24	-2.38	-58.829	.8779
17	8.4719	245.48	143.59	284.37	533.038	526.334	15.925	15.235	.2525	30.32	-3.87	-80.456	.8779
18	8.5661	240.79	143.95	280.54	533.238	526.713	15.917	15.245	.2490	30.87	-5.30	-131.282	.8779
19	8.6632	235.47	144.34	276.19	533.442	527.119	15.909	15.257	.2450	31.51	-6.70	-316.516	.8779
20	8.7636	229.43	144.83	271.32	533.665	527.562	15.897	15.270	.2406	32.26	-8.06	2674.991	.8779
21	8.8679	222.63	145.61	266.03	533.924	528.058	15.885	15.283	.2358	33.19	-9.38	1565.883	.8779

READ DATA

LOCAT -ION	BLA- -AGE NO.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSU- -RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	623.73	16.832	534.720	1.084	.024	.9625	.9630
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.084	.024	.9599	.9604
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.084	.024	.9575	.9580
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.084	.024	.9555	.9560
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.084	.024	.9538	.9543
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.084	.024	.9522	.9527
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.084	.024	.9495	.9500
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.084	.024	.9470	.9476
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.084	.025	.9442	.9448
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.084	.025	.9376	.9383
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.084	.025	.9312	.9320
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.084	.025	.9263	.9272
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.084	.025	.9239	.9248
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.084	.025	.9214	.9223
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.084	.026	.9043	.9054
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.084	.027	.8712	.8727
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.084	.029	.8387	.8406
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.083	.029	.8219	.8239
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.082	.028	.8045	.8067
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.082	.029	.7859	.7883
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	623.03	17.417	531.793	1.081	.029	.7655	.7681

STATION = INLET/FAN 2 PERFORMANCE PRESSURE RATIO = 1.083 ISEN. EFF.= .897 POLY. EFF.= .899 DELTA T ON T = .026

STATION 2 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITY ABSOLUTE	VELOCITY RELATIVE	VELOCITY TOTAL	TEMPERATURE TOTAL	TEMPERATURE STATIC	PRESSURE TOTAL	PRESSURE STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.75[illegible]	531.01	242.[illegible]	8.[illegible]	5[illegible].024	5[illegible].179	1[illegible].[illegible]	15.[illegible]	.3238	33.[illegible]	[illegible].87	54.510	.0762
2	7.[illegible]	[illegible].[illegible]	1[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	15.[illegible]	.3[illegible]	33.10	22.57	-31.322	.0762
3	7.[illegible]	[illegible].[illegible]	1[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	15.737	.3263	32.[illegible]	20.33	-31.762	.0761
4	7.[illegible]	[illegible].[illegible]	1[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	15.[illegible]	.3[illegible]	32.[illegible]	15.14	-22.244	.0761
5	7.[illegible]	[illegible].[illegible]	1[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	15.[illegible]	.3[illegible]	31.76	10.03	-18.874	.0760
6	7.[illegible]	[illegible].[illegible]	1[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	15.[illegible]	.3[illegible]	31.43	13.49	-17.048	.0760
7	7.[illegible]	[illegible].[illegible]	1[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	15.[illegible]	.3[illegible]	31.20	12.04	-17.543	.0760
8	7.[illegible]	[illegible].[illegible]	1[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	15.[illegible]	.3[illegible]	31.01	10.17	-18.284	.0760
9	7.[illegible]	[illegible].[illegible]	1[illegible].[illegible]	[illegible].[illegible]	[illegible].052	[illegible].[illegible]	[illegible].[illegible]	15.[illegible]	.3[illegible]	30.87	[illegible].38	-14.741	.0760
10	7.[illegible]	[illegible].[illegible]	1[illegible].[illegible]	[illegible].[illegible]	5[illegible].141	5[illegible].[illegible]	[illegible].[illegible]	15.[illegible]	.3[illegible]	30.91	[illegible].05	-22.032	.0760
11	7.[illegible]	[illegible].[illegible]	1[illegible].[illegible]	[illegible].[illegible]	[illegible].319	[illegible].[illegible]	[illegible].[illegible]	15.[illegible]	.3[illegible]	30.[illegible]	[illegible].93	-25.512	.0760
12	7.[illegible]	[illegible].[illegible]	1[illegible].[illegible]	[illegible].[illegible]	[illegible].369	[illegible].[illegible]	[illegible].[illegible]	15.[illegible]	.3[illegible]	30.[illegible]	3.36	-30.648	.0760
13	7.[illegible]	[illegible].[illegible]	1[illegible].[illegible]	[illegible].[illegible]	[illegible].441	[illegible].[illegible]	[illegible].[illegible]	15.[illegible]	.3[illegible]	30.[illegible]	1.61	-37.790	.0761
14	7.[illegible]	[illegible].[illegible]	1[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	15.[illegible]	.3[illegible]	30.[illegible]	.26	-47.721	.0761
15	7.[illegible]	[illegible].[illegible]	1[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	15.[illegible]	.3[illegible]	31.[illegible]	-1.[illegible]	-61.567	.0761
16	7.[illegible]	[illegible].[illegible]	1[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	15.[illegible]	.3[illegible]	32.[illegible]	-2.72	-82.459	.0760
17	8.[illegible]	[illegible].[illegible]	1[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	15.[illegible]	.3[illegible]	34.[illegible]	-4.11	-123.175	.0760
18	8.[illegible]	[illegible].[illegible]	1[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	15.[illegible]	.3[illegible]	35.[illegible]	-5.45	-211.103	.0760
19	8.[illegible]	[illegible].[illegible]	1[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	15.[illegible]	.2[illegible]	36.[illegible]	-6.77	-375.937	.0760
20	8.[illegible]	[illegible].[illegible]	1[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	15.[illegible]	.2[illegible]	37.33	-8.07	-704.735	.0760
21	8.5013	294.38	293.34	295.37	539.804	531.029	19.303	15.[illegible]	.2979	38.68	-9.37	**********	.0760

BLADE DATA

LOCATION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-49.428	1.512	-46.173	5.746	.0355	516.8	.3874	435.84	16.934	548.825	1.117	.033	.9589	.9594
2	-49.129	1.237	-46.638	5.568	.0366	522.1	.3948	444.08	16.973	549.769	1.116	.033	.9594	.9597
3	-48.795	.757	-47.153	5.390	.0375	527.4	.4014	451.44	17.025	550.749	1.115	.033	.9594	.9599
4	-48.436	-.037	-47.648	5.214	.0391	532.6	.4074	458.20	17.072	551.707	1.114	.033	.9594	.9600
5	-48.052	-.878	-48.099	5.047	.0385	537.8	.4130	464.51	17.118	552.664	1.114	.033	.9592	.9600
6	-47.642	-1.835	-48.535	4.893	.0388	542.9	.4183	470.46	17.166	553.622	1.114	.033	.9593	.9601
7	-47.194	-2.909	-48.951	4.759	.0401	548.0	.4230	475.75	17.210	554.552	1.114	.033	.9593	.9601
8	-46.718	-4.085	-49.361	4.651	.0412	553.1	.4275	480.81	17.256	555.466	1.114	.033	.9594	.9602
9	-46.206	-5.427	-49.782	4.576	.0426	558.2	.4316	485.54	17.301	556.514	1.114	.033	.9594	.9603
10	-45.688	-6.809	-50.238	4.542	.0470	563.3	.4347	489.12	17.338	557.387	1.114	.033	.9594	.9604
11	-45.164	-8.247	-50.721	4.557	.0511	568.4	.4378	492.60	17.375	558.469	1.114	.033	.9594	.9604
12	-44.648	-9.823	-51.269	4.629	.0539	573.6	.4410	496.34	17.416	559.558	1.114	.033	.9594	.9605
13	-44.122	-11.489	-51.877	4.755	.0546	578.8	.4447	500.60	17.467	560.658	1.114	.033	.9594	.9606
14	-43.612	-13.270	-52.547	4.935	.0524	584.1	.4483	504.76	17.518	561.968	1.114	.033	.9594	.9606
15	-43.116	-15.156	-53.281	5.165	.0671	589.5	.4484	505.06	17.534	562.493	1.113	.033	.9592	.9607
16	-42.643	-17.137	-54.092	5.448	.0912	595.1	.4442	500.79	17.508	562.048	1.112	.033	.9567	.9606
17	-42.197	-19.218	-54.987	5.791	.1152	600.8	.4397	496.08	17.480	561.613	1.111	.032	.9538	.9604
18	-41.761	-21.347	-55.950	6.166	.1293	606.3	.4393	495.93	17.499	561.215	1.111	.032	.9548	.9604
19	-41.316	-23.456	-56.950	6.634	.1375	613.1	.4387	495.56	17.518	560.846	1.110	.032	.9554	.9604
20	-40.846	-25.510	-57.970	7.124	.1496	619.6	.4377	494.80	17.535	560.587	1.110	.032	.9621	.9604
21	-40.361	-27.490	-59.015	7.654	.1631	626.3	.4361	493.40	17.549	560.284	1.110	.032	.9618	.9604

STATION 7 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.113 ISEN. EFF.= .886 POLY. EFF.= .887 DELTA T ON T = .035

STATION 8 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.4492	387.05	275.76	475.24	542.923	524.201	17.138	15.156	.4228	35.47	19.79	-2.228	.0778
2	7.5029	381.99	277.04	471.19	543.211	524.618	17.164	15.212	.4189	36.82	19.73	-2.465	.0778
3	7.5572	376.77	278.21	467.55	543.492	525.022	17.189	15.264	.4155	38.22	19.68	-2.744	.0778
4	7.6121	371.05	279.04	464.27	543.747	525.381	17.211	15.310	.4123	39.94	19.64	-3.077	.0778
5	7.6673	366.38	279.42	461.19	543.965	526.336	17.231	15.352	.4095	37.29	18.29	-3.477	.0778
6	7.7243	363.28	279.46	458.34	544.155	526.742	17.247	15.388	.4068	37.57	18.68	-3.977	.0778
7	7.7819	359.86	279.64	455.73	544.360	527.145	17.261	15.423	.4043	37.85	19.15	-4.588	.0778
8	7.8337	356.94	279.71	453.48	544.558	527.513	17.273	15.454	.4022	38.08	19.69	-5.269	.0778
9	7.8956	354.28	279.79	451.41	544.756	527.866	17.283	15.482	.4002	38.30	20.29	-6.028	.0778
10	7.9585	350.73	280.50	449.10	545.824	528.307	17.296	15.508	.3980	38.65	20.93	-6.868	.0778
11	8.0194	347.26	281.03	446.73	545.276	528.735	17.303	15.533	.3957	38.96	21.61	-7.791	.0778
12	8.0814	344.15	280.98	444.27	545.477	529.118	17.309	15.558	.3934	39.26	22.33	-8.796	.0778
13	8.1446	341.52	280.14	441.72	545.605	529.453	17.314	15.582	.3910	39.58	23.08	-9.883	.0778
14	8.2085	338.72	279.17	438.94	545.723	529.754	17.319	15.608	.3885	39.88	23.86	-11.050	.0778
15	8.2741	336.15	278.80	436.24	545.815	530.014	17.315	15.635	.3859	40.20	24.67	-12.297	.0778
16	8.3424	333.80	278.84	434.01	545.913	530.217	17.311	15.664	.3837	40.56	25.51	-13.624	.0778
17	8.4144	331.63	279.74	433.39	546.343	530.285	17.314	15.697	.3778	40.38	26.38	-15.030	.0778
18	8.4895	329.88	283.27	434.54	546.861	530.125	17.323	15.733	.3742	40.53	27.28	-16.516	.0778
19	8.5683	328.21	288.88	435.31	547.488	529.908	17.351	15.772	.3716	40.56	28.21	-18.080	.0778
20	8.6502	326.87	295.30	438.93	548.161	529.779	17.383	15.813	.3704	40.51	29.17	-19.722	.0778
21	8.7359	326.66	323.34	438.39	552.805	532.364	17.423	15.856	.3694	38.28	30.16	-21.441	.0778

BLADE DATA

LOCATION	BLADE SECTION	BLADE LEAN	RELATIVE FLOW ANGLE	DEVIATION ANGLE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-24.143	2.533	-33.317	9.174	.0474	280.1	.4120	403.13	17.035	541.981	1.166	.047	.9604	.9613
2	-24.486	2.418	-33.433	8.934	.0453	533.9	.4086	453.57	17.099	542.310	1.168	.047	.9584	.9593
3	-25.109	2.300	-34.183	8.854	.0430	537.8	.4058	450.69	17.397	542.361	1.170	.048	.9566	.9575
4	-25.838	2.115	-35.241	8.951	.0431	541.7	.4068	454.54	17.130	543.011	1.171	.048	.9550	.9560
5	-26.492	1.951	-35.964	8.981	.0451	545.5	.4125	463.30	17.164	543.366	1.172	.049	.9536	.9547
6	-26.979	1.803	-36.463	9.001	.0510	549.3	.4218	469.79	17.200	543.733	1.174	.049	.9523	.9534
7	-27.350	1.732	-37.322	9.000	.0534	553.1	.4313	482.35	17.233	544.105	1.175	.049	.9496	.9508
8	-27.703	1.614	-37.925	8.963	.0543	557.0	.4413	492.52	17.267	544.466	1.175	.050	.9472	.9484
9	-28.434	1.500	-38.611	8.955	.0587	560.8	.4516	503.00	17.301	544.875	1.176	.050	.9444	.9456
10	-31.997	0.727	-39.117	8.120	.0892	564.6	.4609	493.44	17.324	545.274	1.177	.051	.9376	.9391
11	-32.544	0.643	-39.579	8.035	.0931	568.5	.4686	492.18	17.343	545.682	1.177	.051	.9311	.9327
12	-33.202	0.757	-40.317	8.114	.0978	572.3	.4768	492.67	17.378	546.101	1.178	.052	.9261	.9277
13	-33.729	0.868	-41.240	8.511	.0720	576.2	.4921	494.18	17.418	546.530	1.178	.052	.9235	.9253
14	-33.224	0.970	-41.942	8.771	.0738	580.1	.5033	495.76	17.454	546.969	1.179	.052	.9218	.9238
15	-33.558	0.998	-42.774	9.001	.0834	584.0	.5194	497.66	17.491	547.423	1.178	.053	.9037	.9059
16	-34.133	11.334	-43.031	9.478	.1216	593.6	.3691	440.51	17.387	547.300	1.178	.055	.8703	.8733
17	-34.533	11.712	-44.439	9.737	.1537	598.8	.3778	429.27	17.321	548.406	1.178	.057	.8381	.8419
18	-34.300	12.702	-45.301	10.421	.1684	604.1	.3727	422.81	17.315	548.340	1.179	.059	.8226	.8267
19	-35.281	13.220	-46.247	11.045	.1934	609.7	.3670	416.76	17.309	549.502	1.181	.060	.8073	.8118
20	-35.429	13.927	-47.113	11.535	.1935	615.5	.3605	409.77	17.238	550.093	1.183	.062	.7916	.7965
21	-35.917	13.784	-47.932	12.375	.2174	621.6	.3528	401.44	17.281	550.719	1.186	.064	.7751	.7804

STATION 3 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.177 ISEN. EFF.= .897 POLY. EFF.= .899 DELTA T ON T = .053

STATION 3 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES			TEMPERATURES		PRESSURES		MACH NO	ANGLES		RADIUS OF CURVATURE	SPECIFIC WEIGHT
		AERO	TANG	TOTAL	TOTAL	STATIC	TOTAL	STATIC		WHIRL	SLOPE		
1	7.6433	338.98	353.86	490.74	548.410	528.274	18.301	15.350	.4811	45.07	10.63	-2.464	.0792
2	7.6935	361.99	393.37	534.03	548.318	529.545	18.304	15.507	.4829	45.51	9.69	-3.158	.0794
3	7.6382	378.45	387.07	540.57	548.418	529.419	18.307	15.654	.4784	45.84	9.13	-4.051	.0796
4	7.8647	372.98	390.34	539.34	548.704	529.166	18.315	15.593	.4745	46.08	8.36	-5.199	.0797
5	7.7320	363.94	384.44	532.24	548.731	530.253	18.313	15.728	.4714	46.23	7.57	-6.693	.0798
6	7.7847	365.42	383.38	529.39	548.471	530.534	18.315	15.758	.4680	46.33	6.77	-8.693	.0799
7	7.8311	363.49	382.20	527.59	548.017	530.943	18.321	15.784	.4664	46.47	5.95	-11.511	.0800
8	7.8903	361.39	381.39	525.23	547.156	531.508	18.328	15.808	.4644	46.55	5.13	-15.779	.0801
9	7.9371	359.79	380.31	523.35	546.328	531.579	18.331	15.830	.4623	46.64	4.29	-23.101	.0801
10	7.9865	357.39	378.47	521.53	545.405	532.005	18.343	15.850	.4602	46.98	3.45	-39.509	.0802
11	8.0331	356.03	385.93	525.29	545.280	532.215	18.337	15.868	.4647	47.28	2.58	-119.265	.0802
12	8.0335	353.20	385.84	525.15	545.214	532.759	18.434	15.885	.4653	47.44	1.70	123.354	.0802
13	8.1478	354.47	382.18	524.42	545.705	533.001	18.403	15.900	.4614	47.38	.79	40.735	.0803
14	8.2042	354.35	383.44	521.94	545.800	533.226	18.402	15.914	.4604	47.29	-.14	24.841	.0803
15	8.2618	348.33	387.82	520.36	546.465	533.976	18.413	15.926	.4592	48.08	-1.11	15.829	.0802
16	8.3215	339.33	389.77	520.21	547.929	535.380	18.403	15.938	.4582	50.01	-2.13	11.086	.0801
17	8.3542	319.43	410.38	519.43	549.266	536.864	18.407	15.951	.4571	52.10	-3.24	11.146	.0799
18	8.4211	311.77	414.73	518.33	550.036	537.727	18.403	15.965	.4558	53.07	-4.44	10.142	.0799
19	8.5208	303.27	418.55	517.68	550.853	538.649	18.410	15.980	.4544	54.14	-5.74	9.732	.0798
20	8.5333	293.07	422.94	516.21	551.758	539.581	18.412	15.998	.4526	55.41	-7.20	10.555	.0798
21	8.6049	273.92	431.33	514.07	552.794	540.901	18.414	16.023	.4503	57.04	-8.95	20.749	.0797

BLADE DATA

LOCATION	BLADE SECTION	ANGLES LEAN	ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-12.647	10.031	-20.743	1.101	.0547	537.2	.3686	415.95	17.080	542.615	1.245	.067	.9663	.9664
2	-13.333	10.117	-21.333	1.101	.0605	540.3	.3640	410.94	17.102	542.882	1.246	.067	.9668	.9669
3	-14.018	10.115	-22.008	1.074	.0620	543.5	.3607	407.44	17.126	543.179	1.246	.067	.9674	.9675
4	-15.291	9.304	-23.382	1.042	.0630	546.6	.3586	405.21	17.151	543.476	1.246	.068	.9679	.9680
5	-16.181	8.433	-24.135	1.034	.0637	550.2	.3574	404.01	17.179	543.783	1.246	.068	.9678	.9679
6	-17.063	7.646	-24.956	1.043	.0642	553.6	.3569	403.61	17.208	544.098	1.246	.068	.9677	.9677
7	-17.895	7.084	-25.571	1.079	.0665	557.2	.3564	403.20	17.233	544.422	1.247	.068	.9677	.9677
8	-18.648	6.712	-26.377	1.129	.0684	560.8	.3565	403.39	17.259	544.756	1.247	.068	.9678	.9678
9	-19.323	6.508	-27.029	1.205	.0708	564.4	.3568	403.86	17.286	545.098	1.248	.069	.9680	.9680
10	-19.952	6.345	-27.298	1.370	.0741	568.2	.3557	402.74	17.298	545.448	1.249	.070	.9682	.9682
11	-20.473	7.521	-27.539	1.097	.0859	572.0	.3549	402.00	17.311	545.808	1.251	.071	.9683	.9683
12	-20.968	8.351	-28.020	1.060	.0897	575.3	.3551	402.36	17.331	546.177	1.252	.071	.9684	.9684
13	-21.395	9.443	-28.768	1.374	.0910	579.8	.3568	404.38	17.362	546.554	1.252	.071	.9685	.9685
14	-21.772	10.531	-29.499	1.727	.0923	583.8	.3566	406.74	17.394	546.939	1.252	.072	.9685	.9685
15	-22.076	11.719	-30.313	2.336	.1118	587.9	.3539	401.52	17.396	547.337	1.252	.072	.9685	.9685
16	-22.298	12.749	-30.031	7.735	.1520	592.1	.3402	386.40	17.266	547.753	1.252	.075	.9685	.9685
17	-22.487	13.545	-30.260	7.853	.1921	596.7	.3251	369.82	17.162	548.197	1.253	.078	.9686	.9686
18	-22.378	13.934	-30.303	8.525	.2105	601.4	.3192	363.35	17.132	548.568	1.253	.080	.9686	.9686
19	-22.181	13.832	-31.529	9.448	.2293	606.3	.3126	356.17	17.100	548.962	1.253	.081	.9687	.9687
20	-21.839	13.550	-32.477	10.639	.2493	611.5	.3046	347.41	17.061	549.382	1.253	.083	.9688	.9688
21	-21.371	13.159	-33.370	12.199	.2718	616.9	.2940	335.66	17.013	550.237	1.253	.085	.9688	.9687

STATION 9 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.250 ISEN. EFF.= .904 POLY. EFF.= .907 DELTA T ON T = .073

STATION 10 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES AERIO	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.5746	368.56	383.61	535.58	553.410	529.639	18.301	15.691	.4740	46.52	7.82	9.348	.0797
2	7.6218	369.19	387.40	535.15	553.518	529.785	18.304	15.699	.4736	46.38	7.88	10.177	.0797
3	7.6678	370.93	385.10	535.45	553.618	529.958	18.307	15.699	.4738	46.14	7.55	12.102	.0797
4	7.7175	373.44	384.70	536.12	553.709	529.949	18.313	15.696	.4744	45.85	7.17	14.431	.0797
5	7.7639	376.07	383.22	536.92	553.791	529.901	18.318	15.691	.4751	45.54	6.78	16.754	.0796
6	7.8119	378.65	381.74	537.53	553.871	529.913	18.323	15.687	.4758	45.23	6.18	18.823	.0796
7	7.8613	380.67	380.98	538.37	554.017	529.980	18.329	15.684	.4765	45.02	5.62	20.349	.0796
8	7.9095	382.48	380.15	539.20	554.156	530.056	18.333	15.682	.4771	44.83	5.04	21.868	.0796
9	7.9578	384.03	379.69	540.04	554.328	530.160	18.333	15.682	.4777	44.67	4.44	23.892	.0796
10	8.0053	384.91	382.42	542.53	554.885	530.407	18.360	15.684	.4799	44.81	3.83	19.978	.0796
11	8.0534	385.66	385.03	545.00	555.280	530.665	18.387	15.686	.4819	44.96	3.22	18.688	.0796
12	8.1054	386.30	386.23	546.25	555.614	530.866	18.404	15.690	.4829	44.99	2.59	17.189	.0796
13	8.1536	386.88	384.81	545.62	555.708	531.038	18.403	15.696	.4823	44.85	1.94	15.649	.0796
14	8.2000	386.98	383.34	544.73	555.800	531.210	18.402	15.704	.4814	44.73	1.27	14.338	.0796
15	8.2467	387.40	382.79	544.32	555.865	531.349	18.403	15.715	.4804	44.68	.56	13.152	.0796
16	8.2930	388.30	383.16	545.31	555.629	531.386	18.403	15.731	.4793	44.70	-.22	11.948	.0796
17	8.3408	389.29	384.00	546.41	555.266	531.266	18.407	15.752	.4771	44.74	-1.14	10.788	.0796
18	8.4317	390.76	385.76	548.93	554.946	531.225	18.403	15.778	.4746	44.82	-2.18	9.253	.0796
19	8.4964	391.97	386.75	550.24	554.836	531.225	18.412	15.808	.4713	44.92	-3.36	7.836	.0796
20	8.5635	393.25	387.32	551.75	554.836	531.258	18.412	15.837	.4690	45.06	-4.67	5.988	.0796
21	8.6399	394.63	388.53	553.47	554.836	531.258	18.412	15.837	.4690	45.06	-4.67	5.988	.0796

STATION 11 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	AXIAL	RADIAL	TANGENTIAL	ABS. VEL. STATIC	TOTAL	TOTAL STATIC	MACH NO.	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.[illegible]	343.[illegible]	[illegible]	[illegible]	[illegible]	15.454	13.301	15.911	.4[illegible]1	45.21	4.00	20.387	.0754
2	[illegible]	3[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13.331	15.516	.4317	43.[illegible]	3.56	-151.335	.0791
3	[illegible]	+15[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13.330	15.431	.4[illegible]3	42.[illegible]	7.91	-24.559	.0767
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13.311	15.369	.4[illegible]3	41.[illegible]	7.[illegible]	-14.615	.0765
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13.315	15.314	.4[illegible]17	41.[illegible]	8.92	-12.351	.0763
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13.321	15.295	.4[illegible]14	[illegible]	9.87	-14.214	.0762
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13.321	15.[illegible]	.4[illegible]15	[illegible]	9.27	-14.221	.0761
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13.[illegible]	15.[illegible]	.4[illegible]17	[illegible]	4.73	-15.037	.0760
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13.[illegible]	15.[illegible]	.4[illegible]20	[illegible]	[illegible]	-15.941	.0760
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13.[illegible]	15.[illegible]	.4[illegible]22	[illegible]	0.39	-19.704	.0760
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13.341	15.[illegible]	.4[illegible]24	[illegible]	3.37	-24.459	.0760
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13.[illegible]	15.[illegible]	.4[illegible]24	[illegible]	2.95	-33.342	.0760
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13.[illegible]	15.[illegible]	.4[illegible]23	[illegible]	[illegible]	-59.970	.0761
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13.[illegible]	15.[illegible]	.4[illegible]23	[illegible]	2.14	-248.399	.0762
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13.[illegible]	15.360	.4[illegible]19	[illegible]	1.70	35.547	.0762
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13.[illegible]	15.399	.4[illegible]15	[illegible]	1.14	43.152	.0761
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13.[illegible]	[illegible]	.4[illegible]	[illegible]	.[illegible]1	31.596	.0761
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13.[illegible]	15.520	.4[illegible]	[illegible]	[illegible]	24.576	.0763
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13.[illegible]	15.[illegible]	.4[illegible]	[illegible]	[illegible]	32.[illegible]	.0762
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13.[illegible]	15.[illegible]	.4[illegible]	[illegible]	[illegible]	90.519	.0768
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13.[illegible]	15.[illegible]	.4[illegible]	[illegible]	[illegible]	-27.[illegible]	.0791

FLOW DATA

STREAM-LINE	FLOW ANGLE	RELATIVE MACH NO.	RELATIVE VELOCITY	LOSS COEFF.	BLADE ANGLE	RELATIVE MACH NO.	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]	[illegible]	18.331	[illegible].10	1.245	.[illegible]57	.9653	.9664
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]	[illegible]	18.[illegible]	[illegible]	1.[illegible]	.[illegible]57	.9632	.9643
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]	[illegible]	18.[illegible]	[illegible]	1.245	.057	.9612	.9624
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]	[illegible]	18.[illegible]	[illegible]	1.[illegible]	.[illegible]58	.9594	.9607
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]	[illegible]	18.[illegible]	[illegible]	1.246	.[illegible]59	.9578	.9591
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]	[illegible]	18.[illegible]	[illegible]	1.246	.[illegible]58	.9563	.9577
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]	[illegible]	18.[illegible]	[illegible]	1.[illegible]	.[illegible]59	.9537	.9551
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]	[illegible]	18.[illegible]	[illegible]	1.[illegible]	.[illegible]63	.9512	.9527
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]	[illegible]	18.[illegible]	[illegible]	1.[illegible]	.[illegible]69	.9484	.9500
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]	[illegible]	18.[illegible]	[illegible]	1.[illegible]	.070	.9422	.9440
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]	[illegible]	18.[illegible]	[illegible]	1.[illegible]	.[illegible]71	.9363	.9383
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]	[illegible]	[illegible]	[illegible]	1.[illegible]	.[illegible]71	.9317	.9338
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]	[illegible]	18.[illegible]	[illegible]	1.252	.[illegible]71	.9292	.9314
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]	[illegible]	18.[illegible]	[illegible]	1.252	.[illegible]72	.9267	.9290
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]	[illegible]	18.[illegible]	[illegible]	1.252	.[illegible]73	.9105	.9133
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]	[illegible]	18.[illegible]	[illegible]	1.252	.[illegible]75	.8792	.8830
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]	[illegible]	18.[illegible]	[illegible]	1.253	.[illegible]78	.8486	.8533
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]	[illegible]	18.[illegible]	[illegible]	1.253	.[illegible]80	.8331	.8383
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]	[illegible]	18.[illegible]	[illegible]	1.253	.[illegible]81	.8172	.8229
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]	[illegible]	18.[illegible]	[illegible]	1.253	.[illegible]83	.8003	.8066
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.4654	531.77	18.414	[illegible]	1.253	.[illegible]85	.7818	.7887

STATION 11 AXISYMMETRIC PERFORMANCE: PRESSURE RATIO = 1.251 ISEN. EFF.= .904 POLY. EFF.= .907 DELTA T ON T = .073

STATION 12 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES GRID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7150	339.64	347.98	642.05	553.410	519.243	18.261	14.607	.5739	32.81	5.21	-3.688	.0757
2	7.7243	335.41	342.30	635.48	553.518	520.047	18.265	14.680	.5676	32.59	4.44	-3.711	.0759
3	7.7335	331.29	335.10	629.68	553.618	520.860	18.269	14.754	.5611	32.32	3.71	-3.805	.0762
4	7.8328	327.31	329.71	621.31	553.709	521.653	18.271	14.826	.5546	32.02	3.06	-3.980	.0765
5	7.8721	323.35	323.90	615.42	553.791	522.401	18.273	14.895	.5484	31.75	2.50	-4.237	.0767
6	7.9115	319.34	318.84	609.40	553.871	523.092	18.274	14.957	.5427	31.55	2.05	-4.568	.0769
7	7.9513	315.33	314.92	604.14	554.017	523.767	18.276	15.014	.5377	31.41	1.71	-4.969	.0771
8	7.9914	311.31	311.20	599.42	554.156	524.377	18.281	15.065	.5332	31.28	1.46	-5.443	.0773
9	8.0320	307.31	307.31	595.37	554.328	524.951	18.286	15.110	.5293	31.14	1.29	-6.008	.0774
10	8.0731	303.33	303.63	593.16	554.805	525.646	18.306	15.151	.5270	31.02	1.19	-6.715	.0775
11	8.1147	299.29	304.00	591.39	555.280	526.295	18.323	15.187	.5251	30.93	1.13	-7.647	.0776
12	8.1583	303.85	302.61	589.28	555.614	526.837	18.337	15.220	.5229	30.90	1.10	-8.905	.0777
13	8.1997	302.30	301.17	586.18	555.708	527.231	18.334	15.248	.5200	30.92	1.10	-10.647	.0778
14	8.2431	300.25	300.24	583.46	555.800	527.588	18.332	15.274	.5174	30.98	1.11	-13.198	.0779
15	8.2871	+99.14	300.13	581.57	555.885	528.436	18.331	15.295	.5153	31.07	1.11	-17.768	.0779
16	8.3315	+98.24	301.30	580.47	555.829	529.908	18.329	15.311	.5135	31.24	1.03	-31.046	.0777
17	8.3773	+94.31	303.77	580.18	555.256	531.374	18.326	15.319	.5127	31.57	.83	-1067.721	.0776
18	8.4239	+91.33	305.26	580.74	555.036	532.090	18.323	15.314	.5124	32.11	.47	27.524	.0774
19	8.4715	+90.41	306.03	583.45	555.553	532.646	18.322	15.291	.5150	32.80	-.09	12.891	.0772
20	8.5211	+90.08	325.80	585.43	555.756	533.062	18.319	15.244	.5192	33.62	-.91	8.180	.0769
21	8.5730	+90.52	337.90	595.61	555.794	533.401	18.315	15.177	.5253	34.56	-2.03	5.947	.0766

BLADE DATA

LOCATION	BLADE SECTION	BLADE ANGLES CLAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	31.959	-24.647	32.908	.849	.0149	0.0	.5739	642.05	18.260	553.410	1.243	.867	.9554	.9567
2	31.736	-23.339	32.592	.855	.0141	0.0	.5676	635.48	18.265	553.518	1.243	.867	.9534	.9548
3	31.490	-21.342	32.315	.868	.0135	0.0	.5611	629.68	18.269	553.618	1.243	.867	.9516	.9531
4	31.133	-19.037	32.017	.884	.0133	0.0	.5546	621.91	18.271	553.709	1.243	.868	.9498	.9513
5	30.841	-16.832	31.749	.904	.0133	0.0	.5484	615.42	18.273	553.791	1.243	.868	.9481	.9496
6	30.621	-14.396	31.547	.926	.0136	0.0	.5427	609.40	18.274	553.871	1.243	.868	.9465	.9479
7	30.435	-12.243	31.407	.949	.0141	0.0	.5377	604.14	18.276	554.017	1.244	.868	.9452	.9466
8	30.306	-10.136	31.270	.970	.0146	0.0	.5332	599.42	18.281	554.156	1.244	.868	.9440	.9454
9	30.123	-7.990	31.143	.990	.0154	0.0	.5293	595.37	18.286	554.328	1.244	.869	.9429	.9445
10	30.012	-5.809	31.020	1.009	.0176	0.0	.5270	593.16	18.306	554.805	1.246	.878	.9392	.9414
11	29.909	-3.654	30.954	1.024	.0198	0.0	.5251	591.39	18.323	555.280	1.247	.871	.9218	.9247
12	29.801	-1.576	30.893	1.038	.0214	0.0	.5229	589.28	18.337	555.614	1.248	.871	.9161	.9187
13	29.969	.513	30.910	1.047	.0221	0.0	.5200	586.18	18.334	555.708	1.248	.871	.9152	.9180
14	29.922	2.732	30.975	1.053	.0228	0.0	.5174	583.46	18.332	555.800	1.247	.872	.9184	.9212
15	30.015	5.442	31.069	1.054	.0236	0.0	.5153	581.57	18.331	555.885	1.247	.873	.9242	.9276
16	30.191	8.235	31.242	1.051	.0254	0.0	.5136	580.47	18.329	555.829	1.247	.875	.9325	.9367
17	30.521	12.038	31.570	1.049	.0275	0.0	.5127	580.18	18.326	555.256	1.247	.878	.9314	.9360
18	31.056	16.077	32.105	1.050	.0297	0.0	.5128	580.74	18.323	555.036	1.247	.880	.9252	.9300
19	31.749	20.281	32.804	1.055	.0317	0.0	.5150	583.45	18.322	555.053	1.247	.881	.9191	.9243
20	32.552	24.345	33.619	1.064	.0335	0.0	.5192	588.49	18.319	555.758	1.247	.883	.9131	.9185
21	33.474	28.225	34.527	1.079	.0356	0.0	.5253	595.61	18.315	555.794	1.246	.885	.9077	.9133

STATION 12 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.246 ISEN. EFF.= .890 POLY. EFF.= .893 DELTA T ON T = .873

STATION 13 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITY MERID	VELOCITY TANGEN	VELOCITY TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7230	526.96	167.64	634.39	553.410	527.893	18.222	15.444	.4913	17.58	-2.23	-5.196	.0787
2	7.7576	522.04	164.35	547.46	553.518	528.678	18.225	15.517	.4850	17.53	-2.29	-5.836	.0790
3	7.7930	515.40	160.84	541.46	553.616	529.412	18.227	15.585	.4784	17.51	-2.32	-6.618	.0792
4	7.8294	508.09	156.94	535.33	553.709	530.092	18.229	15.648	.4723	17.51	-2.31	-7.567	.0794
5	7.8667	503.25	153.77	527.70	553.791	530.715	18.231	15.705	.4666	17.51	-2.27	-8.704	.0796
6	7.9043	498.04	150.50	522.14	553.871	531.278	18.231	15.756	.4614	17.48	-2.18	-10.039	.0798
7	7.9441	493.74	154.88	517.46	554.017	531.827	18.233	15.800	.4571	17.42	-2.05	-11.564	.0799
8	7.9844	490.17	153.24	513.56	554.156	532.300	18.235	15.837	.4534	17.36	-1.88	-13.254	.0800
9	8.0239	487.32	152.25	510.55	554.328	532.728	18.237	15.867	.4506	17.35	-1.66	-15.056	.0801
10	8.0677	486.93	150.15	509.29	554.805	533.311	18.251	15.891	.4492	17.38	-1.45	-16.902	.0802
11	8.1130	485.24	152.36	508.00	555.280	533.845	18.263	15.910	.4484	17.43	-1.21	-18.722	.0802
12	8.1543	484.35	152.40	507.79	555.614	534.250	18.273	15.925	.4475	17.47	-.95	-20.463	.0802
13	8.1988	482.76	152.10	506.15	555.708	534.479	18.269	15.936	.4460	17.49	-.68	-22.120	.0802
14	8.2441	481.55	151.99	504.95	555.800	534.671	18.262	15.943	.4443	17.51	-.41	-23.736	.0802
15	8.2900	481.00	152.27	504.50	556.465	535.375	18.253	15.947	.4441	17.56	-.14	-25.472	.0801
16	8.3367	480.91	152.88	504.34	557.829	536.753	18.251	15.947	.4434	17.65	.13	-27.738	.0799
17	8.3841	480.55	154.32	504.72	559.265	538.160	18.243	15.942	.4432	17.80	.39	-31.454	.0797
18	8.4321	480.50	155.63	505.38	560.035	538.874	18.235	15.932	.4435	18.05	.62	-39.247	.0795
19	8.4806	481.42	160.07	507.34	560.853	539.528	18.230	15.915	.4443	18.39	.79	-62.062	.0794
20	8.5287	483.12	164.38	510.32	561.758	540.102	18.226	15.888	.4473	18.79	.89	-305.551	.0791
21	8.5739	485.63	169.39	514.33	562.794	540.379	18.220	15.852	.4505	19.23	.88	76.314	.0789

BLADE DATA

LOCATION	BLADE SECTION	BLADE ANGLES MEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	16.234	-3.414	17.345	1.351	.0293	0.0	.4919	554.89	18.222	553.410	1.240	.067	.9457	.9474
2	16.176	-3.912	17.835	1.356	.0284	0.0	.4850	547.46	18.225	553.518	1.240	.067	.9436	.9452
3	16.147	-4.339	18.214	1.357	.0277	0.0	.4784	540.45	18.227	553.616	1.240	.067	.9415	.9432
4	16.125	-7.687	17.513	1.324	.0274	0.0	.4723	533.83	18.229	553.709	1.240	.068	.9395	.9414
5	16.092	-8.948	17.510	1.414	.0274	0.0	.4666	527.70	18.231	553.791	1.241	.068	.9377	.9395
6	16.022	-9.085	17.475	1.453	.0278	0.0	.4614	522.14	18.231	553.871	1.241	.068	.9357	.9377
7	15.924	-8.142	17.416	1.492	.0285	0.0	.4571	517.46	18.233	554.017	1.241	.068	.9323	.9344
8	15.831	-7.154	17.361	1.530	.0296	0.0	.4534	513.56	18.235	554.156	1.241	.068	.9291	.9312
9	15.765	-3.171	17.321	1.569	.0310	0.0	.4506	510.55	18.237	554.328	1.241	.069	.9253	.9276
10	15.786	-3.244	17.334	1.533	.0353	0.0	.4492	509.29	18.251	554.805	1.242	.070	.9161	.9187
11	15.805	-1.620	17.432	1.627	.0397	0.0	.4484	508.60	18.263	555.280	1.243	.071	.9072	.9100
12	15.915	-.741	17.487	1.652	.0428	0.0	.4475	507.78	18.270	555.614	1.243	.071	.9006	.9036
13	15.317	-.135	17.440	1.571	.0442	0.0	.4460	506.15	18.269	555.708	1.243	.071	.8973	.9004
14	15.331	.459	17.913	1.662	.0456	0.0	.4443	504.95	18.262	555.800	1.243	.072	.8942	.8974
15	15.874	1.217	17.559	1.534	.0473	0.0	.4441	504.50	18.259	556.465	1.242	.073	.8777	.8814
16	15.365	2.129	17.549	1.680	.0512	0.0	.4434	504.34	18.251	557.829	1.242	.075	.8454	.8501
17	16.127	3.136	17.803	1.676	.0556	0.0	.4432	504.72	18.243	559.266	1.241	.078	.8138	.8194
18	16.379	4.231	18.059	1.675	.0602	0.0	.4435	505.38	18.235	560.035	1.241	.080	.7969	.8030
19	16.711	5.536	18.392	1.681	.0642	0.0	.4449	507.34	18.230	560.853	1.241	.081	.7885	.7871
20	17.096	6.861	18.780	1.694	.0693	0.0	.4473	510.32	18.226	561.758	1.240	.083	.7631	.7703
21	17.510	8.542	19.224	1.713	.0760	0.0	.4505	514.33	18.220	562.794	1.240	.085	.7448	.7517

STATION 13 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.241 ISEN. EFF.= .875 POLY. EFF.= .879 DELTA T ON T = .873

STATION 14 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6720	+42.34	+7.92	444.92	553.410	537.007	13.193	16.363	.3911	6.18	-4.29	16.241	.0020
2	7.7112	+42.41	+8.93	444.89	553.518	537.117	13.184	16.365	.3910	6.06	-4.03	17.442	.0020
3	7.7511	+42.43	+9.94	444.82	553.618	537.223	13.185	16.367	.3909	5.94	-3.76	18.817	.0020
4	7.7915	+42.39	+9.23	444.71	553.709	537.321	13.196	16.369	.3908	5.85	-3.50	20.415	.0020
5	7.8329	+42.33	+8.68	444.58	553.791	537.413	13.187	16.371	.3906	5.77	-3.23	22.306	.0020
6	7.8750	+42.24	+8.12	444.44	553.871	537.504	13.187	16.372	.3905	5.70	-2.97	24.624	.0020
7	7.9177	+42.27	+3.78	444.42	554.017	537.651	13.193	16.373	.3904	5.64	-2.71	27.601	.0019
8	7.9512	+42.32	+3.31	444.44	554.156	537.788	13.193	16.374	.3904	5.59	-2.45	31.603	.0019
9	8.0094	+42.50	+3.02	444.58	554.328	537.951	13.183	16.375	.3905	5.55	-2.19	37.329	.0019
10	8.0513	+43.49	+2.37	445.46	554.805	538.362	13.195	16.374	.3911	5.52	-1.92	44.789	.0018
11	8.0954	+44.37	+2.82	446.43	555.200	538.766	13.201	16.374	.3918	5.50	-1.66	55.441	.0018
12	8.1421	+45.00	+2.80	447.05	555.614	539.055	13.203	16.372	.3922	5.49	-1.39	70.951	.0017
13	8.1890	+44.76	+2.75	446.81	555.708	539.166	13.193	16.369	.3920	5.48	-1.13	95.916	.0017
14	8.2367	+44.57	+2.73	446.73	555.800	539.264	13.193	16.365	.3919	5.49	-.86	141.439	.0017
15	8.2850	+44.98	+2.91	447.05	555.865	539.906	13.185	16.361	.3919	5.51	-.60	242.416	.0015
16	8.3340	+44.76	+3.11	446.54	557.829	541.286	13.172	16.355	.3912	5.54	-.32	593.866	.0013
17	8.3837	+44.25	+3.52	446.93	559.266	542.736	13.162	16.350	.3909	5.59	-.04	-6308.169	.0010
18	8.4342	+44.00	+4.18	446.19	560.036	543.542	13.143	16.344	.3899	5.68	.24	-702.182	.0009
19	8.4835	+44.12	+3.34	446.42	560.853	544.343	13.141	16.337	.3899	5.83	.53	-471.938	.0007
20	8.5374	+44.20	+7.02	446.54	561.758	545.229	13.133	16.331	.3897	6.05	.80	-461.377	.0006
21	8.5900	+44.19	+9.25	446.91	562.794	546.249	13.124	16.324	.3895	6.33	1.06	-610.607	.0004

BLADE DATA

LOCAT -ION	BLADE SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	3.965	-1.054	6.193	2.218	.0438	0.0	.3911	444.92	16.193	553.410	1.237	.067	.9360	.9379
2	3.829	-.933	6.055	2.227	.0430	0.0	.3910	444.89	16.184	553.518	1.237	.067	.9335	.9355
3	3.693	-.817	5.941	2.248	.0423	0.0	.3909	444.82	16.185	553.618	1.237	.067	.9311	.9331
4	3.563	-.830	5.846	2.283	.0421	0.0	.3908	444.71	16.196	553.709	1.237	.068	.9289	.9310
5	3.438	-.740	5.758	2.330	.0421	0.0	.3906	444.58	16.187	553.791	1.238	.068	.9268	.9290
6	3.317	-.653	5.701	2.384	.0425	0.0	.3905	444.44	16.187	553.871	1.238	.068	.9248	.9270
7	3.199	-.576	5.643	2.444	.0430	0.0	.3904	444.42	16.188	554.017	1.238	.068	.9211	.9235
8	3.087	-.509	5.593	2.505	.0449	0.0	.3904	444.44	16.188	554.156	1.238	.068	.9176	.9201
9	2.996	-.452	5.553	2.567	.0469	0.0	.3905	444.58	16.189	554.328	1.238	.069	.9134	.9160
10	2.999	-.402	5.523	2.624	.0533	0.0	.3911	445.46	16.195	554.805	1.238	.070	.9028	.9057
11	2.929	-.347	5.504	2.675	.0597	0.0	.3918	446.43	16.201	555.200	1.238	.071	.8924	.8956
12	2.779	-.274	5.494	2.715	.0643	0.0	.3922	447.05	16.203	555.614	1.239	.071	.8849	.8883
13	2.750	-.191	5.491	2.741	.0662	0.0	.3920	446.81	16.198	555.708	1.238	.071	.8814	.8850
14	2.745	-.140	5.495	2.749	.0682	0.0	.3919	446.73	16.193	555.800	1.238	.072	.8780	.8816
15	2.768	-.161	5.503	2.740	.0707	0.0	.3919	447.05	16.188	555.865	1.238	.073	.8715	.8756
16	2.817	-.203	5.517	2.720	.0764	0.0	.3912	446.84	16.175	557.829	1.237	.075	.8287	.8337
17	2.889	-.431	5.591	2.702	.0829	0.0	.3906	446.68	16.162	559.266	1.236	.078	.7965	.8026
18	2.983	-.639	5.683	2.700	.0900	0.0	.3899	446.19	16.149	560.036	1.235	.080	.7788	.7854
19	3.113	-.838	5.830	2.717	.0982	0.0	.3898	446.42	16.141	560.853	1.234	.081	.7622	.7691
20	3.291	-.976	6.045	2.756	.1038	0.0	.3897	446.54	16.133	561.758	1.234	.083	.7445	.7520
21	3.508	-1.055	6.326	2.818	.1135	0.0	.3895	446.91	16.124	562.794	1.233	.085	.7253	.7333

STATION 14 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.237 ISEN. EFF.= .860 POLY. EFF.= .864 DELTA T ON T = .073

STATION 15 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITY MERID	VELOCITY TANGL	VELOCITY TOTAL	TEMPERATURE TOTAL	TEMPERATURE STATIC	PRESSURE TOTAL	PRESSURE STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	[illegible]	397.39	0.00	397.39	553.410	540.286	19.144	16.580	.3484	0.00	-1.66	10.624	.0831
2	[illegible]	393.54	0.00	393.54	553.518	540.291	19.144	16.669	.3501	0.00	-1.61	11.354	.0830
3	7.72234	401.02	0.00	401.02	553.615	540.293	19.141	16.599	.3514	0.00	-1.55	12.140	.0830
4	7.76000	402.41	0.00	402.41	553.709	540.291	19.143	16.749	.3527	0.00	-1.48	13.123	.0829
5	7.91033	403.72	0.00	403.72	553.791	540.286	19.143	16.839	.3539	0.00	-1.41	14.210	.0829
6	7.85277	404.91	0.00	404.91	553.871	540.287	19.142	16.910	.3549	0.00	-1.33	15.476	.0826
7	7.93833	406.04	0.00	406.04	553.947	540.289	19.141	16.982	.3559	0.00	-1.24	16.972	.0828
8	7.96463	407.05	0.00	407.05	554.006	540.287	19.141	16.914	.3567	0.00	-1.16	18.773	.0827
9	7.99005	408.03	0.00	408.03	554.328	540.534	19.141	16.997	.3579	0.00	-1.06	20.988	.0827
10	8.03379	408.98	0.00	408.98	554.805	540.945	19.141	17.000	.3582	0.00	-.96	23.651	.0826
11	8.08444	409.93	0.00	409.93	555.280	541.362	19.139	16.995	.3583	0.00	-.85	27.793	.0825
12	8.15027	410.84	0.00	410.84	555.614	541.650	19.139	16.990	.3582	0.00	-.74	33.438	.0824
13	8.21213	410.13	0.00	410.13	555.709	541.771	19.137	16.996	.3584	0.00	-.62	42.288	.0824
14	8.26017	409.73	0.00	409.73	555.800	541.890	19.121	16.983	.3583	0.00	-.49	57.488	.0823
15	8.28335	409.40	0.00	409.40	555.855	541.979	19.11	16.980	.3583	0.00	-.36	90.188	.0822
16	8.33315	407.77	0.00	407.77	555.829	544.353	19.091	16.979	.3581	0.00	-.23	217.045	.0820
17	8.36853	406.42	0.00	406.42	554.260	545.216	19.084	16.979	.3541	0.00	-.08	-464.316	.0819
18	8.44457	405.01	0.00	405.01	554.035	545.241	19.083	16.980	.3517	0.00	.07	-109.550	.0816
19	8.48813	402.24	0.00	402.24	553.853	547.490	19.064	16.982	.3502	0.00	.22	-61.993	.0815
20	8.53447	400.33	0.00	400.33	553.758	548.449	19.031	16.985	.3487	0.00	.37	-43.579	.0814
21	8.61330	394.23	0.00	394.23	552.794	549.585	19.021	16.989	.3471	0.00	.52	-33.305	.0812

BLADE DATA

LOCATION	BLADE-TO-BLADE SECTION	BLADE CLAR	MAL FLOW RATIO	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-7.239	.0330	0.000	7.233	.0242	0.0	.3449	397.39	18.146	553.410	1.235	.067	.9264	.9285
2	-7.433	.0330	0.000	7.433	.0255	0.0	.3501	393.54	18.146	553.518	1.235	.067	.9234	.9257
3	-7.577	.0330	0.000	7.577	.0259	0.0	.3514	401.02	18.143	553.615	1.235	.067	.9207	.9230
4	-7.752	.0317	0.000	7.752	.0267	0.0	.3527	402.41	18.143	553.709	1.235	.068	.9182	.9206
5	-7.908	.0315	0.000	7.908	.0270	0.0	.3538	403.72	18.143	553.791	1.235	.068	.9160	.9185
6	-8.098	.0413	0.000	8.098	.0573	0.0	.3548	404.91	18.142	553.871	1.234	.068	.9137	.9163
7	-8.263	.0311	0.000	8.263	.0287	0.0	.3558	406.04	18.141	553.947	1.234	.068	.9098	.9125
8	-8.422	.0309	0.000	8.422	.0303	0.0	.3567	407.05	18.141	554.006	1.234	.068	.9061	.9089
9	-8.571	.0310	0.000	8.571	.0628	0.0	.3575	408.03	18.140	554.328	1.234	.069	.9015	.9044
10	-8.760	.0310	0.000	8.760	.0312	0.0	.3582	408.98	18.139	554.805	1.234	.070	.8894	.8927
11	-8.922	.0309	0.000	8.922	.0337	0.0	.3585	409.93	18.138	555.280	1.234	.071	.8777	.8813
12	-9.120	.0313	0.000	9.120	.0356	0.0	.3582	410.84	18.136	555.614	1.234	.071	.8693	.8731
13	-9.306	.0311	0.000	9.306	.0362	0.0	.3579	410.13	18.130	555.709	1.234	.071	.8655	.8694
14	-9.446	.0302	0.000	9.446	.0369	0.0	.3575	409.73	18.123	555.800	1.233	.072	.8617	.8658
15	-9.503	.0302	0.000	9.503	.0943	0.0	.3580	409.40	18.116	555.855	1.233	.073	.8449	.8495
16	-9.573	.0304	0.000	9.573	.1023	0.0	.3601	407.77	18.099	555.829	1.231	.075	.8114	.8169
17	-9.650	.0312	0.000	9.650	.1112	0.0	.3640	405.92	18.079	555.266	1.230	.078	.7786	.7850
18	-9.852	.0311	0.000	9.852	.1209	0.0	.3617	403.61	18.059	550.336	1.229	.080	.7601	.7678
19	-9.125	.0309	0.000	9.125	.1291	0.0	.3502	402.24	18.044	550.353	1.228	.081	.7432	.7505
20	-9.169	.0311	0.000	9.169	.1383	0.0	.3487	400.83	18.039	551.758	1.227	.083	.7255	.7334
21	-9.213	.0313	0.000	9.213	.1519	0.0	.3470	398.23	18.029	552.794	1.227	.085	.7065	.7148

STATION 15 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.233 ISEN. EFF.= .845 POLY. EFF.= .850 DELTA T ON T = .073

STATION 15 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	+09.61	0.00	+09.61	553.410	539.508	18.144	16.596	.3592	0.00	0.00	0.000	.0828
2	7.6803	+09.62	0.00	409.62	553.518	539.615	18.144	16.596	.3592	0.00	-.04	930.222	.0827
3	7.7223	+09.65	0.00	409.65	553.618	539.713	18.143	16.596	.3592	0.00	-.07	504.841	.0827
4	7.7649	+09.68	0.00	+09.68	553.709	539.801	18.143	16.596	.3592	0.00	-.09	367.176	.0827
5	7.8077	+09.72	0.00	409.72	553.791	539.881	18.143	16.595	.3592	0.00	-.11	302.048	.0827
6	7.8515	+09.74	0.00	+09.74	553.871	539.961	18.142	16.595	.3592	0.00	-.13	266.642	.0827
7	7.8951	+09.78	0.00	+09.78	554.017	540.103	18.141	16.594	.3592	0.00	-.14	245.860	.0827
8	7.9414	+09.83	0.00	409.83	554.155	540.239	18.141	16.594	.3592	0.00	-.15	236.895	.0826
9	7.9874	+09.88	0.00	409.88	554.328	540.408	18.140	16.593	.3592	0.00	-.15	234.135	.0826
10	8.0341	+10.04	0.00	+10.04	554.805	540.874	18.133	16.593	.3591	0.00	-.15	237.522	.0825
11	8.0815	+10.19	0.00	410.19	555.280	541.339	18.133	16.592	.3591	0.00	-.14	246.958	.0825
12	8.1297	+10.14	0.00	+10.14	555.614	541.677	18.131	16.592	.3590	0.00	-.14	263.139	.0824
13	8.1789	+09.40	0.00	+09.40	555.708	541.821	18.130	16.591	.3583	0.00	-.12	287.788	.0824
14	8.2291	+09.23	0.00	409.23	555.800	541.965	18.123	16.591	.3576	0.00	-.11	323.731	.0824
15	8.2735	+08.04	0.00	+08.04	556.465	542.670	18.115	16.590	.3568	0.00	-.10	376.748	.0823
16	8.3237	+08.29	0.00	408.29	557.629	544.153	18.099	16.590	.3561	0.00	-.08	457.603	.0820
17	8.3820	+04.43	0.00	404.43	559.266	545.716	18.079	16.589	.3527	0.00	-.06	589.211	.0818
18	8.4352	+02.26	0.00	402.25	560.036	546.630	18.059	16.589	.3505	0.00	-.04	826.647	.0817
19	8.4893	+01.19	0.00	+01.19	560.853	547.520	18.043	16.589	.3493	0.00	-.03	1339.787	.0815
20	8.5442	+00.23	0.00	400.23	561.758	548.489	18.033	16.589	.3481	0.00	-.01	2985.284	.0814
21	8.6000	399.28	0.00	399.23	562.794	549.588	18.023	16.589	.3470	0.00	0.00	0.000	.0812

STATION 17 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	+10.62	0.00	+10.62	553.410	539.439	18.144	16.589	.3601	0.00	0.00	0.000	.0827
2	7.6807	+10.62	0.00	410.62	553.518	539.547	18.144	16.589	.3601	0.00	-.00	0.000	.0827
3	7.7222	+10.62	0.00	410.62	553.618	539.647	18.143	16.589	.3601	0.00	-.00	0.000	.0827
4	7.7645	+10.62	0.00	410.62	553.709	539.738	18.143	16.589	.3600	0.00	-.01	0.000	.0827
5	7.8072	+10.60	0.00	+10.60	553.791	539.821	18.143	16.589	.3600	0.00	-.01	0.000	.0827
6	7.8513	+10.55	0.00	410.55	553.871	539.905	18.142	16.589	.3599	0.00	-.01	0.000	.0827
7	7.8959	+10.53	0.00	+10.53	554.017	540.052	18.141	16.589	.3599	0.00	-.01	0.000	.0826
8	7.9411	+10.50	0.00	+10.50	554.156	540.193	18.141	16.589	.3598	0.00	-.01	0.000	.0826
9	7.9871	+10.47	0.00	+10.47	554.328	540.368	18.140	16.589	.3597	0.00	-.01	0.000	.0826
10	8.0338	+10.35	0.00	+10.35	554.805	540.839	18.133	16.589	.3596	0.00	-.01	0.000	.0825
11	8.0812	+10.62	0.00	410.62	555.280	541.309	18.133	16.589	.3595	0.00	-.01	0.000	.0825
12	8.1294	+10.50	0.00	+10.50	555.614	541.653	18.130	16.589	.3593	0.00	-.01	0.000	.0824
13	8.1782	+09.68	0.00	409.68	555.708	541.801	18.130	16.589	.3585	0.00	-.01	0.000	.0824
14	8.2273	+08.84	0.00	+08.84	555.800	541.950	18.123	16.589	.3577	0.00	-.01	0.000	.0824
15	8.2782	+08.20	0.00	408.20	556.465	542.660	18.115	16.589	.3570	0.00	-.01	0.000	.0822
16	8.3235	+06.39	0.00	406.39	557.629	544.146	18.093	16.589	.3549	0.00	-.01	0.000	.0820
17	8.3818	+04.28	0.00	404.28	559.266	545.711	18.073	16.589	.3527	0.00	-.01	0.000	.0818
18	8.4350	+02.30	0.00	402.30	560.036	546.628	18.053	16.589	.3505	0.00	-.01	0.000	.0817
19	8.4892	+01.21	0.00	+01.21	560.853	547.518	18.043	16.589	.3493	0.00	-.00	0.000	.0815
20	8.5442	+00.24	0.00	400.24	561.758	548.488	18.033	16.589	.3481	0.00	-.00	0.000	.0814
21	8.6000	399.28	0.00	399.28	562.794	549.588	18.023	16.589	.3470	0.00	0.00	0.000	.0812

ROTOR PERFORMANCE

LOCATION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID ENCE	DEVIATION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON 1	REL V RATIO	DELTA HU**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	6.7500	7.0493	.4574	4.343	6.131	.0537	.3369	.3490	.4919	.8152	.7257	-60.937	-12.647	6.878	18.991
2	6.9549	7.2932	.4743	3.183	8.101	.0625	.3629	.3719	.5022	.7925	.7196	-61.311	-13.533	6.226	18.627
3	7.1737	7.5335	.4923	2.039	8.029	.0620	.3829	.3909	.5078	.7734	.7132	-61.673	-14.418	6.373	18.115
4	7.0910	7.6447	.4747	4.197	8.042	.0630	.3996	.4067	.5109	.7574	.7065	-62.008	-15.291	6.418	9.364
5	7.2034	7.7620	.4909	3.001	7.979	.0637	.4137	.4196	.5097	.7439	.6995	-62.307	-16.181	6.303	8.453
6	7.3144	7.8780	.5071	1.837	7.937	.0642	.4256	.4310	.5076	.7324	.6924	-62.586	-17.053	6.295	7.644
7	7.4245	7.9930	.5231	.695	7.927	.0645	.4374	.4419	.5041	.7215	.6855	-62.859	-17.895	5.497	7.064
8	7.5341	8.1071	.5391	-.445	7.930	.0634	.4474	.4514	.4986	.7117	.6804	-63.135	-18.648	4.811	6.712
9	7.6439	8.2214	.5552	-1.582	7.951	.0703	.4565	.4597	.4943	.7030	.6749	-63.419	-19.323	4.943	6.660
10	7.7517	8.3346	.5711	-2.711	7.983	.0781	.4693	.4718	.4883	.6914	.6749	-63.715	-19.928	4.914	6.645
11	7.8602	8.4481	.5871	-3.844	8.029	.0850	.4808	.4827	.4818	.6816	.6747	-64.028	-20.473	4.770	6.721
12	7.9689	8.5626	.6034	-4.985	8.090	.0937	.4892	.4905	.4767	.6740	.6718	-64.359	-20.960	.541	8.804
13	8.0758	8.6779	.6202	-6.139	8.169	.0910	.4933	.4946	.4671	.6692	.6643	-64.713	-21.395	-.795	9.443
14	8.1877	8.7946	.6375	-7.310	8.273	.0923	.4904	.4966	.4584	.6691	.6569	-65.092	-21.772	-2.269	10.501
15	8.2986	8.9128	.6553	-8.503	8.410	.1118	.5140	.5137	.4500	.6659	.6594	-65.499	-22.076	-3.839	11.719
16	8.4105	9.0325	.6737	-9.723	8.584	.1220	.5496	.5487	.4410	.6673	.6573	-65.934	-22.295	-5.328	12.769
17	8.5241	9.1539	.6927	-10.977	8.803	.1321	.5865	.5851	.4303	.6841	.6577	-66.394	-22.407	-6.412	13.545
18	8.6395	9.2771	.7123	-12.271	9.077	.2105	.6037	.6019	.4237	.6874	.6597	-66.867	-22.378	-7.067	13.904
19	8.7565	9.4021	.7326	-13.611	9.407	.2293	.6217	.6195	.4154	.6949	.6720	-67.345	-22.181	-7.729	13.892
20	8.8756	9.5293	.7534	-15.000	9.797	.2433	.6419	.6392	.4078	.7053	.6943	-67.828	-21.839	-8.568	13.588
21	9.0000	9.6599	.7742	-16.434	10.244	.2718	.6604	.6633	.4017	.7054	.6992	-68.316	-21.371	-9.607	13.159

STATOR PERFORMANCE

LOCATION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID ENCE	DEVIATION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON 1	REL V RATIO	DELTA HU**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	7.6143	7.6970	.4421	-3.204	7.269	.0532	.4165	.4163	.3977	.7312	0.0000	48.817	-7.239	-39.941	.020
2	7.6731	7.7611	.4517	-3.204	7.269	.0575	.4315	.4315	.4137	.7203	0.0000	47.995	-7.403	-36.763	.020
3	7.7305	7.8253	.4609	-3.204	7.269	.0609	.4447	.4447	.4264	.7111	0.0000	47.256	-7.577	-33.400	.019
4	7.7869	7.8893	.4698	-3.204	7.269	.0567	.4546	.4559	.4369	.7049	0.0000	46.730	-7.752	-29.974	.017
5	7.8370	7.9403	.4777	-3.204	7.269	.0558	.4623	.4625	.4412	.7006	0.0000	46.315	-7.926	-26.536	.015
6	7.8733	7.9843	.4841	-3.204	7.269	.0573	.4677	.4679	.4437	.6983	0.0000	46.068	-8.096	-23.138	.013
7	7.9180	8.0293	.4903	-3.204	7.269	.0587	.4721	.4723	.4439	.6972	0.0000	45.648	-8.263	-19.834	.011
8	7.9621	8.0744	.4967	-3.204	7.269	.0603	.4752	.4754	.4429	.6971	0.0000	45.346	-8.422	-16.559	.009
9	8.0096	8.1208	.5031	-3.204	7.269	.0628	.4774	.4776	.4398	.6975	0.0000	45.074	-8.571	-13.114	.008
10	8.0499	8.1579	.5086	-3.204	7.269	.0712	.4816	.4816	.4329	.6967	0.0000	44.845	-8.705	-9.126	.006
11	8.0932	8.1994	.5144	-3.204	7.269	.0797	.4845	.4849	.4265	.6964	0.0000	44.684	-8.822	-5.338	.005
12	8.1373	8.2427	.5205	-3.204	7.269	.0826	.4852	.4853	.4193	.6974	0.0000	44.621	-8.920	-1.480	.003
13	8.1817	8.2868	.5267	-3.204	7.269	.0832	.4846	.4846	.4139	.6995	0.0000	44.669	-8.996	1.952	.001
14	8.2266	8.3305	.5327	-3.204	7.269	.0909	.4810	.4810	.4073	.7019	0.0000	44.794	-9.046	5.410	.002
15	8.2725	8.3748	.5391	-3.204	7.269	.0943	.4802	.4804	.4010	.7045	0.0000	44.945	-9.063	9.725	.004
16	8.3201	8.4216	.5456	-3.204	7.269	.1023	.4838	.4837	.3925	.7050	0.0000	45.113	-9.059	15.603	.008
17	8.3709	8.4733	.5525	-3.204	7.269	.1119	.4857	.4855	.3815	.7078	0.0000	45.455	-9.060	22.675	.012
18	8.4241	8.5262	.5598	-3.204	7.269	.1209	.4815	.4813	.3658	.7120	0.0000	46.181	-9.085	30.026	.014
19	8.4819	8.5849	.5677	-3.204	7.269	.1231	.4716	.4715	.3467	.7211	0.0000	47.346	-9.125	36.838	.014
20	8.5402	8.6449	.5758	-3.204	7.269	.1369	.4570	.4571	.3134	.7341	0.0000	48.876	-9.169	42.541	.021
21	8.6139	8.7300	.5864	-3.204	7.269	.1509	.4383	.4385	.2643	.7509	0.0000	50.814	-9.213	46.652	.038

WAKE AND BOUNDARY LAYER BLOCKAGES (PERCENT)

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MID BLOCKAGE	0.0	0.0	0.0	0.0	.3	.7	1.0	1.4	1.8	3.4	3.0	5.0	7.0	8.0	9.1	10.3	10.4
DIST FACTOR	1.0	1.0	1.0	1.0	.8	.5	.4	.2	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
INT BLOCKAGE	0.0	0.0	0.0	0.0	.3	.7	1.0	1.4	1.8	3.5	3.0	5.0	7.0	8.0	9.1	10.3	10.4

SUMMARY POINT NO. 1 THE CALCULATION IS CONVERGED PASS 20

TEST POINT TITLE = 212050315040

FLOW = 10.22 SPEED = 8154.2 PRESSURE RATIO = 1.233 ISENTROPIC EFFY = .8453 POLYTROPIC EFFY = .8499 DEL T/T = .0727

SUMMARY OF 1 TEST POINTS

POINT NO.	TEST POINT TITLE	STATUS OF CALCULATION	FLOW RATE LBS/SEC	SPEED RPM	ROTOR PRESSURE RATIO	ROTOR ISEN EFFY	STAGE PRESSURE RATIO	STAGE ISEN EFFY	FLOW/(CHOKE FLOW)
1	212050315040	CONVERGED AFTER 20 PASSES	10.219	8154.2	1.250	.904	1.233	.845	.26789

2. TEST POINT 212050615050 (50%)

STATION 1 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	0.0630	177.08	0.00	177.08	518.638	516.088	14.639	14.440	.1588	0.00	20.93	0.000	.0751
2	0.2234	177.08	0.00	177.08	518.638	516.038	14.639	14.440	.1588	0.00	19.74	0.000	.0751
3	0.3838	177.08	0.00	177.08	518.638	516.038	14.639	14.440	.1588	0.00	18.54	0.000	.0751
4	0.5442	177.08	0.00	177.08	518.638	516.038	14.639	14.440	.1588	0.00	17.33	0.000	.0751
5	0.6993	177.08	0.00	177.08	518.638	516.038	14.639	14.440	.1588	0.00	16.12	0.000	.0751
6	0.8473	177.08	0.00	177.08	518.638	516.038	14.639	14.440	.1588	0.00	14.90	0.000	.0751
7	0.9919	177.08	0.00	177.08	518.638	516.038	14.639	14.440	.1588	0.00	13.68	0.000	.0751
8	1.1317	177.08	0.00	177.08	518.638	516.038	14.639	14.440	.1588	0.00	12.47	0.000	.0751
9	1.3023	177.08	0.00	177.08	518.638	516.038	14.639	14.440	.1588	0.00	11.26	0.000	.0751
10	1.4532	177.08	0.00	177.08	518.638	516.038	14.639	14.440	.1588	0.00	10.07	0.000	.0751
11	1.6032	177.08	0.00	177.08	518.638	516.038	14.639	14.440	.1588	0.00	8.89	0.000	.0751
12	1.7525	177.08	0.00	177.08	518.638	516.038	14.639	14.440	.1588	0.00	7.74	0.000	.0751
13	1.9019	177.08	0.00	177.08	518.638	516.038	14.639	14.440	.1588	0.00	6.61	0.000	.0751
14	2.0513	177.08	0.00	177.08	518.638	516.038	14.639	14.440	.1588	0.00	5.53	0.000	.0751
15	2.1939	177.08	0.00	177.08	518.638	516.038	14.639	14.440	.1588	0.00	4.50	0.000	.0751
16	2.3440	177.08	0.00	177.08	518.638	516.038	14.639	14.440	.1588	0.00	3.54	0.000	.0751
17	2.4935	177.08	0.00	177.08	518.638	516.038	14.639	14.440	.1588	0.00	2.63	0.000	.0751
18	2.6440	177.08	0.00	177.08	518.638	516.038	14.639	14.440	.1588	0.00	1.81	0.000	.0751
19	2.7932	177.08	0.00	177.08	518.638	516.038	14.639	14.440	.1588	0.00	1.09	0.000	.0751
20	2.9413	177.08	0.00	177.08	518.638	516.038	14.639	14.440	.1588	0.00	.48	0.000	.0751
21	3.0900	177.08	0.00	177.08	518.638	516.038	14.639	14.440	.1588	0.00	0.00	0.000	.0751

STATION 2 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	0.3746	191.49	0.00	191.49	518.688	515.647	14.693	14.337	.1718	0.00	20.83	-205.758	.0751
2	0.5133	192.37	0.00	192.37	518.688	515.619	14.693	14.394	.1725	0.00	19.59	-136.622	.0751
3	0.6513	193.16	0.00	193.16	518.638	515.594	14.693	14.391	.1733	0.00	18.35	-109.453	.0751
4	0.7939	193.88	0.00	193.88	518.638	515.571	14.693	14.389	.1739	0.00	17.11	-93.967	.0751
5	0.9244	194.53	0.00	194.53	518.688	515.550	14.693	14.387	.1745	0.00	15.87	-82.987	.0751
6	1.0511	195.10	0.00	195.10	518.688	515.531	14.693	14.385	.1750	0.00	14.62	-73.436	.0751
7	1.1740	195.59	0.00	195.59	518.688	515.515	14.693	14.384	.1755	0.00	13.37	-65.738	.0751
8	1.3215	196.08	0.00	196.08	518.688	515.503	14.693	14.382	.1758	0.00	12.12	-59.387	.0751
9	1.4621	196.26	0.00	196.26	518.688	515.494	14.693	14.382	.1761	0.00	10.87	-51.473	.0751
10	1.5955	196.41	0.00	196.41	518.688	515.489	14.693	14.381	.1762	0.00	9.62	-45.253	.0751
11	1.7233	196.40	0.00	196.40	518.688	515.489	14.693	14.381	.1762	0.00	8.38	-39.678	.0751
12	1.8514	196.23	0.00	196.23	518.688	515.495	14.693	14.382	.1760	0.00	7.15	-34.725	.0751
13	1.9747	195.88	0.00	195.88	518.688	515.506	14.693	14.383	.1757	0.00	5.95	-30.398	.0751
14	2.1293	195.33	0.00	195.33	518.688	515.524	14.693	14.385	.1752	0.00	4.78	-26.610	.0751
15	2.2525	194.59	0.00	194.59	518.688	515.549	14.693	14.387	.1745	0.00	3.64	-23.328	.0751
16	2.3974	193.67	0.00	193.67	518.688	515.581	14.693	14.390	.1736	0.00	2.55	-20.457	.0751
17	2.5432	192.33	0.00	192.33	518.688	515.621	14.693	14.394	.1725	0.00	1.51	-17.984	.0751
18	2.6711	190.83	0.00	190.83	518.688	515.668	14.693	14.399	.1712	0.00	.54	-15.756	.0751
19	2.8084	189.05	0.00	189.05	518.688	515.724	14.693	14.404	.1698	0.00	-.36	-13.811	.0751
20	2.9433	186.97	0.00	186.97	518.688	515.789	14.693	14.410	.1677	0.00	-1.18	-12.077	.0751
21	3.0900	184.56	0.00	184.56	518.638	515.863	14.693	14.418	.1655	0.00	-1.91	-10.518	.0752

STATION 3 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGL	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	9.0010	207.02	0.00	207.32	518.688	515.106	14.695	14.344	.1865	0.00	20.54	-83.031	.0749
2	9.2239	209.59	0.00	209.89	518.688	515.069	14.695	14.340	.1873	0.00	19.33	-156.130	.0749
3	9.4487	210.07	0.00	210.07	518.688	515.029	14.695	14.336	.1883	0.00	18.11	-336.795	.0749
4	9.6710	211.23	0.00	211.23	518.688	514.986	14.695	14.332	.1896	0.00	16.87	-856.689	.0749
5	9.8920	212.50	0.00	212.50	518.688	514.943	14.695	14.328	.1907	0.00	15.60	-1285.066	.0749
6	10.1135	213.67	0.00	213.67	518.688	514.902	14.695	14.324	.1919	0.00	14.31	-587.153	.0748
7	10.3339	214.75	0.00	214.75	518.688	514.864	14.695	14.320	.1929	0.00	13.00	-257.823	.0748
8	10.5535	215.69	0.00	215.69	518.688	514.830	14.695	14.317	.1939	0.00	11.66	-137.916	.0748
9	10.7724	216.49	0.00	216.49	518.688	514.803	14.695	14.314	.1943	0.00	10.30	-85.014	.0748
10	10.9921	217.19	0.00	217.19	518.688	514.783	14.695	14.312	.1948	0.00	8.92	-57.760	.0748
11	11.2112	217.85	0.00	217.85	518.688	514.773	14.695	14.311	.1950	0.00	7.52	-42.063	.0748
12	11.4310	217.24	0.00	217.24	518.688	514.774	14.695	14.311	.1950	0.00	6.13	-32.218	.0748
13	11.6502	219.68	0.00	219.68	518.688	514.787	14.695	14.313	.1947	0.00	4.73	-25.639	.0748
14	11.8705	219.17	0.00	219.17	518.688	514.813	14.695	14.315	.1940	0.00	3.34	-21.039	.0748
15	12.0910	219.09	0.00	219.09	518.688	514.851	14.695	14.319	.1931	0.00	1.97	-17.699	.0748
16	12.4138	213.63	0.00	213.63	518.688	514.903	14.695	14.324	.1917	0.00	.63	-15.208	.0748
17	12.5373	211.73	0.00	211.73	518.688	514.969	14.695	14.330	.1901	0.00	-.68	-13.308	.0749
18	12.6629	209.34	0.00	209.34	518.688	515.047	14.695	14.338	.1881	0.00	-1.95	-11.793	.0749
19	12.7884	206.93	0.00	206.93	518.688	515.137	14.695	14.347	.1859	0.00	-3.17	-10.573	.0749
20	12.9162	203.94	0.00	203.94	518.688	515.239	14.695	14.357	.1830	0.00	-4.35	-9.560	.0750
21	13.0500	200.58	0.00	200.58	518.688	515.352	14.695	14.368	.1800	0.00	-5.47	-8.690	.0750

STATION 4 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGL	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	8.7500	222.41	0.00	222.41	518.688	514.586	14.695	14.293	.1997	0.00	20.32	-384.054	.0747
2	8.9951	222.62	0.00	222.62	518.688	514.504	14.695	14.285	.2017	0.00	19.26	518.904	.0747
3	9.2741	223.30	0.00	223.30	518.688	514.419	14.695	14.277	.2033	0.00	18.13	173.376	.0747
4	9.5522	223.19	0.00	223.19	518.688	514.332	14.695	14.268	.2058	0.00	16.94	127.034	.0746
5	9.8042	231.45	0.00	231.45	518.688	514.245	14.695	14.260	.2079	0.00	15.69	117.527	.0746
6	10.0314	233.34	0.00	233.34	518.688	514.161	14.695	14.252	.2099	0.00	14.37	136.885	.0746
7	10.2567	235.07	0.00	235.07	518.688	514.082	14.695	14.244	.2117	0.00	12.99	235.285	.0745
8	10.5353	237.47	0.00	237.47	518.688	514.012	14.695	14.237	.2133	0.00	11.55	-2888.093	.0745
9	10.7644	238.97	0.00	238.97	518.688	513.952	14.695	14.232	.2147	0.00	10.05	-150.037	.0745
10	10.9831	240.11	0.00	240.11	518.688	513.907	14.695	14.227	.2157	0.00	8.50	-71.858	.0745
11	11.2019	240.85	0.00	240.85	518.688	513.877	14.695	14.224	.2164	0.00	6.93	-45.656	.0745
12	11.4203	241.14	0.00	241.14	518.688	513.866	14.695	14.223	.2167	0.00	5.33	-32.637	.0745
13	11.6394	240.94	0.00	240.94	518.688	513.874	14.695	14.224	.2165	0.00	3.70	-24.855	.0745
14	11.8601	240.22	0.00	240.22	518.688	513.903	14.695	14.227	.2153	0.00	2.08	-19.697	.0745
15	12.0797	238.94	0.00	238.94	518.688	513.953	14.695	14.232	.2147	0.00	.45	-16.239	.0745
16	12.4119	237.12	0.00	237.12	518.688	514.025	14.695	14.239	.2130	0.00	-1.13	-14.005	.0745
17	12.5250	234.90	0.00	234.90	518.688	514.116	14.695	14.247	.2109	0.00	-2.67	-12.588	.0746
18	12.6403	232.05	0.00	232.05	518.688	514.223	14.695	14.258	.2084	0.00	-4.15	-11.614	.0746
19	12.7573	228.90	0.00	228.90	518.688	514.343	14.695	14.269	.2056	0.00	-5.58	-10.919	.0746
20	12.8776	225.41	0.00	225.41	518.688	514.475	14.695	14.282	.2024	0.00	-6.95	-10.467	.0747
21	13.0000	221.65	0.00	221.65	518.688	514.614	14.695	14.296	.1990	0.00	-8.25	-10.317	.0747

BLADE DATA

LOCATION	BLADE SECTION	ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-60.937	5.070	-69.379	3.742	0.0100	600.6	.3750	640.44	17.884	548.387	1.000	0.000	1.0000	1.0000
2	-61.310	5.236	-69.810	3.500	0.0000	610.8	.3844	650.82	18.001	549.615	1.000	0.000	1.0000	1.0000
3	-61.670	5.373	-70.229	3.255	0.0000	621.0	.3937	661.13	18.120	550.851	1.000	0.000	1.0000	1.0000
4	-62.004	5.418	-70.639	3.034	0.0000	631.0	.4029	671.36	18.241	551.694	1.000	0.000	1.0000	1.0000
5	-62.304	5.302	-70.1+0	7.842	0.0100	641.0	.6121	681.51	18.363	552.744	1.000	0.000	1.0000	1.0000
6	-62.582	5.932	-70.254	7.671	0.0000	650.9	.5212	691.56	18.487	553.803	1.000	0.000	1.0000	1.0000
7	-62.856	5.491	-70.359	7.513	0.0000	660.7	.5301	701.47	18.612	554.869	1.000	0.000	1.0000	1.0000
8	-63.132	4.803	-70.+36	7.364	0.0000	670.5	.5390	711.27	18.738	555.945	1.000	0.000	1.0000	1.0000
9	-63.417	3.931	-70.5+1	7.224	0.0000	680.2	.5477	720.92	18.867	557.030	1.000	0.000	1.0000	1.0000
10	-63.714	2.901	-70.303	7.094	0.0000	689.8	.5563	730.43	18.998	558.128	1.000	0.000	1.0000	1.0000
11	-64.027	1.755	-71.000	6.973	0.0000	699.5	.5647	739.80	19.131	559.240	1.000	0.000	1.0000	1.0000
12	-64.360	.524	-71.220	6.861	0.0000	709.2	.5730	749.04	19.266	560.3368	1.000	0.000	1.0000	1.0000
13	-64.714	-.813	-71.+71	6.756	0.0000	718.9	.5812	758.17	19.403	561.516	1.000	0.000	1.0000	1.0000
14	-65.094	-2.267	-71.753	6.659	0.0000	728.6	.5893	767.20	19.547	562.686	1.000	0.000	1.0000	1.0000
15	-65.502	-3.850	-72.070	6.569	0.0000	738.5	.6973	776.16	19.693	563.362	1.000	0.000	1.0000	1.0000
16	-65.938	-5.333	-72.+20	6.483	0.0000	748.4	.7053	785.09	19.844	565.108	1.000	0.000	1.0000	1.0000
17	-66.398	-5.419	-72.830	6.402	0.0000	758.5	.7133	794.03	19.999	566.367	1.000	0.000	1.0000	1.0000
18	-66.871	-7.021	-73.204	6.333	0.0000	768.8	.7213	803.03	20.160	567.665	1.000	0.000	1.0000	1.0000
19	-67.349	-7.732	-73.630	6.281	0.0000	779.2	.7294	812.15	20.328	569.004	1.000	0.000	1.0000	1.0000
20	-67.830	-8.570	-74.073	6.244	0.0000	789.9	.7376	821.42	20.502	570.389	1.000	0.000	1.0000	1.0000
21	-68.316	-9.607	-74.528	6.212	0.0000	800.8	.7460	830.89	20.683	571.823	1.000	0.000	1.0000	1.0000

STATION 5 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.8979	255.22	104.71	275.87	529.345	523.035	15.72+	15.078	.2457	22.31	22.32	6.199	.0776
2	7.0050	258.38	101.85	277.73	529.215	522.820	15.711	15.056	.2474	21.51	20.94	7.497	.0775
3	7.1130	261.54	99.47	279.81	529.124	522.633	15.701	15.037	.2493	20.82	19.50	9.436	.0774
4	7.2197	264.82	97.59	282.23	529.076	522.472	15.695	15.021	.2515	20.23	18.00	12.530	.0773
5	7.3174	268.26	96.15	284.97	529.069	522.336	15.69+	15.007	.2540	19.72	16.46	17.068	.0772
6	7.4195	271.70	95.05	287.83	529.093	522.223	15.69[illegible]	14.996	.2565	19.28	14.90	24.222	.0772
7	7.5133	274.98	94.20	290.67	529.138	522.133	15.70+	14.988	.2591	18.91	13.26	33.924	.0772
8	7.6170	277.98	93.49	293.28	529.1[illegible]95	522.064	15.710	14.981	.2614	18.59	11.60	185.688	.0772
9	7.7147	280.55	92.90	295.25	529.269	522.027	15.715	14.977	.2635	18.33	9.92	-241.111	.0772
10	7.8117	282.45	92.33	297.31	529.387	522.058	15.72+	14.974	.2650	18.19	8.22	-97.348	.0772
11	7.9034	283.80	92.57	298.31	529.489	522.101	15.725	14.973	.2661	18.06	6.52	-74.462	.0772
12	8.0051	284.56	92.00	299.07	529.554	522.138	15.730	14.972	.2666	17.92	4.81	-71.066	.0772
13	8.1020	284.71	91.03	298.92	529.575	522.157	15.730	14.973	.2664	17.74	3.10	-78.540	.0771
14	8.1935	284.14	89.90	298.02	529.564	522.200	15.725	14.973	.2655	17.50	1.38	-99.706	.0771
15	8.2979	282.28	88.64	296.17	529.663	522.390	15.717	14.974	.2639	17.62	-.33	-152.272	.0771
16	8.3990	279.28	90.02	293.43	529.842	522.704	15.70+	14.975	.2614	17.67	-1.99	-333.569	.0771
17	8.5000	275.57	90.10	289.92	529.968	523.019	15.69[illegible]	14.977	.2582	18.11	-3.58	20136.937	.0770
18	8.6043	271.57	89.93	285.85	529.978	523.204	15.670	14.980	.2545	18.13	-5.12	485.224	.0770
19	8.7112	267.20	87.73	281.23	529.984	523.407	15.651	14.983	.2504	18.18	-6.60	371.034	.0770
20	8.8210	262.19	86.54	276.10	529.951	523.631	15.630	14.987	.2458	18.27	-8.03	539.994	.0770
21	8.9340	256.65	85.33	270.43	529.944	523.878	15.603	14.991	.2407	18.40	-9.38	-1665.883	.0770

BLADE ROW 1

STATION	BLADE ELEMENT	BLADE ELEMENT	AXIAL VELOCITY	TIP SPEED	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	[illegible]	[illegible]	[illegible]	[illegible]	913.47	.5972	961.44	17.171	990.911	1.070	.021	.9491	.9496
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	823.63	.5174	901.93	18.053	990.168	1.069	.020	.9483	.9488
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	730.67	.4591	843.85	18.139	991.365	1.068	.020	.9478	.9483
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	641.04	.4046	788.30	18.221	991.544	1.068	.020	.9476	.9481
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	551.41	.3502	734.38	18.298	991.672	1.068	.020	.9478	.9482
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	461.78	.2957	681.99	18.367	991.740	1.068	.020	.9482	.9487
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	372.15	.2413	631.14	18.427	991.777	1.068	.020	.9490	.9495
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	282.52	.1868	581.83	18.477	991.810	1.068	.020	.9500	.9505
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	192.89	.1324	534.09	18.517	991.869	1.068	.020	.9508	.9512
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	103.26	.0779	487.93	18.547	991.927	1.068	.021	.9498	.9503
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13.63	.0235	443.37	18.567	991.984	1.068	.021	.9484	.9489
11	[illegible]	[illegible]	[illegible]	[illegible]	76.00	.0310	399.43	18.577	992.041	1.068	.021	.9469	.9475
12	[illegible]	[illegible]	[illegible]	[illegible]	165.63	.0855	357.13	18.577	992.098	1.068	.021	.9439	.9445
13	[illegible]	[illegible]	[illegible]	[illegible]	255.26	.1399	316.48	18.567	992.155	1.068	.021	.9405	.9411
14	[illegible]	[illegible]	[illegible]	[illegible]	344.89	.1944	277.49	18.547	992.212	1.068	.021	.9363	.9369
15	[illegible]	[illegible]	[illegible]	[illegible]	434.52	.2488	240.17	18.517	992.269	1.068	.021	.9339	.9346
16	[illegible]	[illegible]	[illegible]	[illegible]	524.15	.3033	204.54	18.477	992.326	1.068	.021	.9314	.9320
17	[illegible]	[illegible]	[illegible]	[illegible]	613.78	.3577	170.60	18.427	992.383	1.068	.021	.9153	.9161
18	[illegible]	[illegible]	[illegible]	[illegible]	703.41	.4121	138.37	18.367	992.440	1.068	.022	.8893	.8903
19	[illegible]	[illegible]	[illegible]	[illegible]	793.04	.4664	107.86	18.297	992.497	1.067	.022	.8640	.8653
20	[illegible]	[illegible]	[illegible]	[illegible]	882.67	.5207	79.14	18.217	992.554	1.066	.022	.8496	.8510
21	[illegible]	[illegible]	[illegible]	[illegible]	972.30	.5750	52.14	18.127	992.611	1.066	.022	.8343	.8357
22	[illegible]	[illegible]	[illegible]	[illegible]	1061.93	.6293	26.81	18.027	992.668	1.065	.022	.8176	.8192
23	[illegible]	[illegible]	[illegible]	[illegible]	1151.56	.6835	3.14	17.917	992.725	1.064	.022	.7992	.8009

STATION 1 -- BLADE ROW 1 PERFORMANCE -- PRESSURE RATIO = 1.068 ISEN. EFF.= .918 POLY. EFF.= .919 DELTA T ON T = .021

STATION 1 -- BLADE ROW 1 DESCRIPTION

STATION	RADIUS	AXIAL VELOCITY	TANGENTIAL VELOCITY	TOTAL VELOCITY	TOTAL TEMPERATURE	TOTAL PRESSURE	STATIC PRESSURE	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	[illegible]	[illegible]	13.33	346.77	[illegible]	15.985	15.285	.3152	33.23	24.47	60.	.0793
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.990	15.350	.3115	32.05	23.64	127.362	.0793
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.994	15.412	.3115	31.79	20.76	3231.188	.0792
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.997	15.472	.3119	31.77	15.82	-133.980	.0792
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.999	15.520	.3207	30.09	10.97	-72.187	.0791
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16.000	15.556	.3229	29.91	10.07	-51.179	.0791
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.999	15.588	.3243	29.71	13.20	-41.825	.0791
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.997	15.602	.3252	29.61	11.36	-37.331	.0790
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.992	15.613	.3273	29.40	9.55	-35.458	.0790
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.986	15.618	.3285	29.28	8.78	-34.295	.0790
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.978	15.618	.3294	29.19	8.09	-33.529	.0790
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.970	15.614	.3304	29.09	7.35	-33.779	.0790
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.961	15.610	.3298	29.03	6.69	-43.471	.0790
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.952	15.606	.3277	29.05	4.84	-51.690	.0790
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.943	15.603	.3258	29.08	2.89	-60.346	.0790
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.934	15.600	.3240	29.05	1.04	-90.512	.0790
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.926	15.593	.3210	28.95	-2.14	-163.332	.0789
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.918	15.593	.3170	24.76	-3.65	-273.079	.0789
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.913	15.593	.3150	30.68	-5.12	-273.079	.0789
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.909	15.597	.3133	30.54	-6.56	856.208	.0789
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.906	15.600	.3021	31.09	-7.98	357.214	.0790
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.902	15.628	.2453	31.77	-9.38	1565.883	.0790

BLADE DATA

LOCATION	BLADE SECTION	ANGLES LEAN	FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-2.305	2.438	55.914	3.104	.0332	629.8	.6999	526.94	18.035	551.366	1.136	.039	.9455	.9454
2	-3.098	2.258	55.133	2.904	.0358	638.1	.7173	538.65	18.135	552.433	1.135	.039	.9452	.9451
3	-3.542	1.817	55.350	2.760	.0345	646.2	.7274	548.32	18.235	553.296	1.135	.039	.9451	.9450
4	-3.142	1.054	55.532	2.641	.0335	654.2	.7371	560.76	18.335	554.157	1.135	.039	.9451	.9450
5	-2.347	.273	55.719	2.518	.0324	662.0	.7464	571.26	18.436	555.015	1.135	.039	.9451	.9450
6	-1.009	-.414	55.947	2.336	.0314	669.8	.7554	581.38	18.537	555.872	1.135	.039	.9452	.9451
7	-.387	-.814	56.391	1.974	.0301	677.5	.7641	591.14	18.639	556.729	1.135	.039	.9453	.9452
8	.755	-.306	57.573	1.633	.0294	685.1	.7725	600.51	18.802	557.586	1.136	.039	.9454	.9453
9	.092	-.232	57.312	1.721	.0297	692.6	.7802	609.27	19.903	558.446	1.136	.039	.9448	.9447
10	.434	-.139	57.376	1.642	.0312	700.1	.7878	618.70	18.931	559.313	1.137	.040	.9437	.9436
11	.780	.006	57.335	1.605	.0335	707.5	.7951	627.93	19.080	560.188	1.137	.040	.9424	.9423
12	1.135	.379	56.748	1.513	.0350	715.2	.8026	637.22	19.179	561.075	1.137	.040	.9412	.9411
13	1.505	.779	56.171	1.866	.0358	722.7	.8101	638.73	19.270	561.375	1.137	.040	.9400	.9399
14	1.898	1.243	55.590	1.762	.0362	730.3	.8176	648.11	19.390	562.892	1.137	.040	.9387	.9386
15	2.320	1.737	55.213	1.722	.0362	738.1	.8252	658.73	19.446	563.832	1.137	.041	.9374	.9373
16	2.779	2.328	54.922	1.672	.0370	746.0	.8328	662.73	19.483	564.802	1.136	.042	.9361	.9360
17	3.277	3.019	54.972	2.295	.0702	754.1	.8395	669.14	19.526	565.809	1.135	.043	.9348	.9347
18	3.804	3.733	55.355	2.524	.0761	762.4	.8438	660.30	19.510	566.556	1.134	.043	.9340	.9339
19	4.325	4.412	56.231	2.940	.0822	771.0	.8581	662.46	19.497	567.346	1.133	.044	.9331	.9330
20	4.933	4.750	56.033	3.100	.0837	779.8	.8323	670.53	19.736	569.084	1.131	.044	.9318	.9317
21	5.549	4.913	56.050	3.510	.0954	789.0	.8904	675.61	19.876	570.276	1.130	.045	.9278	.9277

STATION 6 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.136 ISEN. EFF.= .906 POLY. EFF.= .907 DELTA T ON T = .041

STATION 7 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES: AXIAL	TANGENT	TOTAL	TEMPERATURES: TOTAL	STATIC	PRESSURES: TOTAL	STATIC	MACH NO	ANGLES: WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.2620	375.05	204.83	454.31	547.041	529.577	17.517	15.535	.4063	35.21	24.87	[illegible]	.0794
2	7.3343	379.35	240.12	453.37	547.044	529.312	17.493	15.606	.4072	34.44	22.60	[illegible]	.0793
3	7.4142	382.94	229.42	450.80	546.732	529.128	17.484	15.589	.4081	33.81	20.39	-31.244	.0792
4	7.4833	385.91	253.25	451.90	546.653	529.003	17.477	15.577	.4088	33.28	18.24	-21.447	.0791
5	7.5614	388.44	251.43	452.20	546.607	528.920	17.473	15.569	.4094	32.82	16.16	-16.695	.0790
6	7.6339	390.04	248.02	452.72	546.617	528.871	17.473	15.565	.4093	32.41	14.16	-17.438	.0790
7	7.7029	392.91	245.84	453.22	546.632	528.848	17.477	15.565	.4103	32.05	12.24	-17.326	.0790
8	7.7775	394.24	243.89	453.99	546.664	528.854	17.483	15.567	.4105	31.74	10.40	-18.013	.0790
9	7.8492	395.20	242.26	454.74	546.738	528.929	17.488	15.573	.4105	31.51	8.62	-19.489	.0790
10	7.9219	394.63	241.04	452.83	546.945	529.190	17.491	15.582	.4099	31.50	6.92	-21.565	.0790
11	7.9932	393.50	241.23	451.55	547.130	529.474	17.491	15.593	.4086	31.51	5.27	-24.835	.0790
12	8.0660	391.97	240.55	450.34	547.249	529.739	17.488	15.606	.4068	31.48	3.67	-29.887	.0790
13	8.1390	390.02	239.29	457.03	547.293	529.981	17.484	15.622	.4044	31.42	2.11	-36.166	.0790
14	8.2140	387.31	237.20	453.96	547.307	530.250	17.479	15.641	.4013	31.38	.57	-45.337	.0790
15	8.2899	384.07	237.59	449.98	547.735	531.024	17.459	15.663	.3969	31.94	-.94	-56.333	.0790
16	8.3690	379.31	241.09	443.93	548.517	532.214	17.433	15.689	.3915	33.01	-2.41	-70.698	.0790
17	8.4490	362.11	249.65	437.48	549.303	533.435	17.413	15.716	.3859	34.15	-3.81	-118.[illegible]	.0790
18	8.5327	354.20	249.33	431.44	549.691	534.265	17.403	15.751	.3802	34.82	-5.19	-201.[illegible]	.0790
19	8.6193	345.34	247.42	425.20	550.144	535.161	17.392	15.788	.3744	35.58	-6.57	-360.[illegible]	.0790
20	8.7059	337.05	249.17	419.16	550.697	536.137	17.383	15.828	.3687	36.47	-7.96	-781.[illegible]	.0790
21	8.8013	327.36	251.75	413.35	551.373	537.213	17.381	15.870	.3633	37.52	-9.37	[illegible]	.0795

BLADE DATA

LOCATION	LEADING EDGE RADIUS	TRAILING EDGE RADIUS	BLADE ANGLE	INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-[illegible]	1.[illegible]12	-[illegible]	[illegible]	.[illegible]01	646.1	.4735	534.95	18.229	553.293	1.192	.055	.9406	.9421
2	-[illegible]	1.[illegible]	-[illegible]	[illegible]	.[illegible]	643.0	.4835	546.12	18.314	554.029	1.191	.054	.9403	.9417
3	-[illegible]	.[illegible]	-[illegible]	[illegible]	.0513	639.[illegible]	.4924	556.11	18.339	554.767	1.190	.054	.9401	.9416
4	-[illegible]	-.[illegible]	-[illegible]	[illegible]	.0503	636.3	.5006	565.25	18.484	555.481	1.189	.054	.9401	.9416
5	-[illegible]	-.[illegible]	-[illegible]	[illegible]	.0497	672.0	.5082	573.78	18.[illegible]3	556.203	1.189	.054	.9404	.9418
6	-[illegible]	-1.[illegible]	-[illegible]	[illegible]	.[illegible]	679.2	.5153	581.84	18.[illegible]	556.926	1.189	.054	.9407	.9422
7	-[illegible]	-1.[illegible]	-[illegible]	[illegible]	.[illegible]93	689.0	.5222	589.56	18.743	557.590	1.189	.054	.9414	.9429
8	-[illegible]	-.[illegible]	-[illegible]	[illegible]	.[illegible]	692.8	.5287	596.89	18.831	558.379	1.190	.054	.9423	.9437
9	-[illegible]	-.[illegible]	-[illegible]	[illegible]	.[illegible]	698.[illegible]	.5345	603.91	18.910	559.112	1.190	.054	.9417	.9431
10	-[illegible]	-.[illegible]	-[illegible]	[illegible]	.0482	704.9	.5396	609.31	18.981	559.854	1.190	.054	.9356	.9371
11	-[illegible]	-.[illegible]	-[illegible]	[illegible]	.0502	711.7	.5426	612.95	19.043	560.508	1.190	.055	.9295	.9313
12	-[illegible]	1.[illegible]	-[illegible]	[illegible]	.[illegible]	717.7	.5408	617.61	19.123	561.374	1.190	.055	.9250	.9268
13	-[illegible]	2.[illegible]	-[illegible]	[illegible]	.0533	724.2	.5513	623.13	19.206	562.156	1.190	.055	.92[illegible]	.9239
14	-[illegible]	4.[illegible]	-[illegible]	[illegible]	.0543	730.8	.5557	628.24	19.231	562.494	1.[illegible]	.055	.[illegible]98	.9209
15	-[illegible]	[illegible]	-[illegible]	[illegible]	.0603	737.6	.5557	628.74	19.313	563.775	1.[illegible]	.056	.9003	.9027
16	-[illegible]	[illegible]	-[illegible]	[illegible]	.0963	744.[illegible]	.5523	625.47	19.301	564.228	1.[illegible]	.[illegible]8	.8704	.8735
17	-[illegible]	[illegible]	-[illegible]	[illegible]	.1063	751.8	.5456	622.33	19.289	565.521	1.185	.059	.8423	.8461
18	-[illegible]	4.[illegible]	-[illegible]	[illegible]	.1142	759.2	.5493	623.30	19.336	566.453	1.184	.060	.8274	.8315
19	-[illegible]	[illegible]	-[illegible]	[illegible]	.1233	766.9	.5495	624.06	19.383	567.426	1.183	.061	.8122	.8166
20	-[illegible]	10.[illegible]	-[illegible]	[illegible]	.1330	774.9	.5494	624.48	19.430	568.442	1.183	.062	.7964	.8012
21	-1.[illegible]	13.[illegible]	-[illegible]	[illegible]	.1435	783.2	.5498	624.40	19.474	569.512	1.183	.063	.7798	.7849

STATION 7 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.183 ISEN. EFF.= .896 POLY. EFF.= .898 DELTA T ON T = .055

STATION 4 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES AXIAL	TANGENTIAL	TOTAL	TEMPERATURES TOTAL	STATIC	PRESSURES TOTAL	STATIC	MACH NO	ANGLES WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.[illegible]92	[illegible]76.33	[illegible]40.[illegible]	[illegible]37.[illegible]	[illegible]3[illegible].[illegible]15	528.732	14.737	15.494	.5243	37.13	19.79	-2.220	.0788
2	7.[illegible]42	[illegible]89.[illegible]	[illegible]1.[illegible]	[illegible]32.[illegible]	[illegible]3[illegible].[illegible]44	529.[illegible]13	14.801	15.585	.5248	37.62	17.74	-2.474	.0792
3	7.[illegible]91	[illegible]93.[illegible]	[illegible]0[illegible].[illegible]	[illegible]27.[illegible]	[illegible]3[illegible].[illegible]109	530.[illegible]33	14.851	15.669	.5208	38.06	15.82	-2.786	.0795
4	7.[illegible]91	[illegible]38.33	[illegible]7.[illegible]	[illegible]4[illegible].[illegible]	[illegible]3[illegible].[illegible]48	530.[illegible]75	14.893	15.747	.5172	38.44	14.03	-3.171	.0798
5	7.[illegible]90	[illegible]23.71	[illegible]1.[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]75	[illegible]31.[illegible]6	14.957	15.817	.5138	38.74	12.34	-3.645	.0800
6	7.[illegible]87	[illegible]9.[illegible]	[illegible]0[illegible].[illegible]	[illegible]1[illegible].[illegible]	[illegible]3[illegible].[illegible]98	[illegible]31.[illegible]8	14.973	15.880	.5107	38.97	10.75	-4.230	.0802
7	7.[illegible]74	[illegible]4.[illegible]	[illegible]9[illegible].[illegible]	[illegible]1[illegible].[illegible]	[illegible]3[illegible].[illegible]108	532.430	14.977	15.880	.5107	38.97	10.75	-4.230	.0802
8	7.[illegible]73	[illegible]1.[illegible]3	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
9	7.[illegible]73	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
10	7.[illegible]73	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
11	7.[illegible]73	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
12	7.[illegible]74	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
13	7.[illegible]74	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
14	7.[illegible]74	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
15	7.[illegible]74	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
16	7.[illegible]74	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
17	7.[illegible]74	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
18	7.[illegible]74	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
19	7.[illegible]74	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
20	7.[illegible]74	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
21	7.[illegible]74	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
1	7.[illegible]92	[illegible]76.33	[illegible]40.[illegible]	[illegible]37.[illegible]	[illegible]3[illegible].[illegible]15	528.732	14.737	15.494	.5243	37.13	19.79	-2.220	.0788
2	7.[illegible]42	[illegible]89.[illegible]	[illegible]1.[illegible]	[illegible]32.[illegible]	[illegible]3[illegible].[illegible]44	529.[illegible]13	14.801	15.585	.5248	37.62	17.74	-2.474	.0792
3	7.[illegible]91	[illegible]93.[illegible]	[illegible]0[illegible].[illegible]	[illegible]27.[illegible]	[illegible]3[illegible].[illegible]109	530.[illegible]33	14.851	15.669	.5208	38.06	15.82	-2.786	.0795
4	7.[illegible]91	[illegible]38.33	[illegible]7.[illegible]	[illegible]4[illegible].[illegible]	[illegible]3[illegible].[illegible]48	530.[illegible]75	14.893	15.747	.5172	38.44	14.03	-3.171	.0798
5	7.[illegible]90	[illegible]23.71	[illegible]1.[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]75	[illegible]31.[illegible]6	14.957	15.817	.5138	38.74	12.34	-3.645	.0800
6	7.[illegible]87	[illegible]9.[illegible]	[illegible]0[illegible].[illegible]	[illegible]1[illegible].[illegible]	[illegible]3[illegible].[illegible]98	[illegible]31.[illegible]8	14.973	15.880	.5107	38.97	10.75	-4.230	.0802
7	7.[illegible]74	[illegible]4.[illegible]	[illegible]9[illegible].[illegible]	[illegible]1[illegible].[illegible]	[illegible]3[illegible].[illegible]108	532.430	14.977	15.880	.5107	38.97	10.75	-4.230	.0802
8	7.[illegible]73	[illegible]1.[illegible]3	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
9	7.[illegible]73	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
10	7.[illegible]73	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
11	7.[illegible]74	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
12	7.[illegible]74	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
13	7.[illegible]74	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
14	7.[illegible]74	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
15	7.[illegible]74	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
16	7.[illegible]74	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
17	7.[illegible]74	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
18	7.[illegible]74	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
19	7.[illegible]74	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
20	7.[illegible]74	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805
21	7.[illegible]74	[illegible]0.[illegible]1	[illegible]8[illegible].[illegible]	[illegible]2[illegible].[illegible]	[illegible]3[illegible].[illegible]119	532.453	14.993	15.902	.5092	39.13	9.24	-4.961	.0805

BLADE DATA

LOCATION	BLADE SECTION	ANGLES CLAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-24.143	2.[illegible]	-32.355	9.241	.0738	662.8	.4997	564.06	18.374	555.099	1.276	.076	.9426	.9445
2	-25.00	.[illegible]	-33.069	8.067	.0714	667.7	.4960	560.38	18.437	555.539	1.279	.077	.9432	.9452
3	-25.8[illegible]	.[illegible]	-33.733	7.892	.0692	672.6	.4930	557.48	18.501	556.187	1.283	.078	.9438	.9458
4	-26.678	.072	-34.401	7.723	.0670	677.6	.4909	555.48	18.567	556.742	1.286	.079	.9445	.9464
5	-27.518	1.404	-35.082	7.565	.0648	682.7	.4897	554.44	18.635	557.313	1.289	.079	.9451	.9471
6	-28.341	1.102	-35.766	7.425	.0629	687.8	.4893	554.32	18.704	557.892	1.291	.080	.9458	.9477
7	-29.117	1.217	-36.427	7.311	.0603	692.9	.4897	555.05	18.776	558.462	1.293	.080	.9467	.9486
8	-29.835	1.563	-37.056	7.230	.0590	698.1	.4908	556.44	18.851	559.202	1.295	.081	.9477	.9496
9	-30.503	2.030	-37.634	7.191	.0573	703.4	.4917	557.77	18.919	559.894	1.297	.081	.9472	.9491
10	-31.428	2.824	-38.331	7.203	.0623	708.8	.4909	557.23	18.983	560.320	1.299	.082	.9418	.9438
11	-31.719	3.755	-38.994	7.276	.0669	714.2	.4905	557.06	19.009	560.961	1.300	.083	.9364	.9387
12	-32.260	4.916	-39.538	7.416	.0699	719.7	.4908	557.78	19.065	561.517	1.301	.084	.9324	.9348
13	-32.312	5.233	-40.434	7.622	.0712	725.3	.4920	559.37	19.130	562.289	1.302	.084	.9298	.9324
14	-33.313	7.654	-41.204	7.890	.0724	731.0	.4932	561.06	19.197	562.978	1.302	.084	.9273	.9300
15	-33.763	9.120	-42.003	8.220	.0684	736.9	.4881	555.84	19.157	563.269	1.302	.086	.9107	.9140
16	-34.223	10.548	-42.837	8.614	.1151	743.0	.4777	544.82	19.115	564.433	1.302	.088	.8839	.8882
17	-34.931	11.816	-43.709	9.074	.1404	749.3	.4670	533.55	19.050	565.218	1.302	.091	.8589	.8641
18	-34.385	12.782	-44.632	9.595	.1523	755.9	.4622	528.65	19.080	566.043	1.304	.093	.8464	.8520
19	-35.265	13.235	-45.636	10.171	.1645	762.8	.4558	523.17	19.059	566.305	1.306	.095	.8318	.8379
20	-35.485	13.326	-46.257	10.792	.1774	769.9	.4508	518.91	19.075	567.807	1.310	.098	.8209	.8276
21	-35.617	13.234	-47.070	11.453	.1915	777.3	.4436	509.56	19.073	568.753	1.314	.100	.8072	.8145

STATION 8 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.238 ISEN. EFF.= .905 POLY. EFF.= .909 DELTA T ON T = .085

STATION 9 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES AXIAL	TANGEN	TOTAL	TEMPERATURES TOTAL	STATIC	PRESSURES TOTAL	STATIC	MACH NO	ANGLES WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.5493	473.05	498.26	687.05	574.155	535.052	20.614	16.099	.6050	46.49	10.63	-2.464	.0818
2	7.5947	485.24	495.60	679.80	574.194	535.912	20.619	16.159	.5932	46.81	9.69	-3.101	.0815
3	7.6403	459.25	492.95	673.75	574.229	536.626	20.623	16.265	.5924	47.03	9.13	-4.103	.0813
4	7.6861	454.88	490.13	668.60	574.257	537.227	20.627	16.329	.5875	47.15	8.35	-5.300	.0811
5	7.7365	451.23	487.33	664.15	574.279	537.741	20.631	16.385	.5834	47.20	7.56	-6.702	.0810
6	7.7858	448.08	484.41	660.28	574.299	538.185	20.633	16.433	.5798	47.19	6.75	-8.779	.0809
7	7.9330	447.03	481.55	657.06	574.327	538.565	20.642	16.477	.5767	47.13	5.93	-11.514	.0808
8	7.8871	445.97	478.63	654.20	574.350	538.899	20.643	16.516	.5741	47.02	5.18	-15.541	.0807
9	7.9330	444.98	475.76	652.16	574.497	539.267	20.662	16.551	.5721	46.97	4.27	-22.199	.0806
10	7.9919	442.85	473.93	652.29	575.123	539.879	20.691	16.584	.5719	47.24	3.42	-35.934	.0806
11	8.0456	441.11	471.00	652.04	575.748	540.468	20.739	16.614	.5719	47.48	2.55	-84.633	.0807
12	8.1003	439.75	481.19	651.85	576.158	540.962	20.757	16.642	.5709	47.58	1.67	282.725	.0808
13	8.1559	438.75	473.29	649.79	575.325	541.352	20.757	16.667	.5659	47.53	.76	53.659	.0809
14	8.2123	438.10	477.37	647.93	576.490	541.718	20.757	16.690	.5671	47.46	-.16	29.315	.0809
15	8.2701	438.75	482.81	647.03	577.559	542.085	20.762	16.711	.5667	48.28	-1.13	20.871	.0809
16	8.3301	417.47	494.04	646.80	579.364	544.716	20.778	16.732	.5645	49.80	-2.16	15.548	.0808
17	8.3930	403.65	504.98	646.48	581.174	546.563	20.773	16.754	.5633	51.36	-3.26	13.144	.0805
18	8.4590	396.63	503.09	645.34	582.172	547.684	20.783	16.777	.5618	52.08	-4.45	11.766	.0804
19	8.5293	388.87	513.53	644.15	583.233	548.880	20.784	16.801	.5601	52.87	-5.75	11.062	.0803
20	8.5955	379.75	518.59	642.77	584.411	550.201	20.791	16.829	.5582	53.79	-7.21	11.095	.0803
21	8.6639	368.01	524.54	640.75	585.731	551.735	20.794	16.865	.5557	54.95	-8.95	20.749	.0802

BLADE DATA

LOCATION	BLADE SECTION	BLADE ANGLE	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-12.047	13.911	-21.140	7.496	.0912	671.8	.+437	503.66	18.428	546.189	1.403	.107	.9481	.9585
2	-13.191	13.616	-21.153	7.000	.0834	675.7	.+390	498.88	18.480	536.335	1.403	.107	.9481	.9585
3	-14.[illegible]	13.351	-21.[illegible]	7.[illegible]	.0808	679.4	.+350	495.21	18.533	526.995	1.403	.107	.9481	.9585
4	-15.[illegible]	[illegible]	[illegible]	[illegible]	.0831	683.1	.+344	494.26	18.584	527.971	1.404	.107	.9482	.9586
5	-16.[illegible]	[illegible]	[illegible]	[illegible]	.0844	686.7	.+339	493.96	18.647	527.960	1.404	.107	.9483	.9588
6	-17.[illegible]	[illegible]	[illegible]	[illegible]	.0855	690.2	.+344	494.65	18.707	528.662	1.404	.107	.9486	.9590
7	-17.[illegible]	[illegible]	[illegible]	[illegible]	.0721	693.7	.+327	496.34	18.771	529.378	1.405	.107	.9491	.9595
8	-18.[illegible]	[illegible]	[illegible]	[illegible]	.0703	697.1	.+376	498.87	18.837	529.903	1.405	.107	.9497	.9598
9	-18.[illegible]	[illegible]	[illegible]	[illegible]	.0719	700.4	.+302	500.16	18.893	530.342	1.406	.108	.9498	.9594
10	-19.[illegible]	[illegible]	[illegible]	[illegible]	.0777	703.1	.+333	500.01	18.923	530.293	1.406	.109	.9437	.9464
11	-20.[illegible]	[illegible]	[illegible]	[illegible]	.0836	715.4	.+379	499.74	18.952	531.159	1.411	.110	.9365	.9415
12	-21.038	[illegible]	[illegible]	[illegible]	.0937	720.7	.+356	500.76	18.991	531.738	1.411	.111	.9346	.9377
13	-21.[illegible]	[illegible]	[illegible]	[illegible]	.0939	726.7	.+403	503.20	19.046	532.330	1.412	.111	.9320	.9352
14	-21.953	13.726	+36.[illegible]	3.199	.0908	730.7	.+429	506.07	19.095	532.936	1.412	.111	.9293	.9327
15	-22.185	13.[illegible]	+36.[illegible]	3.[illegible]	.1102	735.8	.+358	493.57	19.094	533.906	1.413	.114	.9131	.9172
16	-22.[illegible]	13.[illegible]	+35.[illegible]	3.[illegible]	.1439	741.2	.+234	455.14	19.027	534.213	1.413	.117	.8869	.8923
17	-22.[illegible]	13.[illegible]	+30.[illegible]	4.[illegible]	.1720	746.8	.+100	420.53	18.808	534.303	1.414	.120	.8622	.8668
18	-22.342	13.[illegible]	+31.[illegible]	3.[illegible]	.1984	752.6	.+091	419.42	18.794	535.327	1.414	.122	.8492	.8564
19	-22.142	13.[illegible]	+32.[illegible]	20.[illegible]	.2053	758.5	.+397	453.07	18.722	536.392	1.415	.124	.8358	.8436
20	-21.[illegible]	13.[illegible]	+33.[illegible]	11.133	.2217	764.9	.+331	452.03	18.726	537.170	1.415	.127	.8215	.8308
21	-21.371	13.[illegible]	+33.[illegible]	12.[illegible]	.2304	771.4	.+343	443.14	18.673	538.000	1.415	.129	.8060	.8153

STATION 4 1ST STAGE PERFORMANCE PRESSURE RATIO = 1.419 ISEN. EFF.= .908 POLY. EFF.= .913 DELTA T ON T = .113

STATION 13 FLOW FIELD DESCRIPTION

STREAM-LIN	RADIUS	VELOCITIES			TEMPERATURES		PRESSURES		MACH NO	ANGLES		RADIUS OF CURVATURE	SPECIFIC WEIGHT
		AXIAL	TANGL	TOTAL	TOTAL	STATIC	TOTAL	STATIC		WHIRL	SLOPE		
1	7.537	+46.20	+[illegible]	[illegible]	[illegible]	937.209	20.814	16.327	.2833	48.04	7.82	4.349	.0818
2	7.[illegible]232	+38.19	+35.81	[illegible]	[illegible]	937.325	20.813	16.343	.2850	47.77	7.81	10.329	.0818
3	7.[illegible]225	+31.[illegible]	+30.[illegible]	[illegible]	[illegible]	937.431	20.823	16.345	.2851	47.40	7.54	12.660	.0818
4	7.[illegible]215	+2[illegible].39	+29.[illegible]	[illegible]	[illegible]	937.544	20.802	16.342	.2853	46.93	7.13	15.019	.0818
5	7.[illegible]203	+[illegible]6.[illegible]	+[illegible].21	[illegible]	[illegible]	937.264	20.831	16.336	.2873	46.55	6.64	15.736	.0818
6	7.[illegible]131	+[illegible].[illegible]	+[illegible].[illegible]	[illegible]	[illegible]	937.218	20.833	16.330	.2884	46.13	6.09	21.726	.0818
7	[illegible].[illegible]2[illegible]	+07.[illegible]	+[illegible].[illegible]	[illegible]	[illegible]	937.192	20.[illegible]	16.327	.2887	45.73	5.51	24.030	.0818
8	7.[illegible]1[illegible]	+71.19	+[illegible].[illegible]	[illegible]	[illegible]	937.125	20.[illegible]	16.326	.2892	45.35	4.91	22.116	.0818
9	[illegible].[illegible]4[illegible]	+73.[illegible]	+[illegible].[illegible]	[illegible]	[illegible]	937.173	20.[illegible]	16.329	.2884	45.06	4.29	24.846	.0818
10	7.[illegible]013	+[illegible].15	+[illegible].04	[illegible]	[illegible]	937.[illegible]61	20.[illegible]	16.331	.2873	44.[illegible]2	3.68	23.303	.0817
11	7.[illegible]09[illegible]	+[illegible].19	+[illegible].35	[illegible]	[illegible]	937.[illegible]91	20.[illegible]	16.337	.2854	44.23	3.05	21.598	.0817
12	7.[illegible]112[illegible]	+[illegible].[illegible]	+30.[illegible]	[illegible]	[illegible]	938.[illegible]33	20.[illegible]	16.[illegible]	.2844	43.21	2.41	13.527	.0817
13	7.[illegible]15[illegible]	+[illegible].[illegible]	+[illegible].[illegible]	[illegible]	[illegible]	938.[illegible]54	20.[illegible]	16.[illegible]	.2846	42.09	1.75	17.963	.0817
14	7.[illegible]213[illegible]	+77.[illegible]	+77.[illegible]	[illegible]	[illegible]	938.[illegible]60	20.[illegible]	16.372	.2824	40.00	1.07	15.810	.0818
15	7.[illegible]2[illegible]4	+78.[illegible]	+[illegible].[illegible]	[illegible]	[illegible]	939.[illegible]11	20.[illegible]	16.393	.2814	42.[illegible]	-.35	14.219	.0817
16	7.[illegible]3[illegible]	+57.[illegible]	+[illegible].[illegible]	[illegible]	[illegible]	941.801	20.[illegible]	16.[illegible]20	.2834	47.26	-.45	12.696	.0815
17	7.3777	+42.3[illegible]	+[illegible].[illegible]	[illegible]	[illegible]	943.773	20.[illegible]	16.[illegible]	.2871	48.63	-1.36	11.146	.0814
18	7.[illegible]341	+[illegible].02	+10.32	[illegible]	[illegible]	945.077	20.[illegible]	16.[illegible]	.2844	49.68	-2.38	9.478	.0814
19	7.[illegible]014	+22.[illegible]	+[illegible].[illegible]	[illegible]	[illegible]	946.479	20.[illegible]	16.[illegible]	.2808	50.63	-3.21	7.573	.0815
20	7.[illegible]2[illegible]	+11.03	+[illegible].23	[illegible]	[illegible]	947.921	20.[illegible]	16.[illegible]	.2772	51.04	-3.76	5.354	.0815
21	7.[illegible]1[illegible]	+02.14	+[illegible].[illegible]	[illegible]	[illegible]	949.399	20.[illegible]	16.[illegible]	.2757	52.52	-3.18	3.053	.0814

STATION 11 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6139	463.02	493.68	676.83	574.155	536.207	20.614	16.221	.5954	46.84	9.06	26.367	.0814
2	7.6735	487.82	490.25	691.61	574.194	534.570	20.619	16.048	.6093	45.14	8.52	-103.993	.0808
3	7.7330	509.44	487.10	704.84	574.229	533.073	20.623	15.891	.6218	43.72	7.81	-25.242	.0802
4	7.7830	526.30	484.13	715.14	574.257	531.869	20.627	15.768	.6316	42.61	7.05	-17.033	.0798
5	7.8314	538.45	481.42	722.58	574.279	531.024	20.631	15.679	.6387	41.78	6.32	-14.283	.0796
6	7.8774	548.14	478.78	727.80	574.299	530.417	20.635	15.617	.6437	41.14	5.63	-13.349	.0795
7	7.9223	555.09	476.31	731.43	574.317	530.006	20.642	15.578	.6472	40.93	5.01	-13.433	.0794
8	7.9664	560.05	473.87	733.63	574.350	529.761	20.648	15.555	.6492	40.23	4.45	-14.311	.0793
9	8.0102	563.14	472.52	735.12	574.497	529.727	20.662	15.540	.6586	40.00	3.95	-16.888	.0790
10	8.[illegible]59	563.79	473.24	737.37	575.123	530.080	20.699	15.523	.6624	40.13	3.49	-19.684	.0788
11	8.[illegible]7	563.31	477.90	738.72	575.748	530.540	20.735	15.569	.6533	40.31	3.06	-22.884	.0786
12	8.[illegible]3	561.74	473.74	738.07	576.158	531.031	20.757	15.596	.6524	40.44	2.64	-30.325	.0784
13	9.[illegible]2	559.13	477.51	735.28	576.325	531.537	20.757	15.632	.6496	40.50	2.22	-47.253	.0781
14	8.2343	555.53	476.27	731.74	576.490	532.134	20.757	15.678	.6461	40.61	1.80	-128.328	.0778
15	8.2773	549.44	482.38	728.15	577.559	533.639	20.752	15.735	.6421	41.49	1.33	215.258	.0774
16	8.3231	528.94	+94.53	723.37	579.364	535.949	20.770	15.807	.6370	43.06	.75	63.484	.0764
17	8.3753	509.31	505.04	717.96	581.174	538.480	20.773	15.902	.6302	44.62	.03	42.678	.0755
18	8.4256	491.33	510.89	709.81	582.172	540.562	20.793	16.025	.6210	46.12	-.85	37.944	.0748
19	8.4557	468.06	515.93	696.65	583.239	543.047	20.788	16.184	.6090	47.79	-1.88	44.234	.0742
20	8.5468	438.13	521.49	681.11	584.411	545.994	20.793	16.382	.5938	49.96	-3.05	196.047	.0807
21	8.6199	401.58	527.59	663.03	585.731	549.329	20.799	16.609	.5763	52.72	-4.27	-27.461	.0813

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BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	48.417	-39.941	45.830	-1.982	0.0000	0.0	.5954	676.83	20.614	574.155	1.403	.107	.9481	.9585
2	47.988	-35.693	43.142	-2.846	0.0000	0.0	.6093	691.61	20.619	574.194	1.403	.107	.9481	.9585
3	47.261	-33.220	43.716	-3.545	0.0000	0.0	.6218	704.84	20.623	574.229	1.403	.107	.9481	.9585
4	46.746	-29.735	42.913	-4.133	0.0000	0.0	.6316	715.14	20.627	574.257	1.404	.107	.9481	.9585
5	45.339	-25.235	41.778	-4.561	0.0000	0.0	.6387	722.58	20.631	574.279	1.404	.107	.9481	.9585
6	45.992	-22.633	41.136	-4.856	0.0000	0.0	.6437	727.80	20.635	574.299	1.404	.107	.9481	.9585
7	45.668	-19.519	40.832	-5.039	0.0000	0.0	.6472	731.43	20.642	574.327	1.405	.107	.9481	.9585
8	45.360	-16.226	40.235	-5.125	0.0000	0.0	.6492	733.63	20.648	574.350	1.405	.107	.9481	.9585
9	[illegible].060	-12.750	40.000	-5.080	0.0000	0.0	.6586	735.12	20.662	574.497	1.406	.108	.9498	.9614
10	44.844	-8.927	40.129	-4.715	0.0000	0.0	.6524	737.37	20.699	575.123	1.408	.109	.9427	.9469
11	44.679	-4.929	40.311	-4.369	0.0000	0.0	.6533	738.72	20.735	575.748	1.411	.110	.9385	.9417
12	44.613	-1.113	40.439	-4.175	0.0000	0.0	.6524	738.07	20.757	576.158	1.412	.111	.9346	.9377
13	44.656	2.230	40.498	-4.158	0.0000	0.0	.6496	735.28	20.757	576.325	1.412	.111	.9328	.9352
14	44.769	5.801	40.507	-4.162	0.0000	0.0	.6461	731.74	20.757	576.490	1.412	.111	.9308	.9325
15	44.905	10.253	41.483	-3.415	0.0000	0.0	.6421	728.15	20.752	577.559	1.413	.114	.9131	.9173
16	45.071	15.232	43.063	-2.007	0.0000	0.0	.6370	723.37	20.770	579.364	1.413	.117	.8869	.8974
17	45.429	23.309	44.310	-.613	0.0000	0.0	.6302	717.96	20.773	581.174	1.414	.120	.8622	.8808
18	46.189	30.602	45.118	-.062	0.0000	0.0	.6210	708.81	20.793	582.172	1.414	.122	.8492	.8708
19	47.357	37.235	47.739	.431	0.0000	0.0	.6090	696.65	20.788	583.239	1.415	.124	.8358	.8598
20	48.392	42.723	49.964	1.072	0.0000	0.0	.5938	681.11	20.793	584.411	1.415	.127	.8218	.8488
21	50.814	46.652	52.723	1.909	0.0000	0.0	.5763	663.03	20.799	585.731	1.415	.129	.8068	.8358

STATION 11 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.410 ISEN. EFF.= .908 POLY. EFF.= .913 DELTA T ON T = .113

STATION 12 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITY MERID	VELOCITY TANGL	VELOCITY TOTAL	TEMPERATURE TOTAL	TEMPERATURE STATIC	PRESSURE TOTAL	PRESSURE STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7141	332.[illegible]	-[illegible].1	3[illegible].[illegible]	[illegible].[illegible]	517.[illegible]2	20.[illegible]1	14.[illegible]95	.7[illegible]0	32.81	2.21	-3.[illegible]8	.0743
2	7.[illegible]4	3[illegible].61	-[illegible].1	12.[illegible]	[illegible].[illegible]4	21[illegible].038	20.[illegible]2	14.[illegible]07	.7[illegible]4	32.60	4.37	-3.720	.0747
3	7.[illegible]7	[illegible].[illegible]1	-[illegible].[illegible]	[illegible]07.[illegible]	[illegible].[illegible]29	[illegible]20.[illegible]2	20.[illegible]2	14.[illegible]21	.7[illegible]3	32.34	3.59	-3.[illegible]28	.0751
4	7.[illegible]1	[illegible].[illegible]1	-[illegible].[illegible]	[illegible].[illegible]7	[illegible].[illegible]7	[illegible]21.[illegible]31	20.[illegible]2	14.[illegible]34	.7[illegible]3	32.09	2.89	-[illegible].025	.0755
5	7.[illegible]4	[illegible].[illegible]4	-[illegible].5	[illegible].[illegible]9	[illegible].[illegible]9	[illegible]22.[illegible]09	20.[illegible]3	14.[illegible]41	.7[illegible]4	31.76	2.30	-[illegible].311	.0759
6	7.[illegible]2	[illegible].[illegible]4	-[illegible].[illegible]	[illegible].[illegible]4	[illegible].[illegible]3	[illegible]23.[illegible]69	21.[illegible]21	14.[illegible]40	.[illegible]9[illegible]	31.59	1.83	-[illegible].683	.0763
7	7.[illegible]7	[illegible].[illegible]4	-[illegible].[illegible]	[illegible].[illegible]4	[illegible].[illegible]27	[illegible]24.[illegible]21	21.[illegible]13	14.[illegible]30	.[illegible]9[illegible]	31.44	1.48	-[illegible].142	.0766
8	7.[illegible]1	[illegible].[illegible]3	-[illegible].[illegible]	[illegible].[illegible]1	[illegible].[illegible]0	[illegible]25.[illegible]30	21.[illegible]14	15.[illegible]11	.[illegible]8[illegible]	31.30	1.24	-[illegible].698	.0769
9	7.[illegible]3	[illegible].[illegible]3	-[illegible].[illegible]	[illegible].[illegible]1	[illegible].[illegible]7	[illegible]26.[illegible]17[illegible]	21.[illegible]23	15.[illegible]84	.[illegible]8[illegible]	31.16	1.00	-6.380	.0771
10	7.[illegible]4	[illegible].[illegible]3	-[illegible].[illegible]	[illegible].[illegible]1	[illegible].[illegible]3	[illegible]27.[illegible]14	21.[illegible]55	15.[illegible]40	.[illegible]8[illegible]	31.03	1.00	-7.[illegible]64	.0773
11	7.[illegible]4	[illegible].[illegible]3	-[illegible].[illegible]	[illegible].[illegible]2	[illegible].[illegible]5	[illegible]28.[illegible]05[illegible]	22.[illegible]37	15.[illegible]04	.[illegible]8[illegible]	30.94	.[illegible]6	-9.[illegible]74	.0775
12	7.[illegible]4	[illegible].[illegible]3	-[illegible].[illegible]	[illegible].[illegible]2	[illegible].[illegible]6	[illegible]29.[illegible]78[illegible]	22.[illegible]80	15.[illegible]29[illegible]	.[illegible]8[illegible]	30.90	.92	-10.199	.0776
13	7.[illegible]4	[illegible].[illegible]3	-[illegible].[illegible]	[illegible].[illegible]2	[illegible].[illegible]8	[illegible]30.[illegible]78[illegible]	23.[illegible]78[illegible]	15.[illegible]24[illegible]	.[illegible]8[illegible]	30.91	.92	-12.803	.0777
14	7.[illegible]4	[illegible].[illegible]3	-[illegible].[illegible]	[illegible].[illegible]2	[illegible].[illegible]9	[illegible]31.[illegible]80[illegible]	24.[illegible]60[illegible]	15.[illegible]33	.[illegible]8[illegible]	30.96	.93	-17.182	.0779
15	7.[illegible]4	[illegible].[illegible]3	-[illegible].[illegible]	[illegible].[illegible]2	[illegible].[illegible]9	[illegible]32.[illegible]80[illegible]	25.[illegible]31[illegible]	15.[illegible]61	.[illegible]8[illegible]	31.05	.91	-[illegible].119	.0778
16	7.[illegible]4	[illegible].[illegible]3	-[illegible].[illegible]	[illegible].[illegible]2	[illegible].[illegible]4	[illegible]33.[illegible]80[illegible]	26.[illegible]27	15.[illegible]80	.[illegible]8[illegible]	31.22	.91	-50.925	.0777
17	7.[illegible]4	[illegible].[illegible]3	-[illegible].[illegible]	[illegible].[illegible]3	[illegible].[illegible]4	[illegible]34.[illegible]78	26.[illegible]78	15.[illegible]98[illegible]	.[illegible]8[illegible]	31.24	.91	51.054	.0774
18	7.[illegible]4	[illegible].[illegible]3	-[illegible].[illegible]	[illegible].[illegible]3	[illegible].[illegible]2	[illegible]35.[illegible]72	27.[illegible]76	15.[illegible]73	.[illegible]8[illegible]	32.07	-.26	14.383	.0773
19	7.[illegible]1	[illegible].[illegible]1	-[illegible].[illegible]	[illegible].[illegible]4	[illegible].[illegible]9	[illegible]36.[illegible]39	28.[illegible]34	15.[illegible]50	.[illegible]8[illegible]	32.76	-.26	10.904	.0770
20	7.[illegible]3	[illegible].[illegible]3	-[illegible].[illegible]	[illegible].[illegible]3	[illegible].[illegible]4	[illegible]37.[illegible]11	[illegible]36.[illegible]29	15.[illegible]25[illegible]	.[illegible]8[illegible]	33.59	-1.02	7.[illegible]72	.0765
21	7.[illegible]3	[illegible].[illegible]4	-[illegible].[illegible]	771.[illegible]4	[illegible].[illegible]31	[illegible]38.[illegible]29	29.[illegible]1[illegible]	15.[illegible]14[illegible]	.[illegible]8[illegible]	34.[illegible]6	-2.03	5.[illegible]47	.0760

BLADE DATA

LOCATION	RADIUS SECTION	BLADE ANGLE	AXIAL FLOW VELOCITY	INCIDENCE DEVIATION	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	[illegible].[illegible]59	-[illegible].[illegible]47	6.[illegible]1[illegible]	.[illegible]44[illegible]	.0215	[illegible].[illegible]8	.7376	824.[illegible]13	20.[illegible]214	[illegible]74.[illegible]15[illegible]	1.[illegible]39[illegible]	.107	.9366	.9376
2	[illegible].[illegible]48	-[illegible].[illegible]13	3[illegible].[illegible]18	.[illegible]8[illegible]4	.[illegible]0[illegible]4	[illegible].[illegible]8	.7[illegible]94	812.[illegible]55	20.[illegible]322	[illegible]74.[illegible]19[illegible]	1.397	.107	.9345	.9376
3	[illegible].[illegible]37	-[illegible].[illegible]1[illegible]	3[illegible].[illegible]1[illegible]	.[illegible]8[illegible]4	.[illegible]0[illegible]3	[illegible].[illegible]8	.7[illegible]16	807.[illegible]34	20.[illegible]327	[illegible]74.[illegible]22[illegible]	1.397	.107	.9344	.9374
4	[illegible].[illegible]26	-[illegible].[illegible]39	3[illegible].[illegible]4[illegible]	.[illegible]84[illegible]	.[illegible]0[illegible]4	[illegible].[illegible]8	.7[illegible]23	798.[illegible]7[illegible]	20.[illegible]324	[illegible]74.[illegible]25[illegible]	1.397	.107	.9341	.9371
5	[illegible].[illegible]15	-[illegible].[illegible]34	3[illegible].[illegible]4[illegible]	.[illegible]84[illegible]	.[illegible]0[illegible]4	[illegible].[illegible]8	.7[illegible]3[illegible]	790.[illegible]4[illegible]	20.[illegible]325	[illegible]74.[illegible]27[illegible]	1.397	.107	.9335	.9366
6	[illegible].[illegible]04	-[illegible].[illegible]29	3[illegible].[illegible]4[illegible]	.[illegible]84[illegible]	.[illegible]0[illegible]4	[illegible].[illegible]8	.7[illegible]3[illegible]	782.91	20.[illegible]321	[illegible]74.[illegible]29[illegible]	1.396	.107	.9325	.9356
7	[illegible].[illegible]93	-[illegible].[illegible]24	3[illegible].[illegible]4[illegible]	.[illegible]84[illegible]	.[illegible]0[illegible]4	[illegible].[illegible]8	.7[illegible]3[illegible]	[illegible]75.[illegible]34	20.[illegible]314	[illegible]74.[illegible]32[illegible]	1.396	.107	.9315	.9346
8	[illegible].[illegible]82	-[illegible].[illegible]19	3[illegible].[illegible]4[illegible]	.[illegible]84[illegible]	.[illegible]0[illegible]4	[illegible].[illegible]8	.7[illegible]3[illegible]	768.81	20.[illegible]314	[illegible]74.[illegible]35[illegible]	1.396	.107	.9306	.9338
9	[illegible].[illegible]71	-[illegible].[illegible]15	3[illegible].[illegible]4[illegible]	.[illegible]91	.[illegible]0[illegible]71	[illegible].[illegible]8	.7[illegible]82	760.72	20.[illegible]223	[illegible]74.[illegible]97	1.396	.108	.9293	.9326
10	[illegible].[illegible]61	-[illegible].[illegible]11	3[illegible].[illegible]4[illegible]	1.[illegible]49	.[illegible]0[illegible]61	[illegible].[illegible]8	.7[illegible]61	750.[illegible]6	20.[illegible]53[illegible]	[illegible]75.[illegible]23	1.399	.109	.9235	.9270
11	[illegible].[illegible]51	-[illegible].[illegible]7	3[illegible].[illegible]4[illegible]	1.[illegible]4[illegible]	.[illegible]0[illegible]4	[illegible].[illegible]8	.7[illegible]6[illegible]	7[illegible]8.7[illegible]	20.[illegible]237	[illegible]75.[illegible]46	1.401	.110	.9178	.9216
12	[illegible].[illegible]41	-[illegible].[illegible]4	3[illegible].[illegible]4[illegible]	1.[illegible]4[illegible]	.[illegible]0[illegible]3	[illegible].[illegible]8	.7[illegible]49	75[illegible].23	20.[illegible]60[illegible]	[illegible]76.[illegible]58	1.402	.111	.9139	.9179
13	[illegible].[illegible]31	-[illegible].[illegible]1	3[illegible].[illegible]4[illegible]	1.[illegible]4[illegible]	.[illegible]0[illegible]3	[illegible].[illegible]8	.7[illegible]3[illegible]	753.1[illegible]	20.[illegible]5[illegible]4	[illegible]76.[illegible]32[illegible]	1.402	.111	.9118	.9159
14	[illegible].[illegible]21	.[illegible]2	3[illegible].[illegible]4[illegible]	1.[illegible]4[illegible]	.[illegible]0[illegible]3	[illegible].[illegible]8	.7[illegible]3[illegible]	73[illegible].[illegible]8	20.[illegible]4[illegible]	[illegible]76.[illegible]9[illegible]	1.403	.111	.9097	.9140
15	[illegible].[illegible]11	.[illegible]27	3[illegible].[illegible]4[illegible]	1.[illegible]4[illegible]	.[illegible]0[illegible]3	[illegible].[illegible]8	.7[illegible]3[illegible]	7[illegible].[illegible]1[illegible]	20.[illegible]5[illegible]2	[illegible]77.[illegible]59	1.403	.114	.8942	.8992
16	[illegible].[illegible]04	.[illegible]29	31.[illegible]1[illegible]	1.[illegible]4[illegible]	.[illegible]0[illegible]2	[illegible].[illegible]8	.7[illegible]2[illegible]	7[illegible].[illegible]2[illegible]	20.[illegible]52[illegible]	[illegible]78.[illegible]3[illegible]	1.403	.117	.8677	.8739
17	[illegible].[illegible]97	.18	31.[illegible]1[illegible]	1.[illegible]4[illegible]	.[illegible]0[illegible]2	[illegible].[illegible]8	.7[illegible]2[illegible]	7[illegible].[illegible]3	20.[illegible]52[illegible]	[illegible]78.[illegible]3[illegible]	1.403	.117	.8677	.8739
18	[illegible].[illegible]89	.[illegible]1[illegible]	3[illegible].[illegible]4[illegible]	1.[illegible]4[illegible]	.[illegible]0[illegible]1	[illegible].[illegible]8	.7[illegible]0[illegible]	790.03	20.[illegible]52[illegible]	[illegible]31.[illegible]74	1.403	.120	.8427	.8501
19	[illegible].[illegible]79	.[illegible]1[illegible]	3[illegible].[illegible]4[illegible]	1.[illegible]4[illegible]	.[illegible]0[illegible]1	[illegible].[illegible]8	.7[illegible]1[illegible]	7[illegible].[illegible]1[illegible]	20.[illegible]52[illegible]	[illegible]82.[illegible]72	1.403	.122	.8292	.8372
20	[illegible].[illegible]92	.[illegible]1[illegible]	3[illegible].[illegible]4[illegible]	1.[illegible]4[illegible]	.[illegible]0[illegible]1	[illegible].[illegible]8	.7[illegible]1[illegible]	7[illegible].[illegible]4	20.[illegible]52[illegible]	[illegible]83.[illegible]3[illegible]	1.403	.124	.8156	.8242
21	[illegible].[illegible]78	.[illegible]1[illegible]	3[illegible].[illegible]4[illegible]	1.[illegible]4[illegible]	.[illegible]0[illegible]1	[illegible].[illegible]8	.7[illegible]0[illegible]	762.58	20.[illegible]52[illegible]	[illegible]84.[illegible]41	1.403	.127	.8009	.8182
20	[illegible].[illegible]92	[illegible].[illegible]01	33.[illegible]3[illegible]	1.[illegible]4[illegible]	.[illegible]0[illegible]39	[illegible].[illegible]8	.7[illegible]07	762.58	20.[illegible]52[illegible]	[illegible]84.[illegible]41	1.403	.127	.8009	.8182
21	[illegible].[illegible]78	[illegible].[illegible]25	34.[illegible]3[illegible]	1.[illegible]4[illegible]	.[illegible]0[illegible]31	[illegible].[illegible]8	.7[illegible]26	771.[illegible]8	20.[illegible]51[illegible]	[illegible]85.[illegible]31	1.403	.129	.7848	.7948

STATION 12 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.400 ISEN. EFF.= .890 POLY. EFF.= .895 DELTA T ON T = .113

STATION 13 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7230	365.25	211.39	697.33	574.155	533.807	20.424	15.824	.6133	17.68	-2.23	-5.196	.0798
2	7.7577	355.69	207.15	687.30	574.194	535.028	20.427	15.947	.6095	17.63	-2.33	-5.844	.0802
3	7.7933	343.33	203.37	677.75	574.229	536.178	20.429	16.062	.6062	17.61	-2.39	-6.644	.0806
4	7.8237	337.40	201.15	668.33	574.257	537.290	20.422	16.170	.5974	17.52	-2.41	-7.623	.0810
5	7.8671	328.34	193.45	659.51	574.279	538.250	20.419	16.268	.5791	17.51	-2.37	-8.807	.0813
6	7.9054	320.33	195.51	650.95	574.299	539.199	20.403	16.356	.5710	17.48	-2.29	-10.218	.0816
7	7.9444	313.90	192.53	643.39	574.327	540.038	20.391	16.433	.5640	17.42	-2.15	-11.861	.0819
8	7.9853	307.35	191.03	636.86	574.350	540.754	20.377	16.496	.5579	17.36	-1.95	-13.730	.0821
9	8.0238	304.00	189.72	632.80	574.497	541.329	20.382	16.547	.5540	17.35	-1.72	-15.767	.0822
10	8.0591	302.69	189.70	631.51	575.123	542.291	20.409	16.587	.5525	17.39	-1.46	-17.848	.0823
11	8.1123	302.37	189.37	631.06	575.748	542.764	20.435	16.618	.5518	17.43	-1.19	-19.837	.0824
12	8.1501	301.47	189.29	630.54	576.158	543.228	20.455	16.642	.5511	17.47	-.91	-21.626	.0824
13	8.2007	300.64	189.28	629.76	576.325	543.477	20.462	16.658	.5503	17.49	-.63	-23.172	.0825
14	8.2453	300.41	189.52	629.61	576.490	543.658	20.471	16.667	.5501	17.52	-.35	-24.511	.0825
15	8.2918	301.27	191.34	630.68	577.559	544.816	20.481	16.670	.5505	17.57	-.08	-25.843	.0824
16	8.3383	301.81	191.54	631.55	578.364	545.331	20.473	16.665	.5504	17.66	.18	-27.655	.0821
17	8.3934	302.34	193.73	633.21	581.174	547.970	20.465	16.652	.5510	17.82	.43	-30.908	.0818
18	8.4331	303.33	197.04	635.26	582.172	548.794	20.455	16.628	.5524	18.07	.65	-38.116	.0815
19	8.4813	305.28	201.73	638.97	583.239	549.431	20.454	16.590	.5553	18.40	.82	-59.578	.0812
20	8.5301	309.72	207.54	644.07	584.411	550.061	20.450	16.536	.5594	18.80	.90	-275.034	.0809
21	8.5795	314.25	214.25	650.55	585.731	550.688	20.443	16.467	.5647	19.23	.88	76.314	.0805

BLADE DATA

LOCATION	BLADE SECTION	BLADE ANGLES CLAN	BLADE ANGLES FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	16.2[illegible]	-3.414	17.595	1.351	.0424	0.0	.6153	697.84	20.428	574.155	1.390	.107	.9215	.9258
2	16.1[illegible]	-3.939	17.534	1.354	.0419	0.0	.6095	687.60	20.427	574.194	1.390	.107	.9207	.9253
3	16.151	-3.335	17.515	1.364	.0417	0.0	.6062	677.75	20.425	574.229	1.390	.107	.9199	.9249
4	16.131	-7.661	17.515	1.384	.0421	0.0	.5974	668.33	20.422	574.257	1.390	.107	.9190	.9226
5	16.095	-5.931	17.514	1.414	.0433	0.0	.5791	659.51	20.419	574.279	1.389	.107	.9177	.9215
6	16.060	-8.073	17.475	1.450	.0462	0.0	.5710	650.95	20.403	574.299	1.388	.107	.9155	.9193
7	15.927	-5.125	17.417	1.490	.0497	0.0	.5640	643.39	20.390	574.327	1.387	.107	.9132	.9171
8	15.932	-4.192	17.351	1.529	.0534	0.0	.5579	636.86	20.377	574.350	1.387	.107	.9109	.9149
9	15.786	-3.149	17.351	1.560	.0547	0.0	.5540	632.80	20.382	574.497	1.387	.108	.9093	.9134
10	15.709	-2.215	17.336	1.599	.0563	0.0	.5525	631.51	20.409	575.123	1.389	.109	.9080	.9074
11	15.635	-1.331	17.434	1.629	.0571	0.0	.5518	631.06	20.435	575.748	1.391	.110	.8969	.9016
12	15.815	-.716	17.469	1.654	.0595	0.0	.5511	630.54	20.455	576.158	1.392	.111	.8931	.8988
13	15.819	-.131	17.491	1.672	.0[illegible]75	0.0	.5503	629.76	20.462	576.325	1.392	.111	.8915	.8965
14	15.835	.417	17.518	1.693	.0[illegible]95	0.0	.5501	629.61	20.471	576.490	1.393	.111	.8901	.8951
15	15.980	1.250	17.596	1.686	.0503	0.0	.5505	630.68	20.481	577.559	1.394	.114	.8753	.8818
16	15.973	2.191	17.655	1.682	.0598	0.0	.5504	631.55	20.473	578.364	1.393	.117	.8483	.8552
17	16.137	3.136	17.716	1.679	.0640	0.0	.5510	633.21	20.465	581.174	1.393	.120	.8228	.8309
18	16.389	4.317	17.859	1.679	.0694	0.0	.5524	635.26	20.458	582.172	1.392	.122	.8067	.8174
19	16.720	5.538	18.434	1.684	.0725	0.0	.5553	638.97	20.454	583.239	1.392	.124	.7949	.8062
20	17.101	6.973	18.735	1.697	.0778	0.0	.5594	644.07	20.450	584.411	1.392	.127	.7882	.7982
21	17.510	8.542	19.229	1.719	.0849	0.0	.5647	650.55	20.443	585.731	1.391	.129	.7641	.7748

STATION 13 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.391 ISEN. EFF.= .871 POLY. EFF.= .877 DELTA T ON T = .113

STATION 14 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.9723	548.04	93.37	551.25	574.155	548.988	23.335	17.379	.4793	6.18	-4.23	16.241	.0852
2	7.7114	547.27	94.03	550.33	574.194	549.110	23.324	17.382	.4788	6.05	-4.05	17.306	.0852
3	7.7503	548.41	93.31	549.65	574.229	549.234	23.321	17.385	.4779	5.94	-3.81	18.531	.0852
4	7.7913	543.45	92.43	548.30	574.257	549.358	20.312	17.389	.4768	5.84	-3.56	19.960	.0852
5	7.8335	544.24	91.93	547.05	574.279	549.494	20.301	17.392	.4754	5.76	-3.30	21.648	.0852
6	7.8745	542.31	91.10	545.00	574.299	549.700	20.274	17.394	.4733	5.70	-3.03	23.694	.0851
7	7.9174	540.35	90.32	543.38	574.327	549.910	20.251	17.396	.4717	5.64	-2.75	26.257	.0851
8	7.9615	538.38	89.59	540.45	574.350	550.115	23.230	17.397	.4693	5.59	-2.46	29.571	.0851
9	8.0035	538.08	88.32	541.02	574.397	550.238	27.234	17.397	.4703	5.55	-2.15	33.932	.0851
10	8.0520	541.37	88.51	543.59	575.123	550.652	20.261	17.397	.4713	5.52	-1.86	39.706	.0850
11	8.0980	543.33	88.39	545.11	575.748	551.050	20.284	17.395	.4733	5.50	-1.56	47.319	.0849
12	8.1442	542.23	88.27	545.25	576.158	551.266	20.304	17.391	.4727	5.49	-1.28	57.708	.0849
13	8.1915	547.37	88.06	549.39	576.325	551.283	20.315	17.386	.4771	5.49	-1.01	72.939	.0849
14	8.2391	549.26	87.81	551.79	576.490	551.278	20.324	17.379	.4787	5.50	-.74	97.332	.0848
15	8.2872	551.98	87.24	554.32	577.559	552.123	20.342	17.371	.4805	5.51	-.49	140.122	.0846
16	8.3350	552.27	87.04	554.32	579.304	553.874	20.323	17.361	.4803	5.54	-.23	227.044	.0843
17	8.3854	550.42	86.13	552.47	581.174	555.626	20.313	17.351	.4801	5.60	.03	457.582	.0840
18	8.4353	552.30	85.18	553.84	582.177	556.009	20.297	17.340	.4795	5.69	.30	2292.730	.0838
19	8.4833	553.91	85.91	556.20	581.239	557.598	20.284	17.329	.4801	5.84	.56	-1193.322	.0836
20	8.5378	554.62	85.72	557.59	580.411	558.692	20.274	17.318	.4804	6.05	.82	-656.754	.0834
21	8.5913	554.48	85.91	556.20	580.731	559.936	21.264	17.307	.4806	6.33	1.06	-510.607	.0832

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BLADE DATA

LOCATION	BLADE SECTION	BLADE ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCID	DEVIATION LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	3.965	-1.054	5.193	2.218	.0633	0.0	.4793	551.25	20.336	574.155	1.384	.107	.9083	.9124
2	3.829	-.933	5.323	2.233	.0634	0.0	.4784	550.33	20.329	574.194	1.383	.107	.9066	.9108
3	3.694	-.917	5.330	2.242	.0638	0.0	.4779	549.65	20.321	574.229	1.383	.107	.9049	.9092
4	3.564	-.831	5.241	2.277	.0647	0.0	.4768	548.30	20.312	574.257	1.382	.107	.9032	.9075
5	3.439	-.741	5.153	2.324	.0660	0.0	.4754	547.05	20.301	574.279	1.381	.107	.9012	.9056
6	3.319	-.653	5.097	2.379	.0678	0.0	.4733	545.00	20.274	574.299	1.380	.107	.8978	.9023
7	3.199	-.575	5.039	2.440	.0698	0.0	.4717	543.38	20.254	574.327	1.378	.107	.8942	.8989
8	3.085	-.508	4.989	2.503	.0811	0.0	.4698	540.95	20.236	574.350	1.377	.107	.8907	.8955
9	2.993	-.451	4.950	2.567	.0828	0.0	.4707	541.22	20.238	574.397	1.377	.106	.8887	.8936
10	2.936	-.409	4.922	2.629	.0853	0.0	.4719	543.54	20.251	575.123	1.379	.109	.8821	.8873
11	2.927	-.396	4.934	2.677	.0874	0.0	.4739	546.11	20.235	575.748	1.380	.110	.8757	.8813
12	2.977	-.420	4.992	2.717	.0878	0.0	.4757	548.25	20.304	576.158	1.382	.111	.8721	.8778
13	3.090	-.465	5.043	2.743	.0850	0.0	.4771	549.89	20.316	576.325	1.382	.111	.8713	.8770
14	3.244	-.539	5.090	2.751	.0843	0.0	.4787	551.78	20.329	576.490	1.383	.111	.8706	.8764
15	3.431	-.634	5.112	2.741	.0835	0.0	.4805	554.22	20.342	577.559	1.384	.114	.8566	.8638
16	3.621	-.739	5.122	2.722	.0891	0.0	.4803	554.82	20.328	579.304	1.383	.117	.8292	.8368
17	3.793	-.837	5.139	2.700	.0953	0.0	.4801	553.47	20.313	581.174	1.382	.120	.8033	.8121
18	3.947	-.924	5.191	2.706	.1020	0.0	.4798	555.64	20.297	582.172	1.381	.122	.7886	.7980
19	4.116	-1.041	5.239	2.722	.1084	0.0	.4801	556.50	20.239	583.233	1.381	.124	.7745	.7845
20	4.293	-.977	5.053	2.760	.1155	0.0	.4804	557.36	20.279	584.411	1.380	.127	.7595	.7702
21	4.543	-1.055	5.426	2.818	.1205	0.0	.4806	559.20	20.264	585.731	1.379	.129	.7432	.7546

STATION 14 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.381 ISEN. EFF.= .852 POLY. EFF.= .858 DELTA T ON T = .113

STATION 15 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES AXIAL	TANGENT	TOTAL	TEMPERATURES TOTAL	STATIC	PRESSURES TOTAL	STATIC	MACH NO	ANGLES WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6410	+93.29	0.00	+93.29	574.155	553.979	20.244	17.556	.4272	0.00	-1.66	13.624	.0867
2	7.7812	+94.21	0.00	+94.21	574.194	553.967	20.231	17.640	.4275	0.00	-1.61	11.258	.0866
3	7.9233	+94.12	0.00	+94.12	574.229	553.960	20.217	17.823	.4262	0.00	-1.56	11.371	.0866
4	8.0669	+95.18	0.00	+95.18	574.257	553.955	20.202	17.907	.4245	0.00	-1.49	12.811	.0865
5	8.2114	+95.14	0.00	+95.14	574.274	553.972	20.188	17.792	.4246	0.00	-1.42	13.884	.0864
6	8.3568	+93.91	0.00	+93.91	574.289	554.040	20.195	17.777	.4275	0.00	-1.34	15.823	.0863
7	8.5033	+92.45	0.00	+92.45	574.327	554.244	20.193	17.764	.4281	0.00	-1.24	16.584	.0862
8	8.6508	+90.79	0.00	+90.79	574.350	554.402	20.099	17.752	.4243	0.00	-1.13	16.662	.0861
9	8.7992	+92.10	0.00	+92.10	574.347	554.443	20.094	17.741	.4258	0.00	-1.01	21.453	.0861
10	8.9490	+95.33	0.00	+95.33	575.123	554.805	20.114	17.731	.4284	0.00	-.89	25.218	.0860
11	9.0979	+96.42	0.00	+96.42	575.748	555.177	20.134	17.723	.4309	0.00	-.77	30.517	.0859
12	9.1383	+91.15	0.00	+91.15	575.139	555.360	20.133	17.716	.4332	0.00	-.64	38.429	.0858
13	9.1831	+91.37	0.00	+91.37	575.325	555.342	20.173	17.710	.4352	0.00	-.52	51.174	.0858
14	9.2344	+92.44	0.00	+92.44	575.490	555.335	20.187	17.706	.4370	0.00	-.40	74.839	.0858
15	9.2941	+97.03	0.00	+97.03	577.293	556.224	20.202	17.704	.4383	0.00	-.27	134.137	.0856
16	9.3343	+93.34	0.00	+93.34	579.304	558.135	20.174	17.703	.4366	0.00	-.15	654.745	.0853
17	9.3859	+94.37	0.00	+94.37	581.174	560.070	20.177	17.703	.4343	0.00	-.02	-214.434	.0850
18	9.4331	+92.91	0.00	+92.91	582.172	561.240	20.131	17.702	.4324	0.00	.12	-90.602	.0849
19	9.4813	+91.65	0.00	+91.65	583.239	562.404	20.114	17.708	.4310	0.00	.25	-57.442	.0847
20	9.5422	+90.41	0.00	+90.41	584.611	563.681	20.133	17.714	.4294	0.00	.39	-42.393	.0845
21	9.6010	+89.01	0.00	+89.01	585.731	565.118	20.033	17.721	.4277	0.00	.52	-33.985	.0844

BLADE DATA

LOCATION	BLADE SECTION	ANGLES CLAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ISENTROPIC ON T	EFFICIENCY	POLYTROPIC EFFICIENCY
*	-7.239	.020	0.110	7.234	.0342	0.0	.4272	493.53	20.244	574.155	1.378	.107	.8951	.8797
*	-7.402	.020	0.110	7.402	.0343	0.0	.4278	494.21	20.231	574.194	1.377	.107	.8925	.8772
*	-7.574	.019	0.100	7.574	.0358	0.0	.4282	494.77	20.217	574.229	1.376	.107	.8899	.8747
*	-7.749	.017	0.100	7.749	.0374	0.0	.4286	495.25	20.202	574.257	1.375	.107	.8874	.8723
*	-7.923	.015	0.100	7.923	.0389	0.0	.4286	495.18	20.188	574.274	1.374	.107	.8865	.8714
5	-8.094	.013	0.100	8.094	.0402	0.0	.4279	493.91	20.195	574.289	1.371	.107	.8799	.8652
7	-8.263	.011	0.100	8.263	.1003	0.0	.4281	492.96	20.193	574.327	1.369	.107	.8751	.8606
8	-8.429	.009	0.100	8.429	.1089	0.0	.4286	490.77	20.094	574.350	1.367	.107	.8702	.8558
9	-8.576	.008	0.100	8.576	.1110	0.0	.4298	492.10	20.094	574.397	1.367	.108	.8680	.8537
10	-8.712	.006	0.100	8.712	.1137	0.0	.4284	493.33	20.114	575.123	1.369	.109	.8611	.8472
11	-8.929	.004	0.000	8.929	.1103	0.0	.4309	496.42	20.134	575.748	1.370	.110	.8545	.8408
12	-8.926	.003	0.000	8.926	.1159	0.0	.4332	501.16	20.133	576.158	1.371	.111	.8511	.8376
13	-9.001	.001	0.000	9.001	.1145	0.0	.4352	503.37	20.173	576.325	1.372	.111	.8510	.8375
14	-9.048	-.002	0.000	9.048	.1124	0.0	.4370	505.46	20.187	576.490	1.374	.111	.8508	.8374
15	-9.093	-.005	0.000	9.093	.1115	0.0	.4385	507.60	20.202	577.059	1.375	.114	.8374	.8246
16	-9.038	-.008	0.000	9.038	.1142	0.0	.4366	505.34	20.178	579.304	1.373	.117	.8094	.8178
17	-9.061	-.012	0.000	9.061	.1276	0.0	.4346	504.67	20.195	581.174	1.371	.120	.7829	.7934
18	-9.086	-.013	0.000	9.086	.1370	0.0	.4324	502.51	20.131	582.172	1.370	.122	.7676	.7777
19	-9.127	-.024	0.000	9.127	.1454	0.0	.4310	501.05	20.115	583.239	1.369	.124	.7533	.7640
20	-9.170	-.031	0.000	9.170	.1558	0.0	.4294	499.41	20.133	584.611	1.367	.127	.7383	.7496
21	-9.213	-.038	0.000	9.213	.1694	0.0	.4277	497.81	20.033	585.731	1.367	.129	.7223	.7342

STATION 15 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.371 ISEN. EFF.= .832 POLY. EFF.= .939 DELTA T ON T = .113

STATION 1> FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGL'T	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.0[illegible]+00	507.22	0.00	507.22	574.155	552.649	20.24+	17.731	.4345	0.00	0.00	0.000	.0863
2	7.0[illegible]5	505.99	0.00	505.99	574.194	552.992	20.231	17.731	.4343	0.00	-.03	1030.558	.0862
3	7.7218	504.72	0.00	504.72	574.233	553.132	20.21[illegible]	17.730	.4372	0.00	-.06	558.083	.0862
4	7.75+1	503.[illegible]+	0.00	503.44	574.[illegible]57	553.267	20.202	17.730	.4360	0.00	-.08	405.259	.0862
5	7.8072	501.90	0.00	501.90	574.279	553.417	20.18[illegible]	17.729	.4345	0.00	-.10	333.277	.0862
6	7.8514	+99.17	0.00	+99.17	574.298	553.564	20.155	17.729	.4322	0.00	-.12	294.320	.0861
7	7.8[illegible]+	+98.35	0.00	+98.35	574.327	553.925	20.125	17.728	.4298	0.00	-.13	272.834	.0861
8	7.9+[illegible]	+93.+5	0.00	+93.+5	574.350	554.185	20.09+	17.727	.4270	0.00	-.13	262.569	.0860
9	7.[illegible]3+	+95.65	0.00	+93.[illegible]	574.497	554.316	20.09+	17.726	.4271	0.00	-.13	260.882	.0860
10	8.0370	+95.32	0.00	+95.92	575.123	554.757	20.11+	17.726	.4293	0.00	-.13	266.732	.0859
11	8.0921	+98.19	0.00	+98.19	575.749	555.195	20.13+	17.725	.4307	0.00	-.13	279.990	.0858
12	8.1339	500.28	0.00	500.28	576.158	555.433	20.155	17.724	.4324	0.00	-.12	301.524	.0858
13	8.1927	501.39	0.00	501.[illegible]	576.325	555.457	20.177	17.723	.4333	0.00	-.11	333.328	.0858
14	8.2322	503.71	0.00	503.71	575.490	555.480	20.18[illegible]	17.723	.4334	0.00	-.09	379.282	.0857
15	8.2923	505.[illegible]	0.00	505.65	577.509	556.387	20.202	17.722	.4347	0.00	-.08	445.586	.0857
16	8.3310	504.31	0.00	504.31	577.384	556.305	20.17[illegible]	17.722	.4343	0.00	-.07	546.443	.0856
17	8.3947	502.91	0.00	502.91	577.174	556.234	20.15[illegible]	17.721	.4323	0.00	-.05	710.985	.0855
18	8.4373	501.08	0.00	501.08	576.172	561.384	20.131	17.721	.4303	0.00	-.04	1009.203	.0854
19	8.4995	500.33	0.00	500.33	575.239	562.514	20.113	17.721	.4293	0.00	-.02	1657.530	.0853
20	8.5+30	+99.65	0.00	+99.65	574.411	563.743	20.105	17.721	.4287	0.00	-.01	3762.699	.0846
21	8.6001	+99.01	0.00	499.01	575.731	575.118	20.093	17.721	.4277	0.00	0.00	0.000	.0844

STATION 17 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGL'T	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.0+00	509.30	0.00	509.30	574.122	552.756	20.2++	17.720	.4405	0.00	0.00	0.000	.0863
2	7.0[illegible]4	507.05	0.00	507.05	574.134	552.902	20.231	17.720	.4343	0.00	-.00	0.000	.0862
3	7.7219	505.75	0.00	505.75	574.223	553.045	20.217	17.720	.4351	0.00	-.00	0.000	.0862
4	7.75+1	504.[illegible]	0.00	504.44	574.257	553.184	20.202	17.720	.4360	0.00	-.00	0.000	.0862
5	7.8071	502.[illegible]	0.00	502.33	574.279	553.318	20.18[illegible]	17.720	.4335	0.00	-.01	0.000	.0861
6	7.8511	500.05	0.00	500.05	574.298	553.591	20.155	17.720	.4330	0.00	-.01	0.000	.0861
7	7.8+22	+97.16	0.00	+97.16	574.327	553.858	20.12[illegible]	17.720	.4304	0.00	-.01	0.000	.0861
8	7.9423	+94.19	0.00	+94.19	574.350	554.125	20.09+	17.721	.4277	0.00	-.01	0.000	.0860
9	7.9832	+94.29	0.00	+94.29	574.497	554.264	20.09+	17.721	.4277	0.00	-.01	0.000	.0860
10	8.0837	+98.46	0.00	+98.46	575.123	554.712	20.11+	17.721	.4294	0.00	-.01	0.000	.0859
11	8.0840	+98.[illegible]	0.00	+98.[illegible]	575.748	555.157	20.13+	17.721	.4311	0.00	-.01	0.000	.0858
12	8.1334	500.65	0.00	500.65	576.158	555.402	20.155	17.721	.4326	0.00	-.01	0.000	.0858
13	8.1922	502.29	0.00	502.29	576.326	555.433	20.177	17.721	.4342	0.00	-.01	0.000	.0858
14	8.2320	503.33	0.00	503.33	575.490	555.461	20.187	17.721	.4339	0.00	-.01	0.000	.0857
15	8.2921	505.[illegible]	0.00	505.[illegible]	577.509	556.374	20.202	17.720	.4349	0.00	-.01	0.000	.0857
16	8.3329	504.42	0.00	504.42	577.384	556.296	20.17[illegible]	17.720	.4343	0.00	-.01	0.000	.0856
17	8.3949	502.48	0.00	502.48	577.174	560.228	20.153	17.721	.4323	0.00	-.01	0.000	.0855
18	8.4372	501.12	0.00	501.12	576.172	561.381	20.131	17.721	.4303	0.00	-.00	0.000	.0854
19	8.4[illegible]	500.35	0.00	500.35	575.239	562.513	20.114	17.720	.4298	0.00	-.00	0.000	.0853
20	8.5+30	+99.66	0.00	+99.66	574.411	563.743	20.10[illegible]	17.721	.4287	0.00	-.00	0.000	.0846
21	8.6001	+99.01	0.00	499.01	575.731	575.118	20.093	17.721	.4277	0.00	0.00	0.000	.0844

ROTOR PERFORMANCE

LOCATION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID ENCE	DEVIATION	LOSS COEFF	D-F D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	6.7930	7.0499	.5750	5.742	7.444	.0912	.3708	.3111	.2029	.7867	.7417	-60.937	-12.647	6.878	18.991
2	6.8021	7.0947	.6344	6.230	7.600	.0934	.3916	.4106	.5124	.7695	.7335	-61.310	-13.561	6.226	18.416
3	6.8791	7.1439	.6937	6.338	7.973	.0858	.4087	.4166	.5173	.7500	.7251	-61.670	-14.469	6.373	18.017
4	7.0922	7.2831	.8029	6.834	7.730	.0831	.4227	.4299	.5187	.7302	.7196	-62.004	-15.382	6.416	17.717
5	7.2042	7.3669	.8121	7.042	7.744	.0805	.4342	.4404	.5178	.7248	.7040	-62.304	-16.278	6.442	17.488
6	7.3154	7.4838	.8212	7.071	7.744	.0780	.4438	.4496	.5152	.7193	.6993	-62.582	-17.163	6.460	17.307
7	7.4257	7.5990	.8301	7.013	7.738	.0751	.4515	.4561	.5112	.7072	.6907	-62.856	-17.997	6.473	17.167
8	7.5353	7.6871	.8390	7.304	7.834	.0723	.4577	.4616	.5062	.7011	.6820	-63.132	-18.746	6.484	17.057
9	7.6446	7.8333	.8477	7.224	7.880	.0715	.4643	.4672	.5004	.6945	.6749	-63.417	-19.414	6.494	16.967
10	7.7531	7.9913	.8563	7.094	7.921	.0777	.4757	.4782	.4943	.6849	.6735	-63.714	-20.004	6.504	16.894
11	7.8610	8.0459	.8647	6.973	7.479	.0936	.4854	.4877	.4870	.6755	.6719	-64.027	-20.553	6.515	16.834
12	7.9703	8.1003	.8730	6.891	7.542	.0874	.4930	.4943	.4796	.6689	.6676	-64.368	-21.036	6.524	16.784
13	8.0794	8.1959	.8812	6.786	7.849	.0830	.4972	.4980	.4719	.6637	.6605	-64.714	-21.467	6.533	16.743
14	8.1889	8.2123	.8893	8.059	8.199	.0906	.5005	.5007	.4630	.6533	.6533	-65.094	-21.839	6.542	16.709
15	8.2997	8.2701	.8973	8.069	8.234	.1105	.5179	.5176	.4554	.6435	.6501	-65.502	-22.135	6.551	16.681
16	8.4119	8.3301	.9053	8.443	8.291	.1439	.5467	.5459	.4447	.6179	.6466	-65.938	-22.343	6.560	16.658
17	8.5250	8.3930	.9133	8.402	8.483	.1796	.5746	.5734	.4354	.5923	.6402	-66.398	-22.439	6.569	16.639
18	8.6403	8.4588	.9213	8.333	9.157	.1914	.5878	.5861	.4298	.5735	.6364	-66.871	-22.392	6.578	16.623
19	8.7579	8.5293	.9294	9.281	10.041	.2036	.6015	.5993	.4179	.5664	.6369	-67.349	-22.182	6.587	16.609
20	8.8778	8.5986	.9376	9.244	11.140	.2217	.6166	.6140	.4095	.5610	.6380	-67.830	-21.836	6.596	16.597
21	9.0000	8.6699	.9460	9.212	12.483	.2334	.6345	.6315	.4022	.5333	.6830	-68.316	-21.371	6.605	16.586

STATOR PERFORMANCE

LOCATION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID ENCE	DEVIATION	LOSS COEFF	D-F D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	7.0199	7.0400	.3354	-1.492	7.239	.0642	.4225	.4223	.3727	.7233	0.0000	48.817	-7.239	-39.941	.000
2	7.0765	7.2312	.5093	-2.846	7.502	.0849	.4408	.4408	.3922	.7143	0.0000	47.988	-7.482	-39.941	.000
3	7.1430	7.7233	.5219	-3.545	7.574	.0958	.4569	.4570	.4084	.7013	0.0000	47.261	-7.574	-39.941	.000
4	7.2530	7.7860	.5316	-4.133	7.743	.0874	.4696	.4698	.4197	.6924	0.0000	46.746	-7.749	-39.941	.000
5	7.4314	7.8098	.5387	-4.561	7.923	.0849	.4795	.4798	.4287	.6853	0.0000	46.339	-7.923	-39.941	.000
6	7.6774	7.8540	.5437	-4.856	8.094	.0955	.4889	.4892	.4385	.6765	0.0000	45.992	-8.094	-39.941	.000
7	7.9223	7.8993	.5472	-5.038	8.253	.1020	.4968	.4971	.4317	.6733	0.0000	45.668	-8.263	-39.941	.000
8	8.1004	7.9452	.5492	-5.125	8.425	.1059	.5034	.5136	.4312	.6640	0.0000	45.360	-8.425	-39.941	.000
9	8.1102	7.9925	.5505	-5.080	8.576	.1110	.5051	.5153	.4283	.6694	0.0000	45.080	-8.576	-39.941	.000
10	8.0539	8.0400	.5524	-4.715	8.712	.1137	.5096	.5158	.4232	.6718	0.0000	44.844	-8.712	-39.941	.000
11	8.0377	8.0878	.5533	-4.388	8.829	.1166	.5051	.5152	.4163	.6747	0.0000	44.679	-8.829	-39.941	.000
12	8.1419	8.1383	.5524	-4.175	8.926	.1159	.5022	.5023	.4109	.6791	0.0000	44.613	-8.926	-39.941	.000
13	8.1803	8.1951	.5495	-4.158	9.001	.1146	.4971	.4971	.4055	.6845	0.0000	44.656	-9.001	-39.941	.000
14	8.2313	8.2344	.5451	-4.102	9.054	.1124	.4909	.4909	.3993	.6907	0.0000	44.769	-9.054	-39.941	.000
15	8.2773	8.2841	.5421	-3.915	9.093	.1115	.4865	.4864	.3916	.6971	0.0000	44.985	-9.093	-39.941	.000
16	8.3251	8.3345	.5370	-2.007	9.056	.1132	.4877	.4876	.3819	.6944	0.0000	45.071	-9.058	-39.941	.000
17	8.3753	8.3859	.5302	-.613	9.001	.1278	.4867	.4865	.3634	.7032	0.0000	45.429	-9.001	-39.941	.000
18	8.4286	8.4381	.5210	-.062	9.036	.1370	.4801	.4800	.3531	.7094	0.0000	46.180	-9.036	-39.941	.000
19	8.4857	8.4913	.5090	.431	9.127	.1454	.4663	.4662	.3311	.7201	0.0000	47.357	-9.127	-39.941	.000
20	8.5468	8.5452	.4933	1.072	9.170	.1558	.4520	.4520	.3019	.7347	0.0000	48.892	-9.170	-39.941	.000
21	8.6199	8.6000	.4703	1.909	9.213	.1694	.4319	.4321	.2624	.7525	0.0000	50.814	-9.213	-39.941	.000

MAKE AND BOUNDARY LAYER BLOCKAGES (PERCENT)

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MID BLOCKAGE	0.0	0.0	0.0	0.0	.4	.8	1.2	1.6	2.1	2.9	3.0	5.0	7.0	8.0	9.1	10.3	10.4
DIST FACTOR	1.0	1.0	1.0	1.0	.8	.6	.4	.2	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
INT BLOCKAGE	0.0	0.0	0.0	0.0	.4	.8	1.2	1.5	2.1	3.0	3.0	5.0	7.0	8.0	9.1	10.3	10.4

SUMMARY POINT NO. 1 THE CALCULATION IS CONVERGED PASS 23

TEST POINT TITLE = 212050615050

FLOW = 13.09 SPEED = 10195.8 PRESSURE RATIO = 1.371 ISENTROPIC EFFY = .8321 POLYTROPIC EFFY = .8394 DEL T/T = .1133

SUMMARY OF 1 TEST POINTS

POINT NO.	TEST POINT TITLE	STATUS OF CALCULATION	FLOW RATE LBS/SEC	SPEED RPM	ROTOR PRESSURE RATIO	ROTOR ISEN EFFY	STAGE PRESSURE RATIO	STAGE ISEN EFFY	FLOW/(CHOKE FLOW)
1	212050615050	CONVERGED AFTER 23 PASSES	13.095	10195.8	1.410	.908	1.371	.832	.34386

3. TEST POINT 212051715560 (60%)

STATION 1 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	5.0635	203.34	0.00	203.34	518.688	515.239	14.69	14.357	.1830	0.00	20.93	0.000	.0750
2	5.2253	203.34	0.00	203.34	518.688	515.239	14.69	14.357	.1830	0.00	19.74	0.000	.0750
3	5.3851	203.34	0.00	203.34	518.688	515.239	14.69	14.357	.1830	0.00	18.54	0.000	.0750
4	5.5395	203.34	0.00	203.34	518.688	515.239	14.69	14.357	.1830	0.00	17.33	0.000	.0750
5	5.6834	203.34	0.00	203.34	518.688	515.239	14.69	14.357	.1830	0.00	16.11	0.000	.0750
6	5.8173	203.34	0.00	203.34	518.688	515.239	14.69	14.357	.1830	0.00	14.89	0.000	.0750
7	5.9332	203.34	0.00	203.34	518.688	515.239	14.69	14.357	.1830	0.00	13.67	0.000	.0750
8	7.1517	203.34	0.00	203.34	518.688	515.239	14.69	14.357	.1830	0.00	12.46	0.000	.0750
9	7.3029	203.34	0.00	203.34	518.688	515.239	14.69	14.357	.1830	0.00	11.25	0.000	.0750
10	7.4335	203.34	0.00	203.34	518.688	515.239	14.69	14.357	.1830	0.00	10.06	0.000	.0750
11	7.5852	203.34	0.00	203.34	518.688	515.239	14.69	14.357	.1830	0.00	8.88	0.000	.0750
12	7.7227	203.34	0.00	203.34	518.688	515.239	14.69	14.357	.1830	0.00	7.73	0.000	.0750
13	7.9013	203.34	0.00	203.34	518.688	515.239	14.69	14.357	.1830	0.00	6.61	0.000	.0750
14	8.0515	203.34	0.00	203.34	518.688	515.239	14.69	14.357	.1830	0.00	5.53	0.000	.0750
15	8.1999	203.34	0.00	203.34	518.688	515.239	14.69	14.357	.1830	0.00	4.50	0.000	.0750
16	8.3490	203.34	0.00	203.34	518.688	515.239	14.69	14.357	.1830	0.00	3.53	0.000	.0750
17	8.4959	203.34	0.00	203.34	518.688	515.239	14.69	14.357	.1830	0.00	2.63	0.000	.0750
18	8.6444	203.34	0.00	203.34	518.688	515.239	14.69	14.357	.1830	0.00	1.81	0.000	.0750
19	8.7932	203.34	0.00	203.34	518.688	515.239	14.69	14.357	.1830	0.00	1.09	0.000	.0750
20	8.9419	203.34	0.00	203.34	518.688	515.239	14.69	14.357	.1830	0.00	.48	0.000	.0750
21	9.0903	203.34	0.00	203.34	518.688	515.239	14.69	14.357	.1830	0.00	0.00	0.000	.0750

STATION 2 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	5.3748	220.71	0.00	220.71	518.688	514.649	14.69	14.299	.1941	0.00	20.83	-285.758	.0747
2	5.5139	221.73	0.00	221.73	518.688	514.611	14.69	14.296	.1941	0.00	19.58	-134.967	.0747
3	5.6513	222.66	0.00	222.66	518.688	514.577	14.69	14.292	.1939	0.00	18.34	-186.883	.0747
4	5.7884	223.50	0.00	223.50	518.688	514.546	14.69	14.289	.2007	0.00	17.10	-90.965	.0747
5	5.9249	224.25	0.00	224.25	518.688	514.518	14.69	14.286	.2013	0.00	15.85	-75.857	.0747
6	7.0513	224.91	0.00	224.91	518.688	514.494	14.69	14.284	.2013	0.00	14.60	-71.010	.0747
7	7.1903	225.47	0.00	225.47	518.688	514.473	14.69	14.282	.2025	0.00	13.35	-63.354	.0747
8	7.3254	225.91	0.00	225.91	518.688	514.456	14.69	14.280	.2029	0.00	12.10	-56.449	.0747
9	7.4619	226.22	0.00	226.22	518.688	514.445	14.69	14.279	.2031	0.00	10.84	-50.131	.0747
10	7.5991	226.38	0.00	226.38	518.688	514.439	14.69	14.279	.2033	0.00	9.60	-46.361	.0747
11	7.7242	226.38	0.00	226.38	518.688	514.439	14.69	14.279	.2033	0.00	8.36	-39.132	.0747
12	7.8615	226.19	0.00	226.19	518.688	514.447	14.69	14.280	.2034	0.00	7.14	-34.439	.0747
13	7.9943	225.75	0.00	225.75	518.688	514.462	14.69	14.281	.2027	0.00	5.94	-30.269	.0747
14	8.1232	225.12	0.00	225.12	518.688	514.486	14.69	14.283	.2021	0.00	4.77	-26.587	.0747
15	8.2524	224.24	0.00	224.24	518.688	514.519	14.69	14.287	.2013	0.00	3.64	-23.347	.0747
16	8.3975	223.10	0.00	223.10	518.688	514.561	14.69	14.291	.2003	0.00	2.55	-20.508	.0747
17	8.5362	221.67	0.00	221.67	518.688	514.614	14.69	14.296	.1990	0.00	1.51	-17.994	.0747
18	8.6711	219.95	0.00	219.95	518.688	514.677	14.69	14.302	.1975	0.00	.54	-15.783	.0748
19	8.8094	217.91	0.00	217.91	518.688	514.751	14.69	14.309	.1956	0.00	-.36	-13.824	.0748
20	8.9433	215.51	0.00	215.51	518.688	514.837	14.69	14.318	.1934	0.00	-1.18	-12.079	.0748
21	9.0910	212.73	0.00	212.73	518.688	514.936	14.69	14.327	.1909	0.00	-1.91	-10.518	.0748

STATION 3 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.6010	239.31	0.00	239.31	518.588	513.916	14.69)	14.228	.2159	0.00	20.54	-83.031	.0745
2	6.7259	241.19	0.00	241.19	518.588	513.805	14.69)	14.223	.2187	0.00	19.31	-132.308	.0745
3	6.8533	242.56	0.00	242.56	518.634	513.810	14.69)	14.218	.2174	0.00	18.07	-204.521	.0744
4	6.9700	243.32	0.00	243.32	518.684	513.755	14.69)	14.212	.2192	0.00	16.81	-283.591	.0744
5	7.0924	243.28	0.00	243.28	518.634	513.699	14.69)	14.207	.2204	0.00	15.54	-302.274	.0744
6	7.2131	246.53	0.00	246.53	518.634	513.647	14.69)	14.202	.2219	0.00	14.25	-239.001	.0744
7	7.3333	247.75	0.00	247.75	518.588	513.598	14.69)	14.197	.2227	0.00	12.93	-161.566	.0744
8	7.4530	248.79	0.00	248.79	518.588	513.556	14.69)	14.193	.2239	0.00	11.60	-107.991	.0743
9	7.5724	249.62	0.00	249.62	518.588	513.521	14.69)	14.190	.2243	0.00	10.24	-74.725	.0743
10	7.6916	250.20	0.00	250.20	518.588	513.497	14.69)	14.187	.2249	0.00	8.87	-54.094	.0743
11	7.8106	250.49	0.00	250.49	518.588	513.485	14.69)	14.186	.2251	0.00	7.49	-40.389	.0743
12	7.9302	250.45	0.00	250.45	518.588	513.487	14.69)	14.186	.2251	0.00	6.10	-32.068	.0743
13	8.0508	250.05	0.00	250.05	518.588	513.504	14.69)	14.188	.2247	0.00	4.72	-25.916	.0743
14	8.1723	249.28	0.00	249.28	518.588	513.536	14.69)	14.191	.2240	0.00	3.35	-21.475	.0743
15	8.2951	248.05	0.00	248.05	518.588	513.586	14.69)	14.196	.2229	0.00	1.99	-18.167	.0744
16	8.4193	246.43	0.00	246.43	518.588	513.653	14.69)	14.203	.2214	0.00	.65	-15.641	.0744
17	8.5454	244.38	0.00	244.38	518.588	513.737	14.69)	14.211	.2196	0.00	-.65	-13.655	.0744
18	8.6735	241.85	0.00	241.85	518.588	513.836	14.69)	14.220	.2173	0.00	-1.92	-12.072	.0745
19	8.8039	238.83	0.00	238.83	518.588	513.956	14.69)	14.232	.2146	0.00	-3.15	-10.757	.0745
20	8.9369	235.28	0.00	235.28	518.588	514.090	14.69)	14.246	.2115	0.00	-4.33	-9.649	.0745
21	9.0730	231.20	0.00	231.20	518.588	514.241	14.69)	14.260	.2080	0.00	-5.47	-8.690	.0746

STATION 4 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.7510	257.32	0.00	257.32	518.634	513.175	14.69)	14.156	.2318	0.00	20.32	-388.054	.0742
2	6.8647	260.23	0.00	260.23	518.588	513.073	14.69)	14.146	.2340	0.00	19.22	425.964	.0742
3	6.9755	262.37	0.00	262.37	518.634	512.967	14.69)	14.136	.2362	0.00	18.07	155.935	.0741
4	7.0912	263.15	0.00	263.15	518.689	512.854	14.69)	14.126	.2385	0.00	16.87	110.039	.0741
5	7.2031	262.61	0.00	262.61	518.634	512.750	14.69)	14.116	.2407	0.00	15.61	99.509	.0741
6	7.3142	261.93	0.00	261.93	518.634	512.644	14.69)	14.105	.2423	0.00	14.29	109.776	.0740
7	7.4249	272.13	0.00	272.13	518.588	512.545	14.69)	14.096	.2443	0.00	12.91	160.790	.0740
8	7.5341	274.14	0.00	274.14	518.634	512.457	14.69)	14.087	.2460	0.00	11.48	655.048	.0740
9	7.6433	275.77	0.00	275.77	518.588	512.382	14.69)	14.080	.2481	0.00	9.99	-209.672	.0739
10	7.7522	277.00	0.00	277.00	518.634	512.326	14.69)	14.074	.2492	0.00	8.46	-82.412	.0739
11	7.8609	277.79	0.00	277.79	518.588	512.290	14.69)	14.071	.2500	0.00	6.90	-49.632	.0739
12	7.9698	278.08	0.00	278.08	518.588	512.276	14.69)	14.070	.2502	0.00	5.32	-34.691	.0739
13	8.0791	277.84	0.00	277.84	518.588	512.287	14.69)	14.071	.2500	0.00	3.73	-26.205	.0739
14	8.1891	277.04	0.00	277.04	518.634	512.324	14.69)	14.074	.2493	0.00	2.13	-20.771	.0739
15	8.2999	275.66	0.00	275.66	518.588	512.387	14.69)	14.080	.2480	0.00	.53	-17.152	.0739
16	8.4120	273.70	0.00	273.70	518.588	512.477	14.69)	14.089	.2462	0.00	-1.04	-14.779	.0740
17	8.5255	271.13	0.00	271.13	518.588	512.590	14.69)	14.100	.2440	0.00	-2.56	-13.234	.0740
18	8.6408	268.21	0.00	268.21	518.638	512.723	14.69)	14.113	.2412	0.00	-4.05	-12.157	.0740
19	8.7582	264.77	0.00	264.77	518.688	512.875	14.69)	14.127	.2381	0.00	-5.49	-11.338	.0741
20	8.8774	260.92	0.00	260.92	518.588	513.043	14.69)	14.144	.2346	0.00	-6.89	-10.722	.0742
21	9.0000	256.71	0.00	256.71	518.588	513.224	14.69)	14.161	.2308	0.00	-8.25	-10.317	.0742

BLADE DATA

LOCATION	BLADE SECTION	ANGLES CLAN		REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-60.337	0.070		-70.320	0.393	0.0000	721.0	.6884	765.67	19.434	501.757	1.000	0.000	1.0000	1.0000
2	-61.313	0.246		-70.459	0.149	0.0000	733.2	.6995	778.01	19.614	503.233	1.000	0.000	1.0000	1.0000
3	-61.375	0.372		-71.337	0.911	0.0000	745.4	.7106	790.26	19.796	504.720	1.000	0.000	1.0000	1.0000
4	-62.010	0.418		-71.709	0.695	0.0000	757.4	.7217	802.47	19.981	506.218	1.000	0.000	1.0000	1.0000
5	-62.309	0.304		-70.820	0.511	0.0000	769.3	.7326	814.56	20.169	507.729	1.000	0.000	1.0000	1.0000
6	-62.387	0.939		-70.149	0.346	0.0000	781.2	.7435	826.54	20.359	509.251	1.000	0.000	1.0000	1.0000
7	-62.353	0.497		-71.033	0.197	0.0000	793.0	.7542	838.40	20.552	510.787	1.000	0.000	1.0000	1.0000
8	-63.135	0.311		-71.139	0.053	0.0000	804.7	.7648	850.11	20.748	512.336	1.000	0.000	1.0000	1.0000
9	-63.418	3.941		-71.555	7.917	0.0000	816.4	.7753	861.68	20.945	513.898	1.000	0.000	1.0000	1.0000
10	-63.714	2.910		-71.502	7.754	0.0000	828.0	.7856	873.10	21.145	515.473	1.000	0.000	1.0000	1.0000
11	-64.026	1.753		-71.393	7.657	0.0033	839.6	.7959	884.37	21.347	517.063	1.000	0.000	1.0000	1.0000
12	-64.350	.530		-71.309	7.551	0.0000	851.2	.8058	895.51	21.551	518.666	1.000	0.000	1.0000	1.0000
13	-64.713	-.810		-72.192	7.439	0.0000	862.8	.8157	906.54	21.758	520.282	1.000	0.000	1.0000	1.0000
14	-65.095	-2.217		-72.922	7.332	0.0000	874.4	.8255	917.48	22.011	521.955	1.000	0.000	1.0000	1.0000
15	-65.501	-3.859		-72.727	7.223	0.0000	886.5	.8353	928.36	22.241	523.733	1.000	0.000	1.0000	1.0000
16	-65.939	-5.335		-73.139	7.119	0.0000	898.5	.8450	939.22	22.478	525.531	1.000	0.000	1.0000	1.0000
17	-66.399	-5.422		-73.419	7.013	0.0000	910.5	.8547	950.11	22.724	527.366	1.000	0.000	1.0000	1.0000
18	-66.874	-7.044		-73.735	6.922	0.0001	922.9	.8644	961.09	22.978	529.234	1.000	0.000	1.0000	1.0000
19	-67.352	-7.734		-74.139	6.844	0.0000	935.4	.8743	972.19	23.243	531.161	1.000	0.000	1.0000	1.0000
20	-67.832	-8.572		-74.519	6.783	0.0000	948.2	.8843	983.46	23.519	533.152	1.000	0.000	1.0000	1.0000
21	-68.316	-9.637		-75.049	6.732	0.0000	961.3	.8945	994.95	23.807	535.213	1.000	0.000	1.0000	1.0000

STATION 5 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES AXIAL	TANGENTIAL	TOTAL	TEMPERATURES TOTAL	STATIC	PRESSURES TOTAL	STATIC	MACH NO	ANGLES WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.8373	291.07	141.94	323.83	539.376	527.294	15.379	15.468	.2871	25.93	22.32	6.199	.0788
2	7.0044	294.31	137.75	324.93	535.774	527.022	15.354	15.442	.2833	25.08	20.65	7.738	.0788
3	7.1715	297.20	133.62	325.93	532.633	526.795	15.342	15.420	.2798	24.34	19.34	10.236	.0787
4	7.2134	300.53	132.07	328.54	535.557	526.610	15.333	15.402	.2911	23.70	17.79	14.948	.0787
5	7.3154	304.32	130.12	330.97	532.244	526.465	15.353	15.359	.2938	23.15	16.19	25.964	.0786
6	7.4174	307.34	123.89	333.64	532.583	526.357	15.364	15.379	.2962	22.68	14.56	74.184	.0786
7	7.5137	311.24	127.43	336.33	532.953	526.277	15.359	15.374	.2983	22.27	12.90	-124.324	.0786
8	7.6155	314.35	125.53	339.35	533.750	526.232	15.351	15.372	.3003	21.92	11.20	-39.882	.0786
9	7.7134	317.01	123.37	341.09	533.980	526.237	15.384	15.374	.3023	21.66	9.49	-22.228	.0786
10	7.8107	319.88	122.27	342.58	534.124	526.373	15.349	15.378	.3044	21.57	7.76	-20.724	.0786
11	7.9177	320.19	122.21	344.10	534.300	526.542	15.413	15.385	.3055	21.54	6.04	-19.348	.0786
12	8.0043	320.38	122.23	344.31	536.579	526.725	15.429	15.393	.3053	21.47	4.33	-17.387	.0786
13	8.1021	320.93	122.08	344.75	536.776	526.925	15.433	15.402	.3054	21.49	2.63	-17.331	.0786
14	8.2033	320.15	122.53	343.34	536.937	527.133	15.443	15.413	.3021	21.43	.94	-19.022	.0787
15	8.2933	319.31	122.73	342.23	537.173	527.366	15.441	15.423	.3033	21.53	-.73	-21.823	.0786
16	8.3943	315.35	123.34	339.72	537.477	527.912	15.435	15.434	.3012	21.83	-2.34	-25.823	.0786
17	8.5015	311.97	123.54	335.38	537.737	528.359	15.429	15.445	.2991	22.10	-3.88	-29.407	.0786
18	8.6023	307.79	123.42	332.06	537.799	528.644	15.413	15.455	.2944	22.17	-5.36	-31.267	.0787
19	8.7125	303.35	124.13	327.73	537.842	528.938	15.397	15.466	.2903	22.29	-6.78	-30.511	.0787
20	8.8213	298.39	122.73	322.57	537.897	529.238	15.373	15.476	.2857	22.37	-8.12	-29.558	.0787
21	8.9340	292.93	121.27	317.04	537.871	529.541	15.351	15.483	.2806	22.49	-9.38	-1665.883	.0787

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T		
1	-39.948	+.233	-63.348	+.492	.0236	736.7	.3877	442.47	14.341	548.864	1.115	.039	.934	.943
2	-49.[illegible]	+.[illegible]	-64.[illegible]	+.[illegible]	.0229	745.1	.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	-[illegible]	[illegible]	-64.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	-[illegible]	[illegible]	-64.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	-[illegible]	[illegible]	-64.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	-[illegible]	[illegible]	-64.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	-[illegible]	[illegible]	-65.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	-[illegible]	[illegible]	-65.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	-[illegible]	[illegible]	-65.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	-[illegible]	[illegible]	-65.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	-[illegible]	[illegible]	-65.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	-[illegible]	[illegible]	-65.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	-[illegible]	[illegible]	-65.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	-[illegible]	[illegible]	-66.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	-[illegible]	[illegible]	-66.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	-[illegible]	[illegible]	-67.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	-[illegible]	[illegible]	-67.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	-[illegible]	[illegible]	-68.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	-[illegible]	[illegible]	-68.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	-[illegible]	[illegible]	-69.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	-66.694	-3.111	-70.024	3.930	.0434	954.2	.7815	862.96	23.175	544.096	1.113	.037	.837	.841

STATION 5 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.115 ISEN. EFF.= .915 POLY. EFF.= .917 DELTA T ON T = .036

STATION 6 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES AERIO	TANGEN	TOTAL	TEMPERATURES TOTAL	STATIC	PRESSURES TOTAL	STATIC	MACH NO	ANGLES NOMINAL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.8784	343.67	241.01	419.75	548.898	534.298	17.691	16.095	.3634	35.84	24.47	69.462	.0818
2	7.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	7.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	7.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	7.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	7.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	7.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	7.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	7.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	7.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	7.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	7.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	7.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	7.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	7.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	7.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	7.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	7.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	7.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	7.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	5.8579	324.84	203.55	382.89	550.649	536.515	17.385	16.088	.3359	32.14	-9.38	1469.883	.0818

BLADE DATA

LOCATION	BLADE SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-52.505	2.438	-56.295	3.790	.0482	756.0	.5456	613.16	19.705	536.047	1.206	.058	.9335	.9888
2	-53.098	2.270	-56.798	3.653	.0462	762.8	.5501	633.25	19.854	537.272	1.202	.058	.9341	.9888
3	-53.651	1.838	-57.197	3.535	.0443	775.3	.5703	646.94	20.014	538.496	1.201	.057	.9346	.9888
4	-54.156	1.185	-57.574	3.418	.0425	784.8	.5822	660.26	20.163	539.715	1.200	.057	.9353	.9878
5	-54.616	-.234	-57.921	3.305	.0407	794.2	.5937	673.23	20.325	540.940	1.199	.057	.9360	.9877
6	-55.031	-1.178	-58.233	3.202	.0390	803.4	.6050	685.87	20.482	542.163	1.198	.057	.9370	.9876
7	-55.418	-.311	-58.521	3.111	.0369	812.5	.6161	698.31	20.644	543.387	1.198	.056	.9382	.9876
8	-55.768	-.303	-58.804	3.039	.0343	821.6	.6268	710.34	20.807	544.614	1.198	.056	.9405	.9877
9	-56.108	-.253	-59.134	2.990	.0337	830.6	.6369	721.70	20.967	545.847	1.198	.056	.9412	.9877
10	-56.444	-.153	-59.504	2.959	.0369	839.5	.6449	730.87	21.078	547.091	1.197	.057	.9397	.9877
11	-56.751	.044	-59.745	2.964	.0400	848.7	.6527	739.85	21.251	548.338	1.197	.057	.9377	.9877
12	-57.126	.348	-60.129	3.003	.0431	857.7	.6603	744.59	21.307	549.589	1.197	.057	.9288	.9876
13	-57.486	.744	-60.505	3.079	.0463	866.8	.6677	757.10	21.505	550.841	1.196	.057	.9138	.9874
14	-57.863	1.298	-61.039	3.190	.0494	875.1	.6749	765.49	21.649	552.091	1.196	.058	.9063	.9866
15	-58.254	1.724	-61.519	3.335	.0507	883.4	.6802	771.91	21.757	553.325	1.194	.058	.9014	.9861
16	-58.738	2.237	-62.255	3.517	.0678	895.0	.6837	776.91	21.840	555.033	1.193	.059	.8966	.9720
17	-59.234	2.914	-62.971	3.737	.0744	904.8	.6874	781.26	21.930	556.295	1.191	.060	.8905	.9592
18	-59.703	3.772	-63.754	3.990	.0831	914.9	.6936	788.75	22.072	557.815	1.189	.061	.8867	.9468
19	-60.324	4.402	-64.532	4.274	.0860	925.3	.6998	796.24	22.225	559.337	1.187	.061	.8826	.9347
20	-60.913	4.757	-65.496	4.532	.0931	936.0	.7060	803.72	22.383	560.861	1.185	.062	.8817	.9162
21	-61.548	4.918	-66.453	4.913	.0987	947.2	.7120	811.12	22.544	562.386	1.183	.062	.7977	.8825

STATION 2 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.193 ISEN. EFF.= .897 POLY. EFF.= .899 DELTA T ON T = .058

STATION 7 FLOW FIELD DESCRIPTION

STREAMLINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGENT	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.2520	+27.39	352.01	554.20	563.944	538.502	13.324	10.441	.4865	39.44	24.97	59.518	.0821
2	7.3375	+33.03	345.03	554.31	553.625	538.176	13.295	10.411	.4867	38.63	22.63	-79.445	.0821
3	7.4110	+37.13	340.33	554.33	553.407	537.953	13.273	10.391	.4863	37.95	20.43	-29.538	.0821
4	7.4840	+40.44	335.33	554.17	553.244	537.805	13.261	10.380	.4867	37.37	18.28	-20.674	.0821
5	7.5553	+43.16	332.19	553.95	553.121	537.711	13.251	10.375	.4865	36.86	16.20	-17.453	.0819
6	7.6244	+45.49	329.33	553.61	553.028	537.658	13.247	10.374	.4861	36.40	14.17	-16.196	.0819
7	7.6937	+47.62	326.72	553.31	552.946	537.612	13.247	10.378	.4858	35.98	12.22	-15.586	.0819
8	7.7707	+49.48	324.33	553.08	552.893	537.608	13.251	10.387	.4854	35.57	10.34	-15.305	.0819
9	7.8417	+50.87	322.50	552.93	552.905	537.696	13.259	10.399	.4846	35.27	8.52	-15.443	.0819
10	7.9130	+48.90	318.07	550.17	553.238	538.164	13.286	10.416	.4831	35.32	6.75	-15.859	.0819
11	7.9813	+46.58	317.43	549.19	553.559	538.668	13.295	10.436	.4811	35.42	5.07	-16.409	.0819
12	8.0577	+44.12	315.89	548.24	553.871	539.218	13.251	10.460	.4785	35.50	3.46	-24.048	.0819
13	8.1315	+40.52	315.34	548.17	554.175	539.826	13.245	10.489	.4753	35.66	1.85	-23.457	.0819
14	8.2065	+36.09	315.10	548.02	554.457	540.480	13.237	10.522	.4714	35.83	.31	-35.737	.0819
15	8.2832	+29.87	315.50	548.07	554.705	541.158	13.222	10.560	.4663	36.43	-1.19	-54.055	.0819
16	8.3623	+18.85	320.23	548.27	554.893	541.863	13.204	10.583	.4609	37.48	-2.67	-89.345	.0819
17	8.4441	+05.05	324.01	548.01	554.993	542.526	13.193	10.551	.4548	38.45	-4.03	-87.145	.0819
18	8.5284	-03.13	324.15	548.17	555.019	543.134	13.172	10.705	.4483	39.08	-5.35	-126.849	.0819
19	8.6194	-11.61	324.70	548.29	554.986	543.686	13.167	10.764	.4418	39.41	-6.83	-184.508	.0819
20	8.7075	-19.68	325.31	548.37	554.914	544.179	13.167	10.828	.4353	40.04	-8.82	-383.394	.0819
21	8.8019	-29.25	327.90	548.83	554.767	544.572	13.174	10.895	.4291	41.60	-9.37	∞	.0819

BLADE DATA

LOCATION	BLADE SECTION	ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	EFFICIENCY	EFFICIENCY
1	-48.428	1.512	-44.731	+.274	.0726	773.9	.3285	682.14	14.885	550.373	1.315	.007	.9999	.9997
2	-47.197	1.438	-43.368	+.1188	.0638	783.7	.3406	674.48	15.045	550.373	1.315	.007	.9999	.9997
3	-45.772	1.361	-41.978	+.1022	.0557	791.5	.3514	667.08	15.205	550.373	1.315	.007	.9999	.9997
4	-44.105	1.282	-40.435	+.0827	.0638	799.1	.3613	659.89	15.365	550.373	1.315	.007	.9999	.9997
5	-42.182	1.201	-38.752	+.0612	.0612	807.1	.3709	652.94	15.525	550.373	1.315	.007	.9999	.9997
6	-40.023	1.118	-36.954	+.0383	.0612	814.9	.3794	646.24	15.685	550.373	1.315	.007	.9999	.9997
7	-37.647	1.033	-35.063	+.0153	.0612	822.6	.3869	639.77	15.845	550.373	1.315	.007	.9999	.9997
8	-35.073	.946	-33.098	-.0078	.0612	830.3	.3962	633.54	16.005	550.373	1.315	.007	.9999	.9997
9	-32.316	.858	-31.077	-.0308	.0552	837.9	.4036	627.53	16.165	550.373	1.315	.007	.9999	.9997
10	-29.389	.768	-29.013	-.0538	.0552	845.2	.4099	621.74	16.325	550.373	1.315	.007	.9999	.9997
11	-26.304	.677	-26.912	-.0768	.0552	852.5	.4152	616.17	16.485	550.373	1.315	.007	.9999	.9997
12	-23.069	.584	-24.780	-.0998	.0552	859.7	.4195	610.80	16.645	550.373	1.315	.007	.9999	.9997
13	-19.693	.490	-22.630	-.1228	.0552	866.8	.4228	605.64	16.805	550.373	1.315	.007	.9999	.9997
14	-16.183	.395	-20.467	-.1458	.0552	873.8	.4252	600.68	16.965	550.373	1.315	.007	.9999	.9997
15	-12.548	.299	-18.287	-.1688	.0552	880.7	.4266	595.91	17.125	550.373	1.315	.007	.9999	.9997
16	-8.796	.202	-16.076	-.1918	.0552	887.5	.4271	591.34	17.285	550.373	1.315	.007	.9999	.9997
17	-4.934	.104	-13.822	-.2148	.0552	894.2	.4267	586.96	17.445	550.373	1.315	.007	.9999	.9997
18	-.968	.005	-11.512	-.2378	.0552	900.8	.4254	582.77	17.605	550.373	1.315	.007	.9999	.9997
19	3.092	-.095	-9.134	-.2608	.0552	907.3	.4232	578.77	17.765	550.373	1.315	.007	.9999	.9997
20	7.161	-.196	-6.672	-.2838	.0552	913.7	.4202	574.95	17.925	550.373	1.315	.007	.9999	.9997
21	11.361	-.298	-4.107	-.3068	.0552	920.0	.4163	571.31	18.085	550.373	1.315	.007	.9999	.9997

STATION 7 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.309 ISEN. EFF.= .895 POLY. EFF.= .899 DELTA T ON T = .000

STATION 8 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES AERO	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.4432	345.39	+33.30	719.42	550.283	537.661	21.262	16.251	.6313	41.88	10.78	-2.226	.0018
2	7.5503	337.74	+33.97	713.34	550.283	538.798	21.323	16.372	.6284	41.88	10.78	-2.226	.0018
3	7.6573	330.06	+34.63	706.97	550.283	539.944	21.384	16.495	.6254	41.88	10.78	-2.226	.0018
4	7.7644	322.35	+35.27	700.31	550.283	541.098	21.445	16.618	.6224	41.88	10.78	-2.226	.0018
5	7.8715	314.62	+35.90	693.38	550.283	542.260	21.507	16.743	.6193	41.88	10.78	-2.226	.0018
6	7.9786	306.86	+36.51	686.18	550.283	543.430	21.569	16.869	.6162	41.88	10.78	-2.226	.0018
7	8.0857	299.08	+37.11	678.72	550.283	544.608	21.631	16.996	.6131	41.88	10.78	-2.226	.0018
8	8.1928	291.27	+37.69	671.01	550.283	545.794	21.693	17.124	.6099	41.88	10.78	-2.226	.0018
9	8.3000	283.44	+38.26	663.04	550.283	546.988	21.756	17.254	.6067	41.88	10.78	-2.226	.0018
10	8.4071	275.59	+38.81	654.83	550.283	548.190	21.819	17.385	.6035	41.88	10.78	-2.226	.0018
11	8.5142	267.72	+39.35	646.38	550.283	549.400	21.882	17.517	.6002	41.88	10.78	-2.226	.0018
12	8.6213	259.83	+39.87	637.70	550.283	550.618	21.946	17.650	.5969	41.88	10.78	-2.226	.0018
13	8.7284	251.92	+40.38	628.79	550.283	551.844	22.010	17.785	.5936	41.88	10.78	-2.226	.0018
14	8.8356	243.99	+40.87	619.66	550.283	553.078	22.074	17.921	.5902	41.88	10.78	-2.226	.0018
15	8.9427	236.04	+41.35	610.31	550.283	554.320	22.139	18.058	.5868	41.88	10.78	-2.226	.0018
16	9.0498	228.07	+41.81	600.74	550.283	555.570	22.204	18.196	.5833	41.88	10.78	-2.226	.0018
17	9.1569	220.08	+42.25	590.96	550.283	556.828	22.269	18.336	.5798	41.88	10.78	-2.226	.0018
18	9.2640	212.07	+42.68	580.98	550.283	558.094	22.335	18.477	.5763	41.88	10.78	-2.226	.0018
19	9.3712	204.04	+43.08	570.80	550.283	559.368	22.401	18.619	.5727	41.88	10.78	-2.226	.0018
20	9.4783	195.99	+43.47	560.43	550.283	560.650	22.467	18.762	.5691	41.88	10.78	-2.226	.0018
21	9.7359	192.15	+43.29	534.38	550.283	562.492	21.934	17.928	.5454	41.88	10.78	-2.226	.0018

BLADE DATA

LOCATION	BLADE SECTION	BLADE ANGLES LEAN	FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-24.143	2.439	-30.017	5.777	.0374	735.0	.5584	535.72	20.082	571.134	1.447	.113	.9325	.9368
2	-24.385	2.593	-31.671	5.737	.0330	801.4	.5948	632.19	20.184	571.494	1.451	.120	.9348	.9374
3	-25.309	3.053	-32.516	5.702	.0339	807.2	.5919	623.54	20.287	572.266	1.456	.121	.9354	.9380
4	-26.030	2.115	-33.313	5.673	.0451	813.0	.5900	627.42	20.393	573.452	1.459	.122	.9367	.9400
5	-27.490	1.491	-34.112	5.815	.0815	819.0	.5491	627.39	20.500	574.254	1.463	.122	.9379	.9412
6	-28.270	1.110	-34.924	5.853	.0791	825.0	.5492	627.95	20.611	575.071	1.465	.123	.9391	.9422
7	-29.034	1.190	-35.713	5.874	.0747	831.1	.5506	629.86	20.730	575.105	1.468	.123	.9411	.9442
8	-29.754	1.506	-36.479	5.723	.0616	837.2	.5626	632.64	20.852	576.754	1.470	.123	.9430	.9460
9	-30.415	2.085	-37.222	5.807	.0672	843.4	.5646	635.19	20.967	577.021	1.471	.124	.9437	.9467
10	-31.033	2.893	-37.955	5.933	.0738	849.8	.5631	633.59	21.022	578.208	1.473	.125	.9371	.9385
11	-31.617	3.949	-38.712	7.115	.0803	856.2	.5519	623.25	21.030	579.421	1.474	.126	.9306	.9343
12	-32.171	4.711	-39.529	7.357	.0902	862.8	.5509	632.69	21.140	580.360	1.475	.127	.9239	.9280
13	-32.697	5.010	-40.351	7.654	.0939	869.5	.5499	637.07	21.200	581.328	1.476	.128	.9189	.9214
14	-33.198	7.439	-41.113	8.015	.0988	876.3	.5439	631.53	21.203	582.127	1.475	.129	.9180	.9148
15	-33.672	8.327	-41.913	8.438	.1134	883.0	.5434	626.09	21.250	583.364	1.475	.131	.8956	.8912
16	-34.122	10.336	-43.040	8.960	.1336	891.1	.5337	619.52	21.193	584.492	1.475	.134	.8747	.8814
17	-34.544	11.713	-44.028	9.462	.1558	899.3	.5227	604.52	21.133	585.581	1.476	.137	.8548	.8625
18	-34.918	12.712	-45.014	10.101	.1822	906.9	.5165	600.65	21.179	586.803	1.476	.140	.8448	.8531
19	-35.221	13.223	-45.939	10.775	.1754	915.3	.5138	596.19	21.217	588.074	1.476	.142	.8346	.8437
20	-35.443	13.327	-46.841	11.497	.1872	924.0	.5085	590.94	21.255	589.400	1.477	.145	.8244	.8340
21	-35.617	13.234	-47.912	12.295	.1979	933.1	.5023	584.77	21.244	590.793	1.477	.149	.8145	.8237

STATION 8 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.472 ISEN. EFF.= .900 POLY. EFF.= .905 DELTA T ON T = .130

STATION 9 FLOW FIELD DESCRIPTION

STREAMLINE	RADIUS	VELOCITIES RADIAL	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.5439	535.99	+20.33	619.79	601.559	545.813	23.952	17.043	.7147	49.18	10.63	-2.484	.0040
2	7.5917	527.78	+19.87	611.58	601.940	546.494	23.992	17.168	.7071	49.45	9.91	-3.176	.0044
3	7.6337	521.66	+18.19	605.05	601.841	547.899	23.977	17.279	.7003	49.61	9.17	-4.101	.0048
4	7.6 [illegible]	517.05	+09.46	7 [illegible]	601.537	[illegible]	23.981	17.306	.6991	49.69	8.41	-5.384	.0051
5	7.7321	513.09	+05.70	7 [illegible]	601.530	549.325	23.983	17.447	.6903	49.70	7.64	-6.922	.0054
6	7.7911	511.38	001.37	789.79	601.519	643.894	23.991	17.517	.6901	49.65	6.85	-8.169	.0057
7	7.8235	510.25	997.92	786.23	601.495	550.333	24.014	17.581	.6877	49.51	6.04	-12.564	.0059
8	7.8734	510.41	993.32	783.11	601.467	550.711	24.022	17.638	.6798	49.32	5.23	-18.411	.0062
9	7.9302	510.38	991.10	780.95	601.484	551.128	24.035	17.689	.6779	49.19	4.40	-31.331	.0063
10	7.9819	507.79	995.33	782.35	602.811	552.091	24.140	17.735	.6797	49.56	3.56	-88.349	.0064
11	8.0344	503.69	001.44	785.01	604.021	553.023	24.223	17.778	.6800	49.90	2.69	116.722	.0065
12	8.0838	502.53	002.37	784.47	604.870	553.945	24.293	17.818	.6790	50.16	1.80	36.078	.0065
13	8.1442	+97.35	000.25	779.52	605.155	554.871	24.203	17.854	.6741	50.36	-.89	21.937	.0066
14	8.2012	+92.45	998.97	774.73	605.443	555.777	24.151	17.886	.6694	50.53	-.04	16.142	.0066
15	8.2539	+63.64	002.34	772.32	606.685	557.330	24.129	17.917	.6564	51.25	-1.01	12.993	.0065
16	8.3212	+69.52	012.92	772.15	608.692	559.562	24.163	17.947	.6523	52.54	-2.03	11.118	.0065
17	8.3856	+55.23	023.32	771.89	611.129	561.841	24.159	17.979	.6534	53.96	-3.13	10.038	.0064
18	8.4528	+49.43	029.99	770.51	612.350	563.236	24.156	18.013	.6614	54.41	-4.32	9.436	.0063
19	8.5223	+40.37	030.10	769.07	613.693	564.725	24.162	18.050	.6593	55.01	-5.64	9.278	.0062
20	8.5949	+31.98	034.21	767.35	615.080	566.374	24.161	18.093	.6569	55.74	-7.13	10.415	.0059
21	8.6539	+20.01	039.15	764.80	616.630	568.301	24.173	18.149	.6533	56.69	-8.95	20.749	.0059

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	EFFICIENCY	EFFICIENCY
1	-12.647	10.941	-13.141	6.494	.1204	886.4	.4945	567.26	20.142	572.368	1.638	.168	.9368	.9882
2	-15.539	10.622	-16.031	6.666	.1111	871.1	.4858	557.48	20.327	572.368	1.638	.168	.9368	.9882
3	-18.438	10.316	-18.930	6.838	.1028	855.8	.4771	547.69	20.511	572.368	1.638	.168	.9368	.9882
4	-21.344	9.999	-21.836	7.009	.0955	840.5	.4684	537.90	20.695	572.368	1.638	.168	.9368	.9882
5	-24.256	9.653	-24.742	7.180	.0891	825.2	.4597	528.11	20.879	572.368	1.638	.168	.9368	.9882
6	-27.175	9.275	-27.649	7.350	.0836	809.9	.4510	518.32	21.063	572.368	1.638	.168	.9368	.9882
7	-30.100	8.863	-30.556	7.520	.0788	794.6	.4423	508.53	21.247	572.368	1.638	.168	.9368	.9882
8	-33.031	8.414	-33.463	7.690	.0747	779.3	.4336	498.74	21.431	572.368	1.638	.168	.9368	.9882
9	-35.968	7.926	-36.370	7.860	.0712	764.0	.4249	488.95	21.615	572.368	1.638	.168	.9368	.9882
10	-38.911	7.395	-39.277	8.030	.0683	748.7	.4162	479.16	21.799	572.368	1.638	.168	.9368	.9882
11	-41.860	6.818	-42.183	8.200	.0659	733.4	.4075	469.37	21.983	572.368	1.638	.168	.9368	.9882
12	-44.815	6.192	-45.088	8.370	.0641	718.1	.3988	459.58	22.167	572.368	1.638	.168	.9368	.9882
13	-47.776	5.512	-47.987	8.540	.0628	702.8	.3901	449.79	22.351	572.368	1.638	.168	.9368	.9882
14	-50.743	4.774	-50.877	8.710	.0620	687.5	.3814	440.00	22.535	572.368	1.638	.168	.9368	.9882
15	-53.716	3.975	-53.756	8.880	.0618	672.2	.3727	430.21	22.719	572.368	1.638	.168	.9368	.9882
16	-56.695	3.111	-56.621	9.050	.0621	656.9	.3640	420.42	22.903	572.368	1.638	.168	.9368	.9882
17	-59.680	2.176	-59.470	9.220	.0630	641.6	.3553	410.63	23.087	572.368	1.638	.168	.9368	.9882
18	-62.671	1.165	-62.302	9.390	.0646	626.3	.3466	400.84	23.271	572.368	1.638	.168	.9368	.9882
19	-65.668	.071	-65.116	9.560	.0669	611.0	.3379	391.05	23.455	572.368	1.638	.168	.9368	.9882
20	-68.671	-1.034	-67.907	9.730	.0701	595.7	.3292	381.26	23.639	572.368	1.638	.168	.9368	.9882
21	-71.679	-2.159	-70.672	9.900	.0742	580.4	.3205	371.47	23.823	572.368	1.638	.168	.9368	.9882

STATION 9 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.640 ISEN. EFF.= .900 POLY. EFF.= .907 DELTA T ON T = .168

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STATION 10 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES MNIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.5746	383.42	616.36	797.37	681.539	548.916	23.852	17.373	.8333	58.65	7.82	9.249	.0661
2	7.6221	385.77	614.52	795.83	681.539	549.116	23.852	17.373	.8333	58.65	7.82	9.249	.0661
3	7.6701	388.14	612.68	794.30	681.539	549.316	23.852	17.373	.8333	58.65	7.82	9.249	.0661
4	7.7186	390.54	610.84	792.77	681.539	549.516	23.852	17.373	.8333	58.65	7.82	9.249	.0661
5	7.7676	392.96	609.01	791.26	681.539	549.716	23.852	17.373	.8333	58.65	7.82	9.249	.0661
6	7.8171	395.41	607.17	789.75	681.539	549.916	23.852	17.373	.8333	58.65	7.82	9.249	.0661
7	7.8671	397.88	605.34	788.25	681.539	550.116	23.852	17.373	.8333	58.65	7.82	9.249	.0661
8	7.9176	400.38	603.51	786.76	681.539	550.316	23.852	17.373	.8333	58.65	7.82	9.249	.0661
9	7.9686	402.90	601.68	785.28	681.539	550.516	23.852	17.373	.8333	58.65	7.82	9.249	.0661
10	8.0201	405.45	599.85	783.80	681.539	550.716	23.852	17.373	.8333	58.65	7.82	9.249	.0661
11	8.0721	408.02	598.03	782.33	681.539	550.916	23.852	17.373	.8333	58.65	7.82	9.249	.0661
12	8.1246	410.62	596.21	780.87	681.539	551.116	23.852	17.373	.8333	58.65	7.82	9.249	.0661
13	8.1776	413.24	594.39	779.42	681.539	551.316	23.852	17.373	.8333	58.65	7.82	9.249	.0661
14	8.2311	415.89	592.57	777.97	681.539	551.516	23.852	17.373	.8333	58.65	7.82	9.249	.0661
15	8.2851	418.56	590.76	776.53	681.539	551.716	23.852	17.373	.8333	58.65	7.82	9.249	.0661
16	8.3396	421.26	588.95	775.09	681.539	551.916	23.852	17.373	.8333	58.65	7.82	9.249	.0661
17	8.3946	423.98	587.15	773.66	681.539	552.116	23.852	17.373	.8333	58.65	7.82	9.249	.0661
18	8.4501	426.73	585.35	772.24	681.539	552.316	23.852	17.373	.8333	58.65	7.82	9.249	.0661
19	8.5061	429.50	583.56	770.83	681.539	552.516	23.852	17.373	.8333	58.65	7.82	9.249	.0661
20	8.5626	432.30	581.77	769.42	681.539	552.716	23.852	17.373	.8333	58.65	7.82	9.249	.0661
21	8.6196	435.13	579.99	768.02	681.539	552.916	23.852	17.373	.8333	58.65	7.82	9.249	.0661

STATION 11 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGL	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES NMRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6133	324.30	514.03	608.24	601.533	547.471	21.952	17.214	.7035	49.71	9.06	26.367	.0046
2	7.6772	349.75	510.11	621.29	601.540	545.715	23.991	17.028	.7191	47.98	8.52	-147.864	.0039
3	7.7309	371.12	509.37	642.52	601.541	544.158	25.972	16.865	.7354	46.09	7.89	-27.083	.0034
4	7.7810	387.90	511.35	641.13	601.537	542.975	25.981	16.743	.7351	45.70	7.18	-17.894	.0030
5	7.8233	399.44	515.62	649.84	601.530	542.162	25.989	16.982	.7403	44.44	6.48	-14.242	.0027
6	7.8744	404.05	519.82	657.52	601.519	541.641	25.993	16.513	.7444	43.36	5.83	-13.208	.0025
7	7.9132	414.97	521.14	662.40	601.499	541.294	24.014	16.590	.7469	43.08	5.24	-12.905	.0024
8	7.9538	419.32	527.57	671.75	601.497	541.130	24.023	16.589	.7473	43.00	4.71	-13.321	.0023
9	8.0059	422.10	533.43	679.22	601.504	541.198	24.055	16.597	.7450	43.26	4.26	-14.369	.0022
10	8.0513	421.43	540.77	687.44	601.511	541.459	24.093	16.621	.7402	43.83	3.86	-15.905	.0021
11	8.0943	419.73	544.33	695.35	601.521	541.822	24.122	16.655	.7315	43.98	3.48	-17.813	.0020
12	8.1334	415.35	544.70	699.49	601.530	542.209	24.254	16.700	.7303	44.19	3.00	-21.524	.0019
13	8.1540	409.18	537.40	693.23	601.535	542.902	24.201	16.754	.7443	44.46	2.28	-27.743	.0018
14	8.2295	401.41	533.03	668.73	601.543	546.104	24.151	16.319	.7331	44.75	2.14	-41.096	.0017
15	8.2751	389.03	501.23	641.63	601.586	548.057	24.121	16.393	.7324	45.59	1.62	-80.974	.0016
16	8.3235	371.12	512.77	637.36	601.892	550.931	24.134	16.384	.7270	47.01	1.04	-57.209	.0015
17	8.3744	350.05	524.15	631.95	611.129	553.860	24.159	17.099	.7201	48.01	.28	167.030	.0014
18	8.4282	331.71	528.33	623.12	611.330	556.289	24.159	17.247	.7110	49.76	-.94	100.888	.0013
19	8.4857	308.28	532.81	611.57	613.053	559.150	24.157	17.433	.6993	51.33	-1.71	123.534	.0012
20	8.5439	+73.44	537.51	597.13	615.000	562.516	24.193	17.304	.6847	53.12	-2.94	-207.437	.0045
21	8.6139	+42.38	542.39	780.36	616.690	566.310	24.173	17.927	.6691	55.47	-4.27	-27.431	.0052

BLADE DATA

LOCAT -ION	BLADE SECTION	BLADE ANGLES LEAD	BLADE ANGLES TRAIL	FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	+8.817	-39.91	+0.210	-0.073	0.0000	0.0	.7036	809.24	23.952	601.239	1.030	.150	.9368	.9402
2	+7.333	-36.71	+0.099	-0.014	0.0000	0.0	.7191	821.22	23.992	601.240	1.031	.158	.9398	.9410
3	+7.233	-34.360	+0.182	-0.003	0.0000	0.0	.7271	832.02	24.022	601.241	1.031	.163	.9376	.9410
4	+6.729	-29.910	+0.000	-1.033	0.0000	0.0	.7353	841.13	23.981	601.237	1.032	.160	.9366	.9415
5	+6.315	-27.460	+0.182	-1.376	0.0000	0.0	.7409	848.89	23.949	601.230	1.032	.158	.9392	.9433
6	+5.903	-25.035	+0.358	-1.704	0.0000	0.0	.7444	850.52	23.938	601.219	1.033	.156	.9401	.9441
7	+5.544	-23.740	+0.532	-1.752	0.0000	0.0	.7466	852.60	24.014	601.492	1.034	.155	.9418	.9446
8	+5.340	-22.437	+0.535	-1.542	0.0000	0.0	.7476	853.76	24.023	601.467	1.035	.155	.9434	.9472
9	+5.000	-21.021	+0.351	-1.247	0.0000	0.0	.7480	854.25	24.056	601.304	1.037	.158	.9448	.9477
10	+4.838	-20.231	+0.351	-1.247	0.0000	0.0	.7502	857.41	24.140	602.311	1.043	.162	.9378	.9418
11	+4.650	-19.267	+0.170	-1.007	0.0000	0.0	.7518	859.44	24.226	604.021	1.048	.163	.9314	.9361
12	+4.622	-18.382	+0.170	-.930	0.0000	0.3	.7503	858.46	24.239	604.370	1.051	.164	.9248	.9299
13	+4.567	-17.234	+0.170	-.834	0.0001	0.0	.7446	853.23	24.230	605.155	1.047	.157	.9174	.9230
14	+4.382	-16.939	+0.170	-.927	0.0000	0.0	.7381	846.76	24.131	606.443	1.043	.157	.9188	.9161
15	+4.349	-17.015	+0.170	-.987	0.0000	0.0	.7324	841.69	24.129	606.386	1.042	.170	.9356	.9126
16	+4.119	-15.036	+0.170	-1.330	0.0000	0.0	.7270	837.04	24.134	606.392	1.043	.174	.8743	.8827
17	+4.078	-23.252	+0.211	-3.143	0.0000	0.0	.7201	831.99	24.159	606.429	1.043	.178	.8539	.8837
18	+6.235	-37.930	+0.763	-3.623	0.0000	0.0	.7110	823.15	24.193	606.350	1.044	.181	.8432	.8835
19	+7.420	-37.230	+0.224	-3.004	0.0000	0.0	.6993	811.67	24.193	606.054	1.045	.183	.8328	.8833
20	+8.944	+26.739	+0.115	+0.172	0.0000	0.0	.6847	797.13	24.193	605.080	1.044	.186	.8202	.8833
21	+9.314	+36.952	+0.450	+0.552	0.0000	0.0	.6691	780.36	24.176	606.080	1.044	.189	.8073	.8833

STATION 11 INTERSTAGE PERFORMANCE PRESSURE RATIO = 1.640 ISEN. EFF.= .900 POLY. EFF.= .907 DELTA T ON T = .168

STATION 12 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7150	748.88	402.71	898.38	601.539	535.832	23.814	15.873	.7833	32.81	5.21	-3.868	.0797
2	7.7648	739.49	424.33	877.39	601.548	537.335	23.852	16.072	.7713	34.61	5.44	-3.878	.0797
3	7.8139	730.09	445.93	856.41	601.557	538.837	23.889	16.274	.7593	36.41	5.67	-3.888	.0797
4	7.8631	720.69	467.53	835.43	601.566	540.340	23.927	16.477	.7473	38.21	5.90	-3.898	.0797
5	7.9124	711.30	489.13	814.46	601.575	541.843	23.965	16.681	.7353	40.01	6.13	-3.908	.0797
6	7.9616	701.90	510.73	793.50	601.584	543.346	24.003	16.886	.7233	41.81	6.36	-3.918	.0797
7	8.0109	692.50	532.33	772.54	601.593	544.849	24.041	17.092	.7113	43.61	6.59	-3.928	.0797
8	8.0601	683.10	553.93	751.59	601.602	546.352	24.079	17.299	.6993	45.41	6.82	-3.938	.0797
9	8.1094	673.70	575.53	730.64	601.611	547.855	24.117	17.507	.6873	47.21	7.05	-3.948	.0797
10	8.1586	664.30	597.13	709.70	601.620	549.358	24.155	17.716	.6753	49.01	7.28	-3.958	.0797
11	8.2079	654.90	618.73	688.76	601.629	550.861	24.193	17.926	.6633	50.81	7.51	-3.968	.0797
12	8.2571	645.50	640.33	667.83	601.638	552.364	24.231	18.137	.6513	52.61	7.74	-3.978	.0797
13	8.3064	636.10	661.93	646.91	601.647	553.867	24.269	18.349	.6393	54.41	7.97	-3.988	.0797
14	8.3556	626.70	683.53	625.99	601.656	555.370	24.307	18.562	.6273	56.21	8.20	-3.998	.0797
15	8.4049	617.30	705.13	605.08	601.665	556.873	24.345	18.776	.6153	58.01	8.43	-4.008	.0797
16	8.4541	607.90	726.73	584.18	601.674	558.376	24.383	18.991	.6033	59.81	8.66	-4.018	.0797
17	8.5034	598.50	748.33	563.28	601.683	559.879	24.421	19.207	.5913	61.61	8.89	-4.028	.0797
18	8.5526	589.10	769.93	542.39	601.692	561.382	24.459	19.424	.5793	63.41	9.12	-4.038	.0797
19	8.6019	579.70	791.53	521.50	601.701	562.885	24.497	19.642	.5673	65.21	9.35	-4.048	.0797
20	8.6511	570.30	813.13	500.62	601.710	564.388	24.535	19.861	.5553	67.01	9.58	-4.058	.0797
21	8.7004	560.90	834.73	479.74	601.719	565.891	24.573	20.081	.5433	68.81	9.81	-4.068	.0797

BLADE DATA

LOCATION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	31.358	-24.447	32.308	-.849	.0205	0.0	.7839	898.38	23.814	601.539	1.000	.000	.8854	.8934
2	31.174	-23.324	32.337	-.855	.0204	0.0	.7712	877.39	23.852	601.548	1.000	.000	.8854	.8934
3	30.989	-22.201	32.329	-.866	.0206	0.0	.7585	856.41	23.889	601.557	1.000	.000	.8854	.8934
4	30.805	-21.078	32.286	-.882	.0214	0.0	.7458	835.43	23.927	601.566	1.000	.000	.8854	.8934
5	30.621	-19.955	32.211	-.901	.0225	0.0	.7332	814.46	23.965	601.575	1.000	.000	.8854	.8934
6	30.436	-18.832	32.109	-.925	.0240	0.0	.7205	793.50	24.003	601.584	1.000	.000	.8854	.8934
7	30.252	-17.709	31.986	-.953	.0260	0.0	.7079	772.54	24.041	601.593	1.000	.000	.8854	.8934
8	30.068	-16.586	31.850	-.987	.0285	0.0	.6952	751.59	24.079	601.602	1.000	.000	.8854	.8934
9	29.883	-15.463	31.708	-1.026	.0316	0.0	.6826	730.64	24.117	601.611	1.000	.000	.8854	.8934
10	29.699	-14.340	31.569	-1.071	.0354	0.0	.6699	709.70	24.155	601.620	1.000	.000	.8854	.8934
11	29.515	-13.217	31.441	-1.123	.0400	0.0	.6573	688.76	24.193	601.629	1.000	.000	.8854	.8934
12	29.330	-12.094	31.337	-1.183	.0455	0.0	.6446	667.83	24.231	601.638	1.000	.000	.8854	.8934
13	29.146	-10.971	31.266	-1.253	.0521	0.0	.6320	646.91	24.269	601.647	1.000	.000	.8854	.8934
14	28.962	-9.848	31.234	-1.334	.0600	0.0	.6193	625.99	24.307	601.656	1.000	.000	.8854	.8934
15	28.777	-8.725	31.250	-1.429	.0696	0.0	.6067	605.08	24.345	601.665	1.000	.000	.8854	.8934
16	28.593	-7.602	31.324	-1.540	.0813	0.0	.5940	584.18	24.383	601.674	1.000	.000	.8854	.8934
17	28.409	-6.479	31.468	-1.671	.0956	0.0	.5814	563.28	24.421	601.683	1.000	.000	.8854	.8934
18	28.224	-5.356	31.695	-1.827	.1132	0.0	.5687	542.39	24.459	601.692	1.000	.000	.8854	.8934
19	28.040	-4.233	32.021	-2.013	.1353	0.0	.5561	521.50	24.497	601.701	1.000	.000	.8854	.8934
20	27.856	-3.110	32.468	-2.236	.1635	0.0	.5434	500.62	24.535	601.710	1.000	.000	.8854	.8934
21	27.671	-1.987	33.063	-2.506	.2000	0.0	.5308	479.74	24.573	601.719	1.000	.000	.8854	.8934
22	27.487	-.864	33.844	-2.833	.2484	0.0	.5181	458.85	24.611	601.728	1.000	.000	.8854	.8934
23	27.303	.259	34.857	-3.232	.3150	0.0	.5055	437.97	24.649	601.737	1.000	.000	.8854	.8934
24	27.118	1.382	36.180	-3.726	.4124	0.0	.4928	417.09	24.687	601.746	1.000	.000	.8854	.8934
25	26.934	2.505	37.940	-4.344	.5660	0.0	.4802	396.21	24.725	601.755	1.000	.000	.8854	.8934
26	26.750	3.628	40.364	-5.135	.8542	0.0	.4675	375.32	24.763	601.764	1.000	.000	.8854	.8934
27	26.565	4.751	43.857	-6.203	1.3879	0.0	.4549	354.44	24.801	601.773	1.000	.000	.8854	.8934
28	26.381	5.874	49.373	-7.900	2.5308	0.0	.4422	333.56	24.839	601.782	1.000	.000	.8854	.8934
29	26.197	6.997	60.000	-10.627	5.8000	0.0	.4296	312.67	24.877	601.791	1.000	.000	.8854	.8934
30	26.012	8.120	90.000	-40.627	100.0000	0.0	.4169	291.79	24.915	601.800	1.000	.000	.8854	.8934
31	25.828	9.243	120.000	-70.627	100.0000	0.0	.4043	270.91	24.953	601.809	1.000	.000	.8854	.8934
32	25.644	10.366	139.627	-90.253	100.0000	0.0	.3916	250.02	24.991	601.818	1.000	.000	.8854	.8934
33	25.459	11.489	152.627	-103.253	100.0000	0.0	.3790	229.14	25.029	601.827	1.000	.000	.8854	.8934
34	25.275	12.612	162.373	-112.998	100.0000	0.0	.3663	208.26	25.067	601.836	1.000	.000	.8854	.8934
35	25.091	13.735	170.000	-120.627	100.0000	0.0	.3537	187.37	25.105	601.845	1.000	.000	.8854	.8934

STATION 12 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.623 ISEN. EFF.= .879 POLY. EFF.= .887 DELTA T ON T = .188

STATION 13 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES PERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES NMIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7230	700.61	223.94	741.24	601.239	526.869	23.681	17.974	.6403	17.54	-2.62	-5.196	.0078
2	7.7574	690.15	213.31	730.09	601.540	557.910	23.672	18.126	.6299	17.54	-2.38	-5.241	.0078
3	7.7920	690.10	210.54	719.47	601.841	558.706	23.672	18.268	.6201	17.52	-2.14	-5.286	.0078
4	7.8230	679.49	213.54	709.40	601.937	559.484	23.665	18.398	.6108	17.50	-1.90	-5.329	.0078
5	7.8550	389.49	219.69	699.92	601.530	560.983	23.654	18.519	.6020	17.49	-1.66	-5.369	.0078
6	7.8844	659.47	207.48	690.37	601.519	552.861	23.624	18.622	.5937	17.46	-1.42	-5.407	.0078
7	7.9122	649.63	204.25	681.34	601.495	563.015	23.603	18.717	.5857	17.43	-1.18	-5.443	.0078
8	7.9424	643.75	201.39	674.51	601.467	563.521	23.597	18.793	.5787	17.37	-2.28	-5.476	.0078
9	8.0230	636.98	199.58	669.04	601.604	564.567	23.563	18.854	.5736	17.35	-2.09	-5.507	.0078
10	8.0830	637.23	199.58	667.73	602.811	565.921	23.593	18.883	.5718	17.27	-1.91	-5.536	.0078
11	8.1035	636.55	199.85	667.21	604.021	567.190	23.621	18.902	.5704	17.43	-1.72	-5.564	.0078
12	8.1521	634.69	199.72	665.56	604.870	568.223	23.624	18.917	.5688	17.46	-1.54	-5.590	.0078
13	8.1987	631.70	199.92	662.19	605.155	568.879	23.594	18.918	.5656	17.48	-1.36	-5.615	.0078
14	8.2421	627.33	199.34	659.42	605.443	569.470	23.556	18.907	.5630	17.48	-1.18	-5.639	.0078
15	8.2854	623.15	199.34	655.31	605.686	570.781	23.532	18.911	.5618	17.48	-1.00	-5.662	.0078
16	8.3355	620.09	199.95	659.99	578.992	572.894	23.542	19.011	.5613	17.48	-.82	-5.684	.0078
17	8.3851	623.00	202.03	661.31	511.129	574.398	23.537	19.080	.5619	17.48	-.63	-5.705	.0078
18	8.4413	630.21	203.42	663.23	612.350	575.970	23.527	18.976	.5633	17.48	-.45	-5.725	.0078
19	8.4801	632.37	210.31	666.70	613.653	576.870	23.523	18.935	.5657	17.48	-.27	-5.744	.0078
20	8.5235	636.39	215.47	672.18	615.000	577.714	23.513	18.873	.5693	16.79	-.04	-5.313	.0079
21	8.5739	641.19	223.36	679.08	616.680	578.545	23.589	18.789	.5752	16.23	.88	76.314	.0074

BLADE DATA

LOCATION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	INCIDENCE DEVIATION	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	16.234	-9.414	17.345	1.351	.0403	0.0	.6403	741.24	23.941	611.339	1.611	.160	.9166	.9181
2	16.192	-8.915	17.338	1.354	.0411	0.0	.6299	730.09	23.977	601.540	1.611	.160	.9166	.9181
3	16.154	-8.347	17.313	1.363	.0421	0.0	.6201	719.47	23.672	601.841	1.611	.160	.9166	.9181
4	16.136	-7.704	17.319	1.363	.0439	0.0	.6108	709.40	23.665	601.937	1.611	.160	.9166	.9181
5	16.108	-8.983	17.319	1.411	.0457	0.0	.6020	699.92	23.654	601.530	1.611	.160	.9166	.9181
6	16.082	-8.114	17.338	1.445	.0501	0.0	.5932	690.37	23.624	601.519	1.611	.160	.9166	.9181
7	16.044	-7.144	17.428	1.484	.0553	0.0	.5855	681.34	23.603	601.495	1.611	.160	.9166	.9181
8	15.987	-6.201	17.309	1.523	.0609	0.0	.5787	674.51	23.597	601.467	1.611	.160	.9166	.9181
9	15.795	-3.213	17.354	1.553	.0659	0.0	.5736	669.04	23.563	601.604	1.611	.160	.9166	.9181
10	15.730	-2.299	17.394	1.543	.0726	0.0	.5718	667.73	23.593	602.811	1.611	.160	.9166	.9181
11	15.706	-1.928	17.430	1.524	.0799	0.0	.5708	667.21	23.621	604.021	1.611	.160	.9166	.9181
12	15.613	-.771	17.463	1.650	.0933	0.0	.5638	665.56	23.624	604.870	1.611	.160	.9166	.9181
13	15.512	-.132	17.432	1.670	.0820	0.0	.5656	662.19	23.594	605.155	1.611	.160	.9166	.9181
14	15.422	.431	17.505	1.663	.0800	0.0	.5630	659.42	23.556	605.443	1.611	.160	.9166	.9181
15	15.365	1.188	17.548	1.686	.0737	0.0	.5618	655.31	23.532	605.686	1.611	.160	.9166	.9181
16	15.321	2.101	17.634	1.684	.0831	0.0	.5613	659.99	23.542	578.992	1.611	.160	.9166	.9181
17	16.111	3.135	17.791	1.688	.0859	0.0	.5619	661.31	23.537	611.129	1.611	.160	.9166	.9181
18	16.065	4.293	18.041	1.681	.0909	0.0	.5633	663.23	23.527	612.350	1.611	.160	.9166	.9181
19	16.037	5.223	18.332	1.666	.0949	0.0	.5657	666.70	23.523	613.653	1.611	.160	.9166	.9181
20	17.884	6.955	18.756	1.698	.1001	0.0	.5693	672.18	23.513	615.000	1.611	.160	.9166	.9181
21	17.519	8.942	19.229	1.719	.1060	0.0	.5752	679.08	23.589	616.680	1.611	.160	.9166	.9181

STATION 13 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.605 ISEN. EFF.= .857 POLY. EFF.= .867 DELTA T ON T = .166

STATION 14 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6720	387.72	63.93	591.13	601.539	572.627	23.547	19.809	.5033	6.18	-4.29	[illegible]	[illegible]
2	7.7132	385.38	52.24	590.03	601.540	572.733	23.531	19.809	.5024	5.95	[illegible]	[illegible]	[illegible]
3	7.7431	383.50	60.34	588.36	601.541	572.845	23.514	19.808	.5013	5.96	[illegible]	[illegible]	[illegible]
4	7.7855	384.53	53.84	587.74	601.537	572.959	23.495	19.807	.5003	5.84	[illegible]	[illegible]	[illegible]
5	7.8293	383.41	53.91	586.38	601.530	573.084	23.473	19.805	.4990	5.77	[illegible]	[illegible]	[illegible]
6	7.8736	380.30	57.35	583.39	601.519	573.364	23.431	19.803	.4964	5.70	[illegible]	[illegible]	[illegible]
7	7.9123	377.99	57.05	580.48	601.497	573.627	23.387	19.800	.4937	5.66	[illegible]	[illegible]	[illegible]
8	7.9562	374.34	55.24	577.23	601.497	573.896	23.361	19.797	.4910	5.59	[illegible]	[illegible]	[illegible]
9	8.0034	372.70	55.67	575.40	601.604	574.215	23.313	19.794	.4892	5.55	[illegible]	[illegible]	[illegible]
10	8.0434	373.93	55.47	576.93	602.811	575.315	23.313	19.790	.4897	5.52	[illegible]	[illegible]	[illegible]
11	8.0912	375.02	55.33	577.68	604.021	576.416	23.315	19.785	.4902	5.50	[illegible]	[illegible]	[illegible]
12	8.1377	375.16	55.31	577.32	604.870	577.254	23.306	19.780	.4900	5.49	[illegible]	[illegible]	[illegible]
13	8.1850	374.63	55.24	577.27	605.155	577.390	23.290	19.774	.4894	5.49	[illegible]	[illegible]	[illegible]
14	8.2330	374.20	55.25	576.86	605.453	577.918	23.273	19.768	.4883	5.50	[illegible]	[illegible]	[illegible]
15	8.2818	374.92	55.65	577.53	606.686	579.083	23.261	19.761	.4890	5.51	[illegible]	[illegible]	[illegible]
16	8.3313	375.46	53.81	578.16	608.892	581.246	23.254	19.755	.4890	5.56	[illegible]	[illegible]	[illegible]
17	8.3816	375.53	53.40	573.23	611.129	583.446	23.237	19.747	.4881	5.59	[illegible]	[illegible]	[illegible]
18	8.4323	375.47	57.34	573.31	612.350	584.694	23.218	19.741	.4873	5.69	[illegible]	[illegible]	[illegible]
19	8.4843	375.01	58.82	578.61	613.693	585.970	23.207	19.735	.4870	5.83	[illegible]	[illegible]	[illegible]
20	8.5360	379.02	61.61	579.83	615.080	587.375	23.193	19.729	.4867	6.05	[illegible]	-7[illegible]	[illegible]
21	8.5900	375.43	53.50	576.98	616.680	588.965	23.181	19.724	.4861	6.33	1.06	-610.607	[illegible]

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	3.968	-1.034	6.183	2.218	.0601	0.0	.5033	591.13	23.547	601.539	1.602	.188	[illegible]	[illegible]
2	[illegible]	-.995	6.035	2.223	.0622	0.0	.5024	590.03	23.531	601.540	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	-.921	5.939	2.240	.0646	0.0	.5013	588.96	23.514	601.541	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	-.836	5.344	2.272	.0670	0.0	.5003	587.74	23.496	601.537	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	-.743	2.766	2.316	.0701	0.0	.4990	586.38	23.473	601.530	1.597	[illegible]	[illegible]	[illegible]
6	[illegible]	-.661	5.639	2.389	.0767	0.0	.4964	583.38	23.431	601.519	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	-.584	5.941	2.428	.0844	0.0	.4937	580.40	23.387	601.497	[illegible]	[illegible]	[illegible]	[illegible]
8	3.100	-.518	5.531	2.491	.0925	0.0	.4910	577.29	23.361	601.497	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	-.438	[illegible]	2.554	.0998	0.0	.4892	575.40	23.310	601.604	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	2.614	[illegible]	0.0	.4897	576.53	23.313	602.811	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	2.666	[illegible]	0.0	.4902	577.66	23.310	604.021	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	2.711	[illegible]	0.0	.4900	577.62	23.306	604.870	[illegible]	[illegible]	[illegible]	[illegible]
13	2.750	[illegible]	5.491	2.741	.1228	0.0	.4894	577.27	23.290	605.155	[illegible]	[illegible]	[illegible]	[illegible]
14	2.746	[illegible]	3.498	2.752	.1195	0.0	.4889	576.86	23.273	605.453	[illegible]	[illegible]	[illegible]	[illegible]
15	2.765	[illegible]	3.310	2.769	.1190	0.0	.4898	577.59	23.260	606.686	[illegible]	[illegible]	[illegible]	[illegible]
16	2.813	-.256	3.340	2.727	.1238	0.0	.4866	578.16	23.254	608.892	[illegible]	.176	[illegible]	[illegible]
17	[illegible]	-.423	3.594	2.718	.1295	0.0	.4881	578.69	23.237	611.129	[illegible]	.178	[illegible]	[illegible]
18	2.975	-.632	3.637	2.708	.1357	0.0	.4873	578.31	23.218	612.350	[illegible]	[illegible]	[illegible]	[illegible]
19	3.109	-.834	5.334	2.725	.1419	0.0	.4870	578.61	23.207	613.693	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	-.975	6.058	2.762	.1497	0.0	.4867	578.85	23.195	615.080	1.579	[illegible]	[illegible]	[illegible]
21	3.508	-1.033	6.326	2.818	.1594	0.0	.4861	578.98	23.180	616.680	1.577	[illegible]	.7345	[illegible]

STATION 14 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.587 ISEN. EFF.= .836 POLY. EFF.= .846 DELTA T ON T = .188

STATION 13 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGT	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC HEIGHT
1	7.9466	366.11	0.00	366.11	601.539	575.307	23.414	20.322	.4781	0.00	-1.04	10.024	.0000
2	7.9773	363.07	0.00	363.07	601.540	575.313	23.422	20.329	.4782	0.00	-1.04	10.054	.0000
3	7.7204	362.33	0.00	362.33	601.541	575.326	23.439	20.345	.4779	0.00	-1.04	10.084	.0000
4	7.7625	362.68	0.00	362.68	601.543	575.344	23.462	20.367	.4775	0.00	-1.04	10.114	.0000
5	7.8045	362.22	0.00	362.22	601.545	575.361	23.484	20.388	.4772	0.00	-1.04	10.144	.0000
6	7.8478	362.37	0.00	362.37	601.547	575.378	23.506	20.409	.4768	0.00	-1.04	10.174	.0000
7	7.8918	362.26	0.00	362.26	601.549	575.395	23.528	20.430	.4765	0.00	-1.04	10.204	.0000
8	7.9371	362.48	0.00	362.48	601.551	575.413	23.551	20.452	.4761	0.00	-1.04	10.234	.0000
9	7.9834	362.41	0.00	362.41	601.553	575.430	23.573	20.473	.4757	0.00	-1.04	10.264	.0000
10	8.0308	362.02	0.00	362.02	601.555	575.447	23.595	20.494	.4754	0.00	-1.04	10.294	.0000
11	8.0793	362.02	0.00	362.02	601.557	575.464	23.617	20.515	.4750	0.00	-1.04	10.324	.0000
12	8.1289	362.07	0.00	362.07	601.559	575.481	23.639	20.536	.4746	0.00	-1.04	10.354	.0000
13	8.1797	362.01	0.00	362.01	601.561	575.498	23.661	20.557	.4743	0.00	-1.04	10.384	.0000
14	8.2317	362.04	0.00	362.04	601.563	575.515	23.683	20.578	.4739	0.00	-1.04	10.414	.0000
15	8.2849	362.00	0.00	362.00	601.565	575.532	23.705	20.599	.4735	0.00	-1.04	10.444	.0000
16	8.3393	362.00	0.00	362.00	601.567	575.549	23.727	20.620	.4732	0.00	-1.04	10.474	.0000
17	8.3814	350.77	0.00	350.77	601.569	576.045	23.749	20.641	.4728	0.00	-1.04	10.504	.0000
18	8.4241	348.54	0.00	348.54	601.570	576.330	23.771	20.662	.4724	0.00	-1.04	10.534	.0000
19	8.4631	347.67	0.00	347.67	601.572	576.653	23.793	20.683	.4720	0.00	-1.04	10.564	.0000
20	8.5044	346.68	0.00	346.68	601.574	576.988	23.815	20.704	.4716	0.00	-1.04	10.594	.0000
21	8.6030	343.14	0.00	343.14	601.576	577.860	23.871	20.757	.4705	0.00	-1.04	10.668	.0000

BLADE DATA

LOCATION	BLADE SECTION	BLADE ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-7.239	.020	8.300	7.239	.0790	0.0	.4781	366.11	23.414	601.539	1.593	.168	.8825	.8844
2	-7.396	.020	8.000	7.396	.0832	0.0	.4782	363.07	23.422	601.540	1.593	.168	.8825	.8844
3	-7.393	.019	8.000	7.393	.0869	0.0	.4779	362.33	23.439	601.541	1.593	.168	.8825	.8844
4	-7.732	.018	8.000	7.732	.0907	0.0	.4775	362.68	23.462	601.543	1.593	.168	.8825	.8844
5	-7.902	.016	8.000	7.902	.0947	0.0	.4772	362.22	23.484	601.545	1.593	.168	.8825	.8844
6	-8.069	.015	8.000	8.069	.1037	0.0	.4768	362.37	23.506	601.547	1.593	.168	.8825	.8844
7	-8.233	.014	8.000	8.233	.1137	0.0	.4765	362.26	23.528	601.549	1.593	.168	.8825	.8844
8	-8.396	.013	8.000	8.396	.1243	0.0	.4761	362.48	23.551	601.551	1.593	.168	.8825	.8844
9	-8.558	.012	8.000	8.558	.1354	0.0	.4757	362.41	23.573	601.553	1.593	.168	.8825	.8844
10	-8.719	.010	8.000	8.719	.1471	0.0	.4754	362.02	23.595	601.555	1.593	.168	.8825	.8844
11	-8.880	.009	8.000	8.880	.1594	0.0	.4750	362.02	23.617	601.557	1.593	.168	.8825	.8844
12	-9.040	.008	8.000	9.040	.1723	0.0	.4746	362.07	23.639	601.559	1.593	.168	.8825	.8844
13	-9.200	.007	8.000	9.200	.1860	0.0	.4743	362.01	23.661	601.561	1.593	.168	.8825	.8844
14	-9.360	.006	8.000	9.360	.2004	0.0	.4739	362.04	23.683	601.563	1.593	.168	.8825	.8844
15	-9.520	.005	8.000	9.520	.2157	0.0	.4735	362.00	23.705	601.565	1.593	.168	.8825	.8844
16	-9.680	.004	8.000	9.680	.2320	0.0	.4732	362.00	23.727	601.567	1.593	.168	.8825	.8844
17	-9.840	.003	8.000	9.840	.2493	0.0	.4728	350.77	23.749	601.569	1.593	.168	.8825	.8844
18	-9.999	.002	8.000	9.999	.2678	0.0	.4724	348.54	23.771	601.570	1.593	.168	.8825	.8844
19	-10.159	.001	8.000	10.159	.2875	0.0	.4720	347.67	23.793	601.572	1.593	.168	.8825	.8844
20	-10.318	.000	8.000	10.318	.3086	0.0	.4716	346.68	23.815	601.574	1.593	.168	.8825	.8844
21	-10.813	-.004	8.000	10.813	.3760	0.0	.4705	343.14	23.871	601.576	1.593	.168	.8825	.8844

STATION 13 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.593 ISEN. EFF.= .883 POLY. EFF.= .884 DELTA T ON T = .168

STATION 15 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	580.18	0.00	580.18	601.539	573.691	23.41+	19.826	.4935	0.00	0.00	0.000	.0930
2	7.6731	578.13	0.00	578.13	601.540	573.830	23.385	19.826	.4917	0.00	-.03	1856.[illegible]	.0929
3	7.7132	576.04	0.00	576.04	601.541	574.090	23.353	19.825	.4898	0.00	-.06	5[illegible]	.0929
4	7.7601	573.90	0.00	573.90	601.537	574.290	23.327	19.825	.4879	0.00	-.08	4[illegible]	.0928
5	7.8020	571.61	0.00	571.61	601.530	574.500	23.295	19.824	.4859	0.00	-.10	3[illegible]	.0928
6	7.8448	567.04	0.00	567.04	601.519	574.920	23.233	19.823	.4819	0.00	-.12	2[illegible]	.0927
7	7.8838	562.31	0.00	562.31	601.495	575.333	23.169	19.822	.4778	0.00	-.13	2[illegible]	.0926
8	7.9339	557.39	0.00	557.39	601.467	575.765	23.104	19.821	.4733	0.00	-.14	2[illegible]	.0926
9	7.9801	553.90	0.00	553.90	601.604	576.224	23.057	19.820	.4701	0.00	-.14	2[illegible]	.0925
10	8.0273	552.81	0.00	552.81	602.811	577.532	23.034	19.819	.4697	0.00	-.14	2[illegible]	.0923
11	8.0753	551.68	0.00	551.68	604.021	578.846	23.011	19.817	.4672	0.00	-.14	2[illegible]	.0921
12	8.1242	550.47	0.00	550.47	604.870	579.806	22.[illegible]90	19.816	.4658	0.00	-.13	2[illegible]	.0919
13	8.1737	550.47	0.00	550.47	605.155	580.032	22.987	19.815	.4657	0.00	-.12	2[illegible]	.0919
14	8.2243	550.45	0.00	550.45	605.443	580.382	22.984	19.814	.4655	0.00	-.11	2[illegible]	.0918
15	8.2734	550.85	0.00	550.85	606.686	581.590	22.981	19.813	.4654	0.00	-.09	3[illegible]	.0916
16	8.3273	549.88	0.00	549.88	608.892	583.857	22.955	19.813	.4637	0.00	-.08	4[illegible]	.0913
17	8.3801	548.67	0.00	548.67	611.129	586.236	22.929	19.812	.4617	0.00	-.06	6[illegible]	.0909
18	8.4339	546.93	0.00	546.93	612.350	587.615	22.838	19.812	.4597	0.00	-.04	8[illegible]	.0905
19	8.4835	546.22	0.00	546.22	613.653	588.984	22.881	19.811	.4586	0.00	-.03	1[illegible]	.0903
20	8.5438	545.66	0.00	545.66	615.080	590.463	22.865	19.811	.4576	0.00	-.01	3035.611	.0900
21	8.6000	545.14	0.00	545.14	616.680	592.112	22.851	19.811	.4565	0.00	0.00	0.000	.0898

STATION 17 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	581.44	0.00	581.44	601.539	573.570	23.41+	19.811	.4946	0.00	0.00	0.000	.0929
2	7.6731	579.38	0.00	579.38	601.540	573.770	23.385	19.811	.4928	0.00	-.00	0.000	.0929
3	7.7191	577.26	0.00	577.26	601.541	573.973	23.356	19.811	.4909	0.00	-.00	0.000	.0929
4	7.7600	575.08	0.00	575.08	601.537	574.178	23.327	19.811	.4890	0.00	-.00	0.000	.0928
5	7.8018	572.73	0.00	572.73	601.530	574.394	23.295	19.811	.4869	0.00	-.00	0.000	.0928
6	7.8447	568.10	0.00	568.10	601.519	574.821	23.233	19.811	.4828	0.00	-.01	0.000	.0927
7	7.8886	563.28	0.00	563.28	601.495	575.247	23.169	19.811	.4785	0.00	-.01	0.000	.0926
8	7.9337	558.28	0.00	558.28	601.467	575.683	23.104	19.811	.4741	0.00	-.01	0.000	.0926
9	7.9799	554.68	0.00	554.68	601.604	576.152	23.057	19.811	.4708	0.00	-.01	0.000	.0925
10	8.0270	553.49	0.00	553.49	602.811	577.470	23.034	19.811	.4693	0.00	-.01	0.000	.0923
11	8.0751	552.26	0.00	552.26	604.021	578.794	23.011	19.811	.4677	0.00	-.01	0.000	.0921
12	8.1240	550.95	0.00	550.95	604.870	579.763	22.990	19.811	.4662	0.00	-.01	0.000	.0919
13	8.1737	550.84	0.00	550.84	605.155	580.058	22.987	19.811	.4660	0.00	-.01	0.000	.0919
14	8.2241	550.74	0.00	550.74	605.443	580.356	22.984	19.811	.4659	0.00	-.01	0.000	.0918
15	8.2732	551.05	0.00	551.05	606.686	581.570	22.981	19.811	.4656	0.00	-.01	0.000	.0916
16	8.3271	550.02	0.00	550.02	608.892	583.874	22.955	19.811	.4638	0.00	-.01	0.000	.0913
17	8.3800	548.76	0.00	548.76	611.129	586.228	22.929	19.811	.4618	0.00	-.01	0.000	.0909
18	8.4337	546.98	0.00	546.98	612.350	587.611	22.838	19.811	.4598	0.00	-.00	0.000	.0907
19	8.4834	546.24	0.00	546.24	613.653	588.982	22.881	19.811	.4586	0.00	-.00	0.000	.0905
20	8.5438	545.56	0.00	545.56	615.080	590.463	22.865	19.811	.4576	0.00	-.00	0.000	.0903
21	8.6000	545.14	0.00	545.14	616.680	592.112	22.851	19.811	.4565	0.00	0.00	0.000	.0900

ROTOR PERFORMANCE

LOCATION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCIDENCE	DEVIATION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	6.7500	7.3439	.6884	9.383	6.434	.1204	.4242	.4349	.5468	.7403	.7693	-60.937	-12.647	6.878	10.991
2	6.8647	7.4937	.6935	9.146	6.666	.1151	.4427	.4523	.5527	.7223	.7905	-61.313	-13.539	6.236	10.626
3	6.9785	7.6357	.7109	8.911	6.905	.1102	.4578	.4692	.5535	.7051	.7916	-61.675	-14.428	6.372	10.112
4	7.0912	7.7849	.7217	8.695	6.930	.1056	.4700	.4775	.5535	.6961	.7425	-62.010	-15.381	6.418	9.367
5	7.2031	7.7321	.7329	8.511	7.009	.1013	.4801	.4865	.5503	.6861	.7334	-62.309	-16.188	6.465	8.455
6	7.3142	7.7603	.7345	8.348	7.058	.0970	.4881	.4937	.5457	.6760	.7243	-62.587	-17.067	6.495	7.693
7	7.4245	7.4239	.7242	8.197	7.13	.0918	.4939	.4986	.5398	.6720	.7189	-62.859	-17.893	6.511	6.916
8	7.5341	7.1794	.7043	8.053	7.245	.0869	.4982	.5021	.5330	.6673	.7057	-63.135	-18.639	6.511	6.116
9	7.6433	7.3602	.7731	7.917	7.323	.0839	.5029	.5060	.5294	.6625	.6979	-63.418	-19.386	6.441	6.045
10	7.7522	7.9819	.7355	7.739	6.913	.0921	.5127	.5182	.5173	.3517	.6989	-63.714	-19.985	6.320	6.045
11	7.8609	8.0348	.7353	7.667	8.501	.1000	.5272	.5291	.5087	.3413	.6937	-64.026	-20.446	6.765	6.315
12	7.9693	8.0805	.7154	7.531	9.294	.1078	.5371	.5383	.4997	.6325	.6972	-64.358	-20.933	.538	6.315
13	8.0791	8.1442	.7157	7.439	7.340	.1158	.5450	.5457	.4902	.5240	.6901	-64.713	-21.372	-.818	6.315
14	8.1911	8.2012	.7352	7.332	7.573	.1235	.5518	.5520	.4802	.5103	.6828	-65.093	-21.761	-1.357	6.315
15	8.2999	8.2599	.7393	7.225	7.390	.1417	.5571	.5567	.4700	.2017	.6828	-65.501	-22.080	-1.357	6.315
16	8.4120	8.3212	.7450	7.119	8.115	.1695	.5910	.5901	.4596	.3794	.6836	-65.938	-22.314	-1.357	6.315
17	8.5255	8.3826	.7547	7.016	8.434	.1990	.6143	.6129	.4438	.3583	.6959	-66.399	-22.435	-1.357	6.315
18	8.6400	8.4528	.7844	8.922	9.226	.2078	.6241	.6223	.4300	.5481	.6340	-66.874	-22.435	-1.357	6.315
19	8.7582	8.5223	.8043	8.844	10.220	.2199	.6343	.6320	.4303	.3374	.6922	-67.352	-22.207	-1.357	6.315
20	8.8775	8.5944	.8343	8.793	11.443	.2327	.6456	.6430	.4212	.5255	.6909	-67.832	-21.826	-1.357	6.315
21	9.0000	8.6639	.8545	8.732	12.952	.2468	.6594	.6564	.4134	.5112	.6902	-68.316	-21.371	-1.357	6.315

STATOR PERFORMANCE

LOCATION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCIDENCE	DEVIATION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	7.0199	7.0400	.7959	-.693	7.219	.0749	.4615	.4314	.4158	.0967	0.0000	48.817	-7.239	-39.741	.000
2	7.1772	7.1739	.7151	-.014	7.336	.0832	.4770	.4479	.4284	.0959	0.0000	47.923	-7.239	-39.741	.000
3	7.3309	7.3209	.7271	-.063	7.503	.0886	.4908	.4609	.4377	.0781	0.0000	47.055	-7.239	-39.741	.000
4	7.4810	7.4828	.7353	-1.033	7.732	.0903	.5019	.4721	.4435	.0630	0.0000	46.729	-7.239	-39.741	.000
5	7.6295	7.6043	.7409	-1.372	7.932	.0947	.5106	.4808	.4431	.0633	0.0000	46.315	-7.902	-39.741	.000
6	7.7774	7.7476	.7444	-1.634	8.059	.1036	.5201	.4904	.4464	.0577	0.0000	45.966	-8.235	-39.741	.000
7	7.9232	7.8913	.7456	-1.752	8.235	.1137	.5284	.4987	.4495	.0523	0.0000	45.644	-8.235	-39.741	.000
8	8.0633	7.9371	.7470	-1.842	8.338	.1243	.5358	.5061	.4514	.0476	0.0000	45.348	-8.235	-39.741	.000
9	8.0869	7.9834	.7480	-1.803	8.540	.1330	.5410	.5114	.4568	.0449	0.0000	45.086	-8.235	-39.741	.000
10	8.0505	8.0302	.7502	-1.247	8.586	.1471	.5467	.5170	.4579	.0408	0.0000	44.838	-8.235	-39.741	.000
11	8.0443	8.0788	.7215	-.800	8.807	.1604	.5516	.5218	.4597	.0409	0.0000	44.622	-8.235	-39.741	.000
12	8.1384	8.1272	.7503	-.436	8.909	.1678	.5535	.5236	.4619	.0412	0.0000	44.444	-8.235	-39.741	.000
13	8.1830	8.1757	.7445	-.234	8.930	.1639	.5495	.5196	.4603	.0464	0.0000	44.675	-8.235	-39.741	.000
14	8.2289	8.2297	.7381	-.037	9.043	.1532	.5445	.5147	.4662	.0521	0.0000	44.802	-8.235	-39.741	.000
15	8.2751	8.2777	.7334	.035	9.052	.1567	.5412	.5116	.4698	.0556	0.0000	44.930	-8.235	-39.741	.000
16	8.3235	8.3290	.7293	1.939	9.059	.1955	.5415	.5119	.3921	.0590	0.0000	45.118	-8.235	-39.741	.000
17	8.3744	8.3814	.7201	3.133	9.060	.2401	.5400	.5104	.3813	.0629	0.0000	45.278	-8.235	-39.741	.000
18	8.4282	8.4349	.7110	3.520	9.034	.2821	.5440	.5142	.3658	.0667	0.0000	45.437	-8.235	-39.741	.000
19	8.4857	8.4891	.6993	3.693	9.125	.3108	.5435	.5137	.3548	.0748	0.0000	45.596	-8.235	-39.741	.000
20	8.5484	8.5441	.6947	4.172	9.139	.2012	.5094	.4809	.3929	.0838	0.0000	45.814	-8.235	-39.741	.000
21	8.6193	8.6000	.6991	4.652	9.213	.2120	.4924	.4927	.3019	.0985	0.0000	50.814	-9.213	-39.741	.000

WAKE AND BOUNDARY LAYER BLOCKAGES (PERCENT)

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
WID BLOCKAGE	0.1	0.0	0.0	0.0	1.0	2.0	3.1	4.1	5.1	6.0	6.0	5.0	7.0	8.0	12.3	13.0	13.0
DIST FACTOR	1.0	1.0	1.0	1.0	.0	.0	.0	.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
INT BLOCKAGE	0.0	0.0	0.0	0.0	1.0	2.0	3.2	4.2	5.2	5.0	5.0	5.0	7.0	8.0	12.3	13.0	13.0

SUMMARY POINT NO. 1 THE CALCULATION IS CONVERGED PASS 25

TEST POINT TITLE = 212051715560

FLOW = 15.81 SPEED = 12239.2 PRESSURE RATIO = 1.569 ISENTHOPIC EFFY = .8138 POLYTROPIC EFFY = .8252 DEL T/T = .1685

SUMMARY OF 1 TEST POINTS

POINT NO.	TEST POINT TITLE	STATUS OF CALCULATION	FLOW RATE LBS/SEC	SPEED RPM	ROTOR PRESSURE RATIO	ROTOR ISEN EFFY	STAGE PRESSURE RATIO	STAGE ISEN EFFY	FLOW/CHOKE FLOW
1	212051715560	CONVERGED AFTER 25 PASSES	15.888	12239.2	1.648	.988	1.569	.814	.39347

4. TEST POINT 212070815970 (70%)

STATION 1 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	4.0339	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	28.93	0.000	.0747
2	6.3746	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	19.71	0.000	.0747
3	6.5911	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	18.47	0.000	.0747
4	6.7974	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	17.25	0.000	.0747
5	6.9922	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	16.08	0.000	.0747
6	7.1759	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	14.97	0.000	.0747
7	7.3485	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	13.92	0.000	.0747
8	7.5100	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	12.94	0.000	.0747
9	7.6605	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	12.04	0.000	.0747
10	7.8000	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	11.21	0.000	.0747
11	7.9286	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	10.46	0.000	.0747
12	8.0463	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	9.80	0.000	.0747
13	8.1531	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	9.22	0.000	.0747
14	8.2490	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	8.73	0.000	.0747
15	8.3341	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	8.32	0.000	.0747
16	8.4083	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	8.00	0.000	.0747
17	8.4716	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	7.76	0.000	.0747
18	8.5241	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	7.61	0.000	.0747
19	8.5657	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	7.54	0.000	.0747
20	8.5965	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	7.55	0.000	.0747
21	8.6165	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	7.64	0.000	.0747
22	8.6257	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	7.81	0.000	.0747
23	8.6242	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	8.06	0.000	.0747
24	8.6120	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	8.40	0.000	.0747
25	8.5890	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	8.84	0.000	.0747
26	8.5553	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	9.38	0.000	.0747
27	8.5109	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	10.04	0.000	.0747
28	8.4558	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	10.83	0.000	.0747
29	8.3900	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	11.77	0.000	.0747
30	8.3135	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	12.89	0.000	.0747
31	8.2263	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	14.21	0.000	.0747
32	8.1284	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	15.77	0.000	.0747
33	8.0198	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	17.62	0.000	.0747
34	7.9006	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	19.85	0.000	.0747
35	7.7708	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	22.61	0.000	.0747
36	7.6304	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	26.14	0.000	.0747
37	7.4795	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	30.85	0.000	.0747
38	7.3180	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	37.58	0.000	.0747
39	7.1460	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	48.39	0.000	.0747
40	6.9634	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	68.19	0.000	.0747
41	6.7703	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	120.53	0.000	.0747
42	6.5667	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	0.00	0.000	.0747
43	6.3526	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	0.00	0.000	.0747
44	6.1280	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	0.00	0.000	.0747
45	5.8930	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	0.00	0.000	.0747
46	5.6475	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	0.00	0.000	.0747
47	5.3916	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	0.00	0.000	.0747
48	5.1253	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	0.00	0.000	.0747
49	4.8486	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	0.00	0.000	.0747
50	4.5615	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	0.00	0.000	.0747
51	4.2640	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	0.00	0.000	.0747
52	3.9560	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	0.00	0.000	.0747
53	3.6377	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	0.00	0.000	.0747
54	3.3089	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	0.00	0.000	.0747
55	2.9697	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	0.00	0.000	.0747
56	2.6201	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	0.00	0.000	.0747
57	2.2600	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	0.00	0.000	.0747
58	1.8895	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	0.00	0.000	.0747
59	1.5085	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	0.00	0.000	.0747
60	1.1171	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	0.00	0.000	.0747
61	0.7152	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	0.00	0.000	.0747
62	0.3029	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	0.00	0.000	.0747
63	0.0000	235.41	0.00	235.41	518.688	514.078	14.695	14.244	.2117	0.00	0.00	0.000	.0747

STATION 2 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	4.3746	255.93	0.00	255.93	518.688	513.240	14.695	14.163	.2303	0.00	28.03	-285.788	.0744
2	6.5911	237.21	0.000	237.21	518.688	513.155	14.695	14.158	.2307	0.00	19.00	-140.388	.0744
3	6.7974	258.33	0.000	258.33	518.688	513.137	14.695	14.153	.2309	0.00	17.96	-131.888	.0744
4	6.9922	259.31	0.000	259.31	518.688	513.055	14.695	14.149	.2313	0.00	16.94	-111.788	.0744
5	7.1759	260.13	0.000	260.13	518.688	513.059	14.695	14.146	.2314	0.00	15.96	-94.387	.0744
6	7.3485	260.84	0.000	260.84	518.688	513.029	14.695	14.144	.2315	0.00	15.03	-81.387	.0744
7	7.5100	261.37	0.000	261.37	518.688	513.005	14.695	14.142	.2316	0.00	14.14	-71.387	.0744
8	7.6605	261.74	0.000	261.74	518.688	512.988	14.695	14.141	.2317	0.00	13.30	-63.988	.0744
9	7.8000	261.93	0.000	261.93	518.688	512.981	14.695	14.140	.2318	0.00	12.51	-58.388	.0744
10	7.9286	261.93	0.000	261.93	518.688	512.981	14.695	14.140	.2318	0.00	11.77	-53.888	.0744
11	8.0463	261.71	0.000	261.71	518.688	512.991	14.695	14.139	.2318	0.00	11.08	-50.188	.0744
12	8.1531	261.28	0.000	261.28	518.688	513.010	14.695	14.141	.2317	0.00	10.43	-47.188	.0744
13	8.2490	260.61	0.000	260.61	518.688	513.039	14.695	14.144	.2315	0.00	9.83	-44.788	.0744
14	8.3341	259.63	0.000	259.63	518.688	513.078	14.695	14.147	.2312	0.00	9.27	-42.888	.0744
15	8.4083	258.31	0.000	258.31	518.688	513.129	14.695	14.152	.2309	0.00	8.75	-41.388	.0744
16	8.4716	256.63	0.000	256.63	518.688	513.192	14.695	14.158	.2304	0.00	8.27	-40.288	.0744
17	8.5241	254.58	0.000	254.58	518.688	513.267	14.695	14.166	.2297	0.00	7.84	-39.588	.0744
18	8.5657	252.22	0.000	252.22	518.688	513.354	14.695	14.174	.2289	0.00	7.46	-39.288	.0744
19	8.5965	249.61	0.000	249.61	518.688	513.456	14.695	14.185	.2278	0.00	7.13	-39.388	.0744
20	8.6165	246.81	0.000	246.81	518.688	513.571	14.695	14.198	.2266	0.00	6.85	-39.888	.0744
21	8.6257	243.87	0.000	243.87	518.688	513.703	14.695	14.212	.2251	0.00	6.63	-40.788	.0744
22	8.6242	240.81	0.000	240.81	518.688	513.854	14.695	14.229	.2235	0.00	6.47	-42.088	.0744
23	8.6120	237.66	0.000	237.66	518.688	514.026	14.695	14.248	.2216	0.00	6.37	-43.788	.0744
24	8.5890	234.44	0.000	234.44	518.688	514.221	14.695	14.270	.2195	0.00	6.34	-45.888	.0744
25	8.5553	231.17	0.000	231.17	518.688	514.441	14.695	14.295	.2171	0.00	6.38	-48.388	.0744
26	8.5109	227.87	0.000	227.87	518.688	514.688	14.695	14.323	.2144	0.00	6.49	-51.288	.0744
27	8.4558	224.56	0.000	224.56	518.688	514.965	14.695	14.354	.2114	0.00	6.68	-54.588	.0744
28	8.3900	221.26	0.000	221.26	518.688	515.275	14.695	14.389	.2080	0.00	6.96	-58.288	.0744
29	8.3135	217.98	0.000	217.98	518.688	515.620	14.695	14.428	.2042	0.00	7.34	-62.388	.0744
30	8.2263	214.75	0.000	214.75	518.688	516.004	14.695	14.471	.2000	0.00	7.84	-66.888	.0744
31	8.1284	211.58	0.000	211.58	518.688	516.430	14.695	14.519	.1953	0.00	8.48	-71.788	.0744
32	8.0198	208.49	0.000	208.49	518.688	516.902	14.695	14.572	.1901	0.00	9.29	-77.088	.0744
33	7.9006	205.50	0.000	205.50	518.688	517.425	14.695	14.631	.1844	0.00	10.32	-82.788	.0744
34	7.7708	202.63	0.000	202.63	518.688	518.004	14.695	14.696	.1781	0.00	11.64	-88.888	.0744
35	7.6304	199.90	0.000	199.90	518.688	518.646	14.695	14.768	.1712	0.00	13.36	-95.388	.0744
36	7.4795	197.33	0.000	197.33	518.688	519.354	14.695	14.848	.1637	0.00	15.66	-102.288	.0744
37	7.3180	194.94	0.000	194.94	518.688	520.134	14.695	14.936	.1555	0.00	18.82	-109.588	.0744
38	7.1460	192.75	0.000	192.75	518.688	521.000	14.695	15.034	.1466	0.00	23.34	-117.288	.0744
39	6.9634	190.78	0.000	190.78	518.688	521.966	14.695	15.143	.1369	0.00	30.01	-125.388	.0744
40	6.7703	189.05	0.000	189.05	518.688	523.048	14.695	15.265	.1263	0.00	41.01	-133.888	.0744
41	6.5667	187.58	0.000	187.58	518.688	524.264	14.695	15.402	.1147	0.00	68.19	-142.788	.0744
42	6.3526	186.41	0.000	186.41	518.688	525.636	14.695	15.557	.1019	0.00	0.00	-152.088	.0744
43	6.1280	185.57	0.000	185.57	518.688	527.195	14.695	15.733	.0877	0.00	0.00	-161.788	.0744
44	5.8930	185.09	0.000	185.09	518.688	528.977	14.695	15.934	.0719	0.00	0.00	-171.888	.0744
45	5.6475	185.00	0.000	185.00	518.688	531.035	14.695	16.166	.0541	0.00	0.00	-182.388	.0744
46	5.3916	185.34	0.000	185.34	518.688	533.440	14.695	16.438	.0339	0.00	0.00	-193.288	.0744
47	5.1253	186.15	0.000	186.15	518.688	536.288	14.695	16.760	.0107	0.00	0.00	-204.588	.0744
48	4.8486	187.49	0.000	187.49	518.688	539.710	14.695	17.147	-.0161	0.00	0.00	-216.288	.0744
49	4.5615	189.44	0.000	189.44	518.688	543.882	14.695	17.619	-.0475	0.00	0.00	-228.388	.0744
50	4.2640	192.12	0.000	192.12	518.688	549.060	14.695	18.205	-.0855	0.00	0.00	-240.888	.0744
51	3.9560	195.71	0.000	195.71	518.688	555.636	14.695	18.949	-.1331	0.00	0.00	-253.788	.0744
52	3.6377	200.48	0.000	200.48	518.688	564.220	14.695	19.920	-.1952	0.00	0.00	-267.088	.0744
53	3.3089	206.85	0.000	206.85	518.688	576.000	14.695	21.254	-.2806	0.00	0.00	-280.788	.0744
54	2.9697	215.52	0.000	215.52	518.688	593.000	14.695	23.176	-.4035	0.00	0.00	-294.888	.0744
55	2.6201	227.84	0.000	227.84	518.688	620.000	14.695	26.230	-.5999	0.00	0.00	-309.388	.0744
56	2.2600	247.08	0.000	247.08	518.688	670.000	14.695	32.015	-.9599	0.00	0.00	-324.288	.0744
57	1.8895	283.00	0.000	283.00	518.688	800.000	14.695	50.000	-1.8000	0.00	0.00	-339.588	.0744
58	1.5085	360.00	0.000	360.00	518.688	1200.000	14.695	120.000	-5.4000	0.00	0.00	-355.288	.0744
59	1.1171	540.00	0.000	540.00	518.688	2700.000	14.695	540.000	-21.6000	0.00	0.00	-371.388	.0744
60	0.7152	1080.00	0.000	1080.00	518.688	10800.000	14.695	4320.000	-86.4000	0.00	0.00	-387.888	.0744
61	0.3029	2160.00	0.000	2160.00	518.688	43200.000	14.695	34560.000	-691.2000	0.00	0.00	-404.788	.0744
62	0.0000	4320.00	0.000	4320.00	518.688	172800.000	14.695	276480.000	-5529.6000	0.00	0.00	-422.088	.0744
63	0.0000	8640.00	0.000	8640.00	518.688	691200.000	14.695	2211840.000	-44236.8000	0.00	0.00	-439.788	.0744

STATION 3 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.6016	280.28	0.00	280.28	518.688	512.154	14.696	14.058	.2525	0.00	20.54	-83.031	.0740
2	6.7241	281.39	0.00	281.39	518.688	512.073	14.696	14.051	.2540	0.00	19.19	-96.166	.0740
3	6.8458	282.47	0.00	282.47	518.688	511.994	14.696	14.043	.2556	0.00	17.84	-95.867	.0740
4	6.9327	283.26	0.00	283.26	518.688	511.919	14.696	14.036	.2570	0.00	16.48	-90.627	.0739
5	7.0471	284.31	0.00	284.31	518.688	511.850	14.696	14.029	.2583	0.00	15.12	-78.487	.0739
6	7.2030	285.73	0.00	285.73	518.688	511.790	14.696	14.024	.2594	0.00	13.75	-65.352	.0739
7	7.3233	286.83	0.00	286.83	518.688	511.739	14.696	14.019	.2603	0.00	12.38	-53.945	.0739
8	7.4433	287.93	0.00	287.93	518.688	511.702	14.696	14.015	.2612	0.00	11.00	-44.312	.0738
9	7.5644	289.04	0.00	289.04	518.688	511.678	14.696	14.013	.2616	0.00	9.62	-36.635	.0738
10	7.6835	290.13	0.00	290.13	518.688	511.671	14.696	14.012	.2617	0.00	8.23	-30.629	.0738
11	7.8023	291.21	0.00	291.21	518.688	511.672	14.696	14.013	.2615	0.00	6.86	-25.978	.0738
12	7.9220	292.30	0.00	292.30	518.688	511.712	14.696	14.016	.2610	0.00	5.50	-22.154	.0738
13	8.0439	293.42	0.00	293.42	518.688	511.762	14.696	14.021	.2600	0.00	4.16	-19.494	.0739
14	8.1639	294.51	0.00	294.51	518.688	511.831	14.696	14.028	.2587	0.00	2.84	-17.208	.0739
15	8.2854	295.62	0.00	295.62	518.688	511.921	14.696	14.036	.2570	0.00	1.54	-15.349	.0739
16	8.4091	296.75	0.00	296.75	518.688	512.029	14.696	14.047	.2549	0.00	.28	-13.813	.0740
17	8.5337	297.89	0.00	297.89	518.688	512.157	14.696	14.059	.2524	0.00	-.94	-12.523	.0740
18	8.6578	299.02	0.00	299.02	518.688	512.303	14.696	14.073	.2495	0.00	-2.13	-11.407	.0741
19	8.7873	300.20	0.00	300.20	518.688	512.467	14.696	14.089	.2464	0.00	-3.28	-10.416	.0741
20	8.9179	301.39	0.00	301.39	518.688	512.648	14.696	14.106	.2429	0.00	-4.39	-9.519	.0742
21	9.0510	302.58	0.00	302.58	518.688	512.848	14.696	14.125	.2393	0.00	-5.47	-8.690	.0743

STATION 4 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.7210	305.75	0.00	305.75	518.688	510.912	14.696	13.940	.2757	0.00	20.32	-388.854	.0736
2	6.8621	306.97	0.00	306.97	518.688	510.768	14.696	13.926	.2783	0.00	18.98	-217.743	.0735
3	6.9734	311.16	0.00	311.16	518.688	510.634	14.696	13.913	.2807	0.00	17.62	-164.039	.0735
4	7.0633	313.54	0.00	313.54	518.688	510.511	14.696	13.901	.2829	0.00	16.25	-167.245	.0734
5	7.1937	315.71	0.00	315.71	518.688	510.397	14.696	13.891	.2849	0.00	14.85	-143.464	.0734
6	7.3031	317.94	0.00	317.94	518.688	510.295	14.696	13.881	.2868	0.00	13.42	-111.007	.0733
7	7.4121	319.29	0.00	319.29	518.688	510.205	14.696	13.873	.2882	0.00	11.96	-79.718	.0733
8	7.5208	320.37	0.00	320.37	518.688	510.139	14.696	13.866	.2893	0.00	10.46	-56.377	.0733
9	7.6294	321.43	0.00	321.43	518.688	510.094	14.696	13.862	.2901	0.00	8.93	-48.674	.0733
10	7.7341	321.79	0.00	321.79	518.688	510.074	14.696	13.860	.2904	0.00	7.39	-31.803	.0733
11	7.8471	321.82	0.00	321.82	518.688	510.084	14.696	13.861	.2903	0.00	5.85	-29.113	.0733
12	7.9563	320.92	0.00	320.92	518.688	510.121	14.696	13.864	.2897	0.00	4.31	-21.154	.0733
13	8.0693	319.70	0.00	319.70	518.688	510.188	14.696	13.871	.2884	0.00	2.79	-18.219	.0733
14	8.1774	317.93	0.00	317.93	518.688	510.280	14.696	13.879	.2868	0.00	1.26	-15.891	.0733
15	8.2972	315.33	0.00	315.33	518.688	510.401	14.696	13.891	.2848	0.00	-.21	-14.047	.0734
16	8.4031	312.40	0.00	312.40	518.688	510.549	14.696	13.905	.2822	0.00	-1.65	-12.756	.0734
17	8.5191	309.53	0.00	309.53	518.688	510.719	14.696	13.921	.2792	0.00	-3.04	-11.991	.0735
18	8.6332	306.89	0.00	306.89	518.688	510.909	14.696	13.939	.2759	0.00	-4.38	-11.512	.0736
19	8.7532	304.33	0.00	304.33	518.688	511.105	14.696	13.958	.2723	0.00	-5.69	-11.107	.0736
20	8.8754	297.35	0.00	297.35	518.688	511.313	14.696	13.978	.2684	0.00	-6.98	-10.702	.0737
21	9.0000	293.09	0.00	293.09	518.688	511.544	14.696	14.000	.2641	0.00	-8.25	-10.317	.0738

BLADE DATA

LOCATION	BLADE SECTION	ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-48.337	6.878	-70.039	9.182	0.0000	841.4	.8878	893.93	21.416	577.102	1.000	0.000	1.0000	1.0000
2	-43.317	6.878	-70.173	8.836	0.0000	858.6	.8858	893.74	21.078	574.102	1.000	0.000	1.0000	1.0000
3	-38.296	6.878	-70.316	8.509	0.0000	875.7	.8838	893.67	20.744	571.102	1.000	0.000	1.0000	1.0000
4	-33.276	6.878	-70.469	8.199	0.0000	892.9	.8818	893.74	20.414	568.102	1.000	0.000	1.0000	1.0000
5	-28.255	6.878	-70.633	7.905	0.0000	910.0	.8798	893.93	20.088	565.102	1.000	0.000	1.0000	1.0000
6	-23.235	6.878	-70.807	7.627	0.0000	927.2	.8778	894.25	19.766	562.102	1.000	0.000	1.0000	1.0000
7	-18.214	6.878	-70.992	7.364	0.0000	944.3	.8758	894.69	19.448	559.102	1.000	0.000	1.0000	1.0000
8	-13.194	6.878	-71.188	7.116	0.0000	961.5	.8738	895.26	19.134	556.102	1.000	0.000	1.0000	1.0000
9	-8.173	6.878	-71.394	6.882	0.0000	978.6	.8718	895.95	18.824	553.102	1.000	0.000	1.0000	1.0000
10	-3.153	6.878	-71.611	7.000	0.0000	995.8	.8698	896.76	18.518	550.102	1.000	0.000	1.0000	1.0000
11	1.868	6.878	-71.839	7.000	0.0000	1012.9	.8678	897.69	18.216	547.102	1.000	0.000	1.0000	1.0000
12	6.888	6.878	-72.078	7.000	0.0000	1030.1	.8658	898.74	17.918	544.102	1.000	0.000	1.0000	1.0000
13	11.909	6.878	-72.328	7.000	0.0000	1047.2	.8638	899.91	17.624	541.102	1.000	0.000	1.0000	1.0000
14	16.929	6.878	-72.589	7.000	0.0000	1064.4	.8618	901.20	17.334	538.102	1.000	0.000	1.0000	1.0000
15	21.950	6.878	-72.862	7.000	0.0000	1081.5	.8598	902.61	17.048	535.102	1.000	0.000	1.0000	1.0000
16	26.970	6.878	-73.146	7.000	0.0000	1098.7	.8578	904.14	16.766	532.102	1.000	0.000	1.0000	1.0000
17	31.991	6.878	-73.443	7.000	0.0000	1115.8	.8558	905.79	16.488	529.102	1.000	0.000	1.0000	1.0000
18	37.011	6.878	-73.752	7.000	0.0000	1133.0	.8538	907.56	16.214	526.102	1.000	0.000	1.0000	1.0000
19	42.032	6.878	-74.074	7.000	0.0000	1150.1	.8518	909.45	15.944	523.102	1.000	0.000	1.0000	1.0000
20	47.052	6.878	-74.409	7.000	0.0000	1167.3	.8498	911.46	15.678	520.102	1.000	0.000	1.0000	1.0000
21	52.073	6.878	-74.757	7.000	0.0000	1184.4	.8478	913.59	15.416	517.102	1.000	0.000	1.0000	1.0000
22	57.093	6.878	-75.119	7.000	0.0000	1201.6	.8458	915.84	15.158	514.102	1.000	0.000	1.0000	1.0000
23	62.114	6.878	-75.495	7.000	0.0000	1218.7	.8438	918.22	14.904	511.102	1.000	0.000	1.0000	1.0000
24	67.134	6.878	-75.886	7.000	0.0000	1235.9	.8418	920.72	14.654	508.102	1.000	0.000	1.0000	1.0000
25	72.155	6.878	-76.292	7.000	0.0000	1253.0	.8398	923.34	14.408	505.102	1.000	0.000	1.0000	1.0000
26	77.175	6.878	-76.714	7.000	0.0000	1270.2	.8378	926.09	14.166	502.102	1.000	0.000	1.0000	1.0000
27	82.196	6.878	-77.153	7.000	0.0000	1287.3	.8358	928.97	13.928	499.102	1.000	0.000	1.0000	1.0000
28	87.216	6.878	-77.610	7.000	0.0000	1304.5	.8338	931.98	13.694	496.102	1.000	0.000	1.0000	1.0000
29	92.237	6.878	-78.086	7.000	0.0000	1321.6	.8318	935.12	13.464	493.102	1.000	0.000	1.0000	1.0000
30	97.257	6.878	-78.583	7.000	0.0000	1338.8	.8298	938.40	13.238	490.102	1.000	0.000	1.0000	1.0000
31	102.278	6.878	-79.102	7.000	0.0000	1355.9	.8278	941.82	13.016	487.102	1.000	0.000	1.0000	1.0000
32	107.298	6.878	-79.645	7.000	0.0000	1373.1	.8258	945.38	12.798	484.102	1.000	0.000	1.0000	1.0000
33	112.319	6.878	-80.214	7.000	0.0000	1390.2	.8238	949.09	12.584	481.102	1.000	0.000	1.0000	1.0000
34	117.339	6.878	-80.811	7.000	0.0000	1407.4	.8218	952.95	12.374	478.102	1.000	0.000	1.0000	1.0000
35	122.360	6.878	-81.439	7.000	0.0000	1424.5	.8198	956.97	12.168	475.102	1.000	0.000	1.0000	1.0000
36	127.380	6.878	-82.101	7.000	0.0000	1441.7	.8178	961.15	11.967	472.102	1.000	0.000	1.0000	1.0000
37	132.401	6.878	-82.800	7.000	0.0000	1458.8	.8158	965.51	11.769	469.102	1.000	0.000	1.0000	1.0000
38	137.421	6.878	-83.541	7.000	0.0000	1476.0	.8138	970.04	11.576	466.102	1.000	0.000	1.0000	1.0000
39	142.442	6.878	-84.328	7.000	0.0000	1493.1	.8118	974.76	11.387	463.102	1.000	0.000	1.0000	1.0000
40	147.462	6.878	-85.167	7.000	0.0000	1510.3	.8098	979.68	11.202	460.102	1.000	0.000	1.0000	1.0000
41	152.483	6.878	-86.064	7.000	0.0000	1527.4	.8078	984.80	11.021	457.102	1.000	0.000	1.0000	1.0000
42	157.503	6.878	-87.027	7.000	0.0000	1544.6	.8058	990.14	10.844	454.102	1.000	0.000	1.0000	1.0000
43	162.524	6.878	-88.066	7.000	0.0000	1561.7	.8038	995.71	10.671	451.102	1.000	0.000	1.0000	1.0000
44	167.544	6.878	-89.193	7.000	0.0000	1578.9	.8018	1001.52	10.502	448.102	1.000	0.000	1.0000	1.0000
45	172.565	6.878	-90.424	7.000	0.0000	1596.0	.7998	1007.59	10.337	445.102	1.000	0.000	1.0000	1.0000
46	177.585	6.878	-91.780	7.000	0.0000	1613.2	.7978	1013.94	10.176	442.102	1.000	0.000	1.0000	1.0000
47	182.606	6.878	-93.287	7.000	0.0000	1630.3	.7958	1020.59	10.019	439.102	1.000	0.000	1.0000	1.0000
48	187.626	6.878	-94.980	7.000	0.0000	1647.5	.7938	1027.57	9.866	436.102	1.000	0.000	1.0000	1.0000
49	192.647	6.878	-96.911	7.000	0.0000	1664.6	.7918	1034.91	9.717	433.102	1.000	0.000	1.0000	1.0000
50	197.667	6.878	-99.161	7.000	0.0000	1681.8	.7898	1042.66	9.572	430.102	1.000	0.000	1.0000	1.0000
51	202.688	6.878	-101.870	7.000	0.0000	1698.9	.7878	1050.87	9.432	427.102	1.000	0.000	1.0000	1.0000
52	207.708	6.878	-105.299	7.000	0.0000	1716.1	.7858	1059.62	9.296	424.102	1.000	0.000	1.0000	1.0000
53	212.729	6.878	-110.000	7.000	0.0000	1733.2	.7838	1069.04	9.165	421.102	1.000	0.000	1.0000	1.0000
54	217.749	6.878	-118.000	7.000	0.0000	1750.4	.7818	1079.34	9.039	418.102	1.000	0.000	1.0000	1.0000
55	222.770	6.878	-180.000	7.000	0.0000	1767.5	.7798	1090.82	8.918	415.102	1.000	0.000	1.0000	1.0000

STATION 3 FLOW FIELD DESCRIPTION

STREAMLINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.4979	346.35	161.32	382.34	541.853	529.788	16.573	15.683	.3387	25.06	22.22	6.199	.07208
2	6.8112	346.08	154.43	379.34	541.471	529.358	16.540	15.660	.3364	24.37	20.83	6.811	.07207
3	7.1246	345.81	147.54	376.34	541.090	528.928	16.507	15.637	.3341	23.68	19.43	7.486	.07206
4	7.4379	345.54	140.65	373.34	540.709	528.498	16.474	15.614	.3318	22.99	18.04	8.236	.07205
5	7.7513	345.27	133.76	370.34	540.328	528.068	16.441	15.591	.3295	22.30	16.65	9.072	.07204
6	8.0646	345.00	126.87	367.34	539.947	527.638	16.408	15.568	.3272	21.61	15.25	10.007	.07203
7	8.3780	344.73	119.98	364.34	539.566	527.208	16.375	15.545	.3249	20.92	13.86	11.057	.07202
8	8.6913	344.46	113.09	361.34	539.185	526.778	16.342	15.522	.3226	20.23	12.47	12.237	.07201
9	9.0047	344.19	106.20	358.34	538.804	526.348	16.309	15.499	.3203	19.54	11.07	13.567	.07200
10	9.3180	343.92	99.31	355.34	538.423	525.918	16.276	15.476	.3180	18.85	9.68	15.067	.07199
11	9.6314	343.65	92.42	352.34	538.042	525.488	16.243	15.453	.3157	18.16	8.29	16.763	.07198
12	9.9447	343.38	85.53	349.34	537.661	525.058	16.210	15.430	.3134	17.47	6.89	18.685	.07197
13	10.2581	343.11	78.64	346.34	537.280	524.628	16.177	15.407	.3111	16.78	5.50	20.866	.07196
14	10.5714	342.84	71.75	343.34	536.899	524.198	16.144	15.384	.3088	16.09	4.11	23.347	.07195
15	10.8848	342.57	64.86	340.34	536.518	523.768	16.111	15.361	.3065	15.40	2.71	26.181	.07194
16	11.1981	342.30	57.97	337.34	536.137	523.338	16.078	15.338	.3042	14.71	1.32	29.437	.07193
17	11.5115	342.03	51.08	334.34	535.756	522.908	16.045	15.315	.3019	14.02	-0.07	33.206	.07192
18	11.8248	341.76	44.19	331.34	535.375	522.478	16.012	15.292	.2996	13.33	-1.46	37.600	.07191
19	12.1382	341.49	37.30	328.34	534.994	522.048	15.979	15.269	.2973	12.64	-2.86	42.760	.07190
20	12.4515	341.22	30.41	325.34	534.613	521.618	15.946	15.246	.2950	11.95	-4.25	48.864	.07189
21	12.7649	340.95	23.52	322.34	534.232	521.188	15.913	15.223	.2927	11.26	-5.64	56.139	.07188
22	13.0782	340.68	16.63	319.34	533.851	520.758	15.880	15.200	.2904	10.57	-7.04	64.880	.07187
23	13.3916	340.41	9.74	316.34	533.470	520.328	15.847	15.177	.2881	9.88	-8.43	75.488	.07186
24	13.7049	340.14	2.85	313.34	533.089	519.898	15.814	15.154	.2858	9.19	-9.82	88.511	.07185
25	14.0183	339.87	-4.04	310.34	532.708	519.468	15.781	15.131	.2835	8.50	-11.22	104.722	.07184
26	14.3316	339.60	-10.93	307.34	532.327	519.038	15.748	15.108	.2812	7.81	-12.61	125.294	.07183
27	14.6450	339.33	-17.82	304.34	531.946	518.608	15.715	15.085	.2789	7.12	-14.00	151.972	.07182
28	14.9583	339.06	-24.71	301.34	531.565	518.178	15.682	15.062	.2766	6.43	-15.40	187.417	.07181
29	15.2717	338.79	-31.60	298.34	531.184	517.748	15.649	15.039	.2743	5.74	-16.79	236.000	.07180
30	15.5850	338.52	-38.49	295.34	530.803	517.318	15.616	15.016	.2720	5.05	-18.18	304.000	.07179
31	15.8984	338.25	-45.38	292.34	530.422	516.888	15.583	14.993	.2697	4.36	-19.58	400.000	.07178
32	16.2117	337.98	-52.27	289.34	530.041	516.458	15.550	14.970	.2674	3.67	-20.97	544.000	.07177
33	16.5251	337.71	-59.16	286.34	529.660	516.028	15.517	14.947	.2651	2.98	-22.36	776.000	.07176
34	16.8384	337.44	-66.05	283.34	529.279	515.598	15.484	14.924	.2628	2.29	-23.76	1165.000	.07175
35	17.1518	337.17	-72.94	280.34	528.898	515.168	15.451	14.901	.2605	1.60	-25.15	1940.000	.07174
36	17.4651	336.90	-79.83	277.34	528.517	514.738	15.418	14.878	.2582	0.91	-26.54	3880.000	.07173
37	17.7785	336.63	-86.72	274.34	528.136	514.308	15.385	14.855	.2559	0.22	-27.94	19400.000	.07172
38	18.0918	336.36	-93.61	271.34	527.755	513.878	15.352	14.832	.2536	-0.47	-29.33	-19400.000	.07171
39	18.4052	336.09	-100.50	268.34	527.374	513.448	15.319	14.809	.2513	-1.16	-30.72	-3880.000	.07170
40	18.7185	335.82	-107.39	265.34	526.993	513.018	15.286	14.786	.2490	-1.85	-32.12	-1940.000	.07169
41	19.0319	335.55	-114.28	262.34	526.612	512.588	15.253	14.763	.2467	-2.54	-33.51	-1165.000	.07168
42	19.3452	335.28	-121.17	259.34	526.231	512.158	15.220	14.740	.2444	-3.23	-34.90	-776.000	.07167
43	19.6586	335.01	-128.06	256.34	525.850	511.728	15.187	14.717	.2421	-3.92	-36.30	-544.000	.07166
44	19.9719	334.74	-134.95	253.34	525.469	511.298	15.154	14.694	.2398	-4.61	-37.69	-400.000	.07165
45	20.2853	334.47	-141.84	250.34	525.088	510.868	15.121	14.671	.2375	-5.30	-39.08	-304.000	.07164
46	20.5986	334.20	-148.73	247.34	524.707	510.438	15.088	14.648	.2352	-5.99	-40.48	-236.000	.07163
47	20.9120	333.93	-155.62	244.34	524.326	510.008	15.055	14.625	.2329	-6.68	-41.87	-187.417	.07162
48	21.2253	333.66	-162.51	241.34	523.945	509.578	15.022	14.602	.2306	-7.37	-43.26	-151.972	.07161
49	21.5387	333.39	-169.40	238.34	523.564	509.148	14.989	14.579	.2283	-8.06	-44.66	-125.294	.07160
50	21.8520	333.12	-176.29	235.34	523.183	508.718	14.956	14.556	.2260	-8.75	-46.05	-104.722	.07159
51	22.1654	332.85	-183.18	232.34	522.802	508.288	14.923	14.533	.2237	-9.44	-47.44	-88.511	.07158
52	22.4787	332.58	-190.07	229.34	522.421	507.858	14.890	14.510	.2214	-10.13	-48.84	-75.488	.07157
53	22.7921	332.31	-196.96	226.34	522.040	507.428	14.857	14.487	.2191	-10.82	-50.23	-64.880	.07156
54	23.1054	332.04	-203.85	223.34	521.659	506.998	14.824	14.464	.2168	-11.51	-51.62	-56.139	.07155
55	23.4188	331.77	-210.74	220.34	521.278	506.568	14.791	14.441	.2145	-12.20	-53.02	-48.864	.07154

BLADE DATA

LOCATION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-58.348	4.253	-63.621	4.673	.0247	880.3	.6985	779.52	21.572	580.188	1.155	.045	.9438	.9442
2	-58.422	4.234	-64.071	4.649	.0235	872.9	.7054	796.18	21.614	582.006	1.153	.044	.9436	.9447
3	-59.867	4.[illegible]	-65.[illegible]91	4.[illegible]62[illegible]	.0224	685.5	.7200	812.30	21.060	583.839	1.150	.043	.9441	.9452
4	-60.263	4.[illegible]7[illegible]2	-66.[illegible]71	4.601	.0214	897.9	.7342	828.09	21.310	585.588	1.148	.042	.9446	.9456
5	-60.628	4.224	-65.209	4.581	.0204	910.3	.7480	843.44	21.564	587.253	1.147	.042	.9450	.9460
6	-60.957	4.[illegible]40	-65.319	4.567	.0195	922.6	.7614	858.31	21.821	588.[illegible]16	1.145	.042	.9453	.9463
7	-61.254	4.[illegible]41	-65.[illegible]14	4.560	.0181	934.8	.7744	872.79	22.086	591.297	1.145	.042	.9457	.9467
8	-61.506	4.228	-65.118	4.564	.0169	947.0	.7868	886.69	22.355	592.195	1.145	.041	.9458	.9468
9	-61.832	11.852	-66.[illegible]14	4.582	.0157	959.1	.7986	900.08	22.629	593.[illegible]18	1.145	.041	.9459	.9469
10	-62.[illegible]18	11.[illegible]25	-66.[illegible]34	4.[illegible]16	.0194	971.2	.8079	910.72	23.860	597.[illegible]45	1.145	.041	.9421	.9432
11	-62.407	.980	-67.074	4.967	.0238	983.4	.8167	920.98	24.896	599.[illegible]28	1.146	.043	.9311	.9325
12	-62.787	-.541	-67.435	4.729	.0262	995.6	.8252	930.96	24.343	601.[illegible]28	1.147	.043	.9216	.9235
13	-63.022	-.037	-67.[illegible]16	4.[illegible]94	.0275	1007.8	.8334	941.15	24.[illegible]11	603.[illegible]29	1.149	.043	.9163	.9179
14	-63.[illegible]368	-.[illegible]412	-68.[illegible]215	4.[illegible]855	.0295	1020.4	.8422	951.85	24.889	605.[illegible]176	1.151	.043	.9114	.9131
15	-63.[illegible]729	-.958	-68.[illegible]581	4.[illegible]802	.0325	1033.0	.8497	960.19	25.160	607.[illegible]326	1.153	.044	.9061	.9080
16	-64.[illegible]433	-1.[illegible]488	-69.[illegible]034	4.[illegible]831	.0412	1045.9	.8545	966.69	25.[illegible]373	608.[illegible]348	1.156	.045	.8974	.8998
17	-64.[illegible]733	-1.[illegible]732	-69.[illegible]315	4.942	.0498	1058.8	.8594	972.24	25.593	611.[illegible]328	1.158	.046	.8875	.8902
18	-65.[illegible]045	-1.[illegible]821	-69.[illegible]930	4.[illegible]935	.0551	1072.4	.8621	973.77	25.864	612.[illegible]194	1.161	.047	.8793	.8826
19	-65.[illegible]551	-1.[illegible]930	-70.[illegible]451	4.[illegible]918	.0581	1086.0	.8738	991.40	26.163	616.[illegible]538	1.163	.053	.8339	.8374
20	-66.[illegible]897	-2.[illegible]445	-70.[illegible]378	4.872	.0637	1100.0	.8824	1001.85	26.466	619.[illegible]165	1.164	.054	.8214	.8252
21	-66.694	-3.111	-71.[illegible]521	4.827	.0695	1114.2	.8928	1013.41	26.766	621.777	1.163	.055	.8046	.8087

STATION 5 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.152 ISEN. EFF.= .982 POLY. EFF.= .984 DELTA T ON T = .046

STATION 6 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.0784	387.97	303.55	492.61	563.236	543.073	13.273	10.987	.4310	38.04	24.47	88.453	.0042
2	7.1964	393.13	293.28	490.89	563.187	542.872	13.277	10.987	.4324	37.28	24.78	1[illegible]1.17	.0042
3	7.2538	398.13	285.31	490.70	563.097	542.678	13.274	10.988	.4339	36.57	24.98	3[illegible]6.68	.0042
4	7.3382	403.88	291.60	497.50	563.053	542.487	13.280	10.996	.4355	36.88	24.89	2[illegible]7.69	.0041
5	7.4229	408.00	288.03	499.43	563.011	542.285	13.283	10.998	.4373	36.22	24.[illegible]	2[illegible]7.69	.0041
6	7.5047	412.03	284.51	501.38	562.968	542.078	13.284	10.999	.4391	35.57	24.[illegible]	[illegible]1.[illegible]	.0040
7	7.5896	417.64	280.86	503.18	562.834	541.795	13.[illegible]	10.[illegible]	.4410	34.98	24.[illegible]	4[illegible]1.[illegible]	.0040
8	7.6672	421.91	275.60	504.43	562.658	541.509	13.[illegible]	10.[illegible]	.4428	34.25	24.[illegible]	[illegible]1.[illegible]	.0039
9	7.7473	425.41	272.13	505.01	562.488	541.208	13.[illegible]	10.[illegible]	.4446	33.64	24.[illegible]	[illegible]1.[illegible]	.0039
10	7.8273	429.48	271.85	507.49	562.676	541.527	13.[illegible]	10.[illegible]	.4464	33.78	24.[illegible]	[illegible]1.[illegible]	.0038
11	7.9079	434.41	268.17	510.53	562.824	541.834	13.[illegible]	10.[illegible]	.4482	33.57	24.[illegible]	[illegible]1.[illegible]	.0038
12	7.9893	440.24	266.27	514.19	562.784	541.888	13.[illegible]	10.[illegible]	.4501	33.24	24.46	[illegible]1.[illegible]	.0037
13	8.0713	446.29	265.41	518.91	562.[illegible]	541.[illegible]	13.[illegible]	10.[illegible]	.4521	33.[illegible]	24.[illegible]	[illegible]1.[illegible]	.0037
14	8.1539	452.70	264.64	523.96	562.[illegible]	541.[illegible]	13.[illegible]	10.[illegible]	.4541	33.[illegible]	24.[illegible]	[illegible]1.[illegible]	.0036
15	8.2421	459.54	264.54	529.94	562.[illegible]	541.[illegible]	13.[illegible]	10.[illegible]	.4562	33.[illegible]	24.[illegible]	[illegible]1.[illegible]	.0036
16	8.3313	465.57	263.06	534.98	562.[illegible]	541.[illegible]	13.[illegible]	10.[illegible]	.4582	33.[illegible]	24.[illegible]	[illegible]1.[illegible]	.0035
17	8.4238	472.[illegible]	262.[illegible]	540.[illegible]	562.[illegible]	541.[illegible]	13.[illegible]	10.[illegible]	.4603	33.[illegible]	24.[illegible]	[illegible]1.[illegible]	.0035
18	8.5237	479.[illegible]	261.[illegible]	546.[illegible]	562.[illegible]	541.[illegible]	13.[illegible]	10.[illegible]	.4624	33.[illegible]	24.[illegible]	[illegible]1.[illegible]	.0034
19	8.6249	486.[illegible]	260.[illegible]	552.[illegible]	562.[illegible]	541.[illegible]	13.[illegible]	10.[illegible]	.4645	33.[illegible]	24.[illegible]	[illegible]1.[illegible]	.0034
20	8.7337	493.[illegible]	259.[illegible]	559.[illegible]	562.[illegible]	541.[illegible]	13.[illegible]	10.[illegible]	.4667	33.[illegible]	24.[illegible]	[illegible]1.[illegible]	.0033
21	8.8479	500.71	259.01	563.63	562.[illegible]	541.[illegible]	13.[illegible]	10.[illegible]	.4689	33.[illegible]	24.[illegible]	[illegible]1.[illegible]	.0033

BLADE DATA

LOCATION	BLADE SECTION	ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-52.588	2.488	-56.146	3.681	.0582	882.8	.8488	937.16	21.812	582.448	1.113	.886	.9388	.9488
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	51.948	40.819	-72.132	10.591	.1399	1106.0	.9076	927.91	29.538	620.260	1.213	.878	.7172	.7248

STATION 6 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.296 ISEN. EFF.= .898 POLY. EFF.= .892 DELTA T ON T = .884

STATION 7 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	8.8819	1082.17	384.37	478.93	588.841	569.953	20.447	18.357	.4874	69.73	-10.37	[illegible]	.0004

BLADE DATA

LOCATION	BLADE SECTION	ANGLES LEAN	FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-40.468	1.512	-43.[illegible]	3.417	.0757	905.7	.3709	657.23	22.073	546.945	1.499	.131	.9377	.9412
2	-41.095	1.236	-44.[illegible]	3.234	.0719	914.9	.3947	672.92	22.273	548.224	1.498	.130	.9391	.9425
3	-41.730	.935	-44.[illegible]	3.092	.0632	923.7	.9971	688.97	22.470	549.504	1.[illegible]	.130	.9406	.9439
4	-42.343	.597	-45.[illegible]	2.973	.0648	932.5	.6093	693.84	22.[illegible]	550.930	1.[illegible]	.130	.9420	.9453
5	-42.935	-.755	-45.[illegible]	2.702	.0617	941.1	.9148	711.87	22.857	552.267	1.501	.130	.9435	.9466
6	-43.503	-1.246	-45.[illegible]	2.544	.0587	949.6	.9267	723.28	23.031	553.900	1.502	.130	.9450	.9480
7	-44.755	-1.[illegible]	-46.[illegible]	2.414	.0546	958.0	.9338	734.77	23.257	554.931	1.505	.131	.9475	.9505
8	-44.338	-1.315	-47.[illegible]	2.329	.0508	966.3	.9464	745.78	23.[illegible]	556.[illegible]	1.507	.131	.9501	.9529
9	-45.[illegible]	-.[illegible]	-47.[illegible]	2.318	.0471	974.5	.9576	756.41	23.673	557.598	1.508	.131	.9526	.9553
10	-45.[illegible]	-.[illegible]	-47.[illegible]	2.373	.0453	982.9	.9593	759.10	23.733	558.349	1.508	.132	.9406	.9439
11	-46.[illegible]	.[illegible]	-48.[illegible]	2.[illegible]	.0491	991.3	.9510	761.70	23.[illegible]	600.328	1.507	.134	.9286	.9326
12	-46.[illegible]	1.[illegible]	-48.[illegible]	2.[illegible]	.0755	999.4	.9630	764.75	23.[illegible]	601.733	1.504	.135	.9175	.9221
13	-47.[illegible]	2.[illegible]	-50.[illegible]	3.331	.0837	1008.[illegible]	.9771	770.05	24.[illegible]	603.[illegible]	1.500	.137	.9101	.9151
14	-47.[illegible]	3.[illegible]	-51.[illegible]	3.947	.0386	1017.[illegible]	.9713	775.44	24.[illegible]	604.[illegible]	1.494	.137	.9024	.9078
15	-47.726	4.[illegible]	-52.[illegible]	4.[illegible]	.0976	1026.6	.9732	778.[illegible]	24.[illegible]	[illegible].227	1.[illegible]	.136	.8899	.8959
16	-48.206	5.[illegible]	-54.[illegible]	5.[illegible]	.1239	1035.2	.9652	773.94	24.[illegible]	607.[illegible]	1.473	.136	.8586	.8661
17	-48.730	7.041	-55.[illegible]	7.[illegible]	.1501	1046.[illegible]	.9567	762.97	24.[illegible]	609.[illegible]	1.460	.138	.8264	.8354
18	-49.304	9.[illegible]	-57.[illegible]	9.[illegible]	.1391	1057.[illegible]	.9544	761.80	24.[illegible]	[illegible]11.[illegible]	1.[illegible]	.138	.8032	.8131
19	-49.926	9.[illegible]	-61.[illegible]	11.602	.1783	1069.3	.9547	763.37	24.141	[illegible]13.[illegible]	1.427	.136	.7825	.7931
20	-50.[illegible]	10.377	-64.[illegible]	14.[illegible]	.1913	1082.[illegible]	.9552	765.32	24.[illegible]	[illegible]16.020	1.409	.132	.7596	.7710
21	-51.301	13.[illegible]	-67.[illegible]	17.052	.2094	1097.7	.9551	766.95	24.354	618.757	1.393	.135	.7336	.7457

STATION 7 INTERSPATIAL PERFORMANCE PRESSURE RATIO = 1.491 ISEN. EFF.= .888 POLY. EFF.= .894 DELTA T ON T = .134

STATION 8 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	TANGTL	TOTAL	TEMPERATURES TOTAL	STATIC	PRESSURES TOTAL	STATIC	MACH NO	ANGLES WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.4432	[illegible]12.97	532.15	552.01	[illegible]10.077	549.515	25.084	17.431	.7409	44.03	13.79	-2.220	.0855
2	7.5011	[illegible]09.02	531.46	546.13	[illegible]10.301	551.174	25.193	17.537	.7345	44.35	13.77	-2.456	.0861
3	7.5533	[illegible]90.25	[illegible]90.58	[illegible]9.[illegible]1	[illegible]11.136	[illegible]22.452	24.232	17.784	.7244	44.04	15.89	-2.744	.0867
4	7.6033	[illegible]92.28	[illegible]93.94	[illegible]37.[illegible]9	[illegible]11.542	[illegible]33.635	25.335	17.901	.7244	44.89	14.14	-3.096	.0872
5	7.6537	[illegible]87.14	[illegible]88.75	331.49	[illegible]12.100	[illegible]34.713	25.470	18.036	.7193	45.08	12.49	-3.527	.0877
6	7.7113	[illegible]82.92	[illegible]97.39	[illegible]27.[illegible]1	[illegible]12.524	[illegible]35.688	25.551	18.150	.7159	45.22	10.94	-4.061	.0881
7	7.7656	[illegible]80.39	[illegible]05.53	[illegible]24.[illegible]1	[illegible]12.879	[illegible]36.469	25.[illegible]	18.274	.7125	45.25	9.47	-4.739	.0885
8	7.8190	[illegible]79.04	[illegible]83.71	521.30	[illegible]13.240	537.172	25.723	18.380	.7100	45.25	8.09	-5.642	.0889
9	7.8733	[illegible]77.51	[illegible]81.33	[illegible]19.[illegible]3	[illegible]13.566	[illegible]37.902	25.805	18.477	.7073	46.21	6.77	-6.925	.0893
10	7.9240	[illegible]67.34	[illegible]85.13	[illegible]16.[illegible]3	[illegible]14.961	[illegible]39.[illegible]98	25.931	18.567	.7034	46.91	5.50	-8.850	.0894
11	7.9855	[illegible]93.18	[illegible]90.11	912.29	[illegible]16.303	[illegible]41.547	25.[illegible]4	18.[illegible]52	.6990	46.59	[illegible]4.27	-11.959	.0896
12	8.1438	[illegible]44.70	[illegible]32.70	[illegible]07.[illegible]3	[illegible]17.[illegible]39	[illegible]03.[illegible]04	25.[illegible]4	18.733	.6939	47.21	3.08	-13.048	.0897
13	8.1825	[illegible]40.34	[illegible]31.35	[illegible]01.[illegible]9	[illegible]17.[illegible]73	[illegible]04.[illegible]54	25.[illegible]1	18.[illegible]11	.6879	47.56	1.91	-37.024	.0898
14	8.1932	[illegible]31.[illegible]8	[illegible]37.[illegible]6	792.[illegible]5	[illegible]16.[illegible]03	[illegible]65.[illegible]82	25.[illegible]24	18.[illegible]85	.6733	47.[illegible]9	.73	[illegible]66.070	.0900
15	8.2253	[illegible]15.[illegible]7	[illegible]83.[illegible]5	772.[illegible]5	[illegible]19.[illegible]35	[illegible]97.[illegible]37	22.[illegible]43	18.[illegible]57	.6670	48.43	-.46	32.470	.0900
16	8.2919	[illegible]83.12	[illegible]97.[illegible]7	752.26	[illegible]19.[illegible]74	571.467	25.[illegible]2	19.[illegible]31	.6503	50.47	-1.69	16.044	.0898
17	8.3037	[illegible]48.70	[illegible]31.73	[illegible]7[illegible].01	[illegible]21.[illegible]96	575.[illegible]46	24.[illegible]34	19.[illegible]12	.6313	52.63	-2.92	13.[illegible]97	.0895
18	8.[illegible]22	[illegible]14.[illegible]6	[illegible]97.[illegible]2	[illegible]19.[illegible]4	[illegible]21.[illegible]83	578.[illegible]95	24.[illegible]73	19.[illegible]03	.6037	54.76	-4.19	12.201	.0895
19	8.5245	[illegible]73.04	[illegible]73.66	[illegible]92.[illegible]9	[illegible]21.[illegible]65	[illegible]81.[illegible]97	24.[illegible]5[illegible]	19.[illegible]06	.5859	[illegible]6.82	-5.62	12.[illegible]29	.0895
20	8.[illegible]244	[illegible]37.[illegible]5	[illegible]7[illegible].[illegible]7	[illegible]66.[illegible]1	[illegible]21.[illegible]43	[illegible]84.[illegible]01	24.[illegible]07[illegible]	19.[illegible]27	.5623	[illegible]3.[illegible]6	-7.32	[illegible]3.[illegible]92	.0896
21	8.7359	[illegible]89.[illegible]7	[illegible]75.[illegible]3	[illegible]44.14	[illegible]22.[illegible]05	[illegible]88.[illegible]395	23.[illegible]31	19.[illegible]72	.5415	[illegible]3.30	-9.37	[illegible]	.0897

BLADE DATA

LOCATION	BLADE SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-24.142	2.469	-28.888	+4.863	.1813	929.0	.6079	699.07	22.371	590.398	1.706	.176	.8369	.8545
2	-24.468	2.469	-30.648	+4.645	.1858	935.5	.6142	696.08	22.354	591.482	1.714	.177	.8369	.8545
3	-24.794	2.469	-32.361	+4.961	.1903	942.0	.6218	693.73	22.337	592.577	1.723	.178	.8369	.8545
4	-25.120	2.469	-34.027	+5.327	.1964	948.6	.6288	691.39	22.322	593.672	1.732	.179	.8369	.8545
5	-25.446	2.469	-35.648	+5.748	.2025	955.2	.6358	689.06	22.308	594.768	1.741	.180	.8369	.8545
6	-25.772	2.469	-37.225	+6.225	.2085	961.8	.6429	686.82	22.295	595.863	1.750	.181	.8369	.8545
7	-26.098	2.469	-38.760	+6.760	.2146	968.3	.6500	684.59	22.283	596.959	1.759	.182	.8369	.8545
8	-26.424	2.469	-40.255	+7.355	.2207	974.9	.6571	682.36	22.272	598.054	1.768	.183	.8369	.8545
9	-26.750	2.469	-41.712	+8.012	.2268	981.5	.6642	680.13	22.262	599.150	1.777	.184	.8369	.8545
10	-27.076	2.469	-43.134	+8.734	.2329	988.1	.6713	677.90	22.253	600.245	1.786	.185	.8369	.8545
11	-27.402	2.469	-44.522	+9.522	.2390	994.6	.6784	675.67	22.245	601.341	1.795	.186	.8369	.8545
12	-27.728	2.469	-45.878	+10.378	.2451	1001.2	.6855	673.44	22.238	602.436	1.804	.187	.8369	.8545
13	-28.054	2.469	-47.204	+11.304	.2512	1007.8	.6926	671.21	22.232	603.532	1.813	.188	.8369	.8545
14	-28.380	2.469	-48.502	+12.302	.2573	1014.4	.6997	668.98	22.227	604.627	1.822	.189	.8369	.8545
15	-28.706	2.469	-49.774	+13.374	.2634	1020.9	.7068	666.75	22.223	605.723	1.831	.190	.8369	.8545
16	-29.032	2.469	-51.021	+14.521	.2695	1027.5	.7139	664.52	22.220	606.818	1.840	.191	.8369	.8545
17	-29.358	2.469	-52.246	+15.746	.2756	1034.1	.7210	662.29	22.218	607.914	1.849	.192	.8369	.8545
18	-29.684	2.469	-53.450	+17.050	.2817	1040.7	.7281	660.06	22.217	609.009	1.858	.193	.8369	.8545
19	-30.010	2.469	-54.635	+18.435	.2878	1047.2	.7352	657.83	22.217	610.105	1.867	.194	.8369	.8545
20	-30.336	2.469	-55.803	+19.903	.2939	1053.8	.7423	655.60	22.218	611.200	1.876	.195	.8369	.8545
21	-30.662	2.469	-56.955	+21.455	.3000	1060.4	.7494	653.37	22.220	612.296	1.885	.196	.8369	.8545
22	-30.988	2.469	-58.093	+23.093	.3061	1067.0	.7565	651.14	22.223	613.391	1.894	.197	.8369	.8545
23	-31.314	2.469	-59.218	+24.818	.3122	1073.5	.7636	648.91	22.227	614.487	1.903	.198	.8369	.8545
24	-31.640	2.469	-60.331	+26.631	.3183	1080.1	.7707	646.68	22.232	615.582	1.912	.199	.8369	.8545
25	-31.966	2.469	-61.433	+28.533	.3244	1086.7	.7778	644.45	22.238	616.678	1.921	.200	.8369	.8545
26	-32.292	2.469	-62.525	+30.525	.3305	1093.3	.7849	642.22	22.245	617.773	1.930	.201	.8369	.8545
27	-32.617	2.469	-63.608	+32.608	.3366	1099.8	.7920	639.99	22.253	618.869	1.939	.202	.8369	.8545
28	-32.943	2.469	-64.683	+34.783	.3427	1106.4	.7991	637.76	22.262	619.964	1.948	.203	.8369	.8545
29	-33.269	2.469	-65.751	+37.051	.3488	1113.0	.8062	635.53	22.272	621.060	1.957	.204	.8369	.8545
30	-33.595	2.469	-66.813	+39.413	.3549	1119.6	.8133	633.30	22.283	622.155	1.966	.205	.8369	.8545
31	-33.921	2.469	-67.870	+41.870	.3610	1126.1	.8204	631.07	22.295	623.251	1.975	.206	.8369	.8545
32	-34.247	2.469	-68.923	+44.423	.3671	1132.7	.8275	628.84	22.308	624.346	1.984	.207	.8369	.8545
33	-34.573	2.469	-69.973	+47.073	.3732	1139.3	.8346	626.61	22.322	625.442	1.993	.208	.8369	.8545
34	-34.899	2.469	-71.021	+49.821	.3793	1145.9	.8417	624.38	22.337	626.537	2.002	.209	.8369	.8545
35	-35.225	2.469	-72.069	+52.669	.3854	1152.4	.8488	622.15	22.354	627.633	2.011	.210	.8369	.8545
36	-35.551	2.469	-73.118	+55.618	.3915	1159.0	.8559	619.92	22.371	628.728	2.020	.211	.8369	.8545

STATION 8 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.721 ISEN. EFF.= .888 POLY. EFF.= .897 DELTA T ON T = .189

STATION 9 FLOW FIELD DESCRIPTION

STREAMLINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.8493	618.78	738.58	961.94	633.844	557.075	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
2	7.8819	618.81	738.42	961.92	633.844	557.102	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
3	7.9145	618.84	738.28	961.92	633.844	557.129	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
4	7.9471	618.87	738.14	961.92	633.844	557.156	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
5	7.9797	618.90	738.00	961.92	633.844	557.183	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
6	8.0123	618.93	737.86	961.92	633.844	557.210	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
7	8.0449	618.96	737.72	961.92	633.844	557.237	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
8	8.0775	618.99	737.58	961.92	633.844	557.264	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
9	8.1101	619.02	737.44	961.92	633.844	557.291	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
10	8.1427	619.05	737.30	961.92	633.844	557.318	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
11	8.1753	619.08	737.16	961.92	633.844	557.345	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
12	8.2079	619.11	737.02	961.92	633.844	557.372	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
13	8.2405	619.14	736.88	961.92	633.844	557.399	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
14	8.2731	619.17	736.74	961.92	633.844	557.426	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
15	8.3057	619.20	736.60	961.92	633.844	557.453	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
16	8.3383	619.23	736.46	961.92	633.844	557.480	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
17	8.3709	619.26	736.32	961.92	633.844	557.507	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
18	8.4035	619.29	736.18	961.92	633.844	557.534	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
19	8.4361	619.32	736.04	961.92	633.844	557.561	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
20	8.4687	619.35	735.90	961.92	633.844	557.588	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
21	8.5013	619.38	735.76	961.92	633.844	557.615	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
22	8.5339	619.41	735.62	961.92	633.844	557.642	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
23	8.5665	619.44	735.48	961.92	633.844	557.669	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
24	8.5991	619.47	735.34	961.92	633.844	557.696	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
25	8.6317	619.50	735.20	961.92	633.844	557.723	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
26	8.6643	619.53	735.06	961.92	633.844	557.750	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
27	8.6969	619.56	734.92	961.92	633.844	557.777	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
28	8.7295	619.59	734.78	961.92	633.844	557.804	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
29	8.7621	619.62	734.64	961.92	633.844	557.831	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
30	8.7947	619.65	734.50	961.92	633.844	557.858	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
31	8.8273	619.68	734.36	961.92	633.844	557.885	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
32	8.8599	619.71	734.22	961.92	633.844	557.912	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
33	8.8925	619.74	734.08	961.92	633.844	557.939	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
34	8.9251	619.77	733.94	961.92	633.844	557.966	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
35	8.9577	619.80	733.80	961.92	633.844	557.993	28.407	18.113	.8310	49.97	10.63	-8.988	.0877
36	8.9903	619.83	733.66	961.92	633.844	558.020	28.407	18.113	.8310	49.97	10.63	-8.988	.0877

BLADE DATA

LOCATION	BLADE SECTION	BLADE ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-12.647	10.931	-15.333	5.686	.1252	941.6	.5631	651.78	22.461	592.349	1.938	.222	.9363	.9419
2	-13.489	10.644	-19.535	6.047	.1147	946.8	.5583	647.86	22.591	593.165	1.937	.221	.9376	.9431
3	-14.333	10.170	-20.091	6.358	.1127	952.1	.5557	644.58	22.723	594.005	1.935	.221	.9388	.9442
4	-15.163	9.461	-21.300	6.638	.1073	957.6	.5547	643.96	22.858	594.870	1.934	.220	.9399	.9452
5	-16.005	8.629	-22.398	6.861	.1021	963.2	.5551	644.98	22.997	595.758	1.932	.220	.9411	.9463
6	-16.849	7.824	-23.499	7.050	.0973	968.8	.5567	647.17	23.139	596.668	1.931	.219	.9422	.9473
7	-17.653	7.220	-25.003	7.350	.0907	974.6	.5604	651.69	23.303	597.600	1.928	.218	.9445	.9494
8	-18.389	6.810	-26.066	7.678	.0844	980.5	.5649	657.13	23.470	598.552	1.925	.217	.9468	.9515
9	-19.054	6.646	-27.092	8.039	.0784	986.4	.5701	663.35	23.642	599.523	1.923	.216	.9491	.9536
10	-19.658	6.759	-27.297	7.629	.0971	992.5	.5620	653.04	23.374	600.322	1.927	.220	.9362	.9418
11	-20.216	7.138	-27.493	7.277	.1150	998.6	.5541	646.90	23.506	601.158	1.932	.224	.9234	.9301
12	-20.734	7.844	-27.326	7.092	.1308	1005.3	.5472	639.91	23.456	602.632	1.935	.227	.9116	.9194
13	-21.215	8.771	-28.734	7.519	.1394	1011.3	.5448	637.86	23.481	603.745	1.931	.228	.9038	.9122
14	-21.650	9.961	-29.654	8.004	.1477	1018.7	.5428	636.22	23.509	604.895	1.926	.230	.8959	.9051
15	-22.057	11.011	-30.551	8.494	.1625	1025.9	.5383	629.58	23.461	605.090	1.921	.232	.8834	.8936
16	-22.439	12.136	-32.236	8.899	.2062	1033.2	.5077	598.39	23.066	607.359	1.913	.239	.8512	.8641
17	-22.828	13.144	-32.367	9.739	.2496	1041.3	.4757	562.96	22.655	608.745	1.905	.247	.8188	.8345
18	-22.716	13.505	-33.790	11.074	.2761	1050.0	.4552	540.29	22.454	610.267	1.900	.252	.7977	.8158
19	-22.578	13.950	-35.506	12.936	.2964	1059.5	.4387	522.18	22.329	611.921	1.895	.256	.7883	.7998
20	-22.138	13.529	-37.738	15.594	.3191	1069.8	.4182	499.32	22.173	613.732	1.890	.262	.7610	.7813
21	-21.371	13.139	-41.121	19.749	.3473	1081.3	.3888	466.03	21.955	615.763	1.883	.268	.7380	.7601

STATION 9 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.920 ISEN. EFF.= .881 POLY. EFF.= .892 DELTA T ON T = .232

STATION 10 FLOW FIELD DESCRIPTION

STREAMLINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.5700	332.60	734.17	937.25	633.844	560.971	24.437	14.561	.8069	51.57	7.82	9.349	.0892
2	7.6197	383.49	727.74	932.77	633.514	561.336	24.461	18.921	.8028	51.28	7.95	8.819	.0894
3	7.6654	900.91	721.46	930.04	633.207	561.451	24.434	18.650	.8004	50.87	7.84	9.315	.0896
4	7.7113	891.70	715.36	928.36	632.919	561.422	24.415	18.662	.7989	50.40	7.58	10.527	.0896
5	7.7573	897.11	709.39	927.24	632.642	561.316	24.394	18.665	.7981	49.91	7.23	11.815	.0897
6	7.8032	902.64	703.52	926.35	632.366	561.179	24.374	18.664	.7974	49.42	6.83	13.049	.0897
7	7.8489	908.43	697.74	925.55	632.086	561.021	24.355	18.663	.7968	48.83	6.40	14.152	.0897
8	7.8940	913.42	692.07	925.67	631.807	560.880	24.297	18.665	.7946	48.30	5.94	14.967	.0898
9	7.9403	919.81	686.69	920.67	631.780	560.958	24.259	18.669	.7930	47.77	5.46	15.420	.0898
10	7.9865	914.95	683.78	924.10	632.767	561.924	24.324	18.677	.7943	48.28	4.98	15.547	.0896
11	8.0337	910.60	697.98	927.37	634.800	563.461	24.391	18.689	.7967	48.92	4.47	15.409	.0894
12	8.0819	906.00	704.63	929.42	636.614	564.965	24.433	18.707	.7974	49.31	3.92	15.069	.0893
13	8.1311	901.39	703.75	926.04	637.175	566.047	24.372	18.731	.7957	49.46	3.35	14.574	.0892
14	8.1813	897.16	702.77	922.17	637.738	567.203	24.304	18.762	.7838	49.65	2.72	14.255	.0892
15	8.2326	887.52	705.10	917.85	638.583	569.013	24.229	18.803	.7847	50.19	2.05	13.903	.0891
16	8.2839	859.73	722.26	913.15	642.608	573.465	24.121	18.859	.7776	52.28	1.27	13.588	.0887
17	8.3352	824.11	740.25	907.00	646.577	578.375	24.003	18.936	.7691	54.70	.31	13.152	.0883
18	8.4080	796.64	750.53	899.37	649.331	582.193	23.922	19.035	.7607	56.51	-.88	12.311	.0882
19	8.4778	770.32	757.81	891.83	651.672	585.742	23.852	19.153	.7516	58.17	-2.31	10.569	.0882
20	8.5537	738.53	769.30	882.91	654.361	589.762	23.773	19.281	.7415	60.22	-4.03	7.263	.0881
21	8.6399	700.50	777.47	874.56	657.717	594.344	23.673	19.388	.7317	62.75	-6.18	3.853	.0880

STATION 11 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6139	368.22	723.81	324.93	634.844	562.877	29.437	18.783	.7950	52.10	9.06	26.367	.0888
2	7.6770	304.75	722.30	942.04	633.514	559.592	28.441	18.453	.6118	50.09	8.76	-65.481	.0885
3	7.7304	637.97	715.39	958.54	633.207	556.980	28.437	18.135	.6262	48.27	8.26	-20.884	.0878
4	7.7808	664.69	709.03	971.88	632.919	554.551	28.413	17.874	.8413	46.86	7.69	-14.668	.0869
5	7.8269	685.04	703.04	981.93	632.642	552.689	28.394	17.679	.8514	45.75	7.12	-11.497	.0862
6	7.8717	700.35	697.39	988.38	632.368	551.314	28.374	17.548	.8583	44.88	6.56	-11.749	.0858
7	7.9133	712.13	690.23	991.78	632.036	550.216	28.335	17.446	.8621	44.11	6.11	-11.863	.0855
8	7.9581	720.03	681.39	993.21	631.707	549.359	28.293	17.362	.8644	43.47	5.78	-11.711	.0853
9	8.0004	725.89	675.57	992.93	631.389	548.698	28.253	17.296	.8654	42.95	5.53	-11.391	.0852
10	8.0425	724.19	664.98	986.32	632.767	550.318	28.324	17.360	.8604	43.41	5.03	-11.101	.0854
11	8.0843	719.75	653.56	979.53	634.800	551.906	28.391	17.361	.8675	43.94	4.71	-12.228	.0854
12	8.1277	713.75	700.71	1000.22	636.614	553.615	28.443	17.423	.8668	44.47	4.38	-11.956	.0856
13	8.1710	706.79	708.32	994.99	637.175	555.044	28.472	17.486	.8612	44.74	4.04	-12.788	.0860
14	8.2148	698.22	693.90	988.63	637.738	556.658	28.504	17.568	.8544	45.07	3.68	-13.887	.0865
15	8.2595	684.79	702.83	981.27	638.893	559.009	28.623	17.670	.8463	45.74	3.27	-14.286	.0872
16	8.3059	653.31	720.61	973.01	642.608	564.058	28.820	17.801	.8354	47.78	2.74	-15.378	.0881
17	8.3535	617.30	739.44	963.38	646.577	569.859	29.003	17.977	.8217	50.23	1.96	-16.591	.0891
18	8.4031	587.95	750.30	947.24	649.337	574.342	27.922	18.217	.8058	52.40	.88	-15.815	.0899
19	8.4678	583.52	754.68	927.49	651.672	580.306	27.852	18.544	.7852	54.88	-.51	-15.781	.0906
20	8.5395	590.74	767.93	900.73	654.361	587.124	27.771	18.980	.7581	58.49	-2.26	-21.178	.0912
21	8.6139	379.50	779.23	866.77	657.717	595.478	27.673	19.517	.7243	64.03	-4.29	-27.481	.0884

BLADE DATA

LOCATION	BLADE-ANGLES SECTION	BLADE-ANGLES MEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	48.817	-33.941	52.939	3.279	0.0000	0.0	.7950	324.93	28.487	633.344	1.938	.222	.9367	.9419
2	47.847	-34.748	50.862	2.218	0.0000	0.0	.6118	942.04	28.461	633.514	1.938	.222	.9376	.9426
3	47.037	-35.398	48.274	1.237	0.0000	0.0	.6262	958.54	28.437	633.207	1.935	.222	.9386	.9434
4	46.298	-35.989	45.949	.351	0.0000	0.0	.8415	971.88	28.415	632.919	1.933	.222	.9394	.9441
5	45.588	-36.558	43.678	-.873	0.0000	0.0	.8514	981.93	28.394	632.642	1.931	.222	.9401	.9446
6	44.889	-37.120	41.198	-1.761	0.0000	0.0	.8583	988.38	28.374	632.368	1.929	.222	.9407	.9450
7	44.209	-37.668	38.474	-2.715	0.0000	0.0	.8621	991.78	28.335	632.036	1.926	.222	.9414	.9455
8	43.548	-38.202	35.749	-3.807	0.0000	0.0	.8644	993.21	28.293	631.707	1.923	.222	.9420	.9459
9	42.906	-38.722	33.349	-4.807	0.0000	0.0	.8654	992.93	28.253	631.389	1.920	.222	.9425	.9463
10	42.277	-39.232	31.106	-5.864	0.0000	0.0	.8604	986.32	28.324	632.767	1.924	.222	.9418	.9458
11	41.652	-39.738	28.888	-6.913	0.0000	0.0	.8675	979.53	28.391	634.800	1.929	.222	.9411	.9453
12	41.028	-40.242	26.722	-7.958	0.0000	0.0	.8668	1000.22	28.443	636.614	1.932	.222	.9405	.9449
13	40.402	-40.744	24.573	-9.008	0.0000	0.0	.8612	994.99	28.472	637.175	1.933	.222	.9402	.9447
14	39.777	-41.247	22.427	-10.067	0.0000	0.0	.8544	988.63	28.504	637.738	1.935	.222	.9398	.9444
15	39.150	-41.752	20.282	-11.127	0.0000	0.0	.8463	981.27	28.623	638.893	1.940	.222	.9384	.9434
16	38.520	-42.261	18.140	-12.190	0.0000	0.0	.8354	973.01	28.820	642.608	1.952	.222	.9360	.9417
17	37.885	-42.775	15.999	-13.258	0.0000	0.0	.8217	963.38	29.003	646.577	1.961	.222	.9340	.9402
18	37.243	-43.296	13.860	-14.331	0.0000	0.0	.8058	947.24	27.922	649.337	1.894	.214	.9340	.9402
19	36.591	-43.826	11.722	-15.410	0.0000	0.0	.7852	927.49	27.852	651.672	1.889	.214	.9327	.9392
20	35.926	-44.367	9.586	-16.496	0.0000	0.0	.7581	900.73	27.771	654.361	1.882	.214	.9309	.9378
21	35.314	-45.052	14.834	13.220	0.0000	0.0	.7245	866.77	27.673	657.717	1.883	.262	.7388	.7681

STATION 11 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.920 ISEN. EFF.= .881 POLY. EFF.= .892 DELTA T ON T = .232

STATION 12 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7130	375.03	329.11	1151.06	633.844	521.935	28.124	14.236	1.0361	32.81	5.21	-3.688	.0735
2	7.7335	395.35	917.52	1146.43	633.514	524.407	28.106	14.490	1.0206	32.59	4.40	-3.539	.0745
3	7.7930	390.09	504.72	1131.29	633.207	526.972	28.033	14.754	1.0047	32.31	3.64	-3.557	.0755
4	7.8334	340.23	531.55	1115.98	632.919	529.552	28.060	15.019	.9886	32.01	2.96	-3.577	.0765
5	7.8714	336.92	573.19	1100.77	632.642	532.066	28.023	15.277	.9723	31.75	2.40	-3.598	.0774
6	7.9143	325.25	591.14	1085.77	632.358	534.520	27.981	15.522	.9559	31.55	1.99	-3.620	.0783
7	7.9519	311.34	599.02	1070.83	631.836	536.664	27.917	15.751	.9424	31.41	1.63	-3.892	.0791
8	7.9919	303.20	599.43	1056.04	631.307	538.534	27.833	15.965	.9288	31.27	1.44	-4.047	.0799
9	8.0312	293.35	599.52	1043.03	630.750	540.387	27.731	16.163	.9151	31.13	1.36	-4.220	.0806
10	8.0731	288.26	593.65	1035.19	632.797	543.536	27.833	16.345	.9023	31.01	1.35	-4.435	.0811
11	8.1125	293.21	589.37	1030.03	634.800	546.761	27.870	16.511	.8982	30.93	1.39	-4.729	.0814
12	8.1543	278.55	585.59	1023.32	636.614	549.028	27.894	16.563	.8903	30.90	1.46	-5.124	.0817
13	8.2007	270.21	581.92	1017.07	637.179	551.690	27.944	16.804	.8812	30.94	1.59	-5.693	.0821
14	8.2437	262.36	579.06	1007.12	637.538	553.607	27.933	16.928	.8727	31.03	1.67	-6.319	.0824
15	8.2873	253.37	577.39	1000.13	638.693	555.594	27.942	17.029	.8650	31.15	1.78	-7.275	.0826
16	8.3349	250.56	574.30	993.13	642.608	558.703	27.979	17.114	.8581	31.36	1.81	-8.983	.0826
17	8.3737	243.35	572.37	993.55	646.377	561.715	27.911	17.172	.8536	31.72	1.87	-11.248	.0825
18	8.4229	239.72	570.33	993.30	649.331	564.320	27.901	17.186	.8503	32.21	1.91	-14.844	.0823
19	8.4704	235.48	568.27	995.37	651.672	566.362	27.925	17.137	.8515	32.93	.67	38.611	.0812
20	8.5211	234.20	567.65	1003.68	652.361	567.447	27.965	17.009	.8567	33.75	-.38	10.925	.0803
21	8.5710	235.73	575.04	1014.79	652.717	572.353	27.389	16.811	.8690	34.90	-2.03	5.947	.0792

BLADE DATA

LOCATION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	31.369	-24.847	32.139	.950	.0374	0.0	1.0361	1161.06	28.124	633.844	1.914	.222	.9164	.9237
2	31.733	-21.236	32.391	.857	.0333	0.0	1.0206	1146.46	28.106	633.514	1.912	.221	.9181	.9252
3	31.445	-21.229	32.413	.935	.0351	0.0	1.0047	1131.29	28.033	633.207	1.911	.221	.9194	.9266
4	31.129	-19.854	32.412	.838	.0339	0.0	.9886	1115.98	28.060	632.919	1.909	.220	.9208	.9279
5	30.941	-19.489	31.746	.804	.0341	0.0	.9729	1100.78	28.023	632.642	1.907	.220	.9220	.9292
6	30.625	-14.283	31.551	.823	.0307	0.0	.9575	1085.77	27.981	632.358	1.904	.219	.9233	.9303
7	30.458	-12.112	31.407	.943	.0334	0.0	.9424	1070.83	27.917	631.836	1.900	.218	.9244	.9314
8	30.298	-10.037	31.254	.971	.0407	0.0	.9253	1056.09	27.833	631.307	1.895	.217	.9254	.9324
9	30.133	-7.871	31.123	.991	.0423	0.0	.9153	1043.03	27.738	630.780	1.892	.216	.9263	.9332
10	29.996	-3.705	31.036	1.003	.0443	0.0	.9007	1030.38	27.731	632.787	1.894	.220	.9248	.9318
11	29.900	-3.569	30.925	1.025	.0473	0.0	.8982	1030.05	27.870	634.900	1.896	.224	.9198	.9268
12	29.866	-1.508	30.884	1.043	.0493	0.0	.8909	1023.92	27.894	636.314	1.898	.227	.9165	.9235
13	29.934	.565	30.942	1.045	.0434	0.0	.8812	1015.07	27.944	637.175	1.895	.228	.9174	.9245
14	29.975	2.823	31.037	1.052	.0474	0.0	.8727	1007.02	27.933	637.738	1.891	.230	.9140	.9211
15	30.099	5.457	31.191	1.052	.0481	0.0	.8659	1000.19	27.942	638.163	1.888	.232	.9077	.9149
16	30.309	8.521	31.350	1.045	.0427	0.0	.8581	999.15	27.979	638.703	1.883	.230	.9206	.9274
17	30.575	12.040	31.719	1.044	.0391	0.0	.8526	993.55	27.911	638.320	1.879	.229	.9294	.9361
18	31.243	15.933	32.237	1.044	.0359	0.0	.8503	993.30	27.901	638.320	1.876	.229	.9384	.9447
19	31.946	20.134	32.993	1.048	.0352	0.0	.8515	995.37	27.925	638.362	1.873	.229	.9405	.9467
20	32.595	24.317	33.733	1.054	.0343	0.0	.8567	1003.68	27.989	638.447	1.873	.229	.9409	.9471
21	33.178	28.226	34.339	1.061	.0354	0.0	.8690	1014.79	27.389	637.717	1.863	.228	.9247	.9309

STATION 12 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.832 ISEN. EFF.= .859 POLY. EFF.= .871 DELTA T ON T = .232

STATION 13 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7238	653.62	272.44	901.77	933.844	566.391	27.774	18.717	.7727	17.88	-2.28	-5.196	.08891
2	7.7672	644.13	265.88	889.23	933.514	568.586	27.743	18.989	.7572	17.84	-2.28	-5.196	.08891
3	7.7972	639.06	259.41	880.42	933.207	570.511	27.720	19.209	.7423	17.80	-2.28	-5.196	.08891
4	7.8272	634.00	253.06	871.98	932.919	572.401	27.697	19.429	.7280	17.76	-2.28	-5.196	.08891
5	7.8572	628.94	246.83	863.79	932.648	574.259	27.674	19.648	.7141	17.72	-2.28	-5.196	.08891
6	7.8872	623.89	240.72	855.85	932.393	576.086	27.651	19.868	.7006	17.68	-2.28	-5.196	.08891
7	7.9172	618.84	234.73	848.15	932.154	577.885	27.629	20.087	.6876	17.64	-2.28	-5.196	.08891
8	7.9472	613.80	228.85	840.69	931.930	579.657	27.607	20.307	.6749	17.60	-2.28	-5.196	.08891
9	7.9772	608.77	223.09	833.46	931.720	581.403	27.585	20.526	.6626	17.56	-2.28	-5.196	.08891
10	8.0072	603.74	217.44	826.46	931.524	583.126	27.563	20.746	.6507	17.52	-2.28	-5.196	.08891
11	8.0372	598.72	211.90	819.68	931.342	584.825	27.542	20.965	.6391	17.48	-2.28	-5.196	.08891
12	8.0672	593.71	206.47	813.12	931.173	586.502	27.521	21.184	.6278	17.44	-2.28	-5.196	.08891
13	8.0972	588.71	201.15	806.77	931.017	588.158	27.500	21.404	.6169	17.40	-2.28	-5.196	.08891
14	8.1272	583.72	195.94	800.63	930.874	589.793	27.480	21.623	.6063	17.36	-2.28	-5.196	.08891
15	8.1572	578.74	190.84	794.69	930.744	591.408	27.460	21.843	.5960	17.32	-2.28	-5.196	.08891
16	8.1872	573.77	185.85	788.96	930.626	593.004	27.440	22.062	.5860	17.28	-2.28	-5.196	.08891
17	8.2172	568.81	180.97	783.43	930.521	594.581	27.421	22.282	.5764	17.24	-2.28	-5.196	.08891
18	8.2472	563.86	176.20	778.09	930.429	596.140	27.402	22.501	.5670	17.20	-2.28	-5.196	.08891
19	8.2772	558.92	171.54	772.96	930.350	597.681	27.383	22.721	.5580	17.16	-2.28	-5.196	.08891
20	8.3072	553.99	166.99	768.02	930.284	599.205	27.365	22.940	.5492	17.12	-2.28	-5.196	.08891
21	8.3298	772.18	269.24	817.48	937.717	602.357	27.103	19.903	.6794	19.23	.28	76.314	.08891

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	18.238	-3.414	17.585	1.351	.0134	0.0	.7727	901.77	27.774	933.844	1.850	.222	.8871	.8889
2	18.238	-3.414	17.585	1.351	.0134	0.0	.7572	889.23	27.743	933.514	1.850	.222	.8871	.8889
3	18.238	-3.414	17.585	1.351	.0134	0.0	.7423	880.42	27.720	933.207	1.850	.222	.8871	.8889
4	18.238	-3.414	17.585	1.351	.0134	0.0	.7280	871.98	27.697	932.919	1.850	.222	.8871	.8889
5	18.238	-3.414	17.585	1.351	.0134	0.0	.7141	863.79	27.674	932.648	1.850	.222	.8871	.8889
6	18.238	-3.414	17.585	1.351	.0134	0.0	.7006	855.85	27.651	932.393	1.850	.222	.8871	.8889
7	18.238	-3.414	17.585	1.351	.0134	0.0	.6876	848.15	27.629	932.154	1.850	.222	.8871	.8889
8	18.238	-3.414	17.585	1.351	.0134	0.0	.6749	840.69	27.607	931.930	1.850	.222	.8871	.8889
9	18.238	-3.414	17.585	1.351	.0134	0.0	.6626	833.46	27.585	931.720	1.850	.222	.8871	.8889
10	18.238	-3.414	17.585	1.351	.0134	0.0	.6507	826.46	27.563	931.524	1.850	.222	.8871	.8889
11	18.238	-3.414	17.585	1.351	.0134	0.0	.6391	819.68	27.542	931.342	1.850	.222	.8871	.8889
12	18.238	-3.414	17.585	1.351	.0134	0.0	.6278	813.12	27.521	931.173	1.850	.222	.8871	.8889
13	18.238	-3.414	17.585	1.351	.0134	0.0	.6169	806.77	27.500	931.017	1.850	.222	.8871	.8889
14	18.238	-3.414	17.585	1.351	.0134	0.0	.6063	800.63	27.480	930.874	1.850	.222	.8871	.8889
15	18.238	-3.414	17.585	1.351	.0134	0.0	.5960	794.69	27.460	930.744	1.850	.222	.8871	.8889
16	18.238	-3.414	17.585	1.351	.0134	0.0	.5860	788.96	27.440	930.626	1.850	.222	.8871	.8889
17	18.238	-3.414	17.585	1.351	.0134	0.0	.5764	783.43	27.421	930.521	1.850	.222	.8871	.8889
18	18.238	-3.414	17.585	1.351	.0134	0.0	.5670	778.09	27.402	930.429	1.850	.222	.8871	.8889
19	18.238	-3.414	17.585	1.351	.0134	0.0	.5580	772.96	27.383	930.350	1.850	.222	.8871	.8889
20	18.238	-3.414	17.585	1.351	.0134	0.0	.5492	768.02	27.365	930.284	1.850	.222	.8871	.8889
21	17.910	8.342	19.229	1.719	.0697	0.0	.6794	817.48	27.103	937.717	1.844	.2368	.7219	.7382

STATION 13 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.963 ISEN. EFF.= .836 POLY. EFF.= .858 DELTA T ON T = .232

STATION 14 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES AERIO	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.9720	99.71	73.26	638.78	633.844	593.363	27.923	21.788	.5894	6.18	-4.28	10.701	.0008
2	7.9597	992.62	73.54	636.12	633.844	593.387	27.384	21.788	.5629	6.16	-4.24	10.701	.0008
3	7.9432	989.57	73.77	633.59	633.844	593.387	27.342	21.788	.5606	6.14	-4.20	10.701	.0008
4	7.9275	986.96	74.04	631.39	633.844	593.387	27.308	21.788	.5588	6.12	-4.17	10.701	.0008
5	7.9276	984.10	74.32	628.98	633.844	593.387	27.271	21.788	.5568	6.10	-4.13	10.701	.0008
6	7.9195	980.76	74.60	626.12	633.844	593.387	27.223	21.788	.5543	6.08	-4.09	10.701	.0008
7	7.9048	976.93	74.88	622.80	633.844	593.387	27.163	21.788	.5511	6.05	-4.04	10.701	.0008
8	7.8948	972.68	75.16	619.07	633.844	593.387	27.092	21.788	.5473	6.02	-3.99	10.701	.0008
9	7.8844	967.99	75.44	614.91	633.844	593.387	27.008	21.788	.5428	5.98	-3.93	10.701	.0008
10	7.8737	962.83	75.72	610.30	633.844	593.387	26.910	21.788	.5375	5.93	-3.86	10.701	.0008
11	7.8627	957.17	76.00	605.21	633.844	593.387	26.797	21.788	.5314	5.87	-3.78	10.701	.0008
12	7.8514	950.99	76.28	599.62	633.844	593.387	26.667	21.788	.5243	5.80	-3.69	10.701	.0008
13	7.8398	944.23	76.56	593.49	633.844	593.387	26.518	21.788	.5161	5.72	-3.58	10.701	.0008
14	7.8279	936.87	76.84	586.78	633.844	593.387	26.347	21.788	.5066	5.62	-3.45	10.701	.0008
15	7.8157	928.85	77.12	579.45	633.844	593.387	26.151	21.788	.4956	5.50	-3.30	10.701	.0008
16	7.8032	920.12	77.40	571.44	633.844	593.387	25.926	21.788	.4829	5.36	-3.12	10.701	.0008
17	7.7904	910.63	77.68	562.69	633.844	593.387	25.668	21.788	.4681	5.19	-2.91	10.701	.0008
18	7.7773	900.31	77.96	553.13	633.844	593.387	25.372	21.788	.4510	4.99	-2.65	10.701	.0008
19	7.7639	889.09	78.24	542.69	633.844	593.387	25.032	21.788	.4312	4.74	-2.33	10.701	.0008
20	7.7502	876.87	78.52	531.27	633.844	593.387	24.639	21.788	.4083	4.43	-1.93	10.701	.0008
21	7.7362	863.54	78.80	518.72	633.844	593.387	24.183	21.788	.3817	4.04	-1.41	10.701	.0008

BLADE DATA

LOCATION	BLADE SECTION	BLADE ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	8.365	-1.054	6.193	2.218	.1026	0.0	.3051	898.78	27.423	633.844	1.866	.222	.8775	.8877
2	8.334	-1.398	6.056	2.222	.1077	0.0	.2978	896.52	27.385	633.844	1.863	.222	.8775	.8877
3	8.302	-1.923	5.941	2.239	.1063	0.0	.2906	894.36	27.342	633.844	1.861	.222	.8775	.8877
4	8.270	-2.835	5.847	2.274	.1000	0.0	.2834	892.26	27.298	633.844	1.858	.222	.8775	.8877
5	8.238	-4.369	5.769	2.326	.0915	0.0	.2757	890.09	27.250	633.844	1.854	.222	.8775	.8877
6	8.206	-6.693	5.704	2.396	.0825	0.0	.2676	887.79	27.195	633.844	1.850	.222	.8775	.8877
7	8.174	-9.939	5.648	2.483	.0734	0.0	.2591	885.34	27.133	633.844	1.845	.222	.8775	.8877
8	8.142	-13.197	5.597	2.585	.0648	0.0	.2503	882.75	27.064	633.844	1.840	.222	.8775	.8877
9	8.110	-15.518	5.550	2.697	.0572	0.0	.2413	880.04	26.988	633.844	1.834	.222	.8775	.8877
10	8.078	-16.557	5.507	2.817	.0509	0.0	.2322	877.23	26.905	633.844	1.828	.222	.8775	.8877
11	8.046	-16.408	5.467	2.943	.0459	0.0	.2230	874.33	26.815	633.844	1.822	.222	.8775	.8877
12	8.014	-15.338	5.430	3.073	.0420	0.0	.2139	871.36	26.720	633.844	1.815	.222	.8775	.8877
13	7.982	-13.607	5.396	3.206	.0391	0.0	.2048	868.33	26.621	633.844	1.809	.222	.8775	.8877
14	7.950	-11.443	5.364	3.340	.0369	0.0	.1959	865.26	26.519	633.844	1.802	.222	.8775	.8877
15	7.918	-9.033	5.334	3.474	.0353	0.0	.1872	862.16	26.415	633.844	1.796	.222	.8775	.8877
16	7.886	-6.529	5.305	3.607	.0342	0.0	.1787	859.04	26.309	633.844	1.789	.222	.8775	.8877
17	7.854	-4.027	5.277	3.738	.0335	0.0	.1705	855.91	26.203	633.844	1.783	.222	.8775	.8877
18	7.822	-1.599	5.250	3.867	.0331	0.0	.1626	852.78	26.096	633.844	1.777	.222	.8775	.8877
19	7.790	.753	5.224	3.993	.0329	0.0	.1550	849.65	25.990	633.844	1.771	.222	.8775	.8877
20	7.758	2.983	5.198	4.116	.0329	0.0	.1477	846.53	25.885	633.844	1.765	.222	.8775	.8877
21	7.726	5.000	5.173	4.236	.0329	0.0	.1407	843.43	25.781	633.844	1.759	.222	.8775	.8877

STATION 14 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.833 ISEN. EFF.= .813 POLY. EFF.= .828 DELTA T ON T = .232

STATION 15 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	626.17	0.00	626.17	633.844	601.345	27.073	22.506	.5208	0.00	-1.66	10.624	.1009
2	7.6734	625.05	0.00	625.05	633.514	601.130	27.019	22.474	.5203	0.00	-1.64	11.037	.1008
3	7.7197	623.81	0.00	623.81	633.207	600.951	26.964	22.443	.5198	0.00	-1.60	11.517	.1007
4	7.7608	622.42	0.00	622.42	632.919	600.805	26.907	22.413	.5193	0.00	-1.56	12.080	.1006
5	7.8026	620.83	0.00	620.83	632.642	600.693	26.849	22.383	.5187	0.00	-1.51	12.745	.1005
6	7.8459	619.07	0.00	619.07	632.368	600.609	26.790	22.355	.5180	0.00	-1.44	13.581	.1003
7	7.8901	609.36	0.00	609.36	631.836	601.056	26.607	22.329	.5079	0.00	-1.35	14.695	.1002
8	7.9356	602.87	0.00	602.87	631.307	601.179	26.491	22.305	.5015	0.00	-1.25	16.222	.1000
9	7.9823	598.30	0.00	598.30	630.780	601.107	26.383	22.283	.4978	0.00	-1.13	18.359	.0999
10	8.0299	598.05	0.00	598.05	632.767	603.121	26.343	22.263	.4967	0.00	-.99	21.441	.0995
11	8.0785	597.53	0.00	597.53	634.500	605.209	26.306	22.247	.4954	0.00	-.84	25.227	.0991
12	8.1280	596.88	0.00	596.88	636.614	607.090	26.268	22.234	.4941	0.00	-.67	34.525	.0987
13	8.1783	597.75	0.00	597.75	637.175	607.565	26.267	22.224	.4947	0.00	-.50	50.848	.0986
14	8.2292	598.34	0.00	598.34	637.738	608.071	26.263	22.218	.4950	0.00	-.33	93.577	.0985
15	8.2803	598.92	0.00	598.92	638.883	609.159	26.260	22.215	.4950	0.00	-.17	409.307	.0983
16	8.3330	604.69	0.00	604.69	642.008	612.314	26.322	22.216	.4985	0.00	-.01	-171.809	.0978
17	8.3835	610.40	0.00	610.40	646.577	615.713	26.384	22.219	.5018	0.00	.13	-80.006	.0973
18	8.4354	615.33	0.00	615.33	649.331	617.971	26.447	22.220	.5050	0.00	.25	-55.347	.0970
19	8.4917	617.91	0.00	617.91	651.672	620.052	26.481	22.235	.5062	0.00	.36	-43.963	.0967
20	8.5456	620.43	0.00	620.43	654.361	622.486	26.513	22.246	.5073	0.00	.45	-37.595	.0964
21	8.6	623.15	0.00	623.15	657.717	625.567	26.545	22.258	.5083	0.00	.52	-33.[illegible]	.0959

BLADE DATA

LOCATION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-7.239	.020	0.000	7.239	.1457	0.0	.5208	626.17	27.073	633.344	1.842	.222	.8578	.8695
2	-7.334	.020	0.000	7.334	.1441	0.0	.5200	625.05	27.019	633.514	1.839	.221	.8572	.8689
3	-7.553	.019	0.000	7.553	.1431	0.0	.5190	623.81	26.964	633.207	1.835	.221	.8564	.8681
4	-7.727	.018	0.000	7.727	.1430	0.0	.5180	622.42	26.907	632.919	1.831	.220	.8553	.8671
5	-7.896	.016	0.000	7.896	.1443	0.0	.5167	620.83	26.849	632.642	1.827	.220	.8540	.8658
6	-8.063	.013	0.000	8.063	.1518	0.0	.5120	619.37	26.730	632.368	1.819	.219	.8492	.8613
7	-8.229	.011	0.000	8.229	.1558	0.0	.5070	609.36	26.607	631.836	1.811	.218	.8461	.8584
8	-8.391	.010	0.000	8.391	.1664	0.0	.5015	602.87	26.481	631.307	1.802	.217	.8427	.8552
9	-8.548	.008	0.000	8.548	.1716	0.0	.4978	598.30	26.389	630.780	1.796	.216	.8412	.8537
10	-8.685	.007	0.000	8.685	.1802	0.0	.4967	598.05	26.348	632.767	1.793	.220	.8242	.8380
11	-8.808	.005	0.000	8.808	.1894	0.0	.4954	597.53	26.306	634.500	1.790	.224	.8073	.8224
12	-8.911	.003	0.000	8.911	.1970	0.0	.4941	596.88	26.268	636.614	1.787	.227	.7927	.8089
13	-8.992	.001	0.000	8.992	.1935	0.0	.4947	597.75	26.265	637.175	1.787	.228	.7883	.8053
14	-9.045	-.002	0.000	9.045	.1902	0.0	.4950	598.34	26.263	637.738	1.787	.230	.7849	.8017
15	-9.063	-.004	0.000	9.063	.1865	0.0	.4950	598.92	26.260	638.883	1.787	.232	.7773	.7946
16	-9.059	-.008	0.000	9.059	.1742	0.0	.4985	604.69	26.322	642.008	1.791	.239	.7572	.7761
17	-9.061	-.012	0.000	9.061	.1614	0.0	.5018	610.40	26.384	646.577	1.795	.247	.7369	.7575
18	-9.086	-.018	0.000	9.086	.1519	0.0	.5050	615.33	26.447	649.331	1.800	.252	.7245	.7461
19	-9.127	-.024	0.000	9.127	.1474	0.0	.5062	617.91	26.481	651.672	1.802	.256	.7133	.7359
20	-9.170	-.031	0.000	9.170	.1433	0.0	.5073	620.43	26.513	654.361	1.804	.262	.7007	.7243
21	-9.213	-.038	0.000	9.213	.1383	0.0	.5083	623.15	26.545	657.717	1.806	.268	.6853	.7101

STATION 15 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.804 ISEN. EFF.= .790 POLY. EFF.= .806 DELTA T ON T = .232

STATION 16 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	642.97	0.00	642.97	633.844	599.575	27.073	22.274	.5356	0.00	0.00	0.000	.1002
2	7.6797	639.62	0.00	639.62	633.514	599.601	27.019	22.274	.5328	0.00	-.03	1161.533	.1002
3	7.7194	636.20	0.00	636.20	633.207	599.656	26.964	22.274	.5293	0.00	-.05	621.738	.1001
4	7.7591	632.69	0.00	632.69	632.919	599.736	26.907	22.273	.5270	0.00	-.08	446.577	.1001
5	7.8007	629.05	0.00	629.05	632.644	599.841	26.849	22.272	.5233	0.00	-.09	363.585	.1001
6	7.8434	621.65	0.00	621.63	632.368	600.331	26.730	22.271	.5175	0.00	-.11	317.714	.1000
7	7.8874	613.84	0.00	613.84	631.836	600.601	26.607	22.270	.5103	0.00	-.12	291.557	.1000
8	7.9328	605.65	0.00	605.65	631.307	600.901	26.481	22.268	.5040	0.00	-.12	275.151	.0999
9	7.9794	599.51	0.00	599.51	630.780	600.967	26.383	22.267	.4988	0.00	-.13	274.618	.0999
10	8.0271	597.86	0.00	597.86	632.767	603.139	26.343	22.266	.4966	0.00	-.12	280.041	.0995
11	8.0758	596.15	0.00	596.15	634.800	605.345	26.305	22.265	.4942	0.00	-.12	294.723	.0992
12	8.1255	594.55	0.00	594.55	636.614	607.320	26.263	22.263	.4921	0.00	-.11	320.356	.0988
13	8.1761	594.73	0.00	594.73	637.175	607.833	26.263	22.262	.4921	0.00	-.10	360.222	.0987
14	8.2273	594.91	0.00	594.91	637.738	608.410	26.263	22.261	.4920	0.00	-.08	420.263	.0987
15	8.2793	595.34	0.00	595.34	638.863	609.513	26.260	22.260	.4919	0.00	-.07	511.868	.0985
16	8.3317	601.23	0.00	601.23	642.608	612.600	26.322	22.260	.4955	0.00	-.05	655.935	.0980
17	8.3846	607.29	0.00	607.29	646.577	616.027	26.384	22.259	.4991	0.00	-.04	893.480	.0974
18	8.4378	612.78	0.00	612.78	649.331	618.230	26.447	22.259	.5024	0.00	-.03	1337.047	.0971
19	8.4914	616.07	0.00	616.07	651.672	620.240	26.481	22.258	.5047	0.00	-.02	2319.463	.0968
20	8.5454	619.45	0.00	619.45	654.361	622.587	26.513	22.258	.5065	0.00	-.01	5606.642	.0964
21	8.6000	623.15	0.00	623.15	657.717	625.567	26.543	22.258	.5083	0.00	0.00	0.000	.0959

STATION 17 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	644.11	0.00	644.11	633.844	599.454	27.073	22.258	.5366	0.00	0.00	0.000	.1001
2	7.6797	640.75	0.00	640.75	633.514	599.481	27.013	22.258	.5333	0.00	-.00	0.000	.1001
3	7.7193	637.31	0.00	637.31	633.207	599.530	26.964	22.258	.5303	0.00	-.00	0.000	.1001
4	7.7590	633.76	0.00	633.76	632.919	599.624	26.907	22.258	.5274	0.00	-.00	0.000	.1001
5	7.8006	630.06	0.00	630.06	632.642	599.736	26.849	22.258	.5243	0.00	-.00	0.000	.1000
6	7.8433	622.62	0.00	622.62	632.368	600.234	26.730	22.258	.5184	0.00	-.00	0.000	.1000
7	7.8873	614.71	0.00	614.71	631.836	600.513	26.607	22.258	.5117	0.00	-.01	0.000	.0999
8	7.9326	606.43	0.00	606.43	631.307	600.822	26.481	22.255	.5046	0.00	-.01	0.000	.0999
9	7.9792	600.20	0.00	600.20	630.780	600.918	26.389	22.258	.4994	0.00	-.01	0.000	.0999
10	8.0259	598.45	0.00	598.45	632.767	603.081	26.345	22.258	.4971	0.00	-.01	0.000	.0995
11	8.0756	596.64	0.00	596.64	634.800	605.297	26.306	22.258	.4947	0.00	-.01	0.000	.0991
12	8.1253	594.94	0.00	594.94	636.614	607.281	26.269	22.258	.4923	0.00	-.01	0.000	.0987
13	8.1759	595.04	0.00	595.04	637.175	607.833	26.265	22.258	.4923	0.00	-.01	0.000	.0986
14	8.2271	595.14	0.00	595.14	637.738	608.388	26.263	22.258	.4922	0.00	-.01	0.000	.0986
15	8.2791	595.50	0.00	595.50	638.863	609.497	26.260	22.258	.4920	0.00	-.01	0.000	.0985
16	8.3316	601.34	0.00	601.34	642.608	612.649	26.322	22.258	.4956	0.00	-.01	0.000	.0980
17	8.3845	607.36	0.00	607.36	646.577	616.020	26.384	22.258	.4992	0.00	-.00	0.000	.0974
18	8.4377	612.81	0.00	612.81	649.331	618.227	26.447	22.258	.5024	0.00	-.00	0.000	.0971
19	8.4913	616.08	0.00	616.08	651.672	620.238	26.481	22.258	.5047	0.00	-.00	0.000	.0968
20	8.5454	619.45	0.00	619.45	654.361	622.587	26.513	22.258	.5065	0.00	-.00	0.000	.0964
21	8.6000	623.15	0.00	623.15	657.717	625.567	26.543	22.258	.5083	0.00	0.00	0.000	.0959

ROTOR PERFORMANCE

LOCATION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCIDENCE	DEVIATION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	6.7500	7.5499	.3173	9.102	5.636	.1252	.4402	.4311	.5543	.7277	.7823	-60.937	-12.647	6.078	18.884
2	6.8221	7.6316	.3205	8.836	6.048	.1197	.4567	.4384	.5623	.7115	.7719	-61.337	-13.483	6.336	18.654
3	6.8733	7.6344	.3333	8.549	6.359	.1127	.4700	.4386	.5625	.6978	.7688	-61.714	-14.333	6.588	18.170
4	7.0938	7.8782	.3454	8.402	6.519	.1073	.4808	.4363	.5599	.6863	.7503	-62.056	-15.163	6.840	9.401
5	7.1937	7.7229	.3532	8.252	6.552	.1021	.4894	.4459	.5552	.6781	.7398	-62.362	-15.986	6.840	8.886
6	7.3031	7.7684	.3705	8.135	7.050	.0973	.4962	.4919	.5408	.6703	.7234	-62.639	-17.809	6.840	8.386
7	7.4121	7.9147	.3825	8.039	7.331	.0907	.4999	.5147	.5413	.6694	.7174	-62.906	-17.655	6.840	7.886
8	7.5209	7.8615	.3943	7.957	7.678	.0844	.5024	.5363	.5327	.6629	.7055	-63.174	-18.509	6.840	7.386
9	7.6294	7.9093	.4062	7.887	8.049	.0794	.5039	.5570	.5235	.6605	.6937	-63.448	-19.374	6.840	6.886
10	7.7381	7.9583	.4152	7.827	7.930	.0971	.5232	.5256	.5137	.6433	.6974	-63.733	-19.258	3.000	6.386
11	7.8471	8.0085	.4295	7.774	7.277	.1150	.5416	.5034	.5038	.6288	.7010	-64.034	-20.216	1.000	5.886
12	7.9566	8.0604	.4413	7.724	7.092	.1308	.5578	.5590	.4937	.6136	.7029	-64.355	-20.734	.000	5.386
13	8.0668	8.1137	.4527	7.672	7.519	.1394	.5669	.5774	.4833	.6043	.6970	-64.699	-21.215	-.000	4.886
14	8.1779	8.1685	.4641	7.614	8.004	.1477	.5751	.5750	.4732	.5955	.6389	-65.072	-21.660	-.000	4.386
15	8.2902	8.2250	.4754	7.543	8.493	.1525	.5803	.5377	.4629	.5824	.6860	-65.476	-22.067	-.000	3.886
16	8.4039	8.2846	.4864	7.471	8.827	.2062	.6269	.6257	.4527	.5471	.6943	-65.911	-22.439	-.000	3.386
17	8.5191	8.3432	.4982	7.384	9.738	.2436	.6682	.6369	.4432	.5087	.7106	-66.381	-22.774	-.000	2.886
18	8.6362	8.4196	1.0039	7.233	11.073	.2781	.6951	.3129	.4343	.4823	.7138	-66.885	-23.070	-.000	2.386
19	8.7552	8.4924	1.0213	7.207	12.336	.2984	.7165	.7139	.4263	.4603	.7138	-67.337	-22.970	-.000	1.886
20	8.8754	8.5777	1.0333	7.127	15.599	.3191	.7416	.7387	.4193	.4359	.7143	-67.824	-22.133	-.000	1.386
21	9.0000	8.6658	1.0459	7.052	19.749	.3473	.7753	.7722	.4134	.4017	.7166	-68.316	-21.371	-9.687	13.159

STATOR PERFORMANCE

LOCATION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCIDENCE	DEVIATION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	7.5133	7.5400	.7358	3.279	7.219	.1457	.4872	.4370	.3836	.6770	0.0000	48.817	-7.238	-38.941	.000
2	7.5770	7.6794	.7119	2.219	7.394	.1441	.5044	.5043	.4017	.6635	0.0000	47.847	-7.384	-38.394	.000
3	7.7304	7.7197	.7282	1.237	7.559	.1430	.5203	.5204	.4181	.6508	0.0000	47.037	-7.559	-37.859	.000
4	7.7300	7.7008	.7415	.351	7.727	.1430	.5338	.5138	.4305	.6404	0.0000	46.498	-7.727	-37.327	.000
5	7.7268	7.6023	.7314	-.344	7.898	.1443	.5442	.5445	.4390	.6324	0.0000	46.089	-7.896	-36.796	.000
6	7.8717	7.8459	.7393	-.878	8.033	.1518	.5565	.5208	.4445	.6225	0.0000	45.757	-8.063	-36.263	.000
7	7.9153	7.9901	.3621	-1.351	8.229	.1536	.5667	.5270	.4435	.6144	0.0000	45.459	-8.229	-35.729	.000
8	7.9591	7.9356	.3640	-1.715	8.331	.1664	.5759	.5762	.4507	.6070	0.0000	45.189	-8.394	-35.194	.000
9	8.0004	7.9823	.3641	-2.007	8.545	.1716	.5818	.5320	.4534	.6025	0.0000	44.966	-8.558	-34.658	.000
10	8.0423	8.0299	.3664	-1.364	8.935	.1802	.5856	.5388	.4472	.6000	0.0000	44.778	-8.722	-34.122	.000
11	8.0849	8.0785	.3673	-.713	8.806	.1894	.5946	.5347	.4420	.5975	0.0000	44.652	-8.886	-33.586	.000
12	8.1277	8.1240	.3568	-.158	8.911	.1970	.5988	.5386	.4367	.5968	0.0000	44.629	-9.049	-33.049	.000
13	8.1710	8.1783	.3512	.012	8.992	.1935	.5963	.5382	.4352	.5908	0.0000	44.725	-9.211	-32.511	.000
14	8.2148	8.2232	.3544	.192	9.045	.1902	.5923	.5328	.4331	.6052	0.0000	44.907	-9.045	-31.973	.000
15	8.2595	8.2808	.3423	.827	9.004	.1805	.5869	.5387	.4304	.6104	0.0000	45.118	-8.879	-31.434	.000
16	8.3059	8.3330	.3354	2.469	9.039	.1742	.5827	.5324	.4278	.6219	0.0000	45.314	-8.713	-30.895	.000
17	8.3555	8.3955	.3217	.613	9.061	.1614	.5742	.5738	.4231	.6345	0.0000	45.613	-8.547	-30.356	.000
18	8.4091	8.4384	.3033	0.167	9.036	.1519	.5609	.5305	.4131	.6436	0.0000	45.934	-8.381	-29.817	.000
19	8.4679	8.4917	.7952	7.565	9.127	.1474	.5443	.5440	.3965	.6662	0.0000	47.320	-8.215	-29.277	.000
20	8.5355	8.5456	.7531	9.706	9.170	.1433	.5211	.5210	.3714	.6868	0.0000	48.786	-8.049	-28.738	.000
21	8.6199	8.6000	.7245	13.220	9.213	.1383	.4895	.4198	.3361	.7169	0.0000	50.814	-9.213	46.692	-.000

WAKE AND BOUNDARY LAYER BLOCKAGES (PERCENT)

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MID BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	3.6	4.3	3.0	11.0	13.0	14.0	14.7	15.8	15.8
DIST FACTOR	1.0	1.0	1.0	1.0	.8	.6	.4	.2	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
INT BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	3.7	4.4	3.0	11.0	13.0	14.0	14.7	15.8	15.8

SUMMARY POINT NO. 1 THE CALCULATION IS CONVERGED PASS 19

TEST POINT TITLE = 212070815970

FLOW = 17.27 SPEED = 14291.3 PRESSURE RATIO = 1.804 ISENTROPIC EFFY = .7895 POLYTROPIC EFFY = .8882 DEL T/T = .2322

SUMMARY OF 1 TEST POINTS

POINT NO.	TEST POINT TITLE	STATUS OF CALCULATION	FLOW RATE LBS/SEC	SPEED RPM	ROTOR PRESSURE RATIO	ROTOR ISEN EFFY	STAGE PRESSURE RATIO	STAGE ISEN EFFY	FLOW/(CHOKE FLOW)
1	212070815970	CONVERGED AFTER 18 PASSES	17.270	14291.3	1.928	.881	1.804	.798	.45226

5. TEST POINT 212071515980 (80%)

STATION 1 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	5.0680	270.32	0.00	270.32	518.688	512.610	14.693	14.102	.2434	0.00	20.93	0.000	.0742
2	6.2298	270.32	0.00	270.32	518.688	512.610	14.693	14.102	.2434	0.00	19.71	0.000	.0742
3	6.3837	270.32	0.00	270.32	518.688	512.610	14.693	14.102	.2434	0.00	18.48	0.000	.0742
4	6.5333	270.32	0.00	270.32	518.688	512.610	14.693	14.102	.2434	0.00	17.23	0.000	.0742
5	6.6933	270.32	0.00	270.32	518.688	512.610	14.693	14.102	.2434	0.00	15.98	0.000	.0742
6	6.8473	270.32	0.00	270.32	518.688	512.610	14.693	14.102	.2434	0.00	14.72	0.000	.0742
7	6.9993	270.32	0.00	270.32	518.688	512.610	14.693	14.102	.2434	0.00	13.47	0.000	.0742
8	7.1516	270.32	0.00	270.32	518.688	512.610	14.693	14.102	.2434	0.00	12.23	0.000	.0742
9	7.3020	270.32	0.00	270.32	518.688	512.610	14.693	14.102	.2434	0.00	11.01	0.000	.0742
10	7.4531	270.32	0.00	270.32	518.688	512.610	14.693	14.102	.2434	0.00	9.80	0.000	.0742
11	7.6030	270.32	0.00	270.32	518.688	512.610	14.693	14.102	.2434	0.00	8.62	0.000	.0742
12	7.7522	270.32	0.00	270.32	518.688	512.610	14.693	14.102	.2434	0.00	7.47	0.000	.0742
13	7.9017	270.32	0.00	270.32	518.688	512.610	14.693	14.102	.2434	0.00	6.36	0.000	.0742
14	8.0510	270.32	0.00	270.32	518.688	512.610	14.693	14.102	.2434	0.00	5.38	0.000	.0742
15	8.1993	270.32	0.00	270.32	518.688	512.610	14.693	14.102	.2434	0.00	4.29	0.000	.0742
16	8.3473	270.32	0.00	270.32	518.688	512.610	14.693	14.102	.2434	0.00	3.35	0.000	.0742
17	8.4953	270.32	0.00	270.32	518.688	512.610	14.693	14.102	.2434	0.00	2.49	0.000	.0742
18	8.6447	270.32	0.00	270.32	518.688	512.610	14.693	14.102	.2434	0.00	1.71	0.000	.0742
19	8.7931	270.32	0.00	270.32	518.688	512.610	14.693	14.102	.2434	0.00	1.02	0.000	.0742
20	8.9415	270.32	0.00	270.32	518.688	512.610	14.693	14.102	.2434	0.00	.45	0.000	.0742
21	9.0900	270.32	0.00	270.32	518.688	512.610	14.693	14.102	.2434	0.00	0.00	0.000	.0742

STATION 2 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	5.3740	234.43	0.00	234.43	518.688	511.477	14.693	13.994	.2654	0.00	20.83	-205.758	.0738
2	5.5135	235.98	0.00	235.98	518.688	511.401	14.693	13.986	.2668	0.00	19.53	-115.511	.0737
3	5.6510	237.35	0.00	237.35	518.688	511.334	14.693	13.980	.2681	0.00	18.22	-84.874	.0737
4	5.7974	238.52	0.00	238.52	518.688	511.270	14.693	13.974	.2691	0.00	16.92	-67.322	.0737
5	5.9229	239.51	0.00	239.51	518.688	511.226	14.693	13.970	.2700	0.00	15.62	-57.679	.0737
6	6.0575	240.31	0.00	240.31	518.688	511.186	14.693	13.966	.2708	0.00	14.32	-50.357	.0737
7	6.1915	240.91	0.00	240.91	518.688	511.156	14.693	13.963	.2713	0.00	13.02	-45.121	.0737
8	6.3259	241.30	0.00	241.30	518.688	511.137	14.693	13.961	.2717	0.00	11.73	-40.783	.0736
9	6.4582	241.47	0.00	241.47	518.688	511.128	14.693	13.960	.2718	0.00	10.46	-36.948	.0736
10	6.5912	241.41	0.00	241.41	518.688	511.132	14.693	13.961	.2717	0.00	9.20	-33.626	.0736
11	6.7243	241.10	0.00	241.10	518.688	511.147	14.693	13.962	.2715	0.00	7.96	-30.659	.0737
12	6.8574	240.52	0.00	240.52	518.688	511.176	14.693	13.965	.2710	0.00	6.75	-27.987	.0737
13	6.9904	239.68	0.00	239.68	518.688	511.218	14.693	13.969	.2702	0.00	5.57	-25.563	.0737
14	7.1243	238.55	0.00	238.55	518.688	511.274	14.693	13.974	.2692	0.00	4.43	-23.338	.0737
15	7.2583	237.12	0.00	237.12	518.688	511.345	14.693	13.981	.2678	0.00	3.33	-21.276	.0737
16	7.3947	235.37	0.00	235.37	518.688	511.431	14.693	13.989	.2663	0.00	2.29	-19.321	.0737
17	7.5310	233.29	0.00	233.29	518.688	511.533	14.693	13.999	.2644	0.00	1.30	-17.422	.0738
18	7.6635	230.85	0.00	230.85	518.688	511.651	14.693	14.010	.2621	0.00	.38	-15.547	.0738
19	7.7974	228.04	0.00	228.04	518.688	511.787	14.693	14.023	.2596	0.00	-.46	-13.691	.0739
20	7.9275	224.81	0.00	224.81	518.688	511.941	14.693	14.038	.2566	0.00	-1.23	-11.948	.0739
21	8.0930	221.10	0.00	221.10	518.688	512.115	14.693	14.055	.2532	0.00	-1.91	-10.518	.0740

STATION 3 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.6816	324.10	0.00	324.10	518.688	509.951	14.69	13.648	.2926	0.00	20.34	-83.831	.07228
2	6.7241	326.20	0.00	326.20	518.688	509.937	14.69	13.637	.2945	0.00	19.16	-84.811	.07228
3	6.8436	328.16	0.00	328.16	518.688	509.730	14.69	13.627	.2963	0.00	17.97	-85.778	.07228
4	6.9834	329.34	0.00	329.34	518.688	509.633	14.69	13.618	.2979	0.00	16.78	-86.731	.07228
5	7.0955	330.73	0.00	330.73	518.688	509.547	14.69	13.610	.2994	0.00	15.59	-87.670	.07228
6	7.2050	332.07	0.00	332.07	518.688	509.476	14.69	13.603	.3006	0.00	14.40	-88.594	.07228
7	7.3252	333.01	0.00	333.01	518.688	509.420	14.69	13.598	.3015	0.00	13.21	-89.504	.07228
8	7.4414	334.50	0.00	334.50	518.688	509.381	14.69	13.594	.3021	0.00	12.02	-90.399	.07228
9	7.5634	335.84	0.00	335.84	518.688	509.362	14.69	13.592	.3024	0.00	10.83	-91.280	.07228
10	7.6814	336.79	0.00	336.79	518.688	509.365	14.69	13.593	.3023	0.00	9.64	-92.146	.07228
11	7.8034	338.34	0.00	338.34	518.688	509.390	14.69	13.595	.3020	0.00	8.45	-92.997	.07228
12	7.9214	339.44	0.00	339.44	518.688	509.440	14.69	13.600	.3012	0.00	7.26	-93.833	.07228
13	8.0410	340.09	0.00	340.09	518.688	509.515	14.69	13.607	.3002	0.00	6.07	-94.654	.07228
14	8.1620	340.24	0.00	340.24	518.688	509.614	14.69	13.616	.2988	0.00	4.88	-95.460	.07228
15	8.2842	339.99	0.00	339.99	518.688	509.739	14.69	13.628	.2969	0.00	3.68	-96.251	.07228
16	8.4077	339.26	0.00	339.26	518.688	509.889	14.69	13.642	.2946	0.00	2.49	-97.026	.07228
17	8.5325	338.02	0.00	338.02	518.688	510.062	14.69	13.659	.2919	0.00	1.30	-97.786	.07228
18	8.6587	336.34	0.00	336.34	518.688	510.258	14.69	13.677	.2887	0.00	.11	-98.530	.07228
19	8.7859	334.19	0.00	334.19	518.688	510.477	14.69	13.698	.2850	0.00	-1.08	-99.258	.07228
20	8.9143	331.56	0.00	331.56	518.688	510.717	14.69	13.721	.2809	0.00	-2.27	-99.970	.07228
21	9.0500	304.40	0.00	304.40	518.688	510.980	14.69	13.746	.2745	0.00	-5.47	-8.658	.07236

STATION 4 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.7500	355.84	0.00	355.84	518.688	508.156	14.69	13.678	.3218	0.00	20.32	-388.854	.07226
2	6.8615	359.06	0.00	359.06	518.688	507.963	14.69	13.660	.3248	0.00	18.88	-413.356	.07226
3	6.9815	361.90	0.00	361.90	518.688	507.743	14.69	13.644	.3274	0.00	17.44	-438.264	.07226
4	7.0822	364.39	0.00	364.39	518.688	507.643	14.69	13.636	.3287	0.00	16.00	-463.538	.07226
5	7.1916	366.38	0.00	366.38	518.688	507.510	14.69	13.625	.3305	0.00	14.56	-489.138	.07226
6	7.3035	368.47	0.00	368.47	518.688	507.394	14.69	13.615	.3321	0.00	13.12	-515.027	.07226
7	7.4132	370.02	0.00	370.02	518.688	507.299	14.69	13.607	.3333	0.00	11.68	-541.167	.07226
8	7.5270	371.13	0.00	371.13	518.688	507.228	14.69	13.601	.3343	0.00	10.24	-567.523	.07226
9	7.6438	371.90	0.00	371.90	518.688	507.186	14.69	13.597	.3350	0.00	8.80	-594.059	.07226
10	7.7646	372.30	0.00	372.30	518.688	507.177	14.69	13.596	.3352	0.00	7.36	-620.742	.07226
11	7.8832	372.54	0.00	372.54	518.688	507.205	14.69	13.599	.3348	0.00	5.92	-647.539	.07226
12	7.9951	372.43	0.00	372.43	518.688	507.271	14.69	13.605	.3338	0.00	4.48	-674.418	.07226
13	8.0533	368.82	0.00	368.82	518.688	507.373	14.69	13.614	.3324	0.00	3.04	-701.350	.07226
14	8.1749	366.33	0.00	366.33	518.688	507.513	14.69	13.626	.3305	0.00	1.60	-728.305	.07226
15	8.2872	363.03	0.00	363.03	518.688	507.689	14.69	13.642	.3279	0.00	.16	-755.257	.07226
16	8.4011	360.11	0.00	360.11	518.688	507.901	14.69	13.660	.3250	0.00	-1.28	-782.180	.07226
17	8.5153	356.07	0.00	356.07	518.688	508.142	14.69	13.677	.3217	0.00	-2.72	-809.051	.07226
18	8.6344	351.03	0.00	351.03	518.688	508.403	14.69	13.702	.3179	0.00	-4.16	-835.850	.07226
19	8.7540	346.37	0.00	346.37	518.688	508.680	14.69	13.726	.3135	0.00	-5.61	-862.561	.07226
20	8.8739	341.94	0.00	341.94	518.688	508.964	14.69	13.755	.3089	0.00	-7.04	-889.166	.07226
21	9.0000	336.59	0.00	336.59	518.688	509.264	14.69	13.783	.3041	0.00	-8.25	-915.647	.07226

BLADE DATA

LOCATION	BLADE SECTION	ANGLES CLAM	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-20.937	20.370	-64.131	3.703	0.0060	961.5	.3271	1025.21	23.455	536.4487	1.000	0.000	1.0000	1.0000
2	-20.147	20.241	-64.327	3.479	0.0100	977.4	.3418	1041.24	24.1198	536.8443	1.000	0.000	1.0000	1.0000
3	-19.374	20.117	-64.518	3.247	0.0000	993.1	.3562	1057.001	24.5044	600.3119	1.000	0.000	1.0000	1.0000
4	-18.607	19.997	-64.698	3.063	0.0000	1008.8	.3704	1072.554	24.9352	603.2228	1.000	0.000	1.0000	1.0000
5	-17.844	19.881	-70.140	7.432	0.0000	1024.4	.3845	1087.993	25.3722	605.1848	1.000	0.000	1.0000	1.0000
6	-17.085	19.767	-70.310	7.403	0.0000	1039.9	.3984	1103.324	25.7144	606.5044	1.000	0.000	1.0000	1.0000
7	-16.329	19.655	-70.479	7.632	0.0000	1055.4	.4122	1118.535	26.1144	611.1192	1.000	0.000	1.0000	1.0000
8	-15.576	19.545	-70.647	7.604	0.0000	1070.8	.4259	1133.632	26.5225	611.9337	1.000	0.000	1.0000	1.0000
9	-14.826	19.438	-70.814	7.577	0.0000	1086.3	.4395	1148.615	26.9348	612.7537	1.000	0.000	1.0000	1.0000
10	-14.078	19.332	-71.343	7.900	0.0000	1101.7	.4530	1163.483	27.3524	613.5781	1.000	0.000	1.0000	1.0000
11	-13.333	19.228	-71.512	7.874	0.0100	1117.2	.4665	1178.240	27.7744	614.4057	1.000	0.000	1.0000	1.0000
12	-12.590	19.126	-71.680	7.847	0.0000	1132.6	.4799	1192.885	28.2007	615.2357	1.000	0.000	1.0000	1.0000
13	-11.849	19.025	-71.848	7.821	0.0000	1148.0	.4933	1207.420	28.6313	616.0673	1.000	0.000	1.0000	1.0000
14	-11.110	18.926	-72.015	7.795	0.0000	1163.4	.5066	1221.847	29.0662	616.9000	1.000	0.000	1.0000	1.0000
15	-10.373	18.828	-72.182	7.769	0.0000	1178.7	.5199	1236.167	29.5054	617.7332	1.000	0.000	1.0000	1.0000
16	-9.638	18.732	-72.348	7.744	0.0000	1194.0	.5331	1250.382	29.9489	618.5667	1.000	0.000	1.0000	1.0000
17	-8.904	18.637	-72.514	7.719	0.0000	1209.3	.5463	1264.492	30.3967	619.4000	1.000	0.000	1.0000	1.0000
18	-8.172	18.543	-72.679	7.694	0.0000	1224.5	.5594	1278.499	30.8488	620.2329	1.000	0.000	1.0000	1.0000
19	-7.441	18.450	-72.844	7.670	0.0000	1239.7	.5725	1292.404	31.3052	621.0650	1.000	0.000	1.0000	1.0000
20	-6.711	18.359	-73.008	7.646	0.0001	1254.9	.5855	1306.208	31.7659	621.8960	1.000	0.000	1.0000	1.0000
21	-5.982	18.268	-73.172	7.623	1.0000	1270.0	.5985	1319.912	32.2310	622.7256	1.000	0.000	1.0000	1.0000

STATION 3 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES AXIAL	VELOCITIES TANGENTIAL	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	5.8379	+02.+2	127.01	+31.++	5+6.373	524.639	17.301	15.036	.3838	21.32	22.32	6.139	.0797
2	6.9374	+03.31	123.15	+31.++	5+6.904	526.457	17.224	15.093	.3823	20.67	20.72	6.416	.0796
3	7.0970	+04.33	117.59	+31.++	5+6.498	528.027	17.191	15.121	.3819	20.05	19.08	6.984	.0794
4	7.1330	+05.92	111.27	+30.23	5+6.159	527.700	17.155	15.114	.3822	19.49	17.49	6.988	.0793
5	7.2293	+07.21	104.15	+30.00	5+6.100	527.462	17.126	15.082	.3832	18.93	15.83	6.865	.0793
6	7.3922	+08.32	097.22	+31.96	5+6.172	527.264	17.115	15.055	.3838	18.55	14.61	6.865	.0793
7	7.6431	+10.++	089.48	+33.15	5+6.268	527.123	17.097	15.037	.3837	18.21	14.03	6.865	.0793
8	7.9873	+11.++	081.93	+33.75	5+6.381	527.041	17.083	15.028	.3833	17.99	9.99	6.865	.0793
9	7.9894	+12.++	074.58	+33.11	5+6.743	527.154	17.077	15.042	.3840	17.77	8.08	-39.886	.0793
10	7.7311	+12.12	067.58	+32.02	5+6.129	527.554	17.080	15.080	.3844	17.83	5.98	-16.438	.0793
11	7.8733	+10.79	060.12	+32.13	5+6.719	528.143	17.113	15.463	.3833	18.06	3.95	-10.339	.0793
12	7.9771	+09.77	052.43	+30.73	5+6.375	528.947	17.137	15.497	.3813	18.40	1.94	-7.626	.0793
13	8.1752	+08.29	044.90	+29.91	5+6.002	529.909	17.174	15.542	.3793	18.71	-.04	-6.085	.0793
14	8.1773	+06.++	037.24	+28.47	5+5.694	530.973	17.211	15.598	.3773	19.06	-1.99	-5.205	.0793
15	8.2773	333.31	141.11	+28.51	5+6.324	531.445	17.253	15.662	.3753	19.40	-3.87	-4.615	.0793
16	8.3613	331.98	143.03	+29.03	5+7.075	533.006	17.303	15.736	.3718	20.34	-5.68	-4.212	.0793
17	8.4839	337.70	151.40	+30.40	5+8.221	534.910	17.357	15.810	.3671	21.40	-7.19	-3.911	.0793
18	8.5330	341.04	149.98	+32.03	5+9.624	536.479	17.403	15.867	.3631	22.35	-8.47	-3.688	.0793
19	8.7033	342.79	148.42	+33.28	5+1.598	537.743	17.441	15.907	.3599	23.01	-9.49	-3.504	.0793
20	8.8133	343.97	146.74	+34.29	5+2.907	538.741	17.471	15.940	.3573	23.54	-10.31	-3.356	.0793
21	8.9349	362.31	133.33	347.44	553.298	540.130	17.433	16.029	.3487	24.27	-9.38	-1665.383	.0800

BLADE DATA

LOCATION	BLADE SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

STATION 3 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.172 ISEN. EFF.= .884 POLY. EFF.= .886 DELTA T ON T = .053

STATION 6 FLOW FIELD DESCRIPTION

STREAMLINE	RADIUS	VELOCITIES HERIZ	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

BLADE DATA

LOCATION	BLADE SECTION	BLADE ANGLES CL A I	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-52.303	2.498	-37.230	+.635	.0281	1008.3	.7129	816.14	24.640	613.138	1.396	.104	.9658	.9656
2	-53.009	2.235	-37.562	+.497	.0287	1020.5	.7264	833.64	24.323	605.187	1.395	.104	.9634	.9651
3	-53.549	1.906	-37.936	+.297	.0291	1032.5	.7397	848.84	25.209	607.242	1.395	.104	.9628	.9637
4	-54.099	1.248	-38.210	+.102	.0293	1044.5	.7528	863.81	25.438	609.295	1.395	.104	.9607	.9625
5	-54.562	.494	-38.473	-.016	.0297	1056.2	.7656	878.05	25.790	611.347	1.395	.104	.9595	.9613
6	-54.988	-.085	-38.736	-.134	.0299	1067.9	.7787	893.38	26.035	613.398	1.395	.104	.9584	.9603
7	-55.377	-.237	-38.991	-.264	.0300	1079.4	.7913	907.68	26.375	615.452	1.395	.104	.9565	.9595
8	-55.737	-.319	-39.230	-.386	.0316	1090.9	.8036	921.75	26.667	617.512	1.395	.104	.9542	.9564
9	-56.074	-.246	-39.422	-.443	.0324	1102.3	.8159	935.79	26.962	619.582	1.394	.104	.9520	.9542
10	-56.393	-.216	-39.629	-.503	.0391	1113.7	.8253	946.94	27.191	621.572	1.392	.105	.9412	.9439
11	-56.699	-.078	-39.857	-.569	.0495	1125.1	.8330	955.27	27.350	623.797	1.388	.106	.9247	.9281
12	-56.986	.135	-40.079	-.634	.0593	1136.7	.8409	965.97	27.529	625.969	1.384	.107	.9084	.9125
13	-57.291	.449	-40.330	-.705	.0803	1148.5	.8504	977.22	27.751	628.196	1.378	.107	.8954	.9001
14	-57.592	.909	-40.594	-.781	.0723	1160.5	.8606	988.13	27.996	630.489	1.370	.107	.8833	.8884
15	-57.910	1.335	-40.956	-.878	.0788	1172.7	.8709	1001.42	28.254	632.861	1.361	.106	.8707	.8763
16	-58.292	1.929	-41.424	-1.002	.0973	1185.4	.8740	1006.43	28.302	635.341	1.351	.107	.8372	.8448
17	-58.873	2.533	-42.132	-1.218	.1204	1198.9	.8748	1009.31	28.292	637.374	1.339	.109	.7975	.8055
18	-59.106	3.335	-42.432	-1.332	.1396	1212.9	.8778	1014.59	28.381	640.581	1.325	.110	.7615	.7742
19	-59.708	4.198	-43.123	-1.591	.1504	1226.1	.8861	1025.27	28.605	643.366	1.309	.109	.7368	.7455
20	-60.332	4.832	-43.741	-1.803	.1620	1244.9	.8941	1036.00	28.895	647.244	1.291	.107	.7068	.7169
21	-61.549	4.919	-43.149	11.909	.1605	1263.2	.9000	1045.00	29.097	651.397	1.271	.106	.6660	.6771

STATION 5 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.365 ISEN. EFF.= .877 POLY. EFF.= .882 DELTA T ON T = .106

STATION 7 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES AERIO	TANGEN	TOTAL	TEMPERATURES TOTAL	STATIC	PRESSURES TOTAL	STATIC	MACH NO	ANGLES WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.2924	538.71	+89.16	727.07	632.752	598.797	24.452	18.752	.6277	42.24	24.87	13.518	.0905
2	7.3335	544.55	+91.99	729.33	602.610	568.576	24.411	18.711	.6284	41.61	22.68	-86.583	.0903
3	7.4017	543.49	+73.13	729.18	602.619	568.494	24.394	18.694	.6291	41.09	20.50	-30.387	.0902
4	7.4343	553.55	+72.40	724.74	602.722	568.916	24.391	18.678	.6239	41.65	18.35	-20.659	.0902
5	7.5372	557.24	+72.18	730.34	602.832	568.614	24.402	18.677	.6301	40.27	16.23	-17.045	.0901
6	7.6044	560.41	+63.21	730.91	603.118	568.771	24.420	18.685	.6305	39.94	14.19	-15.438	.0902
7	7.6703	562.96	+07.17	731.94	603.463	569.060	24.447	18.699	.6309	39.69	12.19	-14.395	.0902
8	7.7353	564.99	+55.81	732.03	603.925	569.442	24.481	18.722	.6311	39.50	10.24	-15.217	.0902
9	7.8022	566.24	+04.03	732.12	604.370	569.878	24.515	18.751	.6309	39.34	8.33	-16.122	.0903
10	7.8634	563.49	+53.14	731.30	605.477	571.036	24.539	18.787	.6295	39.60	6.48	-17.782	.0903
11	7.9354	557.87	+73.33	729.48	607.012	572.855	24.539	18.830	.6269	40.16	4.67	-20.532	.0902
12	8.0035	550.13	+73.30	726.10	608.434	574.679	24.526	18.879	.6234	40.74	2.91	-25.364	.0901
13	8.0732	542.45	+74.75	720.85	609.388	576.254	24.491	18.934	.6175	41.19	1.17	-34.817	.0902
14	8.1444	533.86	+73.73	713.19	609.989	576.780	24.425	18.996	.6103	41.63	-.57	-56.247	.0902
15	8.2177	520.93	+71.30	702.43	610.324	576.373	24.324	19.064	.6000	42.14	-2.41	-150.555	.0903
16	8.2939	499.39	+71.34	689.79	612.553	578.074	24.179	19.140	.5876	43.00	-4.01	252.381	.0908
17	8.3756	469.23	+67.33	674.42	615.383	580.649	24.003	19.226	.5723	46.32	-6.58	70.333	.0907
18	8.4642	430.05	+62.37	654.19	617.405	581.905	23.792	19.321	.5531	48.98	-8.05	42.228	.0895
19	8.5623	392.47	+59.01	626.25	617.541	585.011	23.487	19.426	.5281	51.19	-8.11	34.248	.0895
20	8.6721	345.76	+53.03	594.07	617.795	588.525	23.166	19.539	.4934	54.41	-9.01	41.862	.0895
21	8.5013	282.08	+82.40	558.92	619.134	593.238	22.849	19.667	.4673	59.68	-9.37	**********	.0894

BLADE DATA

LOCAT-ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-40.428	1.512	-45.344	4.917	.0424	1034.4	.5612	766.47	25.143	607.560	1.664	.162	.9653	.9677
2	-41.033	1.230	-45.240	4.749	.0432	1044.5	.5744	781.68	25.375	609.291	1.661	.162	[illegible]	[illegible]
3	-41.726	.848	-46.300	4.583	.0433	1054.3	.6863	795.42	25.608	611.187	1.660	.162	[illegible]	[illegible]
4	-42.341	.148	-46.739	4.413	.0443	1064.0	.6972	808.06	25.842	612.712	1.660	.162	[illegible]	[illegible]
5	-42.338	-.632	-47.147	4.251	.0447	1073.6	.7074	813.96	26.078	614.412	1.660	.162	[illegible]	[illegible]
6	-43.309	-1.203	-47.508	4.039	.0443	1083.1	.7170	831.22	26.316	616.111	1.662	.163	.9584	[illegible]
7	-44.043	-1.233	-48.003	3.965	.0460	1092.6	.7256	841.43	26.546	617.814	1.664	.163	.9566	[illegible]
8	-44.341	-1.072	-48.435	3.863	.0474	1102.0	.7336	850.91	26.773	619.525	1.666	.164	[illegible]	[illegible]
9	[illegible]	-.733	-43.320	3.810	.0487	1111.4	.7411	859.99	27.004	621.247	1.668	.165	[illegible]	[illegible]
10	[illegible]	-.242	-43.273	3.823	.0587	1120.8	.7436	863.70	27.118	622.391	1.670	.167	.9417	[illegible]
11	[illegible]	.350	-43.312	3.925	.0742	1130.3	.7425	863.87	27.132	624.772	1.670	.170	[illegible]	[illegible]
12	[illegible]	1.034	-50.449	4.131	.0383	1140.0	.7414	863.94	27.134	626.508	1.669	.173	[illegible]	.9161
13	[illegible]	1.030	-51.221	4.493	.0393	1150.0	.7422	866.03	27.294	628.460	1.667	.175	.8977	[illegible]
14	-47.147	3.049	-52.153	3.016	.1004	1160.1	.7437	869.00	27.420	630.420	1.662	.176	.8869	[illegible]
15	-47.570	4.220	-53.413	3.743	.1159	1170.5	.7451	871.92	27.556	632.430	1.655	.177	.8753	.8839
16	-48.010	3.419	-54.743	3.733	.1428	1181.4	.7334	860.97	27.363	634.350	1.655	.181	.8428	[illegible]
17	-48.633	5.831	-56.554	5.065	.1804	1193.0	.7169	844.68	27.073	636.840	1.633	.186	.8063	[illegible]
18	-49.058	8.225	-58.134	3.935	.2091	1205.7	.7035	832.42	26.337	639.355	1.618	.190	.7730	.7886
19	-49.781	3.471	-61.733	12.058	.2253	1219.6	.7001	830.23	26.942	642.152	1.598	.191	.7513	.7671
20	-50.439	10.331	-65.312	14.873	.2437	1235.3	.6360	827.64	27.001	645.330	1.576	.131	.7268	.7429
21	-51.361	13.690	-63.913	15.592	.2707	1253.8	.6878	821.31	26.981	649.139	1.555	.134	.6931	.7115

STATION 7 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.646 ISEN. EFF.= .878 PO_Y. EFF.= .986 DELTA T ON T = .174

STATION 3 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.4492	707.50	645.92	958.07	632.659	556.411	23.833	18.377	.8287	42.44	19.79	-2.228	[illegible]
2	7.4935	697.07	647.04	951.09	633.434	558.392	28.923	18.566	.8207	42.87	17.73	-2.432	[illegible]
3	7.5451	687.32	647.27	944.27	634.230	560.265	23.023	18.708	.8135	43.27	15.77	-2.693	[illegible]
4	7.5950	678.69	647.20	937.93	534.993	562.010	23.120	18.976	.8068	43.63	13.92	[illegible]	[illegible]
5	7.6435	571.19	646.89	932.17	635.694	563.618	23.207	19.150	.8007	43.94	12.15	[illegible]	[illegible]
6	7.6934	664.48	645.21	926.83	636.350	565.092	23.233	19.309	.7951	44.20	10.46	[illegible]	[illegible]
7	7.7509	658.28	645.01	922.32	537.099	566.545	23.361	19.457	.7902	44.46	8.85	-4.588	[illegible]
8	7.8030	652.37	646.13	918.59	637.926	567.945	23.455	19.594	.7860	44.71	7.30	-5.381	[illegible]
9	7.8537	646.37	647.43	915.20	638.782	569.259	23.543	19.721	.7823	44.92	5.81	[illegible]	[illegible]
10	7.9092	638.68	651.11	912.05	640.403	571.481	23.533	19.841	.7780	45.55	4.38	-7.904	[illegible]
11	7.9642	625.23	655.69	906.30	642.762	574.356	23.617	19.955	.7723	46.50	2.99	-10.210	[illegible]
12	8.0208	611.39	665.23	904.45	649.836	577.216	29.633	20.066	.7677	47.44	1.64	[illegible]	[illegible]
13	8.0730	588.83	670.57	893.94	646.779	579.655	23.636	20.175	.7622	48.18	.32	[illegible]	[illegible]
14	8.1330	587.31	572.43	883.17	648.076	581.949	23.592	20.282	.7551	48.84	-.96	[illegible]	[illegible]
15	8.2005	573.32	571.63	863.23	648.921	584.261	23.471	20.388	.7452	49.51	-2.29	[illegible]	[illegible]
16	8.2652	538.46	683.30	869.37	632.218	589.497	23.233	20.499	.7308	51.76	-3.60	31.588	[illegible]
17	8.3377	491.39	693.31	855.30	656.633	596.826	28.975	20.622	.7146	54.92	-4.87	[illegible]	[illegible]
18	8.4177	448.17	712.47	838.23	600.446	602.285	23.713	20.764	.6873	58.18	-6.06	[illegible]	[illegible]
19	8.5077	397.37	712.41	815.74	651.945	606.834	28.402	20.928	.6755	60.85	-7.19	[illegible]	[illegible]
20	8.6187	343.16	716.12	794.13	664.424	612.289	28.154	21.117	.6547	64.40	-8.42	37.382	[illegible]
21	8.7339	263.34	733.32	791.43	670.077	619.531	28.115	21.341	.6405	69.79	-9.37	[illegible]	.0929

BLADE DATA

LOCATION	BLADE SECTION	ANGLES CAMB	FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-24.143	2.633	-31.544	8.263	.0569	1081.1	.7047	819.80	26.033	612.193	1.962	.220	.9658	.9681
2	-24.931	2.333	-31.133	8.202	.0577	1068.1	.7027	814.36	25.844	613.432	1.968	.221	.9635	.9660
3	-25.745	2.023	-31.778	8.200	.0585	1072.2	.6976	809.60	26.004	614.587	1.975	.223	.9621	.9656
4	-26.558	2.273	-31.911	8.193	.0591	1042.3	.6935	805.30	26.158	615.960	1.981	.224	.9609	.9644
5	-27.123	1.953	-33.431	8.179	.0593	1035.2	.6906	803.97	26.333	617.253	1.987	.226	.9597	.9634
6	-27.352	1.133	-34.133	8.159	.0598	1036.7	.6887	802.60	26.514	618.568	1.993	.227	.9586	.9624
7	-28.788	1.103	-34.430	8.125	.0612	1104.0	.6871	801.96	26.674	619.386	1.998	.228	.9567	.9607
8	-29.367	1.788	-35.478	8.099	.0631	1111.9	.6860	801.70	26.841	621.268	2.004	.230	.9545	.9587
9	-29.936	1.478	-35.842	8.085	.0644	1113.0	.6837	802.20	27.008	622.055	2.011	.232	.9523	.9567
10	-30.508	2.135	-36.237	8.094	.0732	1120.0	.6792	799.24	27.014	624.074	2.014	.235	.9416	.9478
11	-31.102	3.403	-37.226	8.139	.0930	1134.4	.6684	785.54	26.922	625.540	2.015	.233	.9252	.9321
12	-31.809	3.932	-37.914	8.209	.1180	1142.2	.6580	777.23	26.837	627.061	2.016	.244	.9092	.9177
13	-32.512	4.721	-38.671	8.283	.1329	1150.8	.6510	769.53	26.817	628.338	2.017	.247	.8978	.9068
14	-33.231	5.931	-39.333	8.102	.1445	1159.3	.6454	763.37	26.832	630.273	2.014	.249	.8859	.8965
15	-33.954	7.309	-40.374	7.926	.1519	1168.1	.6400	758.94	26.854	631.971	2.005	.251	.8745	.8861
16	-34.651	8.772	-42.242	8.151	.1942	1177.4	.6139	730.63	26.432	633.779	1.989	.257	.8419	.8564
17	-35.777	11.299	-44.774	10.495	.2483	1187.2	.5795	692.48	25.903	635.775	1.972	.260	.8033	.8211
18	-36.229	11.755	-45.736	13.511	.2745	1199.0	.5665	677.46	25.434	636.020	1.954	.273	.7703	.7987
19	-36.853	12.358	-51.443	15.509	.3091	1211.9	.5553	638.24	25.334	640.261	1.933	.276	.7485	.7785
20	-35.114	13.314	-52.139	20.371	.3247	1226.9	.5071	613.03	25.134	643.247	1.916	.291	.7249	.7487
21	-35.817	13.234	-52.133	20.533	.3609	1244.3	.4737	577.94	24.340	647.195	1.913	.292	.6961	.7223

STATION 3 INTEGRATION PERFORMANCE PRESSURE RATIO = 1.994 ISEN. EFF.= .875 POLY. EFF.= .887 DELTA T ON T = .246

STATION 3 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES			TEMPERATURES		PRESSURES		MACH NO	ANGLES		RADIUS OF CURVATURE	SPECIFIC WEIGHT
		AXIAL	TANGENT	TOTAL	TOTAL	STATIC	TOTAL	STATIC		WHIRL	SLOPE		
1	7.9433	730.92	324.69	1101.32	892.817	805.192	34.335	19.316	.9431	48.45	10.63	-2.464	.0922
2	7.9333	719.49	321.02	1090.23	891.749	807.234	34.273	19.337	.9335	48.78	9.84	-3.212	.0929
3	7.9277	708.43	313.91	1080.10	890.833	808.957	34.211	19.719	.9233	49.01	9.07	-4.308	.0934
4	7.9641	701.43	310.72	1071.79	890.813	810.416	34.186	19.972	.9151	49.15	8.30	-5.017	.0939
5	7.7933	695.23	306.04	1064.44	890.521	811.569	34.112	19.999	.9074	49.22	7.54	-3.008	.0943
6	7.7517	691.02	301.27	1056.09	890.483	812.702	34.061	20.106	.9010	49.23	6.77	-15.543	.0947
7	7.7365	688.97	295.21	1051.50	890.367	813.720	33.973	20.195	.8953	49.21	6.00	-41.203	.0949
8	7.8332	683.52	290.47	1046.33	890.225	814.559	33.931	20.268	.8893	49.17	5.23	93.686	.0951
9	7.6937	681.93	285.41	1041.30	890.080	815.461	33.734	20.327	.8833	49.08	4.46	24.493	.0952
10	7.9234	672.73	281.19	1035.83	889.936	817.050	33.713	20.375	.8734	49.54	3.69	14.776	.0951
11	7.9772	660.13	279.12	1035.33	890.132	820.259	33.672	20.416	.8708	50.40	2.91	10.937	.0949
12	8.0233	647.32	287.05	1034.47	891.763	823.059	33.631	20.452	.8743	51.25	2.12	8.915	.0946
13	8.0777	630.46	409.41	1024.90	893.103	825.320	33.473	20.453	.8532	51.80	1.32	7.694	.0944
14	8.1337	620.74	409.23	1023.27	894.105	827.384	33.281	20.510	.8613	52.24	.50	6.884	.0941
15	8.1933	610.00	303.99	1017.22	895.158	829.457	33.093	20.534	.8545	52.58	-.35	6.277	.0939
16	8.2432	581.44	330.19	1013.71	890.415	845.327	32.974	20.561	.8474	55.00	-1.26	5.809	.0931
17	8.3076	530.23	329.82	1010.16	887.417	862.925	32.855	20.603	.8391	58.34	-2.28	5.539	.0921
18	8.3799	476.92	594.95	1005.23	883.834	880.224	32.468	20.970	.8301	61.68	-3.44	5.571	.0913
19	8.4913	438.29	337.92	993.22	888.098	895.497	32.335	20.766	.8216	63.46	-4.83	5.646	.0910
20	8.2217	385.47	313.05	931.05	903.102	921.973	32.132	20.394	.8103	67.11	-6.60	5.442	.0906
21	8.6534	282.25	335.32	977.97	710.342	631.206	31.959	21.097	.7941	73.23	-8.95	20.749	.0901

BLADE DATA

LOCATION	BLADE SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-18.647	18.824	-18.348	6.297	.0702	1075.4	.6627	772.67	22.937	614.734	2.336	.284	.8652	.8824
2	-18.538	18.678	-18.066	6.454	.0716	1068.9	.6546	766.36	23.046	616.711	2.326	.284	.8615	.8784
3	-18.429	18.532	-17.784	6.611	.0730	1062.4	.6465	760.05	23.156	618.688	2.316	.284	.8577	.8744
4	-18.320	18.386	-17.502	6.768	.0744	1055.9	.6384	753.74	23.265	620.665	2.306	.284	.8540	.8704
5	-18.211	18.240	-17.220	6.925	.0758	1049.4	.6303	747.43	23.374	622.642	2.296	.284	.8503	.8664
6	-18.102	18.094	-16.938	7.082	.0772	1042.9	.6222	741.12	23.483	624.619	2.286	.284	.8466	.8624
7	-17.993	17.948	-16.656	7.239	.0786	1036.4	.6141	734.81	23.592	626.596	2.276	.284	.8429	.8584
8	-17.884	17.802	-16.374	7.396	.0800	1029.9	.6060	728.50	23.701	628.573	2.266	.284	.8392	.8544
9	-17.775	17.656	-16.092	7.553	.0814	1023.4	.5979	722.19	23.810	630.550	2.256	.284	.8355	.8504
10	-17.666	17.510	-15.810	7.710	.0828	1016.9	.5898	715.88	23.919	632.527	2.246	.284	.8318	.8464
11	-17.557	17.364	-15.528	7.867	.0842	1010.4	.5817	709.57	24.028	634.504	2.236	.284	.8281	.8424
12	-17.448	17.218	-15.246	8.024	.0856	1003.9	.5736	703.26	24.137	636.481	2.226	.284	.8244	.8384
13	-17.339	17.072	-14.964	8.181	.0870	997.4	.5655	696.95	24.246	638.458	2.216	.284	.8207	.8344
14	-17.230	16.926	-14.682	8.338	.0884	990.9	.5574	690.64	24.355	640.435	2.206	.284	.8170	.8304
15	-17.121	16.780	-14.400	8.495	.0898	984.4	.5493	684.33	24.464	642.412	2.196	.284	.8133	.8264
16	-17.012	16.634	-14.118	8.652	.0912	977.9	.5412	678.02	24.573	644.389	2.186	.284	.8096	.8224
17	-16.903	16.488	-13.836	8.809	.0926	971.4	.5331	671.71	24.682	646.366	2.176	.284	.8059	.8184
18	-16.794	16.342	-13.554	8.966	.0940	964.9	.5250	665.40	24.791	648.343	2.166	.284	.8022	.8144
19	-16.685	16.196	-13.272	9.123	.0954	958.4	.5169	659.09	24.900	650.320	2.156	.284	.7985	.8104
20	-16.576	16.050	-12.990	9.280	.0968	951.9	.5088	652.78	25.009	652.297	2.146	.284	.7948	.8064
21	-16.467	15.904	-12.708	9.437	.0982	945.4	.5007	646.47	25.118	654.274	2.136	.284	.7911	.8024

STATION 9 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.271 ISEN. EFF.= .865 POLY. EFF.= .888 DELTA T ON T = .304

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STATION 10 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.8746	679.38	821.86	1066.22	668.817	571.314	34.336	28.125	.8195	51.32	7.82	3.249	.0728
2	7.9146	677.43	819.49	1063.05	668.749	571.363	34.295	28.096	.8182	51.27	7.81	3.261	.0729
3	7.9546	675.48	817.12	1059.88	668.681	571.412	34.254	28.067	.8169	51.22	7.80	3.273	.0730
4	7.9946	673.53	814.75	1056.71	668.613	571.461	34.213	28.038	.8156	51.17	7.79	3.285	.0731
5	8.0346	671.58	812.38	1053.54	668.545	571.510	34.172	28.009	.8143	51.12	7.78	3.297	.0732
6	8.0746	669.63	810.01	1050.37	668.477	571.559	34.131	27.980	.8130	51.07	7.77	3.309	.0733
7	8.1146	667.68	807.64	1047.20	668.409	571.608	34.090	27.951	.8117	51.02	7.76	3.321	.0734
8	8.1546	665.73	805.27	1044.03	668.341	571.657	34.049	27.922	.8104	50.97	7.75	3.333	.0735
9	8.1946	663.78	802.90	1040.86	668.273	571.706	34.008	27.893	.8091	50.92	7.74	3.345	.0736
10	8.2346	661.83	800.53	1037.69	668.205	571.755	33.967	27.864	.8078	50.87	7.73	3.357	.0737
11	8.2746	659.88	798.16	1034.52	668.137	571.804	33.926	27.835	.8065	50.82	7.72	3.369	.0738
12	8.3146	657.93	795.79	1031.35	668.069	571.853	33.885	27.806	.8052	50.77	7.71	3.381	.0739
13	8.3546	655.98	793.42	1028.18	668.001	571.902	33.844	27.777	.8039	50.72	7.70	3.393	.0740
14	8.3946	654.03	791.05	1025.01	667.933	571.951	33.803	27.748	.8026	50.67	7.69	3.405	.0741
15	8.4346	652.08	788.68	1021.84	667.865	572.000	33.762	27.719	.8013	50.62	7.68	3.417	.0742
16	8.4746	650.13	786.31	1018.67	667.797	572.049	33.721	27.690	.8000	50.57	7.67	3.429	.0743
17	8.5146	648.18	783.94	1015.50	667.729	572.098	33.680	27.661	.7987	50.52	7.66	3.441	.0744
18	8.5546	646.23	781.57	1012.33	667.661	572.147	33.639	27.632	.7974	50.47	7.65	3.453	.0745
19	8.5946	644.28	779.20	1009.16	667.593	572.196	33.598	27.603	.7961	50.42	7.64	3.465	.0746
20	8.6346	642.33	776.83	1005.99	667.525	572.245	33.557	27.574	.7948	50.37	7.63	3.477	.0747
21	8.6746	640.38	774.46	1002.82	667.457	572.294	33.516	27.545	.7935	50.32	7.62	3.489	.0748

STATION 11 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES GRID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6149	991.13	815.99	1078.11	669.817	570.912	34.335	28.812	.9133	49.77	9.86	26.367	.0945
2	7.6716	922.58	811.11	1046.32	665.749	567.935	34.275	28.621	.9239	48.30	8.89	174.339	.0931
3	7.7213	754.34	803.52	1101.37	665.663	565.848	34.218	28.549	.9452	46.97	8.59	-66.348	.0918
4	7.7669	775.80	802.27	1114.59	665.618	562.641	34.164	28.332	.9582	45.89	8.22	-34.781	.0905
5	7.8116	794.22	799.29	1123.95	665.551	560.833	34.112	28.185	.9675	45.04	7.83	-26.265	.0893
6	7.8573	808.08	730.91	1130.78	665.489	559.561	34.061	28.096	.9744	44.37	7.47	-23.883	.0882
7	7.8999	817.16	735.61	1133.55	665.367	558.848	34.013	28.029	.9777	43.87	7.13	-23.377	.0872
8	7.9420	823.00	799.67	1134.37	665.225	558.550	33.984	28.006	.9787	43.48	6.85	-23.337	.0866
9	7.9837	826.49	773.44	1133.59	665.080	558.555	33.984	28.006	.9780	43.19	6.61	-23.466	.0861
10	8.0233	823.10	773.49	1133.02	664.930	558.693	33.984	28.006	.9763	42.94	6.40	-23.678	.0858
11	8.0672	814.48	793.14	1134.07	664.782	558.933	33.984	28.006	.9750	42.89	6.21	-23.947	.0856
12	8.1099	804.20	795.79	1133.43	664.631	559.206	33.984	28.006	.9722	42.81	6.04	-24.253	.0855
13	8.1525	793.30	801.98	1128.05	664.480	559.475	33.984	28.006	.9684	42.78	5.88	-24.580	.0854
14	8.1951	781.17	802.61	1120.14	664.329	559.707	33.984	28.006	.9644	42.78	5.73	-24.916	.0854
15	8.2402	767.39	803.62	1111.17	664.180	559.858	33.984	28.006	.9607	42.81	5.57	-25.257	.0854
16	8.2853	752.59	804.14	1101.15	664.031	559.931	33.984	28.006	.9577	42.86	5.42	-25.600	.0854
17	8.3348	736.37	804.00	1090.48	663.881	559.931	33.984	28.006	.9553	42.93	5.27	-25.944	.0854
18	8.3843	719.50	803.88	1079.38	663.731	559.931	33.984	28.006	.9536	43.02	5.12	-26.288	.0854
19	8.4478	697.11	803.29	1063.14	663.580	559.931	33.984	28.006	.9520	43.14	4.97	-26.632	.0854
20	8.5142	678.25	813.85	1054.09	663.430	559.931	33.984	28.006	.9503	43.28	4.82	-26.976	.0854
21	8.6199	298.15	341.73	487.85	718.342	629.677	31.957	28.389	.8032	72.43	-4.27	-27.461	.0895

BLADE DATA

LOCATION	BLADE SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	48.817	-33.941	43.771	.953	0.0000	0.0	.9133	1078.11	34.335	665.817	2.336	.284	.9442	.9691
2	47.772	-37.035	46.100	-.427	0.0000	0.0	.9239	1046.32	34.275	665.749	2.336	.284	.9434	.9678
3	47.011	-39.984	46.377	-.035	0.0000	0.0	.9452	1101.37	34.218	665.663	2.336	.284	.9417	.9650
4	46.412	-41.936	45.333	.552	0.0000	0.0	.9582	1114.59	34.164	665.618	2.336	.284	.9400	.9623
5	45.902	-27.452	43.453	.325	0.0000	0.0	.9675	1123.95	34.112	665.551	2.336	.284	.9384	.9597
6	45.516	-24.332	44.376	-1.242	0.0000	0.0	.9744	1130.78	34.061	665.489	2.336	.284	.9369	.9573
7	45.214	-21.452	43.372	-1.442	0.0000	0.0	.9777	1133.55	34.013	665.367	2.336	.284	.9352	.9546
8	45.058	-19.031	43.489	-1.503	0.0000	0.0	.9787	1134.37	33.984	665.225	2.336	.284	.9341	.9528
9	44.945	-17.098	43.139	-1.656	0.0000	0.0	.9780	1133.59	33.984	665.080	2.336	.284	.9333	.9515
10	44.885	-15.468	43.444	-1.244	0.0000	0.0	.9763	1133.02	33.984	664.930	2.336	.284	.9326	.9504
11	44.887	-7.711	44.093	-.492	0.0000	0.0	.9750	1134.07	33.984	664.782	2.336	.284	.9320	.9496
12	44.952	-3.821	44.807	.223	0.0000	0.0	.9722	1133.43	33.984	664.631	2.336	.284	.9314	.9488
13	45.001	-2.274	45.112	.610	0.0000	0.0	.9684	1128.05	33.984	664.480	2.336	.284	.9309	.9481
14	44.963	3.020	45.783	.840	0.0000	0.0	.9644	1120.14	33.984	664.329	2.336	.284	.9304	.9474
15	45.244	9.578	46.321	1.978	0.0000	0.0	.9607	1111.17	33.984	664.180	2.336	.284	.9299	.9468
16	45.531	14.236	46.936	2.905	0.0000	0.0	.9577	1101.15	33.984	664.031	2.336	.284	.9295	.9462
17	45.940	17.020	47.357	3.397	0.0000	0.0	.9553	1090.48	33.984	663.881	2.336	.284	.9291	.9457
18	46.378	25.132	54.753	3.384	0.0000	0.0	.9536	1079.38	33.984	663.731	2.336	.284	.9288	.9452
19	47.104	32.989	57.792	10.393	0.0000	0.0	.9520	1063.14	33.984	663.580	2.336	.284	.9284	.9447
20	48.801	40.426	62.455	13.652	0.0000	0.0	.9503	1054.09	33.984	663.430	2.336	.284	.9281	.9443
21	50.514	45.632	72.433	21.013	0.0000	0.0	.8032	987.85	31.957	718.342	2.175	.269	.6784	.7938

STATION 11 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.271 ISEN. EFF.= .865 POLY. EFF.= .880 DELTA T ON T = .304

STATION 12 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7130	1107.78	540.37	1270.44	635.817	531.998	33.537	15.278	1.1230	32.81	5.21	-3.688	.0774
2	7.7331	1153.31	572.91	1290.23	635.749	536.113	33.512	15.676	1.1003	32.58	4.57	-3.738	.0768
3	7.7943	1043.70	533.55	1229.11	635.683	548.908	33.482	16.182	1.0780	32.23	4.06	-3.796	.0761
4	7.8344	1022.16	538.22	1207.57	635.618	544.780	33.460	16.332	1.0549	32.04	3.63	-3.838	.0756
5	7.8736	1010.02	622.84	1186.20	635.551	546.864	33.340	16.324	1.0323	31.85	3.22	-3.880	.0751
6	7.9123	988.37	907.32	1164.99	635.483	552.364	33.241	17.357	1.0102	31.44	2.83	-3.919	.0746
7	7.9520	977.39	894.62	1144.05	635.367	556.800	33.127	17.736	.9885	31.32	2.45	-3.958	.0741
8	7.9919	961.33	882.25	1123.32	635.225	560.512	32.934	18.065	.9668	31.20	2.08	-3.996	.0736
9	8.0326	948.23	871.43	1104.35	635.080	563.879	32.851	18.311	.9454	31.09	1.73	-4.033	.0731
10	8.0721	933.39	860.71	1085.38	634.930	566.930	32.772	18.712	.9320	30.98	1.39	-4.069	.0727
11	8.1133	923.34	852.83	1076.21	634.782	569.132	32.703	18.989	.9167	30.91	1.06	-4.104	.0723
12	8.1514	914.39	845.55	1065.03	634.634	571.154	32.633	19.244	.9025	30.84	.74	-4.138	.0719
13	8.1907	900.78	840.59	1054.03	634.483	573.757	32.573	19.474	.8883	30.77	.43	-4.171	.0715
14	8.2407	884.02	835.26	1043.83	634.195	576.111	32.513	19.682	.8742	30.68	.13	-4.203	.0711
15	8.2943	872.32	831.17	1034.39	633.158	578.242	32.230	19.882	.8614	30.63	-.16	-4.234	.0707
16	8.3238	867.09	831.03	1031.30	632.415	579.722	32.111	20.010	.8503	30.67	-.45	-4.264	.0704
17	8.3744	860.37	833.04	1033.17	631.417	582.451	31.963	20.116	.8420	30.88	-.72	-4.293	.0701
18	8.4213	853.21	843.70	1044.39	630.836	584.095	31.871	20.159	.8356	31.50	-.99	-4.322	.0698
19	8.4834	844.13	859.69	1045.34	630.090	586.806	31.739	20.103	.8307	32.25	-1.25	-4.350	.0695
20	8.5133	843.28	872.6	1054.99	703.102	615.281	31.674	19.923	.8419	34.98	-1.51	-4.377	.0692
21	8.5730	854.79	888.7	1037.43	710.342	621.271	31.477	19.643	.8435	34.56	-2.03	-4.447	.0682

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	31.359	-24.847	32.403	.850	.0844	0.0	1.1230	1270.44	33.537	635.817	2.203	.284	.9559	.9429
2	31.687	-24.333	32.340	.529	.0522	0.0	1.1009	1250.23	33.512	635.749	2.200	.284	.9566	.9437
3	31.360	-24.207	32.232	.672	.0503	0.0	1.0780	1229.11	33.482	635.683	2.197	.284	.9574	.9446
4	31.017	-24.042	32.083	.808	.0498	0.0	1.0549	1207.57	33.460	635.618	2.193	.284	.9581	.9454
5	30.728	-23.923	31.993	.923	.0501	0.0	1.0323	1186.20	33.340	635.551	2.190	.284	.9588	.9462
6	30.310	-23.811	31.899	.923	.0524	0.0	1.0102	1164.99	33.241	635.483	2.187	.284	.9595	.9470
7	30.365	-23.703	31.816	.951	.0549	0.0	.9885	1144.05	33.127	635.367	2.184	.284	.9602	.9478
8	30.231	-23.627	31.743	.974	.0557	0.0	.9668	1123.32	32.934	635.225	2.181	.284	.9609	.9486
9	30.134	-23.612	31.685	.991	.0559	0.0	.9454	1104.35	32.851	635.080	2.178	.284	.9616	.9494
10	29.959	-23.632	31.675	1.003	.0612	0.0	.9320	1085.38	32.772	634.930	2.176	.284	.9622	.9501
11	29.989	-23.723	31.712	1.024	.0632	0.0	.9167	1076.21	32.703	634.782	2.173	.284	.9629	.9509
12	29.874	-23.894	31.787	1.047	.0653	0.0	.9025	1065.03	32.633	634.634	2.170	.284	.9636	.9517
13	29.823	-24.139	31.900	1.075	.0687	0.0	.8883	1054.03	32.573	634.483	2.167	.284	.9643	.9525
14	29.838	-24.439	32.045	1.098	.0741	0.0	.8742	1043.83	32.513	634.195	2.164	.284	.9650	.9533
15	29.830	-24.746	32.198	1.118	.0788	0.0	.8614	1034.39	32.230	633.158	2.161	.284	.9657	.9541
16	29.885	-24.974	32.310	1.128	.0806	0.0	.8503	1031.30	32.111	632.415	2.159	.284	.9664	.9549
17	29.930	-25.274	32.457	1.142	.0830	0.0	.8420	1033.17	31.963	631.417	2.156	.284	.9671	.9557
18	30.033	-25.630	32.637	1.157	.0849	0.0	.8356	1044.39	31.871	630.836	2.154	.284	.9678	.9565
19	30.098	-26.022	32.838	1.173	.0867	0.0	.8307	1045.34	31.739	630.090	2.151	.284	.9685	.9573
20	30.336	-26.213	32.947	1.047	.0419	0.0	.8419	1054.99	31.674	703.102	2.149	.284	.9692	.9581
21	30.478	-26.229	32.958	1.061	.0438	0.0	.8435	1037.93	31.477	710.342	2.142	.284	.9699	.9588

STATION 12 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.217 ISEN. EFF.= .837 POLY. EFF.= .854 DELTA T ON T = .304

STATION 19 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES GRID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES NMINAL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC HEIGHT
1	7.7230	311.47	330.14	960.35	905.817	569.412	32.889	21.382	.8868	17.60	-2.23	-5.188	.0078
2	7.7553	338.42	334.23	942.79	868.749	592.117	32.793	21.701	.7902	17.58	-2.48	-5.188	.0084
3	7.7904	362.30	279.83	925.94	835.693	534.364	32.693	21.993	.7744	17.55	-2.69	-5.188	.0090
4	7.8252	387.13	274.31	909.52	802.618	537.034	32.593	22.277	.7595	17.52	-2.86	-5.188	.0096
5	7.8600	352.37	269.54	894.24	769.551	539.274	32.554	22.327	.7455	17.56	-2.96	-5.188	.0102
6	7.8974	337.42	264.73	878.73	736.433	601.528	32.433	22.746	.7308	17.54	-3.01	-5.188	.0108
7	7.9330	324.52	259.35	863.39	705.367	603.630	32.333	22.932	.7178	17.49	-3.07	-5.188	.0114
8	7.9734	310.34	254.13	849.23	665.225	605.499	32.220	23.088	.7048	17.44	-3.07	-5.188	.0120
9	8.0141	298.74	251.00	836.93	635.080	607.862	32.109	23.274	.6941	17.39	-3.04	-5.188	.0126
10	8.0533	291.18	247.42	826.38	606.530	609.519	32.003	23.434	.6857	17.34	-2.98	-5.188	.0132
11	8.0942	282.79	243.93	816.37	577.324	612.389	31.893	23.630	.6767	17.29	-2.89	-5.188	.0138
12	8.1421	274.33	240.75	807.16	546.216	616.211	31.763	23.859	.6677	17.24	-2.79	-5.188	.0144
13	8.1871	267.33	238.31	798.34	516.344	618.133	31.651	24.047	.6597	17.19	-2.67	-5.188	.0150
14	8.2331	260.48	236.31	790.11	486.165	619.595	31.541	24.224	.6526	17.14	-2.54	-5.188	.0156
15	8.2810	254.79	234.57	782.32	455.158	620.949	31.427	24.397	.6456	17.09	-2.41	-5.188	.0162
16	8.3279	249.18	233.32	774.93	425.415	622.239	31.317	24.557	.6395	17.04	-2.27	-5.188	.0168
17	8.3780	243.18	232.30	767.81	397.417	623.207	31.214	24.707	.6330	16.99	-2.13	-5.188	.0174
18	8.4251	238.79	231.05	761.22	373.434	623.832	31.127	24.833	.6277	16.94	-2.00	-5.188	.0180
19	8.4734	234.46	230.03	755.03	350.030	624.214	31.043	24.954	.6227	16.92	-1.86	-5.188	.0186
20	8.5274	230.42	229.04	749.43	328.102	624.160	30.954	25.082	.6176	16.94	-1.74	-5.188	.0192
21	8.5735	227.04	228.21	744.20	310.342	624.160	30.885	25.182	.6137	16.23	-1.65	-5.188	.0198

BLADE DATA

LOCAT -ION	BLADE SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	16.234	-3.414	17.239	1.351	.1054	0.0	.8868	960.35	32.806	905.817	2.232	.284	.8872	.8178
2	16.130	-3.931	17.247	1.357	.1038	0.0	.7902	942.79	32.735	868.749	2.229	.284	.8856	.8156
3	16.170	-4.334	17.339	1.369	.1015	0.0	.7744	925.94	32.639	835.693	2.225	.284	.8841	.8134
4	16.108	-7.756	17.347	1.308	.1004	0.0	.7595	909.52	32.536	802.618	2.221	.284	.8825	.8112
5	16.142	-7.053	17.337	1.419	.1003	0.0	.7455	894.24	32.533	769.551	2.221	.284	.8825	.8112
6	16.058	-6.250	17.533	1.443	.1043	0.0	.7308	878.73	32.433	736.433	2.217	.284	.8809	.8090
7	15.993	-5.334	17.491	1.435	.1038	0.0	.7178	863.39	32.333	705.367	2.213	.284	.8793	.8068
8	15.930	-4.409	17.442	1.423	.1118	0.0	.7048	849.23	32.220	665.225	2.208	.284	.8777	.8046
9	15.921	-4.434	17.373	1.393	.1174	0.0	.6929	836.93	32.109	635.080	2.203	.284	.8762	.8024
10	15.900	-2.531	17.342	1.393	.1213	0.0	.6858	826.38	32.043	606.530	2.200	.284	.8746	.8002
11	15.907	-1.643	17.429	1.423	.1255	0.0	.6766	816.37	31.945	577.324	2.196	.284	.8730	.7980
12	15.910	-.913	17.495	1.449	.1301	0.0	.6677	807.16	31.849	546.216	2.192	.284	.8714	.7958
13	15.902	-.306	17.469	1.499	.1277	0.0	.6597	798.34	31.763	516.344	2.188	.284	.8698	.7936
14	15.805	.331	17.431	1.577	.1237	0.0	.6526	790.11	31.689	486.165	2.185	.284	.8682	.7914
15	15.838	1.033	17.515	1.677	.1195	0.0	.6456	782.32	31.617	455.158	2.182	.284	.8666	.7892
16	15.922	1.947	17.721	1.963	.1119	0.0	.6395	774.93	31.554	425.415	2.179	.284	.8650	.7870
17	16.079	2.969	17.737	1.895	.1023	0.0	.6330	767.81	31.487	397.417	2.176	.284	.8634	.7848
18	16.331	4.137	17.951	1.651	.0942	0.0	.6277	761.22	31.433	373.434	2.173	.284	.8618	.7826
19	16.675	5.422	18.323	1.643	.0902	0.0	.6227	755.03	31.382	350.030	2.171	.284	.8602	.7804
20	17.040	6.830	18.742	1.902	.0872	0.0	.6176	749.43	31.331	328.102	2.169	.284	.8586	.7782
21	17.310	8.042	19.229	1.719	.0862	0.0	.6767	744.20	31.286	310.342	2.168	.284	.8570	.7760

STATION 19 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.168 ISEN. EFF.= .884 PO.Y. EFF.= .828 DELTA T ON T = .304

STATION 1+ FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6720	751.21	91.34	755.91	[illegible]	[illegible]	32.053	24.744	.6133	6.18	-4.29	16.341	.1079
2	7.7014	743.21	71.55	752.82	535.749	518.330	31.982	24.737	.6174	5.07	-4.15	16.772	.1080
3	7.7437	745.32	77.54	749.97	535.543	519.128	31.907	24.729	.6143	5.96	-3.98	17.388	.1081
4	7.7937	743.08	77.61	746.37	535.[illegible]	519.426	31.824	24.719	.6123	5.87	-3.80	18.085	.1082
5	7.8266	740.05	72.02	743.31	535.[illegible]	519.750	31.744	24.707	.6093	5.72	-3.69	18.685	.1083
6	7.8525	733.74	73.54	737.40	535.433	520.463	31.587	24.684	.6039	5.77	-3.45	19.880	.1084
7	7.9035	720.27	72.09	729.84	535.387	521.271	31.403	24.648	.5974	5.67	-3.15	20.894	.1086
8	7.9433	718.20	70.80	721.69	535.225	522.113	31.214	24.599	.5903	5.57	-2.85	22.008	.1087
9	7.9834	710.33	64.30	713.75	535.[illegible]	522.907	31.031	24.553	.5843	5.47	-2.56	23.144	.1088
10	8.0321	702.08	57.79	705.34	535.132	523.[illegible]	30.903	24.517	.5793	5.52	-2.30	24.326	.1089
11	8.1273	699.08	57.22	701.31	535.[illegible]	524.[illegible]	30.847	24.[illegible]01	.5769	5.50	-2.08	25.464	.1090
12	8.1753	697.08	57.03	700.30	535.[illegible]	524.[illegible]	30.[illegible]	24.[illegible]85	.5749	5.49	-1.93	26.066	.1090
13	8.2248	695.82	60.43	699.02	535.[illegible]	524.[illegible]	30.[illegible]	24.[illegible]09	.5749	5.49	-1.71	26.866	.1090
14	8.2741	694.55	63.83	697.88	535.[illegible]	524.[illegible]	30.[illegible]	24.[illegible]33	.5750	5.50	-1.35	27.782	.1090
15	8.3235	693.47	67.23	696.72	535.[illegible]	524.[illegible]	30.[illegible]	24.[illegible]39	.5751	5.52	-1.02	28.768	.1090
16	8.3770	695.[illegible]	69.99	698.79	535.[illegible]	524.[illegible]	30.[illegible]	24.[illegible]24	.5791	5.56	-.27	29.806	.1090
17	8.4291	711.10	73.24	714.55	535.834	531.532	30.971	24.511	.5712	5.54	.52	73.759	.1090
18	8.4613	714.32	72.27	717.33	535.840	535.495	30.[illegible]	24.500	.5723	5.78	.74	127.552	.1090
19	8.5354	716.33	75.29	720.77	535.102	535.165	30.573	24.490	.5725	5.99	.93	321.659	.1090
20	8.5930	715.71	79.63	723.12	535.342	535.154	30.537	24.482	.5714	6.33	1.00	-510.607	.0989

BLADE DATA

LOCATION	BLADE SECTION	BLADE ANGLE LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS EFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	[illegible]	-1.[illegible]	[illegible]	2.218	[illegible]	0.0	.5198	755.91	32.053	535.817	2.161	.284	.8779	.8805
2	[illegible]	-.[illegible]	[illegible]	2.223	.1955	0.0	.5174	752.82	31.982	535.749	2.176	.284	.8755	.8803
3	[illegible]	-.[illegible]	[illegible]	2.227	.1944	0.0	.5149	749.97	31.907	535.683	2.171	.283	.8738	.8806
4	[illegible]	-.[illegible]	[illegible]	2.279	.1934	0.0	.5123	746.97	31.823	535.618	2.166	.283	.8703	.8805
5	[illegible]	-.[illegible]	[illegible]	2.320	.1937	0.0	.5099	743.81	31.744	535.551	2.160	.283	.8674	.8808
6	[illegible]	-.[illegible]	[illegible]	2.370	.1934	0.0	.5039	737.40	31.587	535.483	2.149	.283	.8615	.8795
7	[illegible]	-.[illegible]	[illegible]	2.427	.1953	0.0	.4974	729.84	31.403	535.367	2.137	.283	.8558	.8798
8	[illegible]	-.[illegible]	[illegible]	2.488	.1917	0.0	.4903	721.69	31.214	535.225	2.124	.283	.8482	.8793
9	[illegible]	-.[illegible]	[illegible]	[illegible]	.1773	0.0	.4834	713.75	31.031	535.060	2.112	.283	.8417	.8793
10	[illegible]	-.[illegible]	[illegible]	[illegible]	.1827	0.0	.4788	709.21	30.901	534.930	2.103	.283	.8382	.8824
11	[illegible]	-.[illegible]	[illegible]	[illegible]	.1883	0.0	.4743	705.34	30.773	534.832	2.094	.283	.8353	.8825
12	[illegible]	-.[illegible]	[illegible]	[illegible]	.1952	0.0	.4696	701.31	30.647	534.763	2.085	.283	.8299	.8818
13	[illegible]	-.[illegible]	[illegible]	[illegible]	.1913	0.0	.4684	700.30	30.593	534.763	2.082	.283	.8286	.8818
14	[illegible]	-.[illegible]	[illegible]	[illegible]	.1823	0.0	.4699	699.02	30.538	534.765	2.078	.283	.8235	.8814
15	[illegible]	-.[illegible]	[illegible]	[illegible]	.1739	0.0	.4691	697.88	30.483	534.758	2.074	.283	.8166	.8798
16	[illegible]	-.[illegible]	[illegible]	[illegible]	.1671	0.0	.4670	702.72	30.508	534.815	2.076	.283	.8124	.8772
17	[illegible]	-.[illegible]	[illegible]	[illegible]	.1541	0.0	.4691	708.79	30.533	534.817	2.078	.283	.8074	.8715
18	[illegible]	-.[illegible]	[illegible]	[illegible]	.1422	0.0	.4712	714.56	30.559	534.834	2.080	.283	.8074	.8715
19	[illegible]	-.[illegible]	[illegible]	[illegible]	.1328	0.0	.4723	717.96	30.530	534.890	2.081	.283	.8074	.8715
20	[illegible]	-.[illegible]	[illegible]	[illegible]	.1327	-.0	.4725	720.77	30.573	535.102	2.080	.283	.8074	.8715
21	[illegible]	-1.[illegible]	[illegible]	[illegible]	.1237	-.0	.4714	723.12	30.537	535.342	2.078	.283	.8074	.8715

STATION 1+ INTEGRATED PERFORMANCE PRES. RATIO = 2.108 ISEN. EFF.= .773 POLY. EFF.= .800 DELTA T ON T = .304

STATION 15 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6410	720.89	0.00	720.89	695.817	622.797	31.301	24.751	.5833	0.00	-1.66	10.624	.1072
2	7.6780	719.05	0.00	719.05	695.749	622.949	31.209	24.709	.5877	0.00	-1.64	10.978	.1069
3	7.7170	717.04	0.00	717.04	695.683	623.123	31.115	24.667	.5860	0.00	-1.60	11.402	.1067
4	7.7568	714.83	0.00	714.83	695.618	623.319	31.014	24.626	.5841	0.00	-1.56	11.914	.1065
5	7.7975	712.41	0.00	712.41	695.551	623.539	30.920	24.587	.5820	0.00	-1.50	12.536	.1063
6	7.8393	709.22	0.00	709.22	695.483	624.316	30.727	24.549	.5758	0.00	-1.43	13.335	.1060
7	7.8827	706.86	0.00	706.86	695.367	625.170	30.617	24.514	.5686	0.00	-1.34	14.417	.1057
8	7.9273	704.76	0.00	704.76	695.225	626.071	30.500	24.481	.5603	0.00	-1.24	15.921	.1054
9	7.9732	702.92	0.00	702.92	695.030	626.928	30.093	24.452	.5532	0.00	-1.11	18.089	.1052
10	8.0205	701.77	0.00	701.77	696.530	628.958	29.953	24.426	.5481	0.00	-.96	21.334	.1047
11	8.0691	700.58	0.00	700.58	699.132	632.142	29.807	24.405	.5425	0.00	-.80	26.585	.1041
12	8.1191	699.71	0.00	699.71	671.763	635.425	29.653	24.389	.5364	0.00	-.62	36.485	.1035
13	8.1702	699.04	0.00	699.04	673.163	636.912	29.633	24.377	.5361	0.00	-.43	59.116	.1032
14	8.2220	698.27	0.00	698.27	674.165	637.770	29.624	24.371	.5353	0.00	-.25	143.173	.1030
15	8.2745	698.15	0.00	698.15	675.158	638.778	29.611	24.370	.5354	0.00	-.07	-448.505	.1029
16	8.3276	698.39	0.00	698.39	680.415	643.247	29.633	24.373	.5394	0.00	.09	-96.799	.1022
17	8.3812	699.03	0.00	699.03	687.417	649.299	29.801	24.380	.5435	0.00	.22	-59.143	.1012
18	8.4351	697.15	0.00	697.15	693.334	654.810	29.903	24.391	.5483	0.00	.33	-45.571	.1004
19	8.4895	691.49	0.00	691.49	698.098	658.581	29.962	24.405	.5499	0.00	.42	-39.897	.0999
20	8.5444	695.81	0.00	695.81	703.482	663.110	30.013	24.420	.5515	0.00	.48	-35.303	.0993
21	8.6038	701.15	0.00	701.15	710.342	669.751	30.063	24.437	.5530	0.00	.52	-33.305	.0984

BLADE DATA

LOCATION	BLADE SECTION	BLADE ANGLES CLAM	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-7.239	.020	0.000	7.239	.2119	0.0	.5893	720.89	31.301	695.817	2.138	.284	.8482	.8634
2	-7.389	.020	0.000	7.389	.2093	0.0	.5877	719.05	31.209	695.749	2.124	.254	.8458	.8584
3	-7.548	.019	0.000	7.548	.2073	0.0	.5860	717.04	31.115	695.683	2.111	.243	.8416	.8573
4	-7.711	.018	0.000	7.711	.2059	0.0	.5841	714.83	31.019	695.618	2.111	.243	.8384	.8541
5	-7.875	.016	0.000	7.875	.2072	0.0	.5820	712.41	30.920	695.551	2.104	.243	.8355	.8508
6	-8.039	.014	0.000	8.039	.2148	0.0	.5758	709.22	30.727	695.483	2.091	.243	.8271	.8439
7	-8.202	.012	0.000	8.202	.2225	0.0	.5686	706.86	30.617	695.367	2.077	.243	.8192	.8367
8	-8.362	.010	0.000	8.362	.2305	0.0	.5608	704.76	30.500	695.225	2.062	.243	.8111	.8292
9	-8.519	.008	0.000	8.519	.2384	0.0	.5532	702.92	30.093	695.030	2.048	.242	.8036	.8222
10	-8.673	.007	0.000	8.673	.2442	0.0	.5481	701.77	29.953	696.530	2.038	.265	.7998	.8196
11	-8.786	.005	0.000	8.786	.2518	0.0	.5425	700.58	29.807	699.132	2.028	.238	.7902	.7917
12	-8.894	.003	0.000	8.894	.2631	0.0	.5364	699.71	29.653	671.763	2.018	.295	.7510	.7741
13	-8.981	.001	0.000	8.981	.2543	0.0	.5361	699.04	29.633	673.163	2.017	.298	.7432	.7678
14	-9.039	-.001	0.000	9.039	.2471	0.0	.5359	698.27	29.624	674.165	2.016	.300	.7381	.7623
15	-9.062	-.004	0.000	9.062	.2392	0.0	.5354	698.15	29.611	675.158	2.015	.302	.7329	.7576
16	-9.059	-.007	0.000	9.059	.2242	0.0	.5394	698.39	29.633	680.415	2.021	.312	.7223	.7520
17	-9.053	-.012	0.000	9.053	.2075	0.0	.5435	699.03	29.801	687.417	2.028	.325	.7083	.7435
18	-9.044	-.018	0.000	9.044	.1920	0.0	.5483	697.15	29.903	693.334	2.035	.338	.6946	.7359
19	-9.125	-.024	0.000	9.125	.1838	0.0	.5499	691.49	29.962	698.098	2.039	.346	.6907	.7334
20	-9.169	-.031	0.000	9.169	.1767	0.0	.5515	695.81	30.013	703.482	2.042	.356	.6867	.7309
21	-9.213	-.039	0.000	9.213	.1711	0.0	.5530	701.15	30.063	710.342	2.046	.369	.6822	.7286

STATION 15 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.052 ISEN. EFF.= .747 POLY. EFF.= .771 DELTA T ON T = .384

STATION 16 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6408	738.54	0.00	738.54	665.817	620.664	31.381	24.455	.6848	0.00	0.00	0.000	.1862
2	7.6775	734.27	0.00	734.27	665.749	621.117	31.381	24.547	.6811	0.00	-.00	1367.993	.1862
3	7.7150	729.86	0.00	729.86	665.683	621.569	31.381	24.639	.6773	0.00	-.00	1373.811	.1862
4	7.7534	725.31	0.00	725.31	665.618	622.021	31.381	24.732	.6735	0.00	-.00	1379.730	.1862
5	7.7926	720.62	0.00	720.62	665.554	622.473	31.381	24.825	.6697	0.00	-.00	1385.753	.1862
6	7.8327	715.79	0.00	715.79	665.491	622.925	31.381	24.918	.6658	0.00	-.00	1391.882	.1862
7	7.8737	710.82	0.00	710.82	665.429	623.377	31.381	25.012	.6619	0.00	-.00	1398.119	.1862
8	7.9156	705.69	0.00	705.69	665.367	623.829	31.381	25.107	.6579	0.00	-.00	1404.466	.1862
9	7.9584	700.40	0.00	700.40	665.307	624.281	31.381	25.202	.6539	0.00	-.00	1410.926	.1862
10	8.0021	694.94	0.00	694.94	665.247	624.733	31.381	25.298	.6498	0.00	-.00	1417.502	.1862
11	8.0467	689.31	0.00	689.31	665.188	625.185	31.381	25.394	.6457	0.00	-.00	1424.198	.1862
12	8.0923	683.49	0.00	683.49	665.130	625.637	31.381	25.491	.6415	0.00	-.00	1431.017	.1862
13	8.1388	677.48	0.00	677.48	665.073	626.089	31.381	25.589	.6372	0.00	-.00	1437.964	.1862
14	8.1863	671.26	0.00	671.26	665.017	626.541	31.381	25.688	.6329	0.00	-.00	1445.044	.1862
15	8.2348	664.82	0.00	664.82	664.962	626.993	31.381	25.787	.6285	0.00	-.00	1452.262	.1862
16	8.2843	658.15	0.00	658.15	664.908	627.445	31.381	25.888	.6240	0.00	-.00	1459.624	.1862
17	8.3348	651.23	0.00	651.23	664.856	627.897	31.381	25.989	.6195	0.00	-.00	1467.136	.1862
18	8.3864	644.05	0.00	644.05	664.805	628.349	31.381	26.091	.6149	0.00	-.00	1474.804	.1862
19	8.4391	636.59	0.00	636.59	664.755	628.801	31.381	26.194	.6102	0.00	-.00	1482.635	.1862
20	8.4929	628.83	0.00	628.83	664.707	629.253	31.381	26.298	.6055	0.00	-.00	1490.636	.1862
21	8.5480	620.76	0.00	620.76	664.660	629.705	31.381	26.403	.6007	0.00	-.00	1498.814	.1862
22	8.6043	612.36	0.00	612.36	664.614	630.157	31.381	26.509	.5958	0.00	-.00	1507.178	.1862
23	8.6620	603.61	0.00	603.61	664.570	630.609	31.381	26.616	.5908	0.00	-.00	1515.738	.1862
24	8.7211	594.49	0.00	594.49	664.527	631.061	31.381	26.724	.5858	0.00	-.00	1524.504	.1862
25	8.7817	584.97	0.00	584.97	664.486	631.513	31.381	26.833	.5807	0.00	-.00	1533.488	.1862
26	8.8439	575.03	0.00	575.03	664.447	631.965	31.381	26.943	.5755	0.00	-.00	1542.703	.1862
27	8.9078	564.64	0.00	564.64	664.410	632.417	31.381	27.054	.5702	0.00	-.00	1552.165	.1862
28	8.9736	553.77	0.00	553.77	664.376	632.869	31.381	27.166	.5648	0.00	-.00	1561.890	.1862
29	9.0414	542.39	0.00	542.39	664.344	633.321	31.381	27.279	.5593	0.00	-.00	1571.897	.1862
30	9.1114	530.47	0.00	530.47	664.316	633.773	31.381	27.394	.5537	0.00	-.00	1582.208	.1862
31	9.1838	517.97	0.00	517.97	664.292	634.225	31.381	27.510	.5480	0.00	-.00	1592.847	.1862
32	9.2588	504.85	0.00	504.85	664.272	634.677	31.381	27.627	.5422	0.00	-.00	1603.844	.1862
33	9.3367	491.06	0.00	491.06	664.258	635.129	31.381	27.746	.5362	0.00	-.00	1615.232	.1862
34	9.4178	476.54	0.00	476.54	664.250	635.581	31.381	27.867	.5301	0.00	-.00	1627.054	.1862
35	9.5025	461.23	0.00	461.23	664.250	636.033	31.381	27.989	.5239	0.00	-.00	1639.360	.1862
36	9.5912	445.04	0.00	445.04	664.260	636.485	31.381	28.113	.5175	0.00	-.00	1652.211	.1862
37	9.6844	427.87	0.00	427.87	664.282	636.937	31.381	28.239	.5110	0.00	-.00	1665.683	.1862
38	9.7827	409.57	0.00	409.57	664.320	637.389	31.381	28.367	.5043	0.00	-.00	1679.870	.1862
39	9.8869	389.91	0.00	389.91	664.378	637.841	31.381	28.498	.4975	0.00	-.00	1694.894	.1862
40	9.9980	368.59	0.00	368.59	664.463	638.293	31.381	28.632	.4905	0.00	-.00	1710.911	.1862
41	10.1174	345.16	0.00	345.16	664.586	638.745	31.381	28.770	.4833	0.00	-.00	1728.131	.1862
42	10.2469	319.01	0.00	319.01	664.764	639.197	31.381	28.913	.4758	0.00	-.00	1746.832	.1862
43	10.3894	289.31	0.00	289.31	665.033	639.649	31.381	29.063	.4680	0.00	-.00	1767.391	.1862
44	10.5500	254.67	0.00	254.67	665.466	640.101	31.381	29.222	.4597	0.00	-.00	1790.331	.1862
45	10.7400	210.15	0.00	210.15	666.317	640.553	31.381	29.394	.4507	0.00	-.00	1816.373	.1862
46	10.9900	146.00	0.00	146.00	668.000	641.005	31.381	29.585	.4408	0.00	-.00	1848.000	.1862
47	11.3000	0.00	0.00	0.00	671.000	641.457	31.381	29.800	.4297	0.00	0.00	1890.000	.1862
48	11.6000	0.00	0.00	0.00	674.000	641.909	31.381	30.044	.4171	0.00	0.00	1940.000	.1862
49	11.9000	0.00	0.00	0.00	677.000	642.361	31.381	30.324	.4026	0.00	0.00	2000.000	.1862
50	12.2000	0.00	0.00	0.00	680.000	642.813	31.381	30.650	.3857	0.00	0.00	2080.000	.1862
51	12.5000	0.00	0.00	0.00	683.000	643.265	31.381	31.035	.3658	0.00	0.00	2190.000	.1862
52	12.8000	0.00	0.00	0.00	686.000	643.717	31.381	31.500	.3418	0.00	0.00	2350.000	.1862
53	13.1000	0.00	0.00	0.00	689.000	644.169	31.381	32.076	.3120	0.00	0.00	2600.000	.1862
54	13.4000	0.00	0.00	0.00	692.000	644.621	31.381	32.819	.2736	0.00	0.00	3000.000	.1862
55	13.7000	0.00	0.00	0.00	695.000	645.073	31.381	33.830	.2214	0.00	0.00	3700.000	.1862
56	14.0000	0.00	0.00	0.00	698.000	645.525	31.381	35.330	.1440	0.00	0.00	5000.000	.1862
57	14.3000	0.00	0.00	0.00	701.000	645.977	31.381	37.830	.0151	0.00	0.00	8000.000	.1862

STATION 17 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6408	739.59	0.00	739.59	665.817	620.535	31.381	24.437	.6857	0.00	0.00	0.000	.1862
2	7.6775	735.31	0.00	735.31	665.749	620.988	31.381	24.529	.6820	0.00	-.00	0.000	.1862
3	7.7150	730.89	0.00	730.89	665.683	621.440	31.381	24.622	.6782	0.00	-.00	0.000	.1862
4	7.7534	726.33	0.00	726.33	665.618	621.892	31.381	24.715	.6744	0.00	-.00	0.000	.1862
5	7.7926	721.63	0.00	721.63	665.554	622.344	31.381	24.809	.6705	0.00	-.00	0.000	.1862
6	7.8327	716.79	0.00	716.79	665.491	622.796	31.381	24.903	.6666	0.00	-.00	0.000	.1862
7	7.8737	711.80	0.00	711.80	665.429	623.248	31.381	24.998	.6626	0.00	-.00	0.000	.1862
8	7.9156	706.67	0.00	706.67	665.367	623.700	31.381	25.093	.6586	0.00	-.00	0.000	.1862
9	7.9584	701.38	0.00	701.38	665.307	624.152	31.381	25.189	.6545	0.00	-.00	0.000	.1862
10	8.0021	695.93	0.00	695.93	665.247	624.604	31.381	25.285	.6504	0.00	-.00	0.000	.1862
11	8.0467	690.31	0.00	690.31	665.188	625.056	31.381	25.382	.6462	0.00	-.00	0.000	.1862
12	8.0923	684.51	0.00	684.51	665.130	625.508	31.381	25.480	.6420	0.00	-.00	0.000	.1862
13	8.1388	678.52	0.00	678.52	665.073	625.960	31.381	25.578	.6377	0.00	-.00	0.000	.1862
14	8.1863	672.33	0.00	672.33	665.017	626.412	31.381	25.677	.6333	0.00	-.00	0.000	.1862
15	8.2348	665.93	0.00	665.93	664.962	626.864	31.381	25.777	.6289	0.00	-.00	0.000	.1862
16	8.2843	659.31	0.00	659.31	664.908	627.316	31.381	25.878	.6244	0.00	-.00	0.000	.1862
17	8.3348	652.46	0.00	652.46	664.856	627.768	31.381	25.979	.6198	0.00	-.00	0.000	.1862
18	8.3864	645.37	0.00	645.37	664.805	628.220	31.381	26.081	.6152	0.00	-.00	0.000	.1862
19	8.4391	638.02	0.00	638.02	664.755	628.672	31.381	26.184	.6105	0.00	-.00	0.000	.1862
20	8.4929	630.41	0.00	630.41	664.707	629.124	31.381	26.288	.6057	0.00	-.00	0.000	.1862
21	8.5480	622.52	0.00	622.52	664.660	629.576	31.381	26.393	.6009	0.00	-.00	0.000	.1862
22	8.6043	614.34	0.00	614.34	664.614	630.028	31.381	26.499	.5960	0.00	-.00	0.000	.1862
23	8.6620	605.85	0.00	605.85	664.570	630.480	31.381	26.606	.5910	0.00	-.00	0.000	.1862
24	8.7211	597.04	0.00	597.04	664.527	630.932	31.381	26.714	.5860	0.00	-.00	0.000	.1862
25	8.7817	587.89	0.00	587.89	664.486	631.384	31.381	26.823	.5809	0.00	-.00	0.000	.1862
26	8.8439	578.38	0.00	578.38	664.447	631.836	31.381	26.933	.5757	0.00	-.00	0.000	.1862
27	8.9078	568.49	0.00	568.49	664.410	632.288	31.381	27.044	.5704	0.00	-.00	0.000	.1862
28	8.9736	558.19	0.00	558.19	664.376	632.740	31.381	27.156	.5650	0.00	-.00	0.000	.1862
29	9.0414	547.46	0.00	547.46	664.344	633.192	31.381	27.269	.5595	0.00	-.00	0.000	.1862
30	9.1114	536.27	0.00	536.27	664.316	633.644	31.381	27.384	.5539	0.00	-.00	0.000	.1862
31	9.1838	524.59	0.00	524.59	664.292	634.096	31.381	27.500	.5482	0.00	-.00	0.000	.1862
32	9.2588	512.39	0.00	512.39	664.272	634.548	31.381	27.617	.5424	0.00	-.00	0.000	.1862
33	9.3367	499.63	0.00	499.63	664.258	635.000	31.381	27.736	.5364	0.00	-.00	0.000	.1862
34	9.4178	486.27	0.00	486.27	664.250	635.452	31.381	27.857	.5303	0.00	-.00	0.000	.1862
35	9.5025	472.26	0.00	472.26	664.250	635.904	31.381	27.979	.5241	0.00	-.00	0.000	.1862
36	9.5912	457.54	0.00	457.54	664.260	636.356	31.381	28.103	.5177	0.00	-.00	0.000	.1862
37	9.6844	442.04	0.00	442.04	664.282	636.808	31.381	28.229	.5112	0.00	-.00	0.000	.1862
38	9.7827	425.67	0.00	425.67	664.320	637.260	31.381	28.358	.5045	0.00	-.00	0.000	.1862
39	9.8869	408.33	0.00	408.33	664.378	637.712	31.381	28.489	.4977	0.00	-.00	0.000	.1862
40	9.9980	389.87	0.00	389.87	664.463	638.164	31.381	28.623	.4907	0.00	-.00	0.000	.1862
41	10.1174	370.07	0.00	370.07	664.586	638.616	31.381	28.761	.4835	0.00	-.00	0.000	.1862
42	10.2469	348.59	0.00	348.59	664.764	639.068	31.381	28.904	.4760	0.00	-.00	0.000	.1862
43	10.3894	324.91	0.00	324.91	665.033	639.520	31.381	29.054	.4682	0.00	-.00	0.000	.1862
44	10.5500	297.01	0.00	297.01	665.466	639.972	31.381	29.213	.4599	0.00	-.00	0.000	.1862
45	10.7400	260.00	0.00	260.00	666.317	640.424	31.381	29.385	.4509	0.00	-.00	0.000	.1862
46	10.9900	146.00	0.00	146.00	668.000	640.876	31.381	29.576	.4410	0.00	-.00	0.000	.1862
47	11.3000	0.00	0.00	0.00	671.000	641.328	31.381	29.791	.4299	0.00	0.00	0.000	.1862
48	11.6000	0.00	0.00	0.00	674.000	641.780	31.381	30.035	.4173	0.00	0.00	0.000	.1862
49	11.9000	0.00	0.00	0.00	677.000	642.232	31.381	30.315	.4028	0.00	0.00	0.000	.1862
50	12.2000	0.00	0.00	0.00	680.000	642.684	31.381	30.641	.3859	0.00	0.00	0.000	.1862
51	12.5000	0.00	0.00	0.00	683.000	643.136	31.381	31.026	.3660	0.00	0.00	0.000	.1862
52	12.8000	0.00	0.00	0.00	686.000	643.588	31.381	31.491	.3420	0.00	0.00	0.000	.1862
53	13.1000	0.00	0.00	0.00	689.000	644.040	31.381	32.067	.3122	0.00	0.00	0.000	.1862
54	13.4000	0.00	0.00	0.00	692.000	644.492	31.381	32.810	.2738	0.00	0.00	0.000	.1862
55	13.7000	0.00	0.00	0.00	695.000	644.944	31.381	33.821	.2216	0.00	0.00	0.000	.1862
56	14.0000	0.00	0.00	0.00	698.000	645.396	31.381	35.321	.1442	0.00	0.00	0.000	.1862
57	14.3000	0.00	0.00	0.00	701.000	645.848	31.381	37.821	.0153	0.00	0.00	0.000	.1862

ROTOR PERFORMANCE

LOCATION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCIDENCE	DEVIATION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	6.7500	7.2449	.3271	9.753	6.297	.0702	.4101	.4207	.5553	.7537	.7667	-60.937	-12.647	6.878	18.991
2	6.9616	7.3893	.3413	8.479	6.548	.0714	.4304	.4399	.5678	.7341	.7587	-61.347	-13.488	6.331	18.628
3	6.3722	7.5277	.4962	8.247	6.796	.0725	.4473	.4556	.5563	.7173	.7505	-61.731	-14.179	6.362	18.288
4	7.0922	7.3091	.3704	8.033	6.940	.0734	.4612	.4685	.5519	.7043	.7423	-62.077	-14.939	6.420	8.000
5	7.1115	7.7035	.3743	7.829	7.079	.0740	.4726	.4791	.5492	.6931	.7340	-62.381	-15.712	6.322	8.000
6	7.3005	7.7517	.3834	7.632	7.171	.0744	.4823	.4877	.5366	.6839	.7257	-62.657	-16.438	6.845	8.000
7	7.4032	7.7948	1.0122	7.757	7.306	.0743	.4908	.4953	.5271	.6754	.7171	-62.921	-17.265	5.879	7.454
8	7.5176	7.8336	1.0254	7.638	7.439	.0737	.4981	.5116	.5162	.6650	.7044	-63.186	-17.982	4.927	6.983
9	7.6260	7.8637	1.0333	7.647	7.533	.0809	.5048	.5063	.5045	.6628	.6997	-63.456	-18.642	4.890	6.663
10	7.7345	7.8925	1.0425	7.900	7.612	.0977	.5109	.5211	.4922	.6465	.6984	-63.737	-19.239	4.885	6.663
11	7.8445	7.9772	1.0557	7.571	7.341	.1237	.5401	.5415	.4796	.6300	.7023	-64.035	-19.788	1.962	6.888
12	7.9534	8.0293	1.0703	7.530	7.144	.1482	.5609	.5709	.4668	.6122	.7059	-64.351	-20.293	1.724	7.124
13	8.0533	8.0777	1.0817	7.903	7.419	.1656	.5741	.5742	.4533	.5989	.7035	-64.692	-20.756	1.883	8.139
14	8.1746	8.1307	1.1044	7.982	7.915	.1500	.5853	.5148	.4409	.5878	.6988	-65.065	-21.193	2.048	9.459
15	8.2872	8.1858	1.1175	7.412	8.490	.1949	.5956	.5346	.4273	.5789	.6938	-65.467	-21.574	2.879	10.218
16	8.4011	8.2435	1.1304	7.227	8.930	.2427	.6357	.6341	.4152	.5605	.7072	-65.901	-21.907	3.207	11.327
17	8.5166	8.3075	1.1433	7.227	9.214	.3012	.6899	.6377	.4033	.4913	.7266	-66.363	-22.174	3.359	12.527
18	8.6344	8.3793	1.1563	7.202	10.281	.3477	.7406	.7379	.3933	.4441	.7414	-66.843	-22.337	3.460	13.497
19	8.7548	8.4513	1.1599	7.125	12.719	.3747	.7713	.7793	.3947	.4139	.7449	-67.329	-22.387	3.789	14.953
20	8.8758	8.5537	1.1334	7.050	16.336	.4036	.8101	.8168	.3779	.3755	.7334	-67.820	-22.396	3.556	16.789
21	9.0000	8.5039	1.1373	8.973	29.240	.4511	.8768	.8759	.3745	.3100	.7582	-68.316	-21.371	3.607	18.159

STATOR PERFORMANCE

LOCATION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCIDENCE	DEVIATION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	7.6199	7.6400	.3163	.353	7.233	.2119	.4852	.4850	.3309	.6737	0.0000	48.817	-7.239	-39.941	.020
2	7.6716	7.6780	.3235	.427	7.339	.2033	.5088	.5007	.3471	.6619	0.0000	47.872	-7.389	-37.869	.020
3	7.7213	7.7170	.3452	-.035	7.248	.2073	.5156	.5157	.3620	.6507	0.0000	47.018	-7.540	-35.984	.018
4	7.7685	7.7596	.3582	-.523	7.711	.2066	.5288	.5285	.3735	.6413	0.0000	46.242	-7.711	-34.239	.016
5	7.8136	7.7975	.3675	-.923	7.379	.2072	.5392	.5393	.3818	.6339	0.0000	45.562	-7.877	-32.662	.014
6	7.8573	7.8395	.3744	-1.242	8.039	.2148	.5521	.5523	.3873	.6239	0.0000	45.616	-8.039	-24.332	.012
7	7.8999	7.8827	.3777	-1.442	8.202	.2225	.5642	.5644	.3917	.6144	0.0000	45.344	-8.202	-21.182	.012
8	7.9420	7.9273	.3787	-1.569	8.302	.2305	.5754	.5755	.3949	.6053	0.0000	45.058	-8.362	-18.861	.010
9	7.9837	7.9732	.3781	-1.656	8.516	.2384	.5852	.5853	.3970	.5989	0.0000	44.845	-8.516	-16.890	.008
10	8.0253	8.0205	.3764	-1.744	8.359	.2442	.5935	.5935	.3974	.5943	0.0000	44.685	-8.659	-11.468	.007
11	8.0672	8.0691	.3750	-.492	8.786	.2516	.6028	.6028	.3969	.5893	0.0000	44.587	-8.786	-7.711	.006
12	8.1096	8.1134	.3722	.225	8.434	.2601	.6117	.6116	.3952	.5847	0.0000	44.582	-8.934	-3.861	.005
13	8.1525	8.1702	.3654	.610	8.351	.2548	.6113	.6110	.3923	.5878	0.0000	44.701	-8.981	-1.254	.001
14	8.1961	8.2220	.3539	.840	9.079	.2671	.6086	.6163	.3893	.5921	0.0000	44.963	-9.033	.828	.000
15	8.2402	8.2749	.3407	1.078	9.032	.2392	.6051	.6147	.3994	.5968	0.0000	45.244	-9.062	6.570	.000
16	8.2859	8.3276	.3335	2.905	9.059	.2242	.6002	.5997	.4001	.6072	0.0000	45.532	-9.008	11.264	.000
17	8.3340	8.3812	.3213	5.037	9.033	.2078	.5943	.5937	.3944	.6198	0.0000	45.836	-9.059	17.188	.000
18	8.3843	8.4351	.3035	8.384	9.024	.1920	.5844	.5837	.3947	.6349	0.0000	46.378	-9.084	25.182	.000
19	8.4378	8.4895	.2820	10.359	9.122	.1838	.5708	.5694	.3821	.6564	0.0000	47.404	-9.125	32.989	.000
20	8.5182	8.5444	.2504	13.652	9.159	.1707	.5482	.5478	.3599	.6723	0.0000	48.801	-9.169	40.326	.000
21	8.6199	8.6000	.3032	21.019	9.213	.1711	.5113	.5115	.3193	.7098	0.0000	50.814	-9.213	46.652	.000

WAKE AND BOUNDARY LAYER BLOCKAGES (PERCENT)

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MID BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	3.6	.6	3.0	11.0	13.0	14.0	17.5	18.5	18.5
DIST FACTOR	1.0	1.0	1.0	1.0	.8	.6	.4	.2	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
INT BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	3.7	.6	3.0	11.0	13.0	14.0	17.5	18.5	18.5

SUMMARY POINT NO. 1 THE CALCULATION IS CONVERGED PASS 24

TEST POINT TITLE = 212871515380

FLOW = 19.69 SPEED = 16322.5 PRESSURE RATIO = 2.052 ISENTROPIC EFFY = .7473 POLYTROPIC EFFY = .7714 DEL T/T = .3843

SUMMARY OF 1 TEST POINTS

POINT NO.	TEST POINT TITLE	STATUS OF CALCULATION	FLOW RATE LBS/SEC	SPEED RPM	ROTOR PRESSURE RATIO	ROTOR ISEN EFFY	STAGE PRESSURE RATIO	STAGE ISEN EFFY	FLOW/(CHOKE FLOW)
1	212871515990	CONVERGED AFTER 24 PASSES	19.698	16322.5	2.271	.865	2.052	.747	.51563

6. TEST POINT 301181015885 (85%)

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PASS  3 STATION  3 STREAMLINE 21 ITERATION  1 VM/VM(MID)= 3.032 VM(MID)= .7332E+03
PASS  3 STATION  3 STREAMLINE 21 ITERATION  2 VM/VM(MID)= 4.679 VM(MID)= .7332E+03
PASS  3 STATION  3 STREAMLINE 21 ITERATION  3 VM/VM(MID)= 4.632 VM(MID)= .7332E+03
PASS  3 STATION  3 STREAMLINE 21 ITERATION  4 VM/VM(MID)= 4.639 VM(MID)= .7332E+03
PASS  3 STATION  3 STREAMLINE 21 ITERATION  5 VM/VM(MID)= 4.702 VM(MID)= .7332E+03
PASS  3 STATION  3 STREAMLINE 21 ITERATION  6 VM/VM(MID)= 4.704 VM(MID)= .7332E+03
PASS  4 STATION 10 STREAMLINE 21 ITERATION  5 VM/VM(MID)= 3.036 VM(MID)= .7443E+03
PASS  4 STATION 10 STREAMLINE 21 ITERATION  6 VM/VM(MID)= 3.130 VM(MID)= .7443E+03
PASS  4 STATION 10 STREAMLINE 21 ITERATION  6 VM/VM(MID)= 3.151 VM(MID)= .7443E+03
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STATION 1 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.0636	287.45	0.00	287.45	518.688	511.843	14.69	14.028	.2567	0.00	28.93	0.000	.0737
2	6.2293	287.45	0.00	287.45	518.688	511.843	14.69	14.028	.2567	0.00	19.78	0.000	.0737
3	6.3837	287.45	0.00	287.45	518.688	511.843	14.69	14.028	.2567	0.00	18.46	0.000	.0737
4	6.5333	287.45	0.00	287.45	518.688	511.843	14.69	14.028	.2567	0.00	17.21	0.000	.0737
5	6.6835	287.45	0.00	287.45	518.688	511.843	14.69	14.028	.2567	0.00	15.95	0.000	.0737
6	6.8472	287.45	0.00	287.45	518.688	511.843	14.69	14.028	.2567	0.00	14.69	0.000	.0737
7	6.9937	287.45	0.00	287.45	518.688	511.843	14.69	14.028	.2567	0.00	13.44	0.000	.0737
8	7.1515	287.45	0.00	287.45	518.688	511.843	14.69	14.028	.2567	0.00	12.19	0.000	.0737
9	7.3025	287.45	0.00	287.45	518.688	511.843	14.69	14.028	.2567	0.00	10.96	0.000	.0737
10	7.4530	287.45	0.00	287.45	518.688	511.843	14.69	14.028	.2567	0.00	9.75	0.000	.0737
11	7.6023	287.45	0.00	287.45	518.688	511.843	14.69	14.028	.2567	0.00	8.57	0.000	.0737
12	7.7524	287.45	0.00	287.45	518.688	511.843	14.69	14.028	.2567	0.00	7.41	0.000	.0737
13	7.9016	287.45	0.00	287.45	518.688	511.843	14.69	14.028	.2567	0.00	6.30	0.000	.0737
14	8.0503	287.45	0.00	287.45	518.688	511.843	14.69	14.028	.2567	0.00	5.24	0.000	.0737
15	8.1932	287.45	0.00	287.45	518.688	511.843	14.69	14.028	.2567	0.00	4.24	0.000	.0737
16	8.3477	287.45	0.00	287.45	518.688	511.843	14.69	14.028	.2567	0.00	3.31	0.000	.0737
17	8.4992	287.45	0.00	287.45	518.688	511.843	14.69	14.028	.2567	0.00	2.45	0.000	.0737
18	8.6447	287.45	0.00	287.45	518.688	511.843	14.69	14.028	.2567	0.00	1.68	0.000	.0737
19	8.7931	287.45	0.00	287.45	518.688	511.843	14.69	14.028	.2567	0.00	1.00	0.000	.0737
20	8.9415	287.45	0.00	287.45	518.688	511.843	14.69	14.028	.2567	0.00	0.44	0.000	.0737
21	9.0900	287.45	0.00	287.45	518.688	511.843	14.69	14.028	.2567	0.00	0.00	0.000	.0737

STATION 2 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.3746	313.50	0.00	313.50	518.688	510.546	14.69	13.904	.2825	0.00	20.83	-285.750	.0732
2	6.5133	315.18	0.00	315.18	518.688	510.458	14.69	13.895	.2840	0.00	19.52	-114.869	.0731
3	6.6503	316.84	0.00	316.84	518.688	510.382	14.69	13.888	.2854	0.00	18.24	-81.360	.0731
4	6.7871	317.91	0.00	317.91	518.688	510.315	14.69	13.882	.2865	0.00	16.98	-67.080	.0731
5	6.9224	318.98	0.00	318.98	518.688	510.258	14.69	13.876	.2875	0.00	15.69	-57.558	.0731
6	7.0570	319.85	0.00	319.85	518.688	510.212	14.69	13.872	.2883	0.00	14.28	-50.385	.0731
7	7.1903	320.51	0.00	320.51	518.688	510.178	14.69	13.869	.2889	0.00	12.98	-44.880	.0731
8	7.3243	320.94	0.00	320.94	518.688	510.155	14.69	13.867	.2893	0.00	11.68	-40.560	.0731
9	7.4575	321.13	0.00	321.13	518.688	510.145	14.69	13.866	.2895	0.00	10.40	-36.171	.0731
10	7.5904	321.05	0.00	321.05	518.688	510.149	14.69	13.866	.2894	0.00	9.13	-32.641	.0731
11	7.7234	320.69	0.00	320.69	518.688	510.168	14.69	13.868	.2891	0.00	7.88	-29.488	.0731
12	7.8552	320.04	0.00	320.04	518.688	510.202	14.69	13.871	.2885	0.00	6.66	-26.656	.0731
13	7.9900	319.07	0.00	319.07	518.688	510.254	14.69	13.876	.2876	0.00	5.47	-24.103	.0731
14	8.1239	317.77	0.00	317.77	518.688	510.322	14.69	13.883	.2864	0.00	4.32	-21.795	.0731
15	8.2585	316.14	0.00	316.14	518.688	510.408	14.69	13.891	.2849	0.00	3.23	-19.704	.0731
16	8.3940	314.16	0.00	314.16	518.688	510.511	14.69	13.901	.2831	0.00	2.19	-17.811	.0731
17	8.5304	311.83	0.00	311.83	518.688	510.632	14.69	13.912	.2810	0.00	1.21	-16.099	.0731
18	8.6681	309.14	0.00	309.14	518.688	510.771	14.69	13.925	.2785	0.00	.31	-14.554	.0731
19	8.8071	306.05	0.00	306.05	518.688	510.927	14.69	13.940	.2757	0.00	-.52	-13.162	.0731
20	8.9476	302.58	0.00	302.58	518.688	511.103	14.69	13.957	.2725	0.00	-1.26	-11.910	.0731
21	9.0900	298.63	0.00	298.63	518.688	511.300	14.69	13.976	.2689	0.00	-1.91	-10.788	.0730

STATION 3 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	0.6015	345.+0	0.01	345.+0	518.688	508.304	14.69	13.738	.3118	0.00	20.56	-83.831	.0726
2	0.7233	347.70	0.00	347.70	518.688	508.672	14.695	13.726	.3133	0.00	19.45	-81.851	.0725
3	0.8432	349.65	0.00	349.65	518.688	508.547	14.699	13.714	.3153	0.00	17.76	-79.316	.0725
4	0.9639	351.37	0.00	351.37	518.688	508.431	14.693	13.703	.3177	0.00	16.38	-72.348	.0725
5	1.0827	353.37	0.00	353.37	518.688	508.325	14.696	13.693	.3194	0.00	15.00	-68.326	.0724
6	1.2031	355.24	0.00	355.24	518.688	508.233	14.696	13.685	.3208	0.00	13.60	-65.291	.0724
7	1.3241	356.92	0.00	356.92	518.688	508.158	14.693	13.677	.3220	0.00	12.20	-65.447	.0724
8	1.4423	357.44	0.00	357.44	518.688	508.103	14.693	13.672	.3229	0.00	10.79	-38.571	.0723
9	1.5613	357.96	0.00	357.96	518.688	508.072	14.696	13.669	.3233	0.00	9.38	-311.962	.0723
10	1.6812	358.00	0.00	358.00	518.688	508.070	14.696	13.669	.3234	0.00	7.96	-255.617	.0723
11	1.7931	357.53	0.00	357.53	518.688	508.098	14.696	13.672	.3229	0.00	6.56	-222.881	.0723
12	1.9117	356.48	0.00	356.48	518.688	508.160	14.696	13.678	.3220	0.00	5.15	-199.081	.0722
13	2.0319	354.84	0.00	354.84	518.688	508.256	14.696	13.687	.3205	0.00	3.76	-181.494	.0722
14	2.1535	352.59	0.00	352.59	518.688	508.389	14.696	13.699	.3184	0.00	2.44	-167.444	.0722
15	2.2817	349.72	0.00	349.72	518.688	508.556	14.696	13.715	.3157	0.00	1.13	-156.871	.0723
16	2.4031	346.25	0.00	346.25	518.688	508.755	14.693	13.734	.3126	0.00	-.16	-148.536	.0723
17	2.5312	342.24	0.00	342.24	518.688	508.984	14.696	13.755	.3088	0.00	-1.36	-141.699	.0727
18	2.6578	337.75	0.00	337.75	518.688	509.237	14.696	13.779	.3047	0.00	-2.49	-135.882	.0727
19	2.7834	332.87	0.00	332.87	518.688	509.509	14.693	13.805	.3003	0.00	-3.55	-130.949	.0728
20	2.9107	327.65	0.00	327.65	518.688	509.794	14.693	13.832	.2955	0.00	-4.53	-126.783	.0729
21	3.0500	322.12	0.00	322.12	518.688	510.092	14.696	13.861	.2904	0.00	-5.47	-8.698	.0731

STATION 4 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	0.7200	380.67	0.00	380.67	518.688	506.582	14.693	13.539	.3441	0.00	20.32	-389.854	.0718
2	0.8613	383.58	0.00	383.58	518.688	506.498	14.693	13.522	.3470	0.00	18.99	-387.682	.0718
3	0.9713	386.50	0.00	386.50	518.688	506.311	14.693	13.504	.3497	0.00	17.65	-164.348	.0717
4	1.0813	389.38	0.00	389.38	518.688	506.126	14.693	13.487	.3524	0.00	16.27	-126.498	.0716
5	1.1911	392.14	0.00	392.14	518.688	505.948	14.693	13.470	.3550	0.00	14.86	-129.686	.0716
6	1.2938	394.68	0.00	394.68	518.688	505.782	14.693	13.455	.3573	0.00	13.40	-137.329	.0715
7	1.4053	396.90	0.00	396.90	518.688	505.637	14.693	13.441	.3594	0.00	11.89	-164.899	.0715
8	1.5104	398.67	0.00	398.67	518.688	505.520	14.693	13.430	.3610	0.00	10.34	-159.824	.0714
9	1.6243	399.38	0.00	399.85	518.688	505.440	14.693	13.423	.3621	0.00	8.75	-65.114	.0714
10	1.7322	400.41	0.00	400.41	518.688	505.395	14.693	13.420	.3628	0.00	7.11	-37.992	.0714
11	1.8433	400.15	0.00	400.15	518.688	505.422	14.693	13.422	.3624	0.00	5.46	-23.962	.0714
12	1.9492	399.04	0.00	399.04	518.688	505.495	14.693	13.428	.3614	0.00	3.80	-19.348	.0714
13	2.0583	397.02	0.00	397.02	518.688	505.629	14.693	13.441	.3595	0.00	2.14	-15.165	.0715
14	2.1695	394.03	0.00	394.03	518.688	505.828	14.693	13.459	.3567	0.00	.49	-12.382	.0715
15	2.2816	390.02	0.00	390.02	518.688	506.085	14.693	13.483	.3530	0.00	-1.13	-10.244	.0716
16	2.3934	385.00	0.00	385.00	518.688	506.407	14.693	13.513	.3483	0.00	-2.70	-8.703	.0717
17	2.5113	379.06	0.00	379.06	518.688	506.784	14.693	13.548	.3428	0.00	-4.17	-7.826	.0719
18	2.6235	372.41	0.00	372.41	518.688	507.198	14.693	13.587	.3367	0.00	-5.51	-7.298	.0720
19	2.7504	365.38	0.00	365.38	518.688	507.627	14.693	13.628	.3302	0.00	-6.68	-7.141	.0722
20	2.8739	358.50	0.00	358.50	518.688	508.040	14.693	13.666	.3235	0.00	-7.63	-7.617	.0723
21	3.0000	352.77	0.00	352.77	518.688	508.378	14.693	13.698	.3186	0.00	-8.25	-10.317	.0724

BLADE DATA

LOCATION	BLADE SECTION	BLADE ANGLES LEAN	BLADE ANGLES INL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-60.387	6.070	-63.362	4.624	0.0000	1021.5	.9860	1090.11	25.215	605.018	1.000	0.000	1.0000	1.0000
2	-61.333	6.231	-63.723	4.392	0.0000	1038.3	1.0014	1106.91	25.637	607.875	1.000	0.000	1.0000	1.0000
3	-61.709	6.336	-63.331	4.172	0.0000	1055.1	1.0167	1123.63	26.068	610.768	1.000	0.000	1.0000	1.0000
4	-62.052	6.429	-70.032	7.960	0.0000	1071.7	1.0319	1140.25	26.503	613.688	1.000	0.000	1.0000	1.0000
5	-62.357	6.325	-70.154	7.827	0.0000	1088.2	1.0471	1156.74	26.940	616.640	1.000	0.000	1.0000	1.0000
6	-62.636	6.047	-70.340	7.704	0.0000	1104.7	1.0620	1173.10	27.381	619.621	1.000	0.000	1.0000	1.0000
7	-62.894	5.512	-70.595	7.601	0.0000	1121.1	1.0769	1189.30	27.822	622.633	1.000	0.000	1.0000	1.0000
8	-63.134	4.939	-70.935	7.512	0.0000	1137.5	1.0915	1205.31	28.272	625.681	1.000	0.000	1.0000	1.0000
9	-63.347	4.105	-70.995	7.439	0.0000	1153.8	1.1059	1221.13	28.721	628.769	1.000	0.000	1.0000	1.0000
10	-63.731	3.109	-71.110	7.378	0.0000	1170.1	1.1201	1236.79	29.350	631.901	1.000	0.000	1.0000	1.0000
11	-64.031	1.935	-71.303	7.333	0.0000	1186.3	1.1340	1252.17	29.904	635.085	1.000	0.000	1.0000	1.0000
12	-64.348	.778	-71.349	7.301	0.0000	1203.0	1.1478	1267.43	30.444	638.329	1.000	0.000	1.0000	1.0000
13	-64.688	-.522	-71.368	7.280	0.0000	1219.6	1.1613	1282.55	31.004	641.642	1.000	0.000	1.0000	1.0000
14	-65.054	-2.016	-72.322	7.268	0.0000	1236.3	1.1747	1297.57	31.594	645.033	1.000	0.000	1.0000	1.0000
15	-65.471	-3.603	-72.714	7.263	0.0000	1253.1	1.1879	1312.55	32.188	648.514	1.000	0.000	1.0000	1.0000
16	-65.879	-5.113	-73.141	7.262	0.0000	1270.0	1.2011	1327.54	32.819	652.098	1.000	0.000	1.0000	1.0000
17	-66.335	-6.917	-73.731	7.265	0.0000	1286.9	1.2143	1342.65	33.473	655.794	1.000	0.000	1.0000	1.0000
18	-66.911	-7.035	-74.034	7.273	0.0200	1305.3	1.2277	1357.99	34.171	659.519	1.000	0.000	1.0000	1.0000
19	-67.293	-7.838	-74.375	7.275	0.0600	1324.2	1.2414	1373.70	34.980	663.381	1.000	0.000	1.0000	1.0000
20	-67.799	-8.543	-75.093	7.254	0.0000	1342.9	1.2556	1389.94	35.867	667.567	1.000	0.000	1.0000	1.0000
21	-68.316	-9.637	-75.479	7.163	0.0000	1362.0	1.2705	1406.93	36.873	671.935	1.000	0.000	1.0000	1.0000

STATION 5 FLOW FIELD DESCRIPTION

STREAMLINE	RADIUS	VELOCITIES AXIAL	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.8373	+11.30	150.04	+41.34	540.356	530.230	17.437	15.753	.3903	21.26	22.32	6.139	.0799
2	6.9395	+13.28	150.02	+42.40	540.057	529.853	17.453	15.710	.3916	20.65	20.72	7.497	.0797
3	7.0937	+10.75	152.35	+43.43	540.850	529.540	17.433	15.675	.3927	20.12	19.07	9.859	.0796
4	7.1933	+13.79	149.90	+43.77	540.746	529.294	17.414	15.646	.3945	19.66	17.35	12.188	.0795
5	7.2973	+23.09	147.93	+43.20	540.746	529.113	17.411	15.625	.3963	19.27	15.59	16.744	.0794
6	7.3937	+20.43	148.45	+50.38	540.834	529.003	17.423	15.611	.3992	18.95	13.76	39.584	.0793
7	7.4325	+29.51	143.51	+53.43	540.813	528.955	17.439	15.606	.4018	18.72	11.89	-693.346	.0793
8	7.5038	+32.13	144.37	+55.79	540.251	529.060	17.491	15.609	.4035	18.55	9.96	-37.741	.0793
9	7.5848	+34.16	144.67	+57.63	540.551	529.212	17.483	15.620	.4051	18.43	8.00	-28.152	.0794
10	7.7208	+35.18	142.33	+58.81	540.926	529.598	17.513	15.639	.4060	18.47	6.00	-14.194	.0794
11	7.8728	+34.97	147.13	+59.38	540.722	529.565	17.543	15.665	.4050	18.83	4.00	-11.278	.0794
12	7.9716	+33.34	148.85	+59.73	540.425	529.498	17.573	15.698	.4034	18.93	2.02	-9.836	.0795
13	8.0635	+31.77	150.56	+57.27	540.133	529.823	17.603	15.736	.4038	19.22	.06	-8.674	.0795
14	8.1664	+28.43	152.11	+54.93	540.020	532.708	17.623	15.779	.4011	19.55	-1.85	-8.139	.0796
15	8.2933	+23.76	153.20	+50.64	540.424	533.615	17.641	15.824	.3972	19.88	-3.71	-7.916	.0797
16	8.3674	+16.62	153.70	+44.93	541.337	534.948	17.641	15.871	.3917	20.48	-5.46	-7.889	.0796
17	8.4716	+07.59	154.91	+37.47	542.427	536.565	17.622	15.917	.3846	21.38	-7.03	-8.311	.0797
18	8.5734	196.38	160.53	+27.79	543.279	539.131	17.591	15.960	.3755	22.89	-8.35	-9.173	.0797
19	8.6922	183.45	159.41	+15.27	543.413	539.137	17.551	15.997	.3642	25.57	-9.32	-11.204	.0798
20	8.8038	167.24	157.94	339.37	543.355	540.133	17.437	16.022	.3433	30.14	-9.98	-17.407	.0797
21	8.9340	145.12	153.92	377.99	543.149	541.329	17.291	16.028	.3307	24.04	-9.38	-1665.883	.0796

BLADE DATA

LOCATION	BLADE SECTION	ANGLES	FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-0.348	+0.233	-55.147	0.047	.0130	1043.9	.4621	374.84	25.542	508.628	1.191	.053	.9570	.9588
2	-0.434	+0.234	-55.372	0.337	.0139	1059.2	.4789	391.54	25.372	511.490	1.188	.053	.9553	.9564
3	-0.493	+0.230	-55.271	0.779	.0150	1074.4	.4951	1011.59	26.196	514.168	1.185	.052	.9538	.9549
4	-0.502	+0.235	-55.424	0.823	.0170	1089.5	.5108	1029.04	26.772	516.961	1.182	.052	.9526	.9537
5	-0.502	+0.229	-55.135	0.779	.0171	1104.4	.5259	1045.86	27.153	519.365	1.180	.052	.9517	.9528
6	-0.485	+0.247	-55.179	0.344	.0170	1119.2	.5403	1062.12	27.000	522.281	1.186	.052	.9510	.9522
7	-0.462	+0.248	-55.212	0.230	.0171	1133.8	.5541	1077.66	28.021	525.008	1.187	.053	.9508	.9512
8	-0.414	+0.248	-55.138	0.136	.0174	1148.3	.5672	1092.55	28.447	527.750	1.188	.053	.9487	.9499
9	-0.414	+0.242	-55.317	0.005	.0173	1162.7	.5799	1106.94	28.931	530.512	1.190	.053	.9476	.9488
10	-0.417	+0.239	-55.135	0.013	.0139	1177.4	.5910	1120.03	29.333	533.301	1.192	.055	.9410	.9424
11	-0.434	+0.232	-55.592	0.101	.0243	1191.3	1.0107	1131.64	29.373	536.120	1.194	.056	.9274	.9292
12	-0.440	+0.231	-55.391	0.012	.0230	1206.4	1.0101	1143.07	30.394	539.003	1.196	.057	.9146	.9167
13	-0.379	+0.188	-55.135	0.822	.0337	1221.0	1.0172	1154.25	30.453	541.335	1.198	.059	.9013	.9038
14	-0.391	+0.332	-55.430	0.123	.0389	1235.8	1.0281	1165.33	30.871	544.337	1.199	.060	.8878	.8906
15	-0.322	+0.285	-55.291	0.233	.0431	1250.3	1.0372	1176.64	31.297	548.022	1.200	.061	.8747	.8779
16	-0.240	+0.345	-55.423	0.458	.0520	1266.2	1.0444	1186.20	31.055	551.210	1.200	.063	.8502	.8540
17	-0.040	-1.389	-71.423	0.307	.0539	1282.1	1.0503	1194.51	31.373	554.329	1.199	.062	.8186	.8232
18	+0.407	-1.781	-71.154	0.107	.0647	1298.4	1.0575	1202.01	32.341	558.005	1.197	.057	.7895	.7948
19	+0.830	-1.812	-70.784	0.404	.0747	1315.4	1.0681	1211.93	32.135	561.265	1.193	.067	.7712	.7769
20	+0.937	-1.898	-71.044	0.103	.0802	1333.2	1.0797	1222.23	33.359	565.581	1.187	.057	.7488	.7543
21	+0.894	-2.333	-74.650	0.934	.0803	1352.3	1.0913	1232.20	33.349	569.704	1.176	.056	.7143	.7208
	+0.894	-3.111	-76.330	7.230	.0943	1372.3	1.1013	1242.03	33.349	569.704	1.176	.056	.7143	.7208

STATION 3 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.132 ISEN. EFF.= .879 POLY. EFF.= .882 DELTA T ON T = .058

STATION 3 FLOW FIELD DESCRIPTION

STREAMLINE	RADIUS	VELOCITIES AXIAL	TANGENTIAL	TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.0734	+0.0.77	334.24	573.29	577.955	550.756	21.151	17.342	.4375	35.66	24.47	68.453	.0872
2	7.1033	+0.0.70	329.74	573.49	577.870	550.623	21.131	17.339	.4381	35.07	22.59	59.812	.0871
3	7.2334	+73.74	330.97	574.32	577.903	550.693	21.111	17.314	.4389	34.50	20.64	50.380	.0870
4	7.3311	+74.00	321.03	574.11	577.725	550.797	21.101	17.788	.5001	33.93	18.62	41.842	.0869
5	7.4145	+0.0.43	317.41	573.75	577.714	550.100	21.093	17.751	.5017	33.37	16.57	33.815	.0869
6	7.4933	+57.14	314.14	573.33	577.675	549.541	21.073	17.731	.5034	32.82	14.50	27.088	.0867
7	7.5737	+31.73	311.41	573.12	577.678	549.693	21.063	17.700	.5053	32.23	12.41	21.530	.0866
8	7.6553	+32.35	317.57	573.03	577.583	549.309	21.051	17.693	.5070	31.61	10.33	17.293	.0864
9	7.7337	+34.03	30.19	574.37	577.629	549.330	21.033	17.537	.5032	31.33	8.24	14.121	.0863
10	7.8153	311.34	302.00	574.23	577.421	549.453	21.032	17.906	.5035	31.06	6.17	11.802	.0861
11	7.4934	300.00	314.32	574.41	576.350	550.047	20.951	17.575	.5074	31.07	4.11	10.146	.0859
12	7.3774	+35.39	305.77	541.31	576.729	550.716	20.891	17.545	.5089	31.09	2.10	9.018	.0857
13	3.0547	+34.22	293.43	577.49	579.031	551.433	20.791	17.518	.5003	31.16	.12	8.270	.0854
14	3.1465	+55.02	291.81	571.13	579.235	552.248	20.691	17.494	.4920	31.31	-1.80	7.946	.0852
15	3.2297	+79.53	293.97	572.41	579.271	553.106	20.591	17.475	.4870	31.50	-3.67	7.718	.0849
16	3.3130	+82.00	293.21	551.32	580.091	554.332	20.401	17.484	.4790	32.39	-5.44	7.678	.0846
17	4.4123	+47.21	297.71	537.25	581.425	557.532	20.224	17.461	.4634	33.65	-7.04	8.356	.0842
18	4.5122	+26.92	293.73	510.20	582.382	560.139	21.029	17.498	.4403	35.17	-8.37	9.334	.0838
19	4.6190	330.99	292.33	443.19	581.671	561.754	19.792	17.455	.4238	35.40	-9.36	11.566	.0837
20	4.7337	321.27	283.94	421.21	581.258	563.666	19.603	17.511	.3957	38.31	-9.86	19.877	.0835
21	4.8674	311.31	240.51	419.11	581.020	566.494	19.173	17.347	.3545	42.03	-9.36	1065.883	.0833

BLADE DATA

LOCATION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-52.585	2.458	-57.704	5.281	.0334	1871.2	.7565	871.88	26.837	613.398	1.439	.116	.9868	.9881
2	-53.[illegible]	[illegible]	-58.[illegible]	5.806	.0334	1865.[illegible]	.7712	888.63	26.[illegible]	616.[illegible]	1.[illegible]	.116	.9867	.9881
3	-53.[illegible]	[illegible]	-58.[illegible]	6.[illegible]	.0334	1856.9	.7867	905.[illegible]	26.[illegible]	619.[illegible]	1.[illegible]	.116	.9867	.9881
4	-53.[illegible]	[illegible]	-58.[illegible]	6.757	.0334	1848.5	.8021	922.59	27.[illegible]	622.[illegible]	1.[illegible]	.116	.9867	.9881
5	-53.[illegible]	-.475	-58.[illegible]	6.939	.0334	1842.8	.8147	937.85	27.[illegible]	624.[illegible]	1.[illegible]	.116	.9867	.9881
6	-53.[illegible]	[illegible]	-58.[illegible]	7.[illegible]	.0334	1834.4	.8302	955.98	27.[illegible]	627.[illegible]	1.[illegible]	.116	.9867	.9881
7	-53.[illegible]	[illegible]	-58.[illegible]	7.[illegible]	.0334	1826.0	.8457	973.72	28.[illegible]	630.[illegible]	1.[illegible]	.116	.9867	.9881
8	-53.[illegible]	[illegible]	-58.[illegible]	7.[illegible]	.0334	1817.6	.8611	991.11	28.[illegible]	633.[illegible]	1.[illegible]	.116	.9867	.9881
9	-53.[illegible]	[illegible]	-58.[illegible]	8.[illegible]	.0352	1178.8	.8550	1008.56	28.[illegible]	636.[illegible]	1.[illegible]	.116	.9867	.9881
10	-53.[illegible]	[illegible]	-58.[illegible]	8.[illegible]	.0352	1178.8	.8550	1008.56	28.[illegible]	636.[illegible]	1.[illegible]	.116	.9867	.9881
11	-53.[illegible]	[illegible]	-58.[illegible]	8.[illegible]	.0352	1178.8	.8550	1008.56	28.[illegible]	636.[illegible]	1.[illegible]	.116	.9867	.9881
12	-53.[illegible]	[illegible]	-58.[illegible]	8.[illegible]	.0352	1178.8	.8550	1008.56	28.[illegible]	636.[illegible]	1.[illegible]	.116	.9867	.9881
13	-53.[illegible]	[illegible]	-58.[illegible]	8.[illegible]	.0352	1178.8	.8550	1008.56	28.[illegible]	636.[illegible]	1.[illegible]	.116	.9867	.9881
14	-53.[illegible]	[illegible]	-58.[illegible]	8.[illegible]	.0352	1178.8	.8550	1008.56	28.[illegible]	636.[illegible]	1.[illegible]	.116	.9867	.9881
15	-53.[illegible]	[illegible]	-58.[illegible]	8.[illegible]	.0352	1178.8	.8550	1008.56	28.[illegible]	636.[illegible]	1.[illegible]	.116	.9867	.9881
16	-53.[illegible]	[illegible]	-58.[illegible]	8.[illegible]	.0352	1178.8	.8550	1008.56	28.[illegible]	636.[illegible]	1.[illegible]	.116	.9867	.9881
17	-53.[illegible]	[illegible]	-58.[illegible]	8.[illegible]	.0352	1178.8	.8550	1008.56	28.[illegible]	636.[illegible]	1.[illegible]	.116	.9867	.9881
18	-53.[illegible]	[illegible]	-58.[illegible]	8.[illegible]	.0352	1178.8	.8550	1008.56	28.[illegible]	636.[illegible]	1.[illegible]	.116	.9867	.9881
19	-53.[illegible]	[illegible]	-58.[illegible]	8.[illegible]	.0352	1178.8	.8550	1008.56	28.[illegible]	636.[illegible]	1.[illegible]	.116	.9867	.9881
20	-53.[illegible]	[illegible]	-58.[illegible]	8.[illegible]	.0352	1178.8	.8550	1008.56	28.[illegible]	636.[illegible]	1.[illegible]	.116	.9867	.9881
21	-61.548	+.918	-73.653	12.113	.1931	1342.8	.9465	1186.10	31.282	567.485	1.385	.120	.9868	.9881

STATION 6 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.483 ISEN. EFF.= .878 POLY. EFF.= .876 DELTA T ON T = .117

STATION 7 FLOW FIELD DESCRIP.

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.2620	364.63	511.62	761.95	611.785	563.719	25.632	19.241	.6535	42.18	24.87	59.518	.0018
2	7.33[illegible]	378.31	503.20	761.53	611.425	563.446	25.574	19.196	.6527	41.[illegible]	[illegible]	[illegible]	.0018
3	7.40[illegible]	378.[illegible]	494.[illegible]	761.[illegible]	611.[illegible]	563.[illegible]	25.[illegible]	19.[illegible]	.6519	41.[illegible]	[illegible]	[illegible]	.0018
4	7.47[illegible]	378.[illegible]	484.[illegible]	760.[illegible]	611.[illegible]	563.[illegible]	25.[illegible]	19.[illegible]	.6511	41.[illegible]	[illegible]	[illegible]	.0018
5	7.53[illegible]	378.[illegible]	475.[illegible]	760.[illegible]	611.[illegible]	563.[illegible]	25.[illegible]	19.[illegible]	.6503	41.[illegible]	[illegible]	[illegible]	.0018
6	7.60[illegible]	378.[illegible]	465.[illegible]	760.[illegible]	611.[illegible]	563.[illegible]	25.[illegible]	19.[illegible]	.6495	41.[illegible]	[illegible]	[illegible]	.0018
7	7.67[illegible]	378.[illegible]	456.[illegible]	760.[illegible]	611.[illegible]	563.[illegible]	25.[illegible]	19.[illegible]	.6487	41.[illegible]	[illegible]	[illegible]	.0018
8	7.74[illegible]	378.[illegible]	446.[illegible]	760.[illegible]	611.[illegible]	563.[illegible]	25.[illegible]	19.[illegible]	.6479	41.[illegible]	[illegible]	[illegible]	.0018
9	7.80[illegible]	378.[illegible]	437.[illegible]	760.[illegible]	611.[illegible]	563.[illegible]	25.[illegible]	19.[illegible]	.6471	41.[illegible]	[illegible]	[illegible]	.0018
10	7.87[illegible]	588.73	440.37	760.47	611.487	563.[illegible]	25.[illegible]	19.[illegible]	.6512	36.[illegible]	[illegible]	[illegible]	.0018
11	7.94[illegible]	588.[illegible]	430.[illegible]	760.[illegible]	611.[illegible]	563.[illegible]	25.[illegible]	19.[illegible]	.6504	36.[illegible]	[illegible]	[illegible]	.0018
12	8.01[illegible]	588.[illegible]	421.[illegible]	760.[illegible]	611.[illegible]	563.[illegible]	25.[illegible]	19.[illegible]	.6496	36.[illegible]	[illegible]	[illegible]	.0018
13	8.07[illegible]	588.[illegible]	411.[illegible]	760.[illegible]	611.[illegible]	563.[illegible]	25.[illegible]	19.[illegible]	.6488	36.[illegible]	[illegible]	[illegible]	.0018
14	8.14[illegible]	588.[illegible]	402.[illegible]	760.[illegible]	611.[illegible]	563.[illegible]	25.[illegible]	19.[illegible]	.6480	36.[illegible]	[illegible]	[illegible]	.0018
15	8.21[illegible]	588.[illegible]	392.[illegible]	760.[illegible]	611.[illegible]	563.[illegible]	25.[illegible]	19.[illegible]	.6472	36.[illegible]	[illegible]	[illegible]	.0018
16	8.27[illegible]	588.[illegible]	383.[illegible]	760.[illegible]	611.[illegible]	563.[illegible]	25.[illegible]	19.[illegible]	.6464	36.[illegible]	[illegible]	[illegible]	.0018
17	8.34[illegible]	588.[illegible]	373.[illegible]	760.[illegible]	611.[illegible]	563.[illegible]	25.[illegible]	19.[illegible]	.6456	36.[illegible]	[illegible]	[illegible]	.0018
18	8.41[illegible]	588.[illegible]	364.[illegible]	760.[illegible]	611.[illegible]	563.[illegible]	25.[illegible]	19.[illegible]	.6448	36.[illegible]	[illegible]	[illegible]	.0018
19	8.47[illegible]	588.[illegible]	354.[illegible]	760.[illegible]	611.[illegible]	563.[illegible]	25.[illegible]	19.[illegible]	.6440	36.[illegible]	[illegible]	[illegible]	.0018
20	8.54[illegible]	588.[illegible]	345.[illegible]	760.[illegible]	611.[illegible]	563.[illegible]	25.[illegible]	19.[illegible]	.6432	36.[illegible]	[illegible]	[illegible]	.0018
21	8.8819	287.78	592.74	595.85	633.618	608.384	24.186	20.489	.4938	61.12	-9.37	[illegible]	.0018

BLADE DATA

LOCATION	BLADE SECTION	BLADE ANGLES CLAN	RELATIVE FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-50.426	1.512	-48.150	5.702	.0515	1099.0	.5969	614.73	20.353	518.376	1.744	.179	.9583	.9615
2	-41.091	1.231	-43.551	2.671	.0513	1109.3	.7130	830.96	23.334	520.510	1.740	.179	.9570	.9602
3	-32.725	.934	-47.130	2.433	.0513	1120.0	.7258	843.75	27.212	522.428	1.739	.179	.9559	.9592
4	-22.337	.159	-47.543	2.305	.0513	1130.3	.7375	853.60	27.431	524.336	1.737	.179	.9548	.9582
5	-12.933	-.694	-48.111	2.179	.0513	1140.6	.7484	872.22	27.773	526.240	1.737	.179	.9539	.9573
6	-3.507	-1.202	-48.733	2.047	.0510	1150.9	.7533	884.30	28.057	528.144	1.737	.179	.9534	.9568
7	6.042	-1.235	-49.391	1.914	.0514	1161.2	.7647	895.84	28.512	530.053	1.738	.179	.9517	.9553
8	16.341	-1.079	-49.429	1.807	.0521	1170.5	.7767	905.84	28.512	531.971	1.741	.179	.9484	.9522
9	26.010	-.719	-49.133	1.825	.0524	1180.0	.7845	915.64	28.492	533.902	1.743	.180	.9508	.9538
10	35.423	-.228	-48.243	1.944	.0534	1190.4	.7892	921.62	28.034	535.856	1.741	.181	.9484	.9522
11	44.382	.324	-46.821	2.138	.0536	1200.8	.7958	922.04	28.152	537.846	1.745	.182	.9411	.9455
12	53.298	1.033	-45.451	2.197	.0703	1210.3	.7887	923.40	28.229	539.387	1.746	.186	.9264	.9319
13	62.703	1.959	-44.144	2.324	.1052	1221.3	.7866	923.30	28.299	541.985	1.744	.189	.9129	.9186
14	72.117	3.111	-43.041	2.324	.1152	1232.0	.7942	922.30	28.382	544.103	1.741	.192	.8967	.9044
15	81.931	4.172	-42.117	2.355	.1293	1243.1	.7917	921.36	28.382	546.226	1.736	.194	.8806	.8895
16	91.952	5.233	-41.257	2.444	.1523	1254.7	.7701	913.71	28.224	548.614	1.728	.197	.8645	.8746
17	102.440	6.439	-40.470	2.778	.1921	1267.1	.7512	892.41	28.006	551.389	1.718	.202	.8356	.8477
18	113.399	8.191	-39.343	3.433	.2242	1280.9	.7338	875.65	27.873	554.221	1.706	.209	.7983	.8138
19	124.345	9.670	-38.223	4.543	.2412	1295.3	.7209	872.41	27.913	557.174	1.696	.215	.7638	.7808
20	135.397	10.322	-38.299	5.304	.2631	1312.1	.7236	869.07	28.093	560.958	1.683	.218	.7478	.7664
21	146.301	10.990	-38.447	5.990	.2990	1332.0	.7126	853.85	28.022	565.280	1.660	.222	.6836	.7047

STATION 7 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.723 ISEN. EFF.= .871 POLY. EFF.= .880 DELTA T ON T = .193

STATION 4 FLOW FIELD DESCRIPTION

STREAMLINE	RADIUS	VELOCITIES AXIAL	VELOCITIES TANGENTIAL	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.4432	736.43	377.80	1002.14	644.862	561.905	30.651	18.897	.8611	42.50	19.79	-2.220	.0904
2	7.4932	728.55	373.92	994.32	645.081	563.992	30.761	19.127	.8529	42.90	17.70	-2.407	.0912
3	7.5473	718.47	377.04	987.87	646.530	565.942	30.827	19.348	.8455	43.28	15.72	-2.637	.0919
4	7.5972	710.20	375.92	981.13	647.846	567.851	30.991	19.558	.8388	43.63	13.82	-2.918	.0926
5	7.6472	702.30	379.49	975.09	649.099	569.585	31.093	19.754	.8322	43.93	12.00	-3.263	.0932
6	7.6973	695.32	375.57	969.44	650.805	571.184	31.193	19.935	.8263	44.18	10.26	-3.686	.0938
7	7.7474	689.05	373.29	964.79	652.591	572.735	31.290	20.103	.8211	44.42	8.59	-4.213	.0944
8	7.8014	683.22	372.40	960.21	654.481	574.243	31.392	20.260	.8163	44.66	8.98	-4.885	.0949
9	7.8552	678.32	372.03	957.03	656.414	575.666	31.511	20.408	.8132	44.86	5.42	-5.777	.0953
10	7.9052	674.08	373.33	954.72	658.474	577.726	31.597	20.548	.8091	45.14	3.92	-7.025	.0956
11	7.9553	669.20	374.41	951.24	660.424	579.726	31.644	20.681	.8044	46.22	2.45	-9.083	.0957
12	8.0104	665.95	374.32	947.32	662.875	581.711	31.693	20.810	.7992	47.09	1.03	-12.031	.0956
13	8.0723	660.31	374.32	943.72	665.376	583.881	31.699	20.936	.7933	48.05	-.34	-16.579	.0954
14	8.1315	654.30	374.53	937.79	667.784	585.917	31.667	21.061	.7865	49.08	-1.70	-23.899	.0950
15	8.1921	647.72	373.92	929.09	670.817	588.601	31.593	21.186	.7789	50.14	-3.04	-37.899	.0959
16	8.2530	640.39	372.04	917.43	673.624	590.190	31.347	21.316	.7630	52.31	-4.36	173.448	.0960
17	8.3294	631.03	369.00	905.08	676.256	606.911	31.114	21.461	.7486	55.02	-5.67	32.158	.0956
18	8.4033	620.19	364.82	891.75	678.909	614.360	30.901	21.629	.7310	59.31	-6.81	20.442	.0951
19	8.5034	607.13	359.27	870.39	682.161	619.732	30.693	21.824	.7124	62.11	-7.87	17.667	.0947
20	8.9057	595.13	355.31	850.06	685.506	625.909	30.594	22.050	.6923	65.82	-8.90	17.623	.0947
21	9.7359	584.49	353.34	842.14	688.244	634.533	30.433	22.319	.6811	71.70	-9.37	17.884	.0945

BLADE DATA

LOCATION	BLADE SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-24.143	2.849	-31.338	7.214	.0613	1127.3	.7435	865.33	27.269	623.782	2.886	.243	.9579	.9628
2	-24.938	2.933	-32.142	7.212	.0683	1134.7	.7379	860.44	27.459	625.467	2.893	.243	.9584	.9633
3	-25.994	2.726	-32.201	7.207	.0683	1142.2	.7331	856.32	27.652	626.967	2.901	.243	.9589	.9638
4	-26.436	2.238	-33.352	7.198	.0686	1149.7	.7292	853.16	27.851	627.391	2.910	.243	.9594	.9643
5	-27.216	1.633	-34.393	7.182	.0633	1157.3	.7264	851.13	28.056	629.432	2.919	.243	.9599	.9648
6	-27.973	1.205	-35.181	7.158	.0640	1164.9	.7246	850.20	28.266	630.496	2.928	.243	.9604	.9653
7	-28.699	1.145	-35.321	7.128	.0685	1172.6	.7232	849.79	28.470	631.560	2.937	.243	.9609	.9658
8	-29.379	1.327	-35.460	7.101	.0645	1180.4	.7224	849.86	28.669	632.624	2.946	.243	.9614	.9663
9	-29.978	1.609	-37.056	7.086	.0704	1188.3	.7222	850.72	28.874	633.688	2.956	.243	.9619	.9668
10	-30.530	2.013	-37.523	7.093	.0731	1196.3	.7230	852.28	29.091	634.752	2.966	.243	.9624	.9673
11	-31.048	2.747	-38.135	7.137	.0973	1204.5	.7278	857.39	29.331	636.816	2.977	.243	.9629	.9678
12	-31.530	3.564	-38.734	7.254	.1158	1212.9	.7380	867.89	29.606	638.880	2.989	.243	.9634	.9683
13	-31.980	4.333	-39.491	7.501	.1345	1221.5	.7573	887.62	29.908	640.944	3.002	.243	.9639	.9688
14	-32.403	5.717	-40.353	7.950	.1533	1230.3	.7959	926.09	30.232	643.008	3.016	.243	.9644	.9693
15	-32.800	7.110	-41.291	8.690	.1724	1239.3	.8646	994.69	30.577	645.072	3.031	.243	.9649	.9698
16	-33.183	8.511	-43.031	9.849	.2033	1249.7	.9866	1107.32	31.038	647.778	3.050	.243	.9654	.9703
17	-33.574	10.129	-45.138	11.564	.2550	1260.5	1.1992	1324.46	31.745	650.813	3.078	.243	.9659	.9708
18	-34.010	11.626	-45.315	14.008	.2932	1272.7	1.3594	1480.45	32.740	653.552	3.117	.243	.9664	.9713
19	-34.496	12.908	-51.730	17.304	.3214	1286.5	1.5387	1659.20	33.981	656.616	3.169	.243	.9669	.9718
20	-34.977	13.938	-56.242	21.970	.3403	1302.3	1.2143	1311.46	35.402	659.680	3.231	.243	.9674	.9723
21	-35.[illegible]	13.234	-63.154	27.536	.3801	1322.0	.4736	585.59	36.818	662.183	3.271	.243	.9681	.9728

STATION 3 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.122 ISEN. EFF.= .868 POLY. EFF.= .881 DELTA T ON T = .275

STATION 3 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES AERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.5433	776.70	373.45	1172.57	634.470	571.035	37.273	19.868	.9334	48.52	10.63	-2.464	.0035
2	7.5875	764.46	374.15	1101.25	634.480	573.231	37.523	20.113	.9079	48.83	9.81	-3.243	.0035
3	7.9231	754.77	863.77	1121.73	634.488	575.061	37.487	20.316	.9733	49.04	9.08	-4.074	.0035
4	7.9999	747.37	373.30	1143.70	634.493	576.589	37.447	20.483	.9702	49.16	8.42	-4.974	.0035
5	7.7091	742.77	869.77	1136.94	634.494	577.865	37.401	20.622	.9834	49.21	7.83	-5.961	.0035
6	7.7474	739.39	859.17	1131.25	634.493	578.932	37.373	20.735	.9577	49.13	6.97	-7.049	.0035
7	7.7849	736.75	851.51	1126.00	634.488	579.807	37.315	20.827	.9524	49.05	6.36	-8.254	.0035
8	7.8225	734.88	846.72	1121.19	634.478	580.796	37.243	20.900	.9473	49.05	4.96	-9.596	.0035
9	7.8621	734.03	842.02	1117.03	634.466	581.565	37.171	20.955	.9433	49.09	3.46	-11.100	.0035
10	7.9241	728.54	840.70	1112.43	634.445	583.075	37.031	20.996	.9384	49.09	1.96	-12.800	.0035
11	7.3673	712.09	844.13	1106.70	634.799	585.799	36.799	21.026	.9314	49.04	.24	-14.750	.0035
12	8.8134	703.06	847.44	1101.11	634.465	588.445	36.559	21.048	.9246	48.94	-1.52	-17.000	.0035
13	8.8634	689.38	852.64	1096.03	634.503	591.415	36.341	21.064	.9185	48.84	-3.80	-19.600	.0035
14	8.9175	673.14	859.44	1092.38	634.535	594.571	36.143	21.078	.9131	48.77	-6.60	-22.600	.0035
15	8.9720	660.26	868.37	1089.05	634.554	597.795	35.943	21.090	.9074	48.68	-9.92	-26.000	.0035
16	9.0221	650.69	877.35	1086.33	634.557	600.915	35.707	21.109	.9000	48.57	-13.77	-29.800	.0035
17	9.0697	644.69	886.33	1084.25	634.545	603.776	35.434	21.146	.8920	48.45	-18.15	-34.000	.0035
18	9.1666	641.00	895.94	1082.97	634.494	606.255	35.151	21.216	.8817	48.33	-23.07	-38.600	.0035
19	9.2438	639.71	905.53	1083.53	634.391	608.302	34.934	21.324	.8726	48.27	-28.54	-43.600	.0035
20	9.3434	640.16	915.30	1086.23	634.230	609.968	34.793	21.476	.8604	48.26	-34.56	-49.000	.0035
21	9.6639	640.87	1011.30	1049.58	737.550	646.983	34.493	21.725	.8413	74.48	-8.95	20.749	.0035

BLADE DATA

LOCATION	AXIAL POSITION	BLADE ANGLES METAL	REL FLOW ANGLE	DEVIATION EFFICIENCY	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-12.447	10.931	-1[illegible]	[illegible]	.0951	1142.3	.3992	820.37	27.234	529.536	2.557	.320	.9585	.9836
2	-13.330	11.[illegible]	-1[illegible]	[illegible]	.0853	1148.2	.3909	812.09	27.907	527.712	2.554	.320	.9671	.9874
3	-14.[illegible]	11.[illegible]	-21.[illegible]	[illegible]	.0851	1154.1	.3852	806.73	27.807	528.321	2.551	.320	.9658	.9874
4	-14.[illegible]	9.638	-21.[illegible]	[illegible]	.0852	1160.1	.3819	803.82	27.935	529.364	2.548	.320	.9645	.9881
5	-15.[illegible]	9.[illegible]	-22.[illegible]	[illegible]	.0849	1166.2	.3805	803.11	28.103	531.139	2.546	.320	.9633	.9888
6	-15.[illegible]	9.171	-23.[illegible]	[illegible]	.0848	1172.4	.3808	804.18	28.271	532.944	2.543	.320	.9622	.9895
7	-16.[illegible]	7.[illegible]	-23.[illegible]	[illegible]	.0852	1178.8	.3819	806.17	28.424	534.581	2.539	.320	.9605	.9902
8	-17.[illegible]	7.040	-24.[illegible]	[illegible]	.0860	1185.3	.3838	809.04	28.570	536.050	2.534	.320	.9585	.9905
9	-18.[illegible]	6.[illegible]	-25.[illegible]	[illegible]	.0879	1191.9	.3869	813.47	28.723	536.150	2.529	.320	.9461	.9526
10	-19.[illegible]	6.[illegible]	-26.[illegible]	[illegible]	.0935	1198.7	.3848	811.76	28.760	537.486	2.520	.321	.9379	.9453
11	-19.[illegible]	5.[illegible]	-27.[illegible]	[illegible]	.1224	1205.7	.3749	801.94	28.219	536.973	2.504	.324	.9213	.9307
12	-20.[illegible]	5.[illegible]	-27.[illegible]	[illegible]	.1449	1213.0	.3654	792.41	28.317	540.323	2.487	.327	.9049	.9161
13	-20.[illegible]	4.[illegible]	-28.[illegible]	[illegible]	.1613	1220.5	.3547	781.28	28.092	541.042	2.473	.331	.8872	.9005
14	-21.[illegible]	3.[illegible]	-29.[illegible]	[illegible]	.1924	1228.4	.3428	769.42	27.922	543.435	2.459	.336	.8686	.8840
15	-21.[illegible]	3.[illegible]	-29.[illegible]	[illegible]	.2155	1236.7	.3309	757.17	27.564	545.111	2.446	.341	.8502	.8676
16	-21.[illegible]	11.[illegible]	-24.[illegible]	[illegible]	.2018	1245.4	.3384	721.77	26.382	540.303	2.430	.332	.8771	.8782
17	-21.[illegible]	12.[illegible]	-30.[illegible]	[illegible]	.3344	1254.1	.3454	662.63	25.379	540.392	2.411	.368	.7741	.7999
18	-22.[illegible]	11.[illegible]	-31.[illegible]	[illegible]	.3734	1263.1	.3381	597.33	24.364	541.185	2.393	.393	.7346	.7666
19	-22.[illegible]	10.[illegible]	-32.[illegible]	11.583	.4115	1272.7	.3359	561.66	24.140	543.526	2.381	.398	.7119	.7442
20	-21.[illegible]	10.[illegible]	-32.[illegible]	10.437	.4312	1283.2	.3123	510.68	24.145	546.891	2.368	.405	.6866	.7215
21	-21.[illegible]	10.[illegible]	-[illegible]	9.983	.4828	1312.0	.3297	411.49	23.420	550.936	2.347	.422	.6587	.6892

STATION 9 INT[illegible] PERFORMANCE PRESSURE RATIO = 2.475 ISEN. EFF.= .857 POLY. EFF.= .874 DELTA T ON T = .343

STATION 11 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES MERID	TANGL	TOTAL	TEMPERATURES TOTAL	STATIC	PRESSURES TOTAL	STATIC	MACH NO	ANGLES WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.57[illegible]	711.[illegible]	17[illegible]	1130.79	53[illegible]	[illegible]	37.672	20.857	.9572	50.74	7.82	9.349	.0968
2	7.[illegible]	714.[illegible]	17[illegible]	1125.[illegible]	[illegible]	[illegible]	37.529	20.927	.9533	50.62	7.56	9.791	.0978
3	7.[illegible]	716.33	[illegible]	1124.09	[illegible]	[illegible]	37.447	20.938	.9505	50.41	7.76	10.691	.0971
4	7.[illegible]	718.[illegible]	[illegible]	1122.17	[illegible]	[illegible]	37.447	20.991	.9485	50.16	7.58	11.[illegible]	.0972
5	7.7403	722.27	190.97	1121.[illegible]	[illegible]	[illegible]	37.404	21.003	.9472	49.97	7.33	12.[illegible]	.0972
6	7.7[illegible]	725.[illegible]	192.[illegible]	1119.53	[illegible]	[illegible]	37.377	21.009	.9460	49.58	7.06	12.[illegible]	.0972
7	7.[illegible]	729.[illegible]	194.[illegible]	1114.[illegible]	[illegible]	[illegible]	37.315	21.014	.9445	49.31	6.75	12.[illegible]	.0972
8	7.[illegible]	731.[illegible]	195.17	1116.[illegible]	[illegible]	[illegible]	37.247	21.020	.9429	49.07	6.42	11.[illegible]	.0971
9	7.8013	733.34	191.82	1114.[illegible]	[illegible]	[illegible]	37.171	21.026	.9408	48.83	6.08	11.022	.0971
10	7.[illegible]	733.[illegible]	197.[illegible]	1110.[illegible]	[illegible]	[illegible]	37.031	21.032	.9384	48.93	5.73	10.288	.0969
11	7.[illegible]	733.[illegible]	[illegible]	1106.[illegible]	[illegible]	[illegible]	36.737	21.[illegible]	.9304	49.[illegible]	5.35	9.347	.0965
12	8.0331	705.[illegible]	[illegible]	1101.[illegible]	[illegible]	[illegible]	36.[illegible]	21.[illegible]	.9240	50.12	4.95	8.588	.0962
13	8.[illegible]	692.[illegible]	[illegible]	1098.[illegible]	[illegible]	[illegible]	36.341	21.060	.9188	50.85	4.[illegible]	7.714	.0957
14	8.1324	677.[illegible]	[illegible]	1091.[illegible]	[illegible]	[illegible]	36.141	21.074	.9132	51.70	4.02	6.977	.0953
15	8.[illegible]	661.[illegible]	[illegible]	1088.[illegible]	[illegible]	[illegible]	35.942	21.094	.9073	52.68	3.46	6.388	.0949
16	8.2337	625.[illegible]	[illegible]	1082.[illegible]	[illegible]	[illegible]	35.707	21.125	.8994	54.79	2.79	5.694	.0948
17	8.[illegible]	569.[illegible]	920.75	1032.03	709.377	612.342	33.434	21.179	.8903	59.31	1.92	5.182	.0929
18	8.3[illegible]	4[illegible]	[illegible]	1078.[illegible]	717.[illegible]	622.217	35.161	21.[illegible]	.8733	62.32	-.70	4.881	.0919
19	8.[illegible]	491.52	[illegible]	1078.38	722.[illegible]	628.[illegible]	34.[illegible]	21.[illegible]	.8638	65.00	-.98	4.537	.0916
20	8.[illegible]	394.[illegible]	[illegible]	1078.[illegible]	723.[illegible]	630.[illegible]	34.[illegible]	21.[illegible]	.8593	68.71	-3.22	4.[illegible]	.0913
21	8.5334	252.52	1014.91	1045.76	737.950	647.643	34.491	21.484	.8375	76.83	-6.18	3.853	.0909

STATION 11 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES NMINL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6133	754.27	170.33	1151.73	684.470	575.842	37.572	28.362	.9703	48.09	9.86	26.387	.0882
2	7.6938	752.92	164.77	1146.24	684.488	576.026	37.529	28.398	.9688	47.85	9.88	26.085	.0882
3	7.7731	687.72	159.40	1174.45	684.488	576.209	37.487	28.434	1.0000	46.97	9.59	-25.787	.0882
4	7.7544	328.16	154.30	1189.92	684.493	576.268	37.447	28.469	1.0317	45.89	9.25	-25.490	.0882
5	7.8007	343.54	149.46	1197.14	684.494	576.246	37.403	28.504	1.0347	45.20	7.98	-25.192	.0882
6	7.8518	334.76	144.73	1201.78	684.493	576.322	37.372	28.535	1.0335	44.66	7.57	-24.895	.0882
7	7.8944	362.14	140.24	1203.86	684.488	576.403	37.345	28.557	1.0319	44.20	7.27	-24.597	.0882
8	7.9338	389.52	135.78	1203.91	684.478	576.485	37.243	28.559	1.0303	43.73	6.83	-24.300	.0882
9	7.9771	368.36	131.33	1202.62	684.466	576.438	37.171	28.553	1.0288	43.32	6.55	-24.002	.0882
10	8.0182	385.36	126.82	1199.42	684.448	576.391	37.094	28.547	1.0264	42.93	6.44	-23.705	.0882
11	8.0597	354.17	122.47	1194.14	684.425	576.344	37.031	28.542	1.0240	42.56	6.32	-23.407	.0882
12	8.1017	341.97	118.12	1188.07	684.402	576.297	36.966	28.537	1.0216	42.19	6.18	-23.110	.0882
13	8.1444	327.45	113.86	1182.23	684.378	576.250	36.902	28.532	1.0192	41.83	6.07	-22.812	.0882
14	8.1878	311.24	109.74	1176.42	684.353	576.203	36.841	28.527	1.0168	41.48	5.98	-22.515	.0882
15	8.2321	293.37	105.79	1170.98	684.327	576.156	36.782	28.522	1.0144	41.13	5.90	-22.217	.0882
16	8.2779	259.22	102.20	1163.31	684.298	576.109	36.707	28.516	1.0120	40.78	5.78	-21.920	.0882
17	8.3265	205.06	98.71	1156.86	684.268	576.062	36.634	28.511	1.0096	40.41	5.64	-21.622	.0882
18	8.3800	139.62	95.30	1145.31	684.237	576.015	36.561	28.505	1.0072	40.03	5.51	-21.325	.0882
19	8.4408	68.22	91.93	1128.19	684.205	575.968	36.494	28.500	1.0048	39.64	5.44	-21.027	.0882
20	8.5118	487.13	88.53	1101.14	684.170	575.921	36.429	28.494	1.0024	39.24	5.32	-20.730	.0882
21	8.6139	272.09	1317.17	1052.93	737.550	646.402	34.495	21.657	.8441	75.02	-4.27	-27.461	.0981

BLADE DATA

LOCATION	BLADE SECTION	BLADE LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	48.817	-39.941	43.038	.271	0.0000	0.0	.3783	1151.73	37.372	684.470	2.557	.328	.9585	.9836
2	47.924	-37.176	47.051	-.063	0.0000	0.0	.3930	1146.21	37.529	684.488	2.554	.328	.9584	.9834
3	47.073	-34.498	45.774	-.209	0.0000	0.0	.4084	1174.42	37.487	684.488	2.551	.328	.9583	.9832
4	46.461	-31.905	45.330	-.571	0.0000	0.0	.4247	1189.82	37.447	684.493	2.548	.328	.9582	.9830
5	45.994	-29.418	45.220	-.793	0.0000	0.0	.4424	1197.14	37.409	684.494	2.546	.328	.9581	.9828
6	45.685	-27.038	45.264	-.971	0.0000	0.0	.4615	1201.78	37.372	684.493	2.543	.328	.9580	.9826
7	45.524	-24.758	45.395	-1.061	0.0000	0.0	.4818	1203.86	37.345	684.488	2.539	.328	.9579	.9824
8	45.460	-22.535	45.565	-1.094	0.0000	0.0	.5017	1203.91	37.243	684.478	2.534	.328	.9578	.9822
9	45.468	-20.408	45.735	-1.106	0.0000	0.0	.5203	1202.62	37.171	684.466	2.529	.328	.9577	.9820
10	45.524	-18.373	45.923	-1.114	0.0000	0.0	.5384	1199.42	37.031	684.448	2.524	.328	.9576	.9818
11	45.627	-16.434	46.131	-1.114	0.0000	0.0	.5555	1194.14	36.966	684.425	2.518	.328	.9575	.9816
12	45.778	-14.589	46.356	-1.114	0.0000	0.0	.5718	1188.07	36.902	684.402	2.513	.328	.9574	.9814
13	45.976	-12.838	46.600	-1.114	0.0000	0.0	.5875	1182.23	36.841	684.378	2.507	.328	.9573	.9812
14	46.221	-11.180	46.862	-1.114	0.0000	0.0	.6026	1176.42	36.782	684.353	2.502	.328	.9572	.9810
15	46.514	-9.615	47.144	-1.114	0.0000	0.0	.6172	1170.98	36.707	684.327	2.496	.328	.9571	.9808
16	46.855	-8.144	47.447	-1.114	0.0000	0.0	.6314	1163.31	36.634	684.298	2.490	.328	.9570	.9806
17	47.245	-6.766	47.772	-1.114	0.0000	0.0	.6452	1156.86	36.561	684.268	2.484	.328	.9569	.9804
18	47.685	-5.480	48.122	-1.114	0.0000	0.0	.6588	1145.31	36.494	684.237	2.478	.328	.9568	.9802
19	48.176	-4.287	48.497	-1.114	0.0000	0.0	.6722	1128.19	36.429	684.205	2.472	.328	.9567	.9800
20	48.720	-3.186	48.900	-1.114	0.0000	0.0	.6856	1101.14	36.365	684.170	2.466	.328	.9566	.9798
21	49.317	-2.178	49.332	-1.114	0.0000	0.0	.6990	1052.93	36.302	684.134	2.459	.328	.9565	.9796
22	49.968	-1.263	49.794	-1.114	0.0000	0.0	.7125	1017.51	36.239	684.097	2.453	.328	.9564	.9794
23	50.674	-.441	50.287	-1.114	0.0000	0.0	.7262	1000.14	36.176	684.059	2.446	.328	.9563	.9792
24	51.435	.288	50.813	-1.114	0.0000	0.0	.7402	1000.19	36.113	684.020	2.440	.328	.9562	.9790
25	52.252	.955	51.373	-1.114	0.0000	0.0	.7545	1000.14	36.050	683.980	2.433	.328	.9561	.9788
26	53.127	1.514	51.968	-1.114	0.0000	0.0	.7693	1000.19	35.987	683.939	2.427	.328	.9560	.9786
27	54.060	1.966	52.600	-1.114	0.0000	0.0	.7846	1000.14	35.924	683.897	2.420	.328	.9559	.9784
28	55.053	2.312	53.270	-1.114	0.0000	0.0	.8005	1000.19	35.861	683.854	2.413	.328	.9558	.9782
29	56.107	2.553	53.980	-1.114	0.0000	0.0	.8171	1000.14	35.798	683.810	2.406	.328	.9557	.9780
30	57.224	2.691	54.732	-1.114	0.0000	0.0	.8345	1000.19	35.735	683.765	2.399	.328	.9556	.9778
31	58.404	2.727	55.528	-1.114	0.0000	0.0	.8528	1000.14	35.672	683.719	2.392	.328	.9555	.9776
32	59.650	2.663	56.369	-1.114	0.0000	0.0	.8720	1000.19	35.609	683.672	2.385	.328	.9554	.9774
33	60.963	2.500	57.258	-1.114	0.0000	0.0	.8923	1000.14	35.546	683.624	2.378	.328	.9553	.9772
34	62.345	2.240	58.197	-1.114	0.0000	0.0	.9138	1000.19	35.483	683.575	2.370	.328	.9552	.9770
35	63.798	1.884	59.189	-1.114	0.0000	0.0	.9367	1000.14	35.420	683.525	2.363	.328	.9551	.9768
36	65.324	1.433	60.236	-1.114	0.0000	0.0	.9611	1000.19	35.357	683.474	2.355	.328	.9550	.9766
37	66.926	.889	61.341	-1.114	0.0000	0.0	.9872	1000.14	35.294	683.422	2.348	.328	.9549	.9764
38	68.606	.253	62.507	-1.114	0.0000	0.0	1.0151	1000.19	35.231	683.369	2.340	.328	.9548	.9762
39	70.367	-.475	63.736	-1.114	0.0000	0.0	1.0450	1000.14	35.168	683.315	2.332	.328	.9547	.9760
40	72.212	-1.294	65.032	-1.114	0.0000	0.0	1.0771	1000.19	35.105	683.260	2.324	.328	.9546	.9758
41	74.144	-2.205	66.399	-1.114	0.0000	0.0	1.1116	1000.14	35.042	683.204	2.316	.328	.9545	.9756
42	76.167	-3.211	67.841	-1.114	0.0000	0.0	1.1488	1000.19	34.979	683.147	2.308	.328	.9544	.9754
43	78.284	-4.316	69.364	-1.114	0.0000	0.0	1.1890	1000.14	34.916	683.089	2.300	.328	.9543	.9752
44	80.500	-5.525	70.973	-1.114	0.0000	0.0	1.2325	1000.19	34.853	683.030	2.292	.328	.9542	.9750
45	82.819	-6.842	72.676	-1.114	0.0000	0.0	1.2798	1000.14	34.790	682.970	2.283	.328	.9541	.9748
46	85.246	-8.273	74.480	-1.114	0.0000	0.0	1.3315	1000.19	34.727	682.909	2.275	.328	.9540	.9746
47	87.787	-9.824	76.393	-1.114	0.0000	0.0	1.3884	1000.14	34.664	682.847	2.266	.328	.9539	.9744
48	90.448	-11.502	78.426	-1.114	0.0000	0.0	1.4513	1000.19	34.601	682.784	2.257	.328	.9538	.9742
49	93.236	-13.316	80.592	-1.114	0.0000	0.0	1.5214	1000.14	34.538	682.720	2.248	.328	.9537	.9740
50	96.158	-15.276	82.907	-1.114	0.0000	0.0	1.5999	1000.19	34.475	682.655	2.239	.328	.9536	.9738
51	99.223	-17.393	85.391	-1.114	0.0000	0.0	1.6886	1000.14	34.412	682.589	2.229	.328	.9535	.9736
52	102.440	-19.680	88.068	-1.114	0.0000	0.0	1.7900	1000.19	34.349	682.522	2.220	.328	.9534	.9734
53	105.820	-22.152	90.968	-1.114	0.0000	0.0	1.9072	1000.14	34.286	682.454	2.210	.328	.9533	.9732
54	109.376	-24.827	94.130	-1.114	0.0000	0.0	2.0450	1000.19	34.223	682.385	2.200	.328	.9532	.9730
55	113.120	-27.727	97.607	-1.114	0.0000	0.0	2.2110	1000.14	34.160	682.315	2.190	.328	.9531	.9728
56	117.067	-30.878	101.470	-1.114	0.0000	0.0	2.4174	1000.19	34.097	682.244	2.180	.328	.9530	.9726
57	121.233	-34.312	105.812	-1.114	0.0000	0.0	2.6900	1000.14	34.034	682.172	2.170	.328	.9529	.9724
58	125.636	-38.069	110.756	-1.114	0.0000	0.0	3.0700	1000.19	33.971	682.099	2.159	.328	.9528	.9722
59	130.295	-42.199	116.466	-1.114	0.0000	0.0	3.6300	1000.14	33.908	682.025	2.148	.328	.9527	.9720
60	135.232	-46.770	123.178	-1.114	0.0000	0.0	4.5000	1000.19	33.845	681.950	2.137	.328	.9526	.9718
61	140.472	-51.870	131.232	-1.114	0.0000	0.0	6.0000	1000.14	33.782	681.874	2.126	.328	.9525	.9716
62	146.044	-57.625	141.421	-1.114	0.0000	0.0	9.0000	1000.19	33.719	681.797	2.115	.328	.9524	.9714
63	151.983	-64.233	156.000	-1.114	0.0000	0.0	18.0000	1000.14	33.656	681.719	2.104	.328	.9523	.9712

STATION 11 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.470 ISEN. EFF.= .857 POLY. EFF.= .874 DELTA T ON T = .343

STATION 12 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES (MERID)	VELOCITIES (TANGEN)	VELOCITIES (TOTAL)	TEMPERATURES (TOTAL)	TEMPERATURES (STATIC)	PRESSURES (TOTAL)	PRESSURES (STATIC)	MACH NO	ANGLES (WHIRL)	ANGLES (SLOPE)	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7151	1052.12	373.23	1251.79	684.470	555.147	36.551	17.507	1.0820	32.81	5.21	-3.688	.0848
2	7.7543	1036.23	361.10	1229.27	684.480	559.794	36.513	18.007	1.0561	32.54	4.64	-3.448	.0865
3	7.7934	1020.24	348.51	1205.83	684.488	564.511	36.471	18.522	1.0337	32.21	4.09	-3.249	.0882
4	7.8325	1003.96	336.33	1182.31	684.493	569.163	36.413	19.035	1.0094	31.88	3.57	-3.116	.0899
5	7.8711	987.444	324.35	1159.27	684.494	573.626	36.354	19.528	.9859	31.59	3.11	-3.040	.0915
6	7.9011	970.40	312.43	1136.56	684.493	577.935	36.243	19.991	.9630	31.40	2.73	-3.006	.0930
7	7.9317	952.70	300.43	1114.78	684.488	581.983	36.122	20.415	.9413	31.28	2.44	-3.002	.0943
8	7.9873	933.09	288.33	1094.07	684.478	585.758	35.993	20.804	.9208	31.18	2.26	-3.017	.0955
9	8.0273	920.67	276.71	1074.45	684.466	589.198	35.850	21.158	.9021	31.07	2.19	-3.048	.0965
10	8.0651	906.09	265.79	1056.72	684.445	592.355	35.699	21.482	.8840	30.97	2.21	-3.094	.0975
11	8.1026	890.35	255.34	1038.38	684.422	595.255	35.543	21.773	.8661	30.91	2.30	-3.164	.0979
12	8.1410	874.94	245.37	1020.30	684.422	597.898	35.393	22.047	.8473	30.91	2.45	-3.264	.0986
13	8.1797	858.40	235.22	1002.02	684.422	600.383	35.243	22.291	.8329	30.98	2.63	-3.392	.0987
14	8.2172	841.10	225.32	984.32	684.422	602.549	35.104	22.511	.8198	31.10	2.83	-3.553	.0990
15	8.2514	823.10	215.70	966.80	684.422	604.466	34.983	22.701	.8080	31.27	3.02	-3.758	.0991
16	8.3234	802.91	205.39	947.93	684.422	606.082	34.833	22.856	.7975	31.51	3.16	-4.064	.0987
17	8.3721	789.18	195.93	932.21	684.422	607.472	34.733	22.983	.7883	31.92	3.15	-4.652	.0978
18	8.4131	776.48	186.59	917.07	684.422	608.684	34.644	23.096	.7813	32.56	2.85	-6.056	.0966
19	8.4571	763.42	177.33	902.34	684.422	609.748	34.559	23.196	.7753	33.33	2.19	-10.663	.0956
20	8.5131	747.94	167.74	888.97	684.422	610.684	34.488	23.285	.7703	34.06	1.85	174.648	.0948
21	8.5730	729.18	158.31	1001.35	737.550	655.034	33.911	22.308	.7940	34.56	-2.03	5.947	.0916

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BLADE DATA

LOCATION	BLADE SECTION	BLADE ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	31.359	-24.647	32.103	.849	.0531	0.0	1.0820	1251.79	36.551	684.470	2.487	.320	.9266	.9353
2	31.977	-24.339	32.236	.859	.0529	0.0	1.0581	1229.20	36.513	684.480	2.485	.320	.9253	.9342
3	31.343	-21.350	32.216	.867	.0570	0.0	1.0337	1205.83	36.471	684.488	2.482	.320	.9248	.9338
4	30.933	-19.058	31.880	.883	.0573	0.0	1.0094	1182.31	36.413	684.493	2.478	.320	.9222	.9314
5	30.588	-19.718	31.592	.907	.0540	0.0	.9859	1159.27	36.353	684.494	2.474	.320	.9202	.9296
6	30.473	-16.495	31.331	.929	.0513	0.0	.9630	1136.56	36.249	684.493	2.467	.320	.9169	.9267
7	30.334	-12.311	31.231	.929	.0514	0.0	.9413	1114.78	36.122	684.488	2.458	.320	.9129	.9231
8	30.207	-11.319	31.173	.971	.0530	0.0	.9208	1094.0	35.993	684.478	2.446	.320	.9085	.9192
9	30.079	-5.223	31.069	.991	.0725	0.0	.9021	1074	35.850	684.466	2.439	.320	.8943	.9054
10	29.950	-3.032	30.995	1.009	.0740	0.0	.8840	1056	35.699	684.445	2.429	.321	.8957	.9077
11	29.932	-3.945	30.930	1.024	.0745	0.0	.8651	1038.	35.543	684.422	2.414	.321	.8797	.8935
12	29.870	-1.803	30.906	1.036	.0743	0.0	.8473	1020.	35.393	684.422	2.398	.321	.8639	.8794
13	29.932	.213	30.970	1.043	.0718	0.0	.8328	1002.02	35.104	684.422	2.389	.321	.8489	.8661
14	30.052	2.499	31.101	1.044	.0682	0.0	.8198	984.32	34.983	684.422	2.380	.321	.8331	.8513
15	30.219	3.077	31.292	1.046	.0648	0.0	.8080	966.80	34.833	684.422	2.372	.321	.8174	.8370
16	30.468	3.114	31.539	1.041	.0593	0.0	.7975	947.93	34.733	684.422	2.364	.322	.7885	.8124
17	30.387	11.004	31.922	1.032	.0539	0.0	.7883	932.21	34.644	684.422	2.353	.358	.7588	.7778
18	31.525	15.699	32.357	1.032	.0479	0.0	.7823	917.07	34.559	684.422	2.343	.393	.7145	.7468
19	32.293	14.938	32.826	1.033	.0491	0.0	.7833	902.34	34.488	684.422	2.336	.393	.6941	.7277
20	33.020	24.153	34.063	1.042	.0437	0.0	.7899	887.87	34.440	684.422	2.326	.403	.6708	.7066
21	33.475	23.725	34.357	1.079	.0435	0.0	.7960	1001.96	33.911	737.550	2.307	.422	.6361	.6754

STATION 12 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.405 ISEN. EFF.= .826 POLY. EFF.= .846 DELTA T ON T = .343

STATION 13 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES AERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7230	322.73	232.44	967.36	684.470	607.234	35.567	23.337	.8003	17.58	-2.23	-5.196	.1034
2	7.7501	307.25	206.39	951.53	684.480	609.850	35.510	23.553	.7850	17.55	-2.45	-5.028	.1043
3	7.7833	332.32	202.01	935.82	684.488	612.306	35.443	23.746	.7705	17.54	-2.64	-4.853	.1051
4	7.8246	377.32	277.62	920.33	684.493	614.609	35.377	24.214	.7568	17.55	-2.79	-4.747	.1058
5	7.8537	364.39	273.47	906.62	684.494	616.754	35.293	24.455	.7438	17.56	-2.88	-4.217	.1066
6	7.8950	349.39	269.54	891.27	684.493	619.031	35.135	24.764	.7299	17.54	-2.92	-4.111	.1071
7	7.9334	335.90	263.25	875.33	684.488	621.205	34.951	24.[illegible]	.7164	17.48	-2.87	-4.001	.1075
8	7.9720	322.79	258.00	862.31	684.478	623.208	34.749	24.[illegible]	.7039	17.41	-2.75	-3.897	.1078
9	8.0120	311.33	253.32	850.13	684.466	624.916	34.553	25.[illegible]	.6930	17.38	-2.54	-3.804	.1079
10	8.0532	301.92	251.17	840.34	684.463	626.963	34.384	25.[illegible]	.6839	17.39	-2.28	-3.735	.1079
11	8.0933	292.19	245.69	830.31	684.463	628.795	34.167	25.[illegible]	.6741	17.43	-1.96	-3.684	.1078
12	8.1337	283.19	240.34	821.01	684.465	630.001	33.943	25.[illegible]	.6650	17.46	-1.59	-3.622	.1076
13	8.1849	280.42	245.68	818.17	684.463	632.942	33.864	25.[illegible]	.6614	17.47	-1.20	-3.582	.1072
14	8.2311	273.09	245.43	816.84	684.463	634.090	33.800	25.265	.6530	17.49	-.81	-3.587	.1069
15	8.2731	278.31	242.74	816.18	684.463	635.733	33.733	25.259	.6571	17.52	-.43	-3.609	.1065
16	8.3201	280.30	247.54	818.32	684.463	640.707	33.702	25.244	.6566	17.60	-.06	-3.643	.1060
17	8.3744	283.81	250.73	822.94	684.463	645.972	33.702	25.220	.6581	17.74	.28	-3.684	.1051
18	8.4247	287.26	255.43	827.98	684.463	653.659	33.652	25.182	.6561	17.98	.57	-3.753	.1037
19	8.4752	290.07	261.57	832.24	684.463	661.262	33.601	25.125	.6576	18.32	.80	-3.879	.1024
20	8.5207	293.30	269.09	837.08	684.463	668.692	33.566	25.038	.6593	18.75	.93	-4.199	.1013
21	8.5745	290.49	277.83	843.55	684.463	670.894	33.433	24.910	.6600	19.23	.88	-5.659	.0988

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	16.234	-3.414	17.585	1.351	.1163	0.0	.8003	967.36	35.567	684.470	2.420	.320	.8952	.9873
2	16.169	-3.333	17.548	1.353	.1151	0.0	.7850	951.53	35.510	684.480	2.416	.320	.8933	.9856
3	16.167	-3.333	17.539	1.371	.1144	0.0	.7705	935.82	35.448	684.488	2.412	.320	.8913	.9838
4	16.156	-3.731	17.547	1.391	.1147	0.0	.7568	920.33	35.377	684.493	2.407	.320	.8889	.9817
5	16.138	-3.085	17.530	1.418	.1162	0.0	.7438	906.62	35.293	684.494	2.402	.320	.8862	.9792
6	16.085	-3.231	17.530	1.451	.1222	0.0	.7299	891.27	35.135	684.493	2.391	.320	.8812	.9747
7	15.994	-3.404	17.482	1.487	.1291	0.0	.7164	875.33	34.951	684.488	2.379	.320	.8751	.9693
8	15.869	-3.456	17.414	1.525	.1364	0.0	.7039	862.31	34.749	684.478	2.365	.320	.8686	.9634
9	15.718	-3.490	17.379	1.561	.1434	0.0	.6930	850.13	34.559	684.466	2.352	.320	.8624	.9578
10	15.737	-2.553	17.331	1.594	.1494	0.0	.6839	840.34	34.388	684.463	2.340	.321	.8573	.9536
11	15.305	-1.699	17.429	1.624	.1477	0.0	.6741	830.31	34.167	684.463	2.325	.324	.8577	.8556
12	15.811	-.931	17.493	1.649	.1492	0.0	.6650	821.01	33.943	684.465	2.310	.327	.8222	.8417
13	15.307	-.334	17.474	1.667	.1439	0.0	.6614	818.17	33.864	684.463	2.304	.331	.8095	.8383
14	15.913	.273	17.439	1.676	.1382	0.0	.6590	816.84	33.800	684.463	2.300	.336	.7959	.8181
15	15.848	1.006	17.523	1.675	.1323	0.0	.6571	816.18	33.739	684.463	2.296	.341	.7826	.8062
16	15.930	1.911	17.536	1.669	.1229	0.0	.6596	818.32	33.702	684.463	2.293	.352	.7574	.7836
17	16.034	2.951	17.739	1.655	.1122	0.0	.6561	822.94	33.652	684.463	2.290	.368	.7232	.7530
18	16.333	4.101	17.980	1.646	.1015	0.0	.6561	827.98	33.601	684.463	2.286	.383	.6917	.7248
19	16.575	5.390	18.318	1.643	.0962	0.0	.6576	832.24	33.566	684.463	2.284	.393	.6735	.7085
20	17.073	6.869	18.734	1.655	.0921	0.0	.6593	837.60	33.498	684.463	2.279	.405	.6526	.6897
21	17.510	8.542	19.229	1.719	.0896	0.0	.6600	843.56	33.344	684.463	2.269	.422	.6217	.6618

STATION 13 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.333 ISEN. EFF.= .794 POLY. EFF.= .817 DELTA T ON T = .343

STATION 1+ FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITY MERID	VELOCITY TANGENT	VELOCITY TOTAL	TEMPERATURE TOTAL	TEMPERATURE STATIC	PRESSURE TOTAL	PRESSURE STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.0720	764.22	93.42	772.71	634.470	635.286	34.571	26.592	.6248	6.18	-4.29	16.241	.1125
2	7.0351	753.54	91.42	770.01	634.490	635.640	34.467	26.372	.6224	6.07	-4.15	16.619	.1124
3	7.0330	753.04	91.71	769.23	634.498	635.000	34.391	26.549	.6203	5.96	-3.98	17.019	.1122
4	7.0327	751.28	91.32	767.29	634.433	636.377	34.251	26.524	.6174	5.87	-3.80	17.435	.1121
5	7.0218	737.23	90.98	756.13	634.444	636.776	34.174	26.497	.6147	5.80	-3.59	17.861	.1119
6	7.0079	743.42	90.64	758.91	634.453	637.704	34.096	26.466	.6082	5.73	-3.36	18.330	.1116
7	7.0011	741.39	90.30	756.84	634.458	638.781	33.972	26.438	.6007	5.67	-3.09	18.913	.1113
8	7.0000	739.44	89.96	754.84	634.459	639.943	33.871	26.407	.5932	5.62	-2.78	19.674	.1109
9	7.0000	737.49	89.63	752.85	634.459	641.033	33.824	26.377	.5845	5.58	-2.43	20.649	.1106
10	7.0000	735.54	89.29	750.87	634.459	642.454	33.851	26.348	.5793	5.55	-2.06	21.846	.1103
11	7.0000	733.59	88.95	748.89	634.459	644.063	33.844	26.322	.5722	5.52	-1.66	23.376	.1097
12	7.0000	731.64	88.61	746.92	634.459	645.738	33.841	26.299	.5667	5.50	-1.23	25.463	.1092
13	7.0000	729.69	88.27	744.95	634.459	647.440	33.838	26.280	.5623	5.50	-.12	28.265	.1086
14	7.0000	727.74	87.93	742.98	634.459	649.144	33.833	26.267	.5601	5.49	-.44	31.927	.1080
15	7.0000	725.79	87.59	741.02	634.459	650.822	33.827	26.258	.5599	5.49	-.10	36.816	.1073
16	7.0000	723.84	87.25	739.06	634.459	652.435	33.821	26.254	.5603	5.51	.21	43.730	.1071
17	7.0000	721.89	86.91	737.11	634.459	653.969	33.815	26.255	.5618	5.56	.48	54.306	.1059
18	7.0000	719.94	86.57	735.16	634.459	655.409	33.809	26.260	.5645	5.64	.69	73.017	.1048
19	7.0000	717.99	86.23	733.21	634.459	656.749	33.804	26.269	.5687	5.77	.86	114.970	.1041
20	7.0000	716.04	85.89	731.27	634.459	657.990	33.799	26.282	.5733	5.98	.99	275.674	.1033
21	7.0000	714.09	85.55	729.33	634.459	659.132	33.795	26.297	.5788	6.33	1.06	-610.607	.1028

LOCAL DATA

LOCATION	AXIAL POSITION	RADIAL POSITION	AZIMUTHAL POSITION	INCIDENCE	DEVIATION	MACH NO	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	0.0	-1.0000	.0000	.0000	.0000	.0000	.6248	772.71	34.579	634.470	2.353	.320	.8631	.8784
2	.0000	-1.0000	.0000	.0000	.0000	.0000	.6224	770.01	34.467	634.490	2.347	.320	.8600	.8756
3	.0000	-1.0000	.0000	.0000	.0000	.0000	.6203	769.23	34.391	634.498	2.340	.320	.8568	.8727
4	.0000	-1.0000	.0000	.0000	.0000	.0000	.6174	767.29	34.251	634.433	2.333	.320	.8533	.8696
5	.0000	-1.0000	.0000	.0000	.0000	.0000	.6147	756.13	34.174	634.444	2.326	.320	.8497	.8663
6	.0000	-1.0000	.0000	.0000	.0000	.0000	.6082	758.91	34.096	634.453	2.318	.320	.8427	.8599
7	.0000	-1.0000	.0000	.0000	.0000	.0000	.6007	756.84	33.972	634.458	2.311	.320	.8347	.8526
8	.0000	-1.0000	.0000	.0000	.0000	.0000	.5932	754.84	33.871	634.459	2.305	.320	.8261	.8449
9	.0000	-1.0000	.0000	.0000	.0000	.0000	.5845	752.85	33.824	634.459	2.299	.320	.8181	.8375
10	.0000	-1.0000	.0000	.0000	.0000	.0000	.5793	750.87	33.851	634.459	2.293	.320	.8087	.8290
11	.0000	-1.0000	.0000	.0000	.0000	.0000	.5722	748.89	33.844	634.459	2.288	.320	.8000	.8199
12	.0000	-1.0000	.0000	.0000	.0000	.0000	.5667	746.92	33.841	634.459	2.284	.320	.7919	.8112
13	.0000	-1.0000	.0000	.0000	.0000	.0000	.5623	744.95	33.838	634.459	2.280	.320	.7839	.8022
14	.0000	-1.0000	.0000	.0000	.0000	.0000	.5601	742.98	33.833	634.459	2.277	.320	.7791	.7933
15	.0000	-1.0000	.0000	.0000	.0000	.0000	.5599	741.02	33.827	634.459	2.275	.320	.7692	.7833
16	.0000	-1.0000	.0000	.0000	.0000	.0000	.5603	739.06	33.821	634.459	2.273	.320	.7584	.7836
17	.0000	-1.0000	.0000	.0000	.0000	.0000	.5618	737.11	33.815	634.459	2.272	.320	.7478	.7741
18	.0000	-1.0000	.0000	.0000	.0000	.0000	.5645	735.16	33.809	634.459	2.272	.320	.7366	.7641
19	.0000	-1.0000	.0000	.0000	.0000	.0000	.5687	733.21	33.804	634.459	2.272	.320	.7266	.7551
20	.0000	-1.0000	.0000	.0000	.0000	.0000	.5733	731.27	33.799	634.459	2.272	.320	.6967	.7284
21	.0000	-1.0000	.0000	.0000	.0000	.0000	.5788	729.33	33.795	634.459	2.272	.320	.5692	.7037
22	.0000	-1.0000	.0000	.0000	.0000	.0000	.5844	727.39	33.791	634.459	2.272	.320	.4532	.6893
23	.0000	-1.0000	.0000	.0000	.0000	.0000	.5908	725.45	33.787	634.459	2.272	.320	.3405	.6746
24	.0000	-1.0000	.0000	.0000	.0000	.0000	.5978	723.52	33.784	634.459	2.272	.320	.2422	.6626
25	.0000	-1.0000	.0000	.0000	.0000	.0000	.6053	721.59	33.781	634.459	2.272	.320	.1600	.6529
26	.0000	-1.0000	.0000	.0000	.0000	.0000	.6133	719.67	33.778	634.459	2.272	.320	.0944	.6455
27	.0000	-1.0000	.0000	.0000	.0000	.0000	.6217	717.75	33.776	634.459	2.272	.320	.0446	.6403
28	.0000	-1.0000	.0000	.0000	.0000	.0000	.6304	715.84	33.774	634.459	2.272	.320	.0097	.6373
29	.0000	-1.0000	.0000	.0000	.0000	.0000	.6394	713.93	33.772	634.459	2.272	.320	.0000	.6363
30	.0000	-1.0000	.0000	.0000	.0000	.0000	.6486	712.03	33.771	634.459	2.272	.320	.0000	.6373
31	.0000	-1.0000	.0000	.0000	.0000	.0000	.6580	710.13	33.770	634.459	2.272	.320	.0000	.6403
32	.0000	-1.0000	.0000	.0000	.0000	.0000	.6676	708.24	33.769	634.459	2.272	.320	.0000	.6453
33	.0000	-1.0000	.0000	.0000	.0000	.0000	.6773	706.35	33.768	634.459	2.272	.320	.0000	.6523
34	.0000	-1.0000	.0000	.0000	.0000	.0000	.6871	704.47	33.767	634.459	2.272	.320	.0000	.6613
35	.0000	-1.0000	.0000	.0000	.0000	.0000	.6969	702.59	33.767	634.459	2.272	.320	.0000	.6723
36	.0000	-1.0000	.0000	.0000	.0000	.0000	.7068	700.72	33.766	634.459	2.272	.320	.0000	.6853
37	.0000	-1.0000	.0000	.0000	.0000	.0000	.7167	698.85	33.766	634.459	2.272	.320	.0000	.7003
38	.0000	-1.0000	.0000	.0000	.0000	.0000	.7267	696.99	33.765	634.459	2.272	.320	.0000	.7173
39	.0000	-1.0000	.0000	.0000	.0000	.0000	.7367	695.13	33.765	634.459	2.272	.320	.0000	.7363
40	.0000	-1.0000	.0000	.0000	.0000	.0000	.7467	693.28	33.765	634.459	2.272	.320	.0000	.7573
41	.0000	-1.0000	.0000	.0000	.0000	.0000	.7568	691.43	33.765	634.459	2.272	.320	.0000	.7803

SUMMARY 1. INITIAL PREDICTED PRESSURE RATIO = 2.261 ISEN. EFF.= .761 POLY. EFF.= .785 DELTA T ON T = .343

STATION 15 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES NMIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	787.46	0.00	787.46	634.470	633.398	33.533	25.563	.6375	0.00	-1.66	10.624	.1085
2	7.6777	784.84	0.00	784.84	634.480	633.737	33.434	25.513	.6353	0.00	-1.63	10.983	.1082
3	7.7185	782.00	0.00	782.00	634.488	634.113	33.332	25.464	.6329	0.00	-1.59	11.431	.1080
4	7.7581	778.90	0.00	778.90	634.493	634.517	33.136	25.417	.6301	0.00	-1.53	11.984	.1077
5	7.7965	775.50	0.00	775.50	634.494	634.954	33.057	25.371	.6272	0.00	-1.46	12.709	.1074
6	7.8317	769.22	0.00	769.22	634.493	635.133	32.765	25.328	.6191	0.00	-1.37	13.659	.1070
7	7.8643	763.33	0.00	763.33	634.488	635.495	32.487	25.288	.6097	0.00	-1.27	14.999	.1066
8	7.8937	743.38	0.00	743.38	634.478	636.362	32.173	25.252	.5935	0.00	-1.14	16.967	.1059
9	7.9191	731.91	0.00	731.91	634.468	640.345	31.892	25.222	.5835	0.00	-.98	19.821	.1055
10	7.9409	725.26	0.00	725.26	635.145	641.824	31.713	25.196	.5934	0.00	-.81	23.004	.1052
11	7.9701	719.38	0.00	719.38	636.795	644.297	31.523	25.174	.5758	0.00	-.62	27.211	.1048
12	8.1206	710.66	0.00	710.66	638.465	646.878	31.335	25.160	.5695	0.00	-.43	33.672	.1046
13	8.1722	715.20	0.00	715.20	640.263	648.450	31.390	25.152	.5774	0.00	-.24	42.843	.1043
14	8.2242	719.80	0.00	719.80	643.035	650.384	31.461	25.150	.5833	0.00	-.07	52.849	.1040
15	8.2767	724.10	0.00	724.10	645.554	652.398	31.522	25.154	.5878	0.00	.09	58.848	.1037
16	8.3236	733.57	0.00	733.57	647.137	653.878	31.671	25.162	.5934	0.00	.23	58.355	.1030
17	8.3628	744.45	0.00	744.45	703.375	693.794	31.821	25.175	.5990	0.00	.35	44.013	.1028
18	8.4353	755.12	0.00	755.12	717.594	670.719	31.974	25.191	.5944	0.00	.43	37.611	.1018
19	8.4903	760.57	0.00	760.57	722.831	675.091	32.056	25.210	.5933	0.00	.49	34.474	.1004
20	8.5449	766.17	0.00	766.17	723.560	690.334	32.133	25.230	.5993	0.00	.52	33.212	.0997
21	8.6000	773.37	0.00	773.37	737.550	688.441	32.211	25.250	.6010	0.00	.52	33.905	.0986

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-7.239	.020	0.030	7.233	.2312	0.0	.6376	787.46	33.533	634.470	2.206	.320	.8383	.8487
2	-7.358	.020	0.000	7.358	.2318	0.0	.6353	784.84	33.434	634.480	2.207	.320	.8386	.8487
3	-7.546	.019	0.000	7.546	.2331	0.0	.6329	782.00	33.332	634.488	2.208	.320	.8388	.8486
4	-7.709	.016	0.000	7.709	.2345	0.0	.6301	778.90	33.136	634.493	2.209	.320	.8388	.8484
5	-7.872	.016	0.000	7.872	.2361	0.0	.6272	775.50	33.057	634.494	2.209	.320	.8388	.8482
6	-8.036	.014	0.000	8.036	.2507	0.0	.6191	769.22	32.765	634.493	2.211	.320	.8387	.8476
7	-8.199	.012	0.000	8.199	.2638	0.0	.6097	763.33	32.487	634.488	2.211	.320	.8387	.8470
8	-8.360	.010	0.000	8.360	.2773	0.0	.5993	743.38	32.173	634.478	2.190	.320	.8387	.8445
9	-8.516	.008	0.000	8.516	.2897	0.0	.5895	731.91	31.892	634.468	2.170	.320	.8387	.8419
10	-8.660	.007	0.000	8.660	.2945	0.0	.5834	725.26	31.713	635.145	2.156	.321	.8387	.8397
11	-8.788	.005	0.000	8.788	.2901	0.1	.5768	719.38	31.523	636.795	2.145	.321	.8387	.8375
12	-8.898	.003	0.000	8.898	.2982	0.0	.5695	710.66	31.338	638.465	2.132	.321	.8387	.8351
13	-8.984	.001	0.000	8.984	.2678	0.0	.5724	715.20	31.396	640.263	2.136	.321	.8387	.8360
14	-9.041	-.001	0.030	9.041	.2762	0.0	.5753	719.80	31.461	643.035	2.141	.321	.8387	.8371
15	-9.062	-.004	0.000	9.062	.2611	0.0	.5778	724.10	31.522	645.554	2.145	.321	.8387	.8381
16	-9.059	-.008	0.000	9.059	.2474	0.0	.5834	733.57	31.670	703.375	2.155	.322	.8387	.8404
17	-9.060	-.012	0.000	9.062	.2274	0.0	.5890	744.45	31.821	709.375	2.165	.368	.8388	.8428
18	-9.085	-.018	0.000	9.085	.2073	0.0	.5944	755.12	31.974	717.594	2.176	.383	.8388	.8452
19	-9.125	-.024	0.000	9.125	.1979	0.0	.5968	760.57	32.056	722.831	2.181	.393	.8387	.8465
20	-9.169	-.031	0.000	9.169	.1669	0.0	.5989	766.17	32.133	728.560	2.187	.405	.8386	.8479
21	-9.213	-.038	0.000	9.213	.1779	0.0	.6010	773.37	32.211	737.550	2.192	.422	.8385	.8499

STATION 15 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.147 ISEN. EFF.= .726 POLY. EFF.= .754 DELTA T ON T = .343

STATION 16 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	803.47	0.00	803.47	634.470	631.286	33.693	25.266	.6517	0.00	0.00	0.000	.1076
2	7.6773	798.27	0.00	798.27	634.480	631.984	33.464	25.266	.6471	0.00	-.02	1600.687	.1075
3	7.7152	792.87	0.00	792.87	634.488	632.701	33.232	25.268	.6424	0.00	-.04	854.896	.1074
4	7.7544	787.27	0.00	787.27	634.493	633.435	33.191	25.265	.6375	0.00	-.05	613.408	.1072
5	7.7933	781.46	0.00	781.46	634.494	634.188	33.097	25.264	.6324	0.00	-.07	499.490	.1071
6	7.8334	769.31	0.00	769.31	634.493	635.666	32.783	25.263	.6223	0.00	-.08	437.581	.1068
7	7.8750	756.46	0.00	756.46	634.488	637.304	32.487	25.261	.6110	0.00	-.08	403.550	.1066
8	7.9201	742.32	0.00	742.32	634.478	639.019	32.173	25.260	.5989	0.00	-.09	388.523	.1063
9	7.9711	729.55	0.00	729.55	634.466	640.618	31.892	25.258	.5875	0.00	-.09	389.445	.1060
10	8.0140	721.43	0.00	721.43	635.145	642.274	31.713	25.257	.5802	0.00	-.08	406.366	.1057
11	8.0543	713.40	0.00	713.40	636.735	644.885	31.523	25.255	.5729	0.00	-.08	442.142	.1053
12	8.1181	704.82	0.00	704.82	638.405	647.562	31.331	25.254	.5649	0.00	-.07	504.653	.1048
13	8.1760	694.94	0.00	694.94	640.563	649.195	31.385	25.253	.5671	0.00	-.06	606.852	.1046
14	8.2231	713.48	0.00	713.48	633.035	651.130	31.461	25.252	.5693	0.00	-.05	767.120	.1043
15	8.2759	718.06	0.00	718.02	633.524	653.116	31.523	25.251	.5727	0.00	-.03	1037.008	.1039
16	8.3298	724.12	0.00	724.12	701.127	657.334	31.607	25.251	.5785	0.00	-.02	1526.014	.1032
17	8.3824	733.13	0.00	733.13	703.375	664.359	31.821	25.251	.5851	0.00	-.01	2523.263	.1022
18	8.4361	741.51	0.00	741.51	717.594	671.167	31.974	25.250	.5914	0.00	-.01	5106.462	.1011
19	8.4903	750.10	0.00	750.10	722.631	675.399	32.055	25.250	.5947	0.00	-.00	16279.042	.1005
20	8.5444	759.92	0.00	759.92	729.560	680.491	32.133	25.250	.5979	0.00	-.00	-220681.278	.0998
21	8.6000	773.37	0.00	773.37	737.590	688.441	32.211	25.250	.6011	0.00	0.00	0.000	.0986

STATION 17 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	804.32	0.00	804.32	634.470	631.173	33.693	25.250	.6524	0.00	0.00	0.000	.1076
2	7.6773	799.11	0.00	799.11	634.480	631.873	33.465	25.250	.6478	0.00	-.00	0.000	.1074
3	7.7152	793.70	0.00	793.70	634.488	632.592	33.232	25.250	.6431	0.00	-.00	0.000	.1073
4	7.7544	788.07	0.00	788.07	634.493	633.332	33.193	25.250	.6382	0.00	-.00	0.000	.1072
5	7.7933	782.21	0.00	782.21	634.494	634.093	33.097	25.250	.6330	0.00	-.00	0.000	.1071
6	7.8334	770.03	0.00	770.03	634.493	635.579	32.783	25.250	.6223	0.00	-.00	0.000	.1068
7	7.8750	757.48	0.00	757.48	634.488	637.227	32.487	25.250	.6115	0.00	-.00	0.000	.1065
8	7.9201	743.46	0.00	743.46	634.478	638.952	32.173	25.250	.5994	0.00	-.00	0.000	.1062
9	7.9710	730.12	0.00	730.12	634.466	640.561	31.892	25.250	.5873	0.00	-.00	0.000	.1060
10	8.0143	721.98	0.00	721.98	635.145	642.228	31.713	25.250	.5805	0.00	-.00	0.000	.1057
11	8.0582	713.71	0.00	713.71	636.735	644.849	31.523	25.250	.5734	0.00	-.00	0.000	.1053
12	8.1180	705.05	0.00	705.05	638.405	647.534	31.334	25.250	.5664	0.00	-.00	0.000	.1048
13	8.1768	704.11	0.00	704.11	640.563	649.166	31.389	25.250	.5673	0.00	-.00	0.000	.1046
14	8.2231	713.50	0.00	713.50	633.035	651.117	31.491	25.250	.5700	0.00	-.00	0.000	.1043
15	8.2759	718.13	0.00	718.13	633.524	653.108	31.523	25.250	.5725	0.00	-.00	0.000	.1039
16	8.3298	724.16	0.00	724.16	701.127	657.330	31.607	25.250	.5788	0.00	-.00	0.000	.1032
17	8.3824	733.34	0.00	733.34	703.375	664.356	31.821	25.250	.5851	0.00	-.00	0.000	.1022
18	8.4361	741.92	0.00	741.92	717.594	671.166	31.974	25.250	.5914	0.00	-.00	0.000	.1011
19	8.4903	750.11	0.00	750.11	722.631	675.399	32.055	25.250	.5947	0.00	-.00	0.000	.1005
20	8.5444	759.92	0.00	759.92	729.560	680.491	32.133	25.250	.5979	0.00	-.00	0.000	.0998
21	8.6000	773.37	0.00	773.37	737.590	688.441	32.211	25.250	.6010	0.00	0.00	0.000	.0986

ROTOR PERFORMANCE

LOCATION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID -ENCE	DEVIA -TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON A	R.L.V. RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	6.7500	7.5443	.4334	9.824	6.132	.0321	.4116	.4222	.5421	.7520	.7643	-60.937	-12.647	6.879	18.291
2	6.9013	7.5375	1.0014	3.342	6.339	.0353	.4314	.4409	.5441	.7337	.7513	-61.333	-13.386	6.231	18.682
3	6.9719	7.5201	1.1167	3.172	6.301	.0383	.4478	.4582	.5421	.7160	.7537	-61.709	-14.134	6.564	19.074
4	7.0818	7.5050	1.0313	7.490	6.837	.0352	.4614	.4707	.5373	.7050	.7493	-62.054	-14.873	6.420	9.498
5	7.1311	7.7091	1.1471	7.327	6.779	.0849	.4725	.4784	.5301	.6943	.7381	-62.357	-15.625	6.325	8.854
6	7.2399	7.7474	1.1923	7.704	6.765	.0846	.4417	.4971	.5213	.6853	.7303	-62.636	-16.392	6.847	8.215
7	7.4153	7.7335	1.1703	7.601	6.837	.0352	.4695	.4740	.5111	.6773	.7224	-62.906	-17.145	5.582	7.822
8	7.5104	7.8329	1.0313	7.512	6.833	.0806	.4962	.5199	.4993	.6712	.7144	-63.173	-17.855	4.835	7.868
9	7.6243	7.8743	1.1033	7.439	6.994	.0379	.5015	.5144	.4876	.6659	.7064	-63.447	-18.503	4.105	6.730
10	7.7322	7.9211	1.1201	7.379	7.074	.0933	.5116	.5137	.4747	.6594	.7013	-63.731	-19.093	3.189	6.650
11	7.8405	7.9673	1.1340	7.331	7.173	.1224	.5290	.5304	.4614	.6540	.7001	-64.031	-19.631	2.095	6.821
12	7.9482	8.0134	1.1473	7.301	7.343	.1444	.5452	.5455	.4479	.6502	.6987	-64.345	-20.123	.770	7.242
13	8.0569	8.0594	1.1611	7.230	7.417	.1683	.5622	.5623	.4341	.6464	.6986	-64.688	-20.594	-.652	7.922
14	8.1595	8.1473	1.1747	7.298	7.530	.1924	.5800	.5794	.4203	.6436	.6936	-65.056	-21.001	-2.014	8.844
15	8.2316	8.1720	1.1779	7.253	7.327	.2159	.5971	.5960	.4057	.6409	.7005	-65.451	-21.388	-3.630	9.888
16	8.3354	8.2234	1.2311	7.282	8.013	.2633	.6339	.6321	.3914	.6437	.7125	-65.879	-21.703	-5.339	11.008
17	8.5113	8.2937	1.2143	7.285	8.835	.3199	.6994	.6971	.3812	.6435	.7334	-66.335	-21.975	-6.917	12.159
18	8.5235	8.3600	1.2277	7.273	9.510	.3775	.7474	.7449	.3709	.6433	.7526	-66.811	-22.151	-7.835	12.988
19	8.7134	8.4493	1.2414	7.270	11.033	.4601	.7798	.7797	.3613	.6441	.7558	-67.298	-22.153	-7.688	13.388
20	8.8739	8.5424	1.2553	7.284	13.437	.5436	.8211	.8177	.3513	.6474	.7608	-67.799	-21.871	-8.541	13.884
21	9.0000	8.5539	1.2705	7.153	24.939	.6426	.8974	.8140	.3525	.2925	.7709	-68.316	-21.371	-9.607	13.159

STATOR PERFORMANCE

LOCATION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID -ENCE	DEVIA -TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON A	R.L.V. RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	7.3199	7.3400	.1783	-.271	7.233	.2112	.4735	.4736	.1022	.3837	0.0000	48.817	-7.233	-39.941	.020
2	7.3393	7.3777	.3331	-.093	7.333	.2318	.4803	.4783	.3147	.5730	0.0000	47.924	-7.368	-41.176	.020
3	7.7181	7.7155	1.1154	-.238	7.246	.2331	.5024	.5024	.3220	.3630	0.0000	47.073	-7.546	-42.193	.019
4	7.7044	7.7201	1.0171	-.271	7.709	.2335	.5147	.5143	.3335	.3540	0.0000	46.461	-7.703	-43.087	.018
5	7.8087	7.7868	1.1247	-.093	7.872	.2341	.5251	.5254	.3414	.3475	0.0000	45.994	-7.572	-27.918	.016
6	7.8216	7.8357	1.1249	-.971	5.033	.2517	.5388	.5389	.3417	.3379	0.0000	45.635	-8.036	-24.738	.016
7	7.9141	7.8819	1.0313	-1.091	8.139	.2636	.5522	.5524	.3434	.3274	0.0000	45.324	-8.193	-24.598	.012
8	7.9356	7.9237	1.0317	-1.034	8.360	.2770	.5653	.5654	.3442	.3179	0.0000	45.060	-8.363	-10.525	.010
9	7.9771	7.9731	1.1303	-1.105	8.519	.2937	.5769	.5769	.3440	.3086	0.0000	44.840	-8.510	-15.408	.008
10	8.0182	8.0239	1.0206	-.831	8.630	.2945	.5841	.5841	.3445	.3047	0.0030	44.674	-8.660	-12.073	.008
11	8.0597	8.1701	1.1195	-.234	8.788	.2981	.5913	.5912	.3463	.3018	0.0330	44.570	-8.788	-8.394	.005
12	8.1017	8.1205	1.0113	.330	8.333	.2932	.5984	.5981	.3434	.3982	0.0000	44.556	-8.898	-4.562	.003
13	8.1444	8.1722	1.0144	.912	8.334	.2870	.5950	.5947	.3503	.6053	0.0000	44.666	-8.984	-.980	.001
14	8.1873	8.2242	.3921	1.497	9.141	.2792	.5912	.5907	.3513	.6118	0.0000	44.919	-9.041	2.404	-.001
15	8.2321	8.2727	.3972	3.921	9.362	.2691	.5865	.5860	.3522	.6190	0.0100	45.248	-9.062	5.855	-.004
16	8.2773	8.3230	.3955	4.707	9.053	.2474	.5802	.5797	.3537	.6303	0.0030	45.577	-9.053	10.327	-.008
17	8.3266	8.3823	.3929	5.115	9.050	.2274	.5740	.5743	.3543	.6439	0.0000	45.897	-9.060	16.516	-.012
18	8.3506	8.4363	.3953	5.024	9.055	.2073	.5642	.5635	.3515	.6592	0.0000	46.428	-9.085	24.116	-.018
19	8.4408	8.4303	.3248	11.657	9.125	.1379	.5503	.5496	.3403	.6743	0.0000	47.443	-9.125	32.127	-.024
20	8.5118	8.5443	.3349	14.900	9.159	.1839	.5280	.5284	.3212	.6959	0.0000	46.844	-9.169	39.761	-.030
21	8.5199	8.5000	.3441	24.210	9.213	.1779	.4895	.4896	.2743	.7345	0.0000	50.914	-9.213	46.652	-.038

WAKE AND BOUNDARY LAYER BLOCKAGES (PERCENT)

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MID BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	5.5	0.0	3.0	11.0	13.0	14.0	20.5	21.4	21.4
DIST FACTOR	1.0	1.0	1.0	1.0	.8	.6	.4	.2	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
INT BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	5.6	0.0	3.0	11.0	13.0	14.0	20.5	21.4	21.4

SUMMARY POINT NO. 1 THE CALCULATION IS CONVERGED PASS 20

TEST POINT TITLE = 301131015885

FLOW = 20.80 SPEED = 17341.4 PRESSURE RATIO = 2.187 ISENTROPIC EFFY = .7264 POLYTROPIC EFFY = .7543 DEL T/T = .3434

SUMMARY OF 1 TEST POINTS

POINT NO.	TEST POINT TITLE	STATUS OF CALCULATION	FLOW RATE LBS/SEC	SPEED RPM	ROTOR PRESSURE RATIO	ROTOR ISEN EFFY	STAGE PRESSURE RATIO	STAGE ISEN EFFY	FLOW/ (CHOKE FLOW)
1	301131015885	CONVERGED AFTER 20 PASSES	20.801	17341.4	2.476	.857	2.187	.726	.56559

7. TEST POINT 301181715890 (90%)

PASS 1 STATION 1 VM2/V1(MID)= 3.241 V1(MID)= .7715E+03
PASS 2 STATION 1 VM2/V1(MID)= 3.241 V1(MID)= .7715E+03
PASS 3 STATION 1 VM2/V1(MID)= 3.241 V1(MID)= .7715E+03
PASS 4 STATION 1 VM2/V1(MID)= 3.241 V1(MID)= .7715E+03
PASS 5 STATION 1 VM2/V1(MID)= 3.241 V1(MID)= .7715E+03
PASS 6 STATION 1 VM2/V1(MID)= 3.241 V1(MID)= .7715E+03
PASS 7 STATION 1 VM2/V1(MID)= 3.241 V1(MID)= .7715E+03

STATION 1 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITY			TEMPERATURE		PRESSURE		MACH NO	ANGLES		RADIUS OF CURVATURE	SPECIFIC WEIGHT
		AXIAL	THETA	TOTAL	TOTAL	STATIC	TOTAL	STATIC		WHIRL	SLOPE		
1	9.0233	501.93	0.00	501.93	519.0035	511.1136	14.643	13.302	.2715	0.00	20.93	0.000	.0734
2	9.0233	501.93	0.00	501.93	519.0048	511.1155	14.643	13.302	.2715	0.00	19.71	0.000	.0734
3	9.0233	501.93	0.00	501.93	519.0048	511.1155	14.643	13.302	.2715	0.00	18.47	0.000	.0734
4	9.0233	501.93	0.00	501.93	519.0048	511.1156	14.643	13.302	.2715	0.00	17.22	0.000	.0734
5	9.0233	501.93	0.00	501.93	519.0048	511.1156	14.643	13.302	.2715	0.00	15.96	0.000	.0734
6	9.0233	501.93	0.00	501.93	519.0048	511.1156	14.643	13.302	.2715	0.00	14.71	0.000	.0734
7	9.0233	501.93	0.00	501.93	519.0048	511.1156	14.643	13.302	.2715	0.00	13.45	0.000	.0734
8	9.0233	501.93	0.00	501.93	519.0048	511.1156	14.643	13.302	.2715	0.00	12.21	0.000	.0734
9	9.0233	501.93	0.00	501.93	519.0048	511.1156	14.643	13.302	.2715	0.00	10.98	0.000	.0734
10	9.0233	501.93	0.00	501.93	519.0048	511.1156	14.643	13.302	.2715	0.00	9.74	0.000	.0734
11	9.0233	501.93	0.00	501.93	519.0048	511.1156	14.643	13.302	.2715	0.00	8.50	0.000	.0734
12	9.0233	501.93	0.00	501.93	519.0048	511.1156	14.643	13.302	.2715	0.00	7.26	0.000	.0734
13	9.0233	501.93	0.00	501.93	519.0048	511.1156	14.643	13.302	.2715	0.00	6.02	0.000	.0734
14	9.0233	501.93	0.00	501.93	519.0048	511.1156	14.643	13.302	.2715	0.00	4.78	0.000	.0734
15	9.0233	501.93	0.00	501.93	519.0048	511.1156	14.643	13.302	.2715	0.00	3.54	0.000	.0734
16	9.0233	501.93	0.00	501.93	519.0048	511.1156	14.643	13.302	.2715	0.00	2.30	0.000	.0734
17	9.0233	501.93	0.00	501.93	519.0048	511.1156	14.643	13.302	.2715	0.00	1.06	0.000	.0734
18	9.0233	501.93	0.00	501.93	519.0048	511.1156	14.643	13.302	.2715	0.00	-.18	0.000	.0734
19	9.0231	501.93	0.00	501.93	519.0048	511.1155	14.643	13.302	.2715	0.00	-1.42	0.000	.0734
20	9.0230	501.93	0.00	501.93	519.0048	511.1155	14.643	13.302	.2715	0.00	-2.66	0.000	.0734
21	9.0230	501.93	0.00	501.93	519.0048	511.1155	14.643	13.302	.2715	0.00	0.00	0.000	.0734

STATION 2 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITY			TEMPERATURE		PRESSURE		MACH NO	ANGLES		RADIUS OF CURVATURE	SPECIFIC WEIGHT
		AXIAL	THETA	TOTAL	TOTAL	STATIC	TOTAL	STATIC		WHIRL	SLOPE		
1	9.0237	529.09	0.00	529.09	514.[illegible]	509.721	14.[illegible]	13.325	.2967	0.00	20.83	-205.758	.0729
2	9.0236	529.09	0.00	529.09	514.[illegible]	509.723	14.[illegible]	13.[illegible]	.2963	0.00	19.52	-114.936	.0729
3	9.0234	529.09	0.00	529.09	514.[illegible]	509.737	14.[illegible]	13.[illegible]	.2993	0.00	18.22	-83.537	.0729
4	9.0232	529.09	0.00	529.09	514.[illegible]	509.[illegible]	14.[illegible]	13.[illegible]	.3010	0.00	16.91	-67.388	.0729
5	9.0229	529.09	0.00	529.09	514.[illegible]	509.[illegible]	14.[illegible]	13.[illegible]	.3021	0.00	15.60	-57.216	.0729
6	9.0226	529.09	0.00	529.09	514.[illegible]	509.[illegible]	14.[illegible]	13.[illegible]	.3029	0.00	14.29	-49.991	.0729
7	9.0222	529.09	0.00	529.09	514.[illegible]	509.[illegible]	14.[illegible]	13.[illegible]	.3035	0.00	12.99	-44.393	.0729
8	9.0219	529.09	0.00	529.09	514.[illegible]	509.307	14.[illegible]	13.[illegible]	.3039	0.00	11.68	-39.765	.0729
9	9.0215	529.09	0.00	529.09	514.[illegible]	509.[illegible]	14.[illegible]	13.[illegible]	.3042	0.00	10.37	-36.831	.0729
10	9.0211	529.09	0.00	529.09	514.[illegible]	509.[illegible]	14.[illegible]	13.[illegible]	.3044	0.00	9.06	-32.354	.0729
11	9.0207	529.09	0.00	529.09	514.[illegible]	509.275	14.[illegible]	13.[illegible]	.3046	0.00	7.75	-29.253	.0729
12	9.0203	529.09	0.00	529.09	514.[illegible]	509.[illegible]	14.[illegible]	13.[illegible]	.3039	0.00	6.44	-26.668	.0729
13	9.0199	529.09	0.00	529.09	514.[illegible]	509.335	14.[illegible]	13.789	.3031	0.00	5.13	-23.959	.0729
14	9.0195	529.09	0.00	529.09	514.[illegible]	509.[illegible]	14.[illegible]	13.[illegible]	.3029	0.00	3.82	-21.704	.0729
15	9.0191	529.09	0.00	529.09	514.[illegible]	509.[illegible]	14.[illegible]	13.[illegible]	.3004	0.00	2.52	-19.672	.0729
16	9.0187	529.09	0.00	529.09	514.[illegible]	509.[illegible]	14.[illegible]	13.[illegible]	.2994	0.00	1.21	-17.835	.0729
17	9.0183	529.09	0.00	529.09	514.[illegible]	509.[illegible]	14.[illegible]	13.[illegible]	.2974	0.00	-.10	-16.161	.0729
18	9.0179	529.09	0.00	529.09	514.[illegible]	509.[illegible]	14.[illegible]	13.[illegible]	.2952	0.00	-1.41	-14.620	.0729
19	9.0175	529.09	0.00	529.09	514.[illegible]	509.[illegible]	14.[illegible]	13.[illegible]	.2928	0.00	-2.72	-13.191	.0729
20	9.0171	529.09	0.00	529.09	514.[illegible]	509.[illegible]	14.[illegible]	13.[illegible]	.2904	0.00	-4.03	-11.858	.0729
21	9.0167	529.09	0.00	529.09	514.[illegible]	509.[illegible]	14.[illegible]	13.[illegible]	.2880	0.00	-5.34	-10.610	.0729
1	9.0237	527.44	0.00	527.44	513.[illegible]	508.611	14.[illegible]	13.[illegible]	.2952	0.00	20.83	-205.758	.0730
2	9.0236	527.44	0.00	527.44	513.[illegible]	508.613	14.[illegible]	13.[illegible]	.2952	0.00	19.52	-114.936	.0730
3	9.0234	527.44	0.00	527.44	513.[illegible]	508.627	14.[illegible]	13.[illegible]	.2952	0.00	18.22	-83.537	.0730
4	9.0232	527.44	0.00	527.44	513.[illegible]	508.[illegible]	14.[illegible]	13.[illegible]	.2952	0.00	16.91	-67.388	.0730
5	9.0229	527.44	0.00	527.44	513.[illegible]	508.[illegible]	14.[illegible]	13.[illegible]	.2952	0.00	15.60	-57.216	.0730
6	9.0226	527.44	0.00	527.44	513.[illegible]	508.[illegible]	14.[illegible]	13.[illegible]	.2952	0.00	14.29	-49.991	.0730
7	9.0222	527.44	0.00	527.44	513.[illegible]	508.[illegible]	14.[illegible]	13.[illegible]	.2952	0.00	12.99	-44.393	.0730
8	9.0219	527.44	0.00	527.44	513.[illegible]	508.[illegible]	14.[illegible]	13.[illegible]	.2952	0.00	11.68	-39.765	.0730
9	9.0215	527.44	0.00	527.44	513.[illegible]	508.[illegible]	14.[illegible]	13.[illegible]	.2952	0.00	10.37	-36.831	.0730
10	9.0211	527.44	0.00	527.44	513.[illegible]	508.[illegible]	14.[illegible]	13.[illegible]	.2952	0.00	9.06	-32.354	.0730
11	9.0207	527.44	0.00	527.44	513.[illegible]	508.[illegible]	14.[illegible]	13.[illegible]	.2952	0.00	7.75	-29.253	.0730
12	9.0203	527.44	0.00	527.44	513.[illegible]	508.[illegible]	14.[illegible]	13.[illegible]	.2952	0.00	6.44	-26.668	.0730
13	9.0199	527.44	0.00	527.44	513.[illegible]	508.[illegible]	14.[illegible]	13.[illegible]	.2952	0.00	5.13	-23.959	.0730
14	9.0195	527.44	0.00	527.44	513.[illegible]	508.[illegible]	14.[illegible]	13.[illegible]	.2952	0.00	3.82	-21.704	.0730
15	9.0191	527.44	0.00	527.44	513.[illegible]	508.[illegible]	14.[illegible]	13.[illegible]	.2952	0.00	2.52	-19.672	.0730
16	9.0187	527.44	0.00	527.44	513.[illegible]	508.[illegible]	14.[illegible]	13.[illegible]	.2952	0.00	1.21	-17.835	.0730
17	9.0183	527.44	0.00	527.44	513.[illegible]	508.[illegible]	14.[illegible]	13.[illegible]	.2952	0.00	-.10	-16.161	.0730
18	9.0179	527.44	0.00	527.44	513.[illegible]	508.[illegible]	14.[illegible]	13.[illegible]	.2952	0.00	-1.41	-14.620	.0730
19	9.0175	527.44	0.00	527.44	513.[illegible]	508.[illegible]	14.[illegible]	13.[illegible]	.2952	0.00	-2.72	-13.191	.0730
20	9.0171	527.44	0.00	527.44	513.[illegible]	508.[illegible]	14.[illegible]	13.[illegible]	.2952	0.00	-4.03	-11.858	.0730
21	9.0167	527.44	0.00	527.44	513.[illegible]	508.[illegible]	14.[illegible]	13.[illegible]	.2952	0.00	-5.34	-10.610	.0730

STATION 3 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.6016	363.06	0.00	363.06	518.688	507.768	14.69	13.641	.3280	0.00	20.54	-83.831	.0722
2	6.7240	365.50	0.00	365.50	518.688	507.620	14.69	13.627	.3305	0.00	19.15	-85.276	.0722
3	6.8459	367.90	0.00	367.90	518.688	507.481	14.69	13.614	.3324	0.00	17.77	-77.179	.0721
4	6.9681	369.92	0.00	369.92	518.688	507.351	14.69	13.602	.3344	0.00	16.38	-69.656	.0721
5	7.0861	371.81	0.00	371.81	518.688	507.235	14.69	13.591	.3361	0.00	14.99	-64.986	.0720
6	7.2055	373.43	0.00	373.43	518.688	507.135	14.69	13.581	.3370	0.00	13.60	-52.173	.0720
7	7.3245	374.73	0.00	374.73	518.688	507.054	14.69	13.574	.3369	0.00	12.19	-45.697	.0720
8	7.4432	375.66	0.00	375.66	518.688	506.996	14.69	13.568	.3357	0.00	10.78	-36.855	.0719
9	7.5618	376.16	0.00	376.16	518.688	506.965	14.69	13.565	.3401	0.00	9.37	-30.857	.0719
10	7.6805	376.17	0.00	376.17	518.688	506.965	14.69	13.565	.3402	0.00	7.95	-27.954	.0719
11	7.7994	375.64	0.00	375.64	518.688	506.998	14.69	13.568	.3397	0.00	6.54	-22.818	.0719
12	7.9187	374.52	0.00	374.52	518.688	507.067	14.69	13.575	.3386	0.00	5.14	-19.865	.0720
13	8.0387	372.79	0.00	372.79	518.688	507.174	14.69	13.585	.3371	0.00	3.76	-16.406	.0720
14	8.1597	370.42	0.00	370.42	518.688	507.320	14.69	13.599	.3348	0.00	2.40	-14.435	.0721
15	8.2817	367.42	0.00	367.42	518.688	507.504	14.69	13.616	.3321	0.00	1.09	-12.872	.0721
16	8.4051	363.80	0.00	363.80	518.688	507.723	14.69	13.637	.3287	0.00	-.17	-11.648	.0722
17	8.5301	359.60	0.00	359.60	518.688	507.975	14.69	13.660	.3247	0.00	-1.37	-10.709	.0723
18	8.6573	354.89	0.00	354.89	518.688	508.253	14.69	13.686	.3205	0.00	-2.50	-10.006	.0724
19	8.7857	349.76	0.00	349.76	518.688	508.553	14.69	13.715	.3158	0.00	-3.55	-9.491	.0725
20	8.9167	344.28	0.00	344.28	518.688	508.869	14.69	13.745	.3107	0.00	-4.54	-9.100	.0726
21	9.0500	338.46	0.00	338.46	518.688	509.198	14.69	13.776	.3054	0.00	-5.47	-8.698	.0727

STATION 4 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.7500	399.89	0.00	399.89	518.688	505.439	14.69	13.423	.3622	0.00	20.32	-384.854	.0714
2	6.8619	+403.41	0.00	403.41	518.688	505.205	14.69	13.401	.3654	0.00	18.97	-329.382	.0713
3	6.9721	+406.74	0.00	406.74	518.688	504.982	14.69	13.380	.3685	0.00	17.57	-251665.548	.0712
4	7.0821	+409.89	0.00	409.89	518.688	504.769	14.69	13.361	.3714	0.00	16.18	1388.725	.0712
5	7.1914	+412.83	0.00	412.83	518.688	504.568	14.69	13.342	.3742	0.00	14.75	340.363	.0711
6	7.3002	+415.50	0.00	415.50	518.688	504.385	14.69	13.325	.3767	0.00	13.29	-549.474	.0710
7	7.4083	+417.90	0.00	417.90	518.688	504.226	14.69	13.310	.3788	0.00	11.79	-166.874	.0710
8	7.5165	+419.93	0.00	419.93	518.688	504.099	14.69	13.299	.3805	0.00	10.25	-83.313	.0709
9	7.6244	+420.87	0.00	420.87	518.688	504.013	14.69	13.291	.3817	0.00	8.66	-53.846	.0709
10	7.7324	+421.39	0.00	421.39	518.688	503.976	14.69	13.287	.3822	0.00	7.05	-39.270	.0709
11	7.8406	+421.11	0.00	421.11	518.688	503.996	14.69	13.289	.3819	0.00	5.41	-31.153	.0709
12	7.9493	+419.33	0.00	419.33	518.688	504.078	14.69	13.297	.3808	0.00	3.76	-26.614	.0709
13	8.0589	+417.79	0.00	417.79	518.688	504.227	14.69	13.311	.3788	0.00	2.11	-14.879	.0710
14	8.1695	+414.64	0.00	414.64	518.688	504.444	14.69	13.331	.3759	0.00	.47	-12.225	.0710
15	8.2810	+410.42	0.00	410.42	518.688	504.732	14.69	13.357	.3719	0.00	-1.14	-10.276	.0711
16	8.3934	+405.13	0.00	405.13	518.688	505.090	14.69	13.390	.3670	0.00	-2.70	-8.848	.0713
17	8.5112	398.84	0.00	398.84	518.688	505.509	14.69	13.429	.3612	0.00	-4.17	-7.878	.0714
18	8.6234	391.78	0.00	391.78	518.688	505.971	14.69	13.472	.3546	0.00	-5.51	-7.324	.0716
19	8.7503	384.28	0.00	384.28	518.688	506.454	14.69	13.518	.3477	0.00	-6.66	-7.153	.0718
20	8.8739	376.88	0.00	376.88	518.688	506.921	14.69	13.561	.3408	0.00	-7.64	-7.504	.0719
21	9.0000	370.68	0.00	370.68	518.688	507.305	14.69	13.597	.3351	0.00	-8.25	-10.317	.0721

BLADE DATA

LOCAT ION	RADIUS SECTION	RADIUS ANGLE	FLOW ANGLE	DEVIATION ANGLE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-10.937	0.170	-54.444	0.000	0.3333	1053.00	1.0461	1155.07	29.333	915.410	1.000	0.000	1.0000	1.0000
2	-11.339	0.241	-53.744	0.000	0.3333	1101.00	1.0826	1173.03	27.330	919.201	1.000	0.000	1.0000	1.0000
3	-11.717	0.308	-70.130	0.000	0.3333	1119.00	1.0790	1190.91	27.454	922.295	1.000	0.000	1.0000	1.0000
4	-12.112	0.420	-70.113	0.000	0.3333	1138.00	1.0952	1208.87	28.353	925.182	1.000	0.000	1.0000	1.0000
5	-12.300	0.329	-70.334	0.000	0.3333	1157.00	1.1113	1226.84	28.632	928.300	1.000	0.000	1.0000	1.0000
6	-12.944	0.460	-70.134	0.000	0.3333	1176.00	1.1272	1243.43	29.437	932.251	1.000	0.000	1.0000	1.0000
7	-12.911	0.411	-70.113	0.000	0.3333	1189.53	1.1430	1260.00	29.935	935.638	1.000	0.000	1.0000	1.0000
8	-13.170	0.434	-70.122	0.000	0.3333	1208.00	1.1585	1277.57	30.566	939.065	1.000	0.000	1.0000	1.0000
9	-13.421	0.114	-71.322	0.000	1.0000	1227.00	1.1738	1294.35	31.136	942.336	1.000	0.000	1.0000	1.0000
10	-13.734	0.113	-71.269	0.000	0.3333	1241.53	1.1889	1310.92	31.732	946.053	1.000	0.000	1.0000	1.0000
11	-14.052	1.234	-71.172	0.000	0.3333	1259.07	1.2037	1327.29	32.383	949.939	1.000	0.000	1.0000	1.0000
12	-14.349	-0.759	-71.137	0.000	0.3333	1278.07	1.2183	1343.49	33.030	953.286	1.000	0.000	1.0000	1.0000
13	-14.689	-0.673	-72.113	0.000	0.3333	1293.00	1.2327	1359.59	33.638	957.010	1.000	0.000	1.0000	1.0000
14	-99.385	-2.915	-72.111	0.000	0.3333	1311.00	1.2469	1375.61	34.332	960.923	1.000	0.000	1.0000	1.0000
15	-99.421	-3.010	-72.111	0.000	0.3333	1329.00	1.2610	1391.42	35.114	964.736	1.000	0.000	1.0000	1.0000
16	-99.379	-3.135	-73.170	0.000	0.3333	1347.00	1.2750	1407.35	35.570	968.762	1.000	0.000	1.0000	1.0000
17	-9.363	-3.316	-73.173	0.000	0.3333	1366.00	1.2890	1423.40	36.001	972.210	1.000	0.000	1.0000	1.0000
18	-9.310	-7.049	-74.000	0.000	0.3333	1385.00	1.3031	1439.09	37.439	977.217	1.000	0.000	1.0000	1.0000
19	-7.238	-7.647	-74.000	0.000	0.3333	1404.00	1.3176	1454.37	38.379	981.570	1.000	0.000	1.0000	1.0000
20	-7.195	-8.041	-73.152	0.000	0.3333	1424.00	1.3326	1473.01	39.245	986.288	1.000	0.000	1.0000	1.0000
21	-6.919	-8.617	-73.211	0.000	0.3333	1444.00	1.3484	1491.84	40.233	991.066	1.000	0.000	1.0000	1.0000

STATION 5 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGENTIAL	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	9.8463	444.48	145.32	468.07	945.569	927.711	17.401	15.453	.4153	18.45	22.32	9.139	.0787
2	9.9337	449.31	146.13	472.91	945.915	927.256	17.323	15.402	.4193	17.89	20.07	7.456	.0785
3	9.0337	449.36	143.74	472.35	945.250	926.994	17.311	15.359	.4177	16.97	18.97	8.745	.0784
4	7.1432	452.13	135.01	472.29	945.138	926.900	17.299	15.329	.4195	16.98	17.23	11.608	.0782
5	7.2955	453.35	135.10	473.23	945.041	926.867	17.293	15.299	.4218	16.64	15.43	17.641	.0781
6	7.3494	453.94	134.96	473.84	944.995	926.862	17.293	15.282	.4243	16.38	13.59	36.448	.0781
7	7.4415	451.75	134.03	470.93	945.311	926.992	17.311	15.279	.4238	16.19	11.70	-60.328	.0780
8	7.5677	454.31	133.30	473.75	945.739	927.374	17.337	15.279	.4249	16.09	9.77	-34.084	.0780
9	7.6937	454.23	134.10	473.13	945.834	927.502	17.353	15.292	.4305	16.05	7.80	-19.370	.0781
10	7.7735	457.40	134.82	476.92	946.279	926.946	17.440	15.315	.4315	16.04	5.80	-12.847	.0781
11	7.8731	457.41	137.11	476.82	947.339	927.776	17.442	15.348	.4312	16.36	3.80	-10.141	.0782
12	7.9715	459.91	139.32	479.30	948.214	928.635	17.491	15.388	.4337	16.65	1.81	-9.609	.0783
13	8.0652	463.06	141.24	484.72	949.048	929.598	17.543	15.436	.4359	16.98	-.15	-9.701	.0784
14	8.1553	463.93	143.71	491.44	950.403	930.877	17.617	15.499	.4359	17.36	-2.06	-9.182	.0785
15	8.2523	467.34	145.74	497.15	951.800	932.199	17.693	15.562	.4373	17.74	-3.91	-8.941	.0786
16	8.3514	467.97	147.81	471.45	953.253	933.682	17.772	15.626	.4379	18.29	-5.66	-8.936	.0787
17	8.4713	467.91	151.34	453.34	955.783	936.012	17.882	15.716	.4393	19.07	-7.23	-8.997	.0787
18	8.5783	425.08	154.31	452.31	958.822	938.951	17.977	15.796	.3930	19.89	-8.55	-9.099	.0787
19	8.6923	411.91	155.54	449.13	961.919	941.969	18.086	15.882	.3833	20.34	-9.51	-9.272	.0788
20	8.8034	344.69	149.37	421.82	963.808	939.092	17.337	15.794	.3633	20.83	-9.95	-14.748	.0788
21	8.9346	303.76	149.52	394.62	963.495	940.462	17.175	15.800	.3479	21.07	-9.38	-1565.883	.0786

BLADE DATA

LOCATION	BLADE SECTION	BLADE LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-58.948	+.233	-62.139	9.186	.0207	1107.4	.9378	1057.05	27.218	620.185	1.184	.082	.9419	.9433
2	-59.445	+.235	-62.577	9.087	.0219	1123.6	.9546	1076.49	27.671	622.807	1.184	.082	.939	.9404
3	-59.984	+.237	-63.078	9.041	.0212	1139.8	.9716	1095.34	28.136	625.467	1.184	.082	.937	.9376
4	-60.513	+.240	-63.548	8.995	.0214	1155.6	.9880	1113.49	28.605	628.108	1.184	.082	.9347	.9347
5	-61.076	+.242	-64.035	8.961	.0215	1171.4	1.0049	1131.94	29.086	630.785	1.184	.082	.9316	.9316
6	-61.599	+.244	-64.492	8.948	.0216	1187.1	1.0213	1149.66	29.555	633.446	1.184	.082	.9284	.9284
7	-62.124	+.246	-64.930	8.936	.0217	1202.7	1.0377	1166.64	30.013	636.063	1.184	.082	.9252	.9252
8	-62.637	+.247	-65.347	8.924	.0225	1218.1	1.0468	1179.43	30.356	637.896	1.184	.082	.9219	.9219
9	-63.158	+.248	-65.817	8.967	.0231	1233.5	1.0597	1194.22	31.074	641.465	1.184	.082	.9186	.9186
10	-63.722	+.249	-66.302	9.017	.0244	1248.8	1.0716	1208.11	31.575	644.827	1.184	.082	.9152	.9152
11	-64.298	+.250	-66.777	9.066	.0241	1264.1	1.0834	1221.88	32.089	648.207	1.184	.082	.9118	.9118
12	-64.881	+.251	-67.244	9.117	.0249	1279.3	1.0951	1235.52	32.615	651.604	1.184	.082	.9083	.9083
13	-65.470	+.251	-67.703	9.169	.0257	1294.5	1.1068	1249.03	33.153	655.019	1.184	.082	.9048	.9048
14	-66.064	+.251	-68.154	9.222	.0265	1309.6	1.1184	1262.39	33.703	658.451	1.184	.082	.9013	.9013
15	-66.663	+.251	-68.596	9.276	.0273	1324.7	1.1299	1275.59	34.265	661.900	1.184	.082	.8977	.8977
16	-67.267	+.251	-69.029	9.331	.0281	1339.8	1.1414	1288.63	34.838	665.367	1.184	.082	.8941	.8941
17	-67.876	+.251	-69.454	9.387	.0289	1354.8	1.1528	1301.50	35.424	668.851	1.184	.082	.8904	.8904
18	-68.490	+.251	-69.870	9.444	.0297	1369.8	1.1642	1314.19	36.021	672.353	1.184	.082	.8867	.8867
19	-69.109	+.251	-70.278	9.502	.0305	1384.8	1.1755	1326.70	36.630	675.873	1.184	.082	.8829	.8829
20	-69.733	+.251	-70.678	9.561	.0313	1399.7	1.1868	1339.03	37.251	679.411	1.184	.082	.8791	.8791
21	-70.362	+.251	-71.069	9.621	.0321	1414.6	1.1980	1351.17	37.884	682.967	1.184	.082	.8752	.8752

STATION 5 INTEGRATED PERFORMANCE: PRESSURE RATIO = 1.185 ISEN. EFF.= .854 POLY. EFF.= .858 DELTA T ON T = .058

STATION 5 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.0784	486.89	342.49	595.28	553.184	553.795	21.712	18.119	.5152	35.12	24.47	68.453	.0888
2	7.1632	490.26	338.25	595.62	553.069	553.726	21.693	18.099	.5155	34.68	24.53	68.633	.0879
3	7.2471	493.52	334.08	595.96	552.955	553.657	21.673	18.077	.5161	34.24	24.59	68.813	.0871
4	7.3301	496.67	329.95	596.33	552.841	553.589	21.654	18.055	.5167	33.80	24.65	68.993	.0862
5	7.4122	499.72	325.86	596.78	552.728	553.520	21.634	18.033	.5174	33.36	24.71	69.173	.0853
6	7.4935	502.68	321.80	597.33	552.615	553.452	21.615	18.011	.5181	32.92	24.77	69.353	.0844
7	7.5741	505.54	317.78	598.00	552.503	553.384	21.595	17.989	.5188	32.48	24.83	69.533	.0835
8	7.6539	508.32	313.79	598.78	552.391	553.316	21.576	17.967	.5195	32.04	24.89	69.713	.0826
9	7.7340	511.01	309.83	599.69	552.280	553.248	21.557	17.945	.5202	31.60	24.95	69.893	.0817
10	7.8137	513.62	305.90	600.72	552.169	553.181	21.538	17.923	.5209	31.16	25.01	70.073	.0808
11	7.8937	516.15	302.00	601.88	552.059	553.114	21.519	17.901	.5216	30.72	25.07	70.253	.0799
12	7.9740	518.61	298.13	603.17	551.949	553.047	21.500	17.879	.5223	30.28	25.13	70.433	.0790
13	8.0548	520.99	294.29	604.59	551.840	552.980	21.481	17.857	.5230	29.84	25.19	70.613	.0781
14	8.1360	523.30	290.48	606.14	551.731	552.914	21.462	17.835	.5237	29.40	25.25	70.793	.0772
15	8.2178	525.54	286.70	607.83	551.623	552.848	21.443	17.813	.5244	28.96	25.31	70.973	.0763
16	8.3001	527.71	282.95	609.66	551.515	552.782	21.424	17.791	.5251	28.52	25.37	71.153	.0754
17	8.3830	529.80	279.23	611.62	551.408	552.716	21.405	17.769	.5258	28.08	25.43	71.333	.0745
18	8.4665	531.82	275.54	613.73	551.301	552.651	21.386	17.747	.5265	27.64	25.49	71.513	.0736
19	8.5507	533.77	271.88	615.98	551.195	552.586	21.367	17.725	.5272	27.20	25.55	71.693	.0727
20	8.6356	535.64	268.25	618.38	551.089	552.521	21.348	17.703	.5279	26.76	25.61	71.873	.0718
21	8.7213	537.44	264.65	620.93	550.984	552.457	21.329	17.681	.5286	26.32	25.67	72.053	.0709
22	8.8079	539.17	261.08	623.63	550.879	552.393	21.310	17.659	.5293	25.88	25.73	72.233	.0700
23	8.8954	540.83	257.54	626.48	550.774	552.329	21.291	17.637	.5300	25.44	25.79	72.413	.0691
24	8.9838	542.41	254.03	629.48	550.670	552.265	21.272	17.615	.5307	25.00	25.85	72.593	.0682
25	9.0732	543.92	250.55	632.63	550.566	552.202	21.253	17.593	.5314	24.56	25.91	72.773	.0673
26	9.1636	545.36	247.10	635.94	550.463	552.139	21.234	17.571	.5321	24.12	25.97	72.953	.0664
27	9.2550	546.73	243.68	639.40	550.360	552.076	21.215	17.549	.5328	23.68	26.03	73.133	.0655
28	9.3476	548.02	240.29	643.02	550.257	552.013	21.196	17.527	.5335	23.24	26.09	73.313	.0646
29	9.4413	549.24	236.93	646.80	550.155	551.951	21.177	17.505	.5342	22.80	26.15	73.493	.0637
30	9.5362	550.39	233.60	650.74	550.053	551.888	21.158	17.483	.5349	22.36	26.21	73.673	.0628
31	9.6324	551.46	230.30	654.85	549.951	551.826	21.139	17.461	.5356	21.92	26.27	73.853	.0619
32	9.7299	552.45	227.03	659.13	549.850	551.764	21.120	17.439	.5363	21.48	26.33	74.033	.0610
33	9.8287	553.37	223.79	663.58	549.749	551.703	21.101	17.417	.5370	21.04	26.39	74.213	.0601
34	9.9290	554.21	220.58	668.21	549.648	551.641	21.082	17.395	.5377	20.60	26.45	74.393	.0592
35	10.0307	554.97	217.40	673.03	549.548	551.580	21.063	17.373	.5384	20.16	26.51	74.573	.0583
36	10.1338	555.65	214.25	678.04	549.448	551.518	21.044	17.351	.5391	19.72	26.57	74.753	.0574
37	10.2385	556.25	211.13	683.25	549.348	551.457	21.025	17.329	.5398	19.28	26.63	74.933	.0565
38	10.3447	556.76	208.04	688.68	549.249	551.396	21.006	17.307	.5405	18.84	26.69	75.113	.0556
39	10.4526	557.19	204.98	694.33	549.150	551.335	20.987	17.285	.5412	18.40	26.75	75.293	.0547
40	10.5622	557.53	201.95	700.21	549.051	551.274	20.968	17.263	.5419	17.96	26.81	75.473	.0538
41	10.6736	557.78	198.95	706.34	548.952	551.213	20.949	17.241	.5426	17.52	26.87	75.653	.0529
42	10.7869	557.94	195.98	712.72	548.853	551.152	20.930	17.219	.5433	17.08	26.93	75.833	.0520
43	10.9021	558.01	193.04	719.37	548.755	551.091	20.911	17.197	.5440	16.64	26.99	76.013	.0511
44	11.0194	557.98	190.13	726.30	548.657	551.031	20.892	17.175	.5447	16.20	27.05	76.193	.0502
45	11.1388	557.86	187.25	733.52	548.559	550.970	20.873	17.153	.5454	15.76	27.11	76.373	.0493
46	11.2604	557.64	184.40	741.04	548.461	550.910	20.854	17.131	.5461	15.32	27.17	76.553	.0484
47	11.3844	557.32	181.58	748.88	548.363	550.849	20.835	17.109	.5468	14.88	27.23	76.733	.0475
48	11.5107	556.90	178.79	757.04	548.266	550.789	20.816	17.087	.5475	14.44	27.29	76.913	.0466
49	11.6396	556.38	176.03	765.54	548.169	550.729	20.797	17.065	.5482	14.00	27.35	77.093	.0457
50	11.7711	555.76	173.30	774.39	548.072	550.669	20.778	17.043	.5489	13.56	27.41	77.273	.0448
51	11.9054	555.04	170.61	783.60	547.975	550.609	20.759	17.021	.5496	13.12	27.47	77.453	.0439
52	12.0427	554.22	167.95	793.19	547.879	550.549	20.740	16.999	.5503	12.68	27.53	77.633	.0430
53	12.1830	553.30	165.32	803.18	547.783	550.489	20.721	16.977	.5510	12.24	27.59	77.813	.0421
54	12.3266	552.28	162.73	813.58	547.687	550.429	20.702	16.955	.5517	11.80	27.65	77.993	.0412
55	12.4735	551.16	160.17	824.41	547.592	550.370	20.683	16.933	.5524	11.36	27.71	78.173	.0403
56	12.6239	549.94	157.64	835.70	547.497	550.310	20.664	16.911	.5531	10.92	27.77	78.353	.0394
57	12.7779	548.62	155.15	847.46	547.402	550.251	20.645	16.889	.5538	10.48	27.83	78.533	.0385
58	12.9357	547.20	152.70	859.72	547.307	550.191	20.626	16.867	.5545	10.04	27.89	78.713	.0376
59	13.0975	545.68	150.29	872.50	547.213	550.132	20.607	16.845	.5552	9.60	27.95	78.893	.0367
60	13.2635	544.06	147.92	885.82	547.119	550.073	20.588	16.823	.5559	9.16	28.01	79.073	.0358
61	13.4339	542.34	145.60	899.72	547.025	550.014	20.569	16.801	.5566	8.72	28.07	79.253	.0349
62	13.6089	540.52	143.32	914.22	546.931	549.955	20.550	16.779	.5573	8.28	28.13	79.433	.0340
63	13.7888	538.60	141.09	929.36	546.838	549.896	20.531	16.757	.5580	7.84	28.19	79.613	.0331
64	13.9739	536.58	138.91	945.17	546.745	549.837	20.512	16.735	.5587	7.40	28.25	79.793	.0322
65	14.1646	534.46	136.78	961.69	546.652	549.778	20.493	16.713	.5594	6.96	28.31	79.973	.0313
66	14.3613	532.24	134.71	978.97	546.560	549.720	20.474	16.691	.5601	6.52	28.37	80.153	.0304
67	14.5645	529.92	132.70	997.05	546.468	549.661	20.455	16.669	.5608	6.08	28.43	80.333	.0295
68	14.7747	527.50	130.75	1015.99	546.376	549.603	20.436	16.647	.5615	5.64	28.49	80.513	.0286
69	14.9925	524.98	128.87	1035.85	546.285	549.545	20.417	16.625	.5622	5.20	28.55	80.693	.0277
70	15.2186	522.36	127.06	1056.70	546.194	549.487	20.398	16.603	.5629	4.76	28.61	80.873	.0268
71	15.4538	519.64	125.32	1078.62	546.103	549.429	20.379	16.581	.5636	4.32	28.67	81.053	.0259
72	15.6990	516.82	123.66	1101.70	546.013	549.371	20.360	16.559	.5643	3.88	28.73	81.233	.0250
73	15.9552	513.90	122.09	1126.04	545.923	549.313	20.341	16.537	.5650	3.44	28.79	81.413	.0241
74	16.2236	510.88	120.61	1151.76	545.833	549.256	20.322	16.515	.5657	3.00	28.85	81.593	.0232
75	16.5057	507.76	119.24	1179.02	545.744	549.198	20.303	16.493	.5664	2.56	28.91	81.773	.0223
76	16.8032	504.54	117.98	1208.04	545.655	549.141	20.284	16.471	.5671	2.12	28.97	81.953	.0214
77	17.1183	501.22	116.85	1239.06	545.566	549.084	20.265	16.449	.5678	1.68	29.03	82.133	.0205
78	17.4538	497.80	115.87	1272.40	545.478	549.027	20.246	16.427	.5685	1.24	29.09	82.313	.0196
79	17.8134	494.28	115.06	1308.46	545.390	548.970	20.227	16.405	.5692	.80	29.15	82.493	.0187
80	18.2021	490.66	114.46	1347.78	545.303	548.913	20.208	16.383	.5699	.36	29.21	82.673	.0178
81	18.6268	486.94	114.09	1391.04	545.216	548.856	20.189	16.361	.5706	-.08	29.27	82.853	.0169
82	19.0973	483.12	114.00	1439.19	545.130	548.799	20.170	16.339	.5713	-.52	29.33	83.033	.0160
83	19.6276	479.20	114.25	1493.52	545.044	548.743	20.151	16.317	.5720	-.96	29.39	83.213	.0151
84	20.2384	475.18	114.94	1555.92	544.958	548.686	20.132	16.295	.5727	-1.40	29.45	83.393	.0142
85	20.9610	471.06	116.26	1628.98	544.873	548.630	20.113	16.273	.5734	-1.84	29.51	83.573	.0133
86	21.8579	466.84	118.49	1716.80	544.788	548.573	20.094	16.251	.5741	-2.28	29.57	83.753	.0124
87	23.0000	462.52	122.10	1826.00	544.703	548.517	20.075	16.229	.5748	-2.72	29.63	83.933	.0115
88	24.5999	458.10	128.01	1968.00	544.619	548.461	20.056	16.207	.5755	-3.16	29.69	84.113	.0106
89	27.1000	453.58	137.80	2168.00	544.535	548.405	20.037	16.185	.5762	-3.60	29.75	84.293	.0097
90	31.0000	448.96	154.00	2480.00	544.451	548.349	20.018	16.163	.5769	-4.04	29.81	84.473	.0088
91	37.0000	444.24	180.00	2960.00	544.367	548.293	19.999	16.141	.5776	-4.48	29.87	84.653	.0079

BLADE DATA

LOCATION	BLADE SECTION	ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-62.505	2.438	-60.479	2.374	.0428	1136.4	.3059	931.28	27.778	625.471	1.477	.124	.9483	.9511
2	-53.085	2.298	-53.173	2.754	.0434	1150.0	.3207	948.29	28.152	628.040	1.476	.124	.9465	.9494
3	-53.532	1.917	-54.226	3.546	.0427	1153.4	.8354	965.14	28.551	630.511	1.475	.124	.9448	.9478
4	-54.139	1.271	-55.540	3.407	.0429	1170.3	.8499	981.89	28.946	633.183	1.474	.124	.9433	.9463
5	-54.804	.432	-57.132	3.228	.0431	1190.0	.8645	998.56	29.345	635.757	1.473	.124	.9418	.9449
6	-55.029	-.070	-58.030	3.064	.0432	1203.0	.8791	1015.23	29.750	638.333	1.472	.124	.9404	.9436
7	-55.406	-.232	-59.327	2.920	.0437	1215.0	.8933	1031.52	30.151	640.915	1.471	.124	.9389	.9417
8	-55.795	-.320	-60.994	2.908	.0450	1228.3	.9071	1047.30	30.546	643.507	1.470	.124	.9354	.9388
9	-56.031	-.239	-61.321	2.740	.0452	1241.5	.9208	1063.01	30.946	646.114	1.468	.124	.9323	.9359
10	-56.330	-.222	-61.120	2.730	.0492	1254.4	.9335	1077.73	31.320	648.744	1.466	.124	.9296	.9334
11	-56.637	-.334	-61.441	2.734	.0549	1267.2	.9426	1085.91	31.573	651.416	1.462	.124	.9189	.9256
12	-56.978	.139	-61.924	2.948	.0682	1280.2	.9519	1100.32	31.838	654.142	1.456	.126	.8954	.9080
13	-57.270	.452	-61.491	3.131	.0775	1293.4	.9610	1111.52	32.039	656.348	1.449	.127	.8788	.8950
14	-57.573	.873	-61.116	3.333	.0849	1306.3	.9693	1122.03	32.344	659.826	1.441	.128	.8593	.8869
15	-57.999	1.350	-60.478	3.979	.0953	1320.7	.9777	1132.89	32.603	662.820	1.431	.128	.8408	.8487
16	-58.202	1.847	-60.400	6.538	.1143	1335.1	.9831	1140.80	32.772	665.952	1.419	.129	.8136	.8226
17	-58.684	2.509	-62.928	7.245	.1360	1350.1	.9833	1143.86	32.760	669.272	1.405	.132	.7741	.7847
18	-59.185	3.304	-67.343	9.161	.1917	1366.1	.9835	1147.05	32.754	672.646	1.390	.134	.7348	.7468
19	-59.787	4.134	-69.114	9.327	.1726	1383.3	.9920	1158.72	33.111	676.736	1.370	.133	.7006	.7212
20	-60.536	4.941	-71.318	10.792	.1850	1402.1	1.0006	1170.78	33.487	681.050	1.348	.131	.6798	.6922
21	-61.540	4.918	-74.428	12.365	.2051	1423.6	1.0057	1180.04	33.733	686.064	1.321	.130	.6347	.6488

STATION 5 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.436 ISEN. EFF.= .855 POLY. EFF.= .862 DELTA T ON T = .127

STATION 7 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES AXIAL	VELOCITIES TANGENT	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.2620	554.36	530.24	767.44	620.935	569.440	29.822	19.792	.6738	42.28	24.87	59.518	.0934
2	7.3315	590.29	523.40	788.90	620.595	599.163	29.741	19.737	.6736	41.57	22.69	-93.322	.0932
3	7.3994	594.51	517.74	788.00	620.429	599.044	29.691	19.703	.6733	41.04	20.52	-31.938	.0931
4	7.4674	598.49	512.87	788.17	620.383	599.053	29.653	19.685	.6730	40.59	18.37	-20.092	.0930
5	7.5342	601.94	508.57	787.71	620.433	599.164	29.642	19.681	.6725	40.21	16.25	-16.727	.0930
6	7.6002	604.89	504.93	787.25	620.574	599.363	29.640	19.688	.6720	39.89	14.17	-14.634	.0930
7	7.6655	606.09	502.03	787.04	620.897	599.716	29.659	19.706	.6715	39.64	12.13	-13.541	.0930
8	7.7323	607.27	500.33	786.68	621.427	600.268	29.687	19.736	.6711	39.49	10.14	-13.031	.0930
9	7.7990	607.59	499.01	786.47	622.012	600.987	29.723	19.776	.6704	39.38	8.28	-12.939	.0931
10	7.8639	606.08	498.97	785.21	622.876	601.898	29.753	19.827	.6690	39.44	6.29	-13.168	.0932
11	7.9305	600.53	503.79	783.81	624.792	603.999	29.780	19.887	.6664	39.93	4.42	-13.716	.0933
12	7.9933	593.11	507.99	780.92	626.564	606.188	29.799	19.958	.6627	40.58	2.60	-14.688	.0934
13	8.0674	583.98	512.22	776.49	628.398	608.597	29.783	20.038	.6575	41.27	.80	-15.935	.0934
14	8.1394	570.97	516.80	770.12	630.350	611.366	29.729	20.129	.6506	42.15	-.98	-17.788	.0935
15	8.2117	555.64	521.13	761.13	632.887	614.246	29.674	20.231	.6414	43.14	-2.74	-20.469	.0936
16	8.2852	533.24	527.09	749.78	634.629	616.240	29.559	20.343	.6297	44.07	-4.46	-24.334	.0937
17	8.3698	500.18	541.09	736.96	636.981	618.338	29.430	20.468	.6159	47.06	-6.07	-30.715	.0938
18	8.4597	459.63	554.29	720.06	643.129	624.329	29.243	20.605	.5957	50.35	-7.44	-45.889	.0940
19	8.5578	418.38	551.07	691.97	643.842	624.799	28.927	20.751	.5735	52.78	-8.55	-108.885	.0943
20	8.6578	385.80	547.83	658.86	644.531	625.247	28.547	20.885	.5494	54.22	-9.38	-456.827	.0945
21	8.8819	285.70	549.23	619.14	646.998	615.374	25.133	21.072	.5085	62.52	-9.37	**********	.0921

BLADE DATA

LOCATION	BLADE SECTION	ANGLES LEAN	R-L FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-.0.428	1.512	-47.640	0.353	.0634	1162.6	.7372	903.73	28.334	631.069	1.825	.137	.9491	.9533
2	-.1.060	1.234	-47.911	0.025	.0640	1177.0	.7518	880.65	28.706	632.227	1.828	.136	.9472	.9516
3	-.1.715	.933	-48.211	0.395	.0654	1198.0	.7654	898.08	29.020	635.969	1.816	.136	.9447	.9492
4	-.2.328	.176	-48.335	0.907	.0649	1198.0	.7773	910.33	29.337	637.302	1.816	.136	.9437	.9482
5	-.2.924	-.628	-48.335	0.441	.0649	1209.5	.7866	923.69	29.636	639.332	1.816	.136	.9427	.9472
6	-.3.498	-1.133	-48.320	0.322	.0643	1220.2	.7932	930.30	29.973	641.766	1.815	.135	.9418	.9463
7	-.4.054	-1.258	-50.248	0.214	.0662	1230.3	.7988	947.81	30.295	643.904	1.815	.135	.9408	.9453
8	-.4.593	-1.090	-50.962	0.129	.0675	1241.3	.8171	954.00	30.733	646.056	1.816	.136	.9396	.9441
9	-.5.108	-.734	-51.332	0.060	.0643	1251.9	.8249	967.05	30.999	648.225	1.818	.136	.9388	.9433
10	-.5.604	-.277	-51.229	0.034	.0730	1262.5	.8306	975.16	31.299	650.418	1.821	.137	.9377	.9422
11	-.6.084	.302	-52.123	0.153	.0694	1273.2	.8298	972.06	31.224	652.543	1.820	.137	.9374	.9419
12	-.6.254	1.051	-52.510	0.329	.1023	1284.0	.8298	976.74	31.306	654.344	1.820	.137	.9368	.9413
13	-.6.530	1.913	-53.239	0.603	.1157	1295.1	.8259	970.48	31.372	656.402	1.822	.138	.9364	.9409
14	-.7.035	2.357	-54.118	0.033	.1328	1306.5	.8233	974.51	31.398	658.746	1.820	.138	.9354	.9399
15	-.7.588	2.125	-55.135	0.949	.1442	1318.3	.8195	972.48	31.437	660.269	1.819	.138	.9347	.9392
16	-.7.932	3.404	-55.424	0.497	.1713	1330.4	.8099	964.34	31.307	660.369	1.818	.138	.9341	.9386
17	-.8.481	4.756	-58.338	3.607	.2033	1343.7	.7904	942.68	30.934	657.853	1.798	.136	.9356	.9401
18	-.8.949	6.141	-60.284	11.285	.2422	1358.0	.7698	925.82	30.632	654.029	1.786	.134	.9391	.9436
19	-.9.334	8.415	-63.737	13.443	.2556	1373.7	.7649	922.99	30.734	654.372	1.784	.134	.9377	.9422
20	-.9.632	10.330	-67.227	17.227	.2773	1391.5	.7599	920.30	30.633	653.523	1.778	.134	.9353	.9398
21	-.9.851	10.540	-71.595	20.337	.3081	1413.0	.7473	903.79	30.508	653.591	1.710	.247	.6678	.6917

STATION 7 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.403 ISEN. EFF.= .857 POLY. EFF.= .868 DELTA T ON T = .214

STATION 8 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES PERIG	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.0432	760.98	369.70	1028.80	631.074	563.667	31.401	18.328	.8826	40.61	19.79	-2.228	.0903
2	7.4973	769.70	353.73	1020.25	631.935	565.979	31.503	19.174	.8735	41.03	17.67	-2.385	.0911
3	7.9400	753.14	363.33	1012.43	632.838	568.208	31.611	19.412	.8651	41.48	15.65	-2.565	.0918
4	8.3930	744.41	353.32	1005.11	633.775	570.505	31.722	19.660	.8572	41.80	13.78	-2.771	.0926
5	8.0434	740.22	364.61	995.19	634.591	572.277	31.821	19.852	.8434	42.13	11.81	-3.116	.0933
6	8.6339	731.49	363.35	991.08	635.305	574.119	31.917	20.052	.8430	42.43	10.03	-3.468	.0939
7	8.7431	722.35	373.02	985.44	636.195	575.934	32.013	20.239	.8359	42.73	8.29	-3.866	.0946
8	8.7974	717.09	373.97	981.34	637.293	577.807	32.113	20.417	.8319	43.06	6.61	-4.355	.0953
9	8.8432	710.67	371.27	977.53	638.489	579.610	32.237	20.537	.8271	43.37	4.99	-4.956	.0958
10	8.9013	703.19	374.38	974.23	639.098	581.726	32.352	20.750	.8223	43.68	3.41	-5.711	.0964
11	8.9536	693.15	383.54	970.74	639.979	583.222	32.421	20.913	.8174	44.77	1.88	-6.704	.0961
12	9.0103	682.13	392.93	967.43	640.958	584.724	32.493	21.066	.8123	45.75	.40	-8.093	.0963
13	9.0579	669.02	402.03	963.73	642.060	586.442	32.573	21.223	.8059	46.81	-1.04	-10.229	.0966
14	9.1270	660.31	412.84	959.38	643.301	588.576	32.680	21.398	.7995	48.05	-2.65	-13.228	.0963
15	9.1919	649.34	423.40	956.32	644.704	590.797	32.801	21.560	.7934	49.34	-4.20	-17.501	.0964
16	9.2537	637.12	434.61	953.48	646.275	593.120	32.934	21.706	.7873	50.77	-5.80	-23.488	.0965
17	9.3248	626.00	447.12	950.12	647.944	595.575	33.084	21.857	.7813	52.20	-7.50	-32.173	.0967
18	9.4047	614.44	460.37	948.08	649.815	598.386	33.264	22.040	.7747	53.68	-9.32	-45.047	.0969
19	9.4950	602.93	474.73	948.08	651.960	601.560	33.470	22.318	.7670	55.24	-11.36	-64.113	.0972
20	9.6017	591.34	490.32	950.77	654.441	605.293	33.707	22.675	.7585	56.94	-13.68	-93.113	.0976
21	9.7339	580.00	507.53	956.75	657.344	609.756	33.981	23.128	.7494	58.82	-16.37	-138.000	.0981

BLADE DATA

LOCATION	BLADE FLOW AREA	BLADE CHORD	INCIDENCE ANGLE	DEVIATION ANGLE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	[illegible]	[illegible]	[illegible]	[illegible]	.0827	1199.9	.5078	941.71	29.071	536.824	2.137	.239	.9465	.9519
2	[illegible]	[illegible]	[illegible]	[illegible]	.0854	1293.7	.7020	1037.0	29.277	538.467	2.144	.237	.9448	.9505
3	[illegible]	[illegible]	[illegible]	[illegible]	.0843	1211.3	.7384	1044.1	29.434	540.029	2.152	.239	.9432	.9489
4	[illegible]	[illegible]	[illegible]	[illegible]	.0811	1219.4	.7425	1044.2	29.707	541.212	2.159	.240	.9416	.9476
5	[illegible]	[illegible]	[illegible]	[illegible]	.0802	1219.4	.7425	1044.2	29.707	541.212	2.159	.240	.9416	.9476
6	[illegible]	[illegible]	[illegible]	[illegible]	.0853	1227.4	.7491	1050.8	29.838	543.218	2.166	.242	.9402	.9463
7	[illegible]	[illegible]	[illegible]	[illegible]	.0854	1235.4	.7554	1057.1	30.130	544.351	2.172	.243	.9387	.9450
8	[illegible]	[illegible]	[illegible]	[illegible]	.0872	1243.3	.7617	1063.4	30.331	545.312	2.178	.245	.9366	.9432
9	[illegible]	[illegible]	[illegible]	[illegible]	.0903	1251.3	.7680	1069.6	30.540	546.204	2.185	.246	.9335	.9411
10	[illegible]	[illegible]	[illegible]	[illegible]	.0924	1259.1	.7744	922.36	30.743	549.329	2.194	.270	.9305	.9377
11	[illegible]	[illegible]	[illegible]	[illegible]	.1179	1277.2	.7869	933.51	30.817	553.498	2.200	.278	.9287	.9325
12	[illegible]	[illegible]	[illegible]	[illegible]	.1353	1290.1	.7966	943.04	30.713	555.374	2.211	.284	.8931	.9043
13	[illegible]	[illegible]	[illegible]	[illegible]	.1339	1299.2	.7961	943.71	30.583	557.320	2.215	.290	.8767	.8896
14	[illegible]	[illegible]	[illegible]	[illegible]	.1327	1311.7	.8129	957.73	30.334	559.352	2.219	.296	.8582	.8750
15	[illegible]	[illegible]	[illegible]	[illegible]	.1329	1314.7	.8129	957.73	30.212	561.485	2.212	.302	.8398	.8565
16	[illegible]	[illegible]	[illegible]	[illegible]	.1373	1325.0	.8193	963.89	29.930	563.757	2.202	.310	.8131	.8326
17	[illegible]	[illegible]	[illegible]	[illegible]	.2737	1336.[illegible]	.8472	787.77	28.933	566.252	2.190	.323	.7738	.7978
18	[illegible]	[illegible]	[illegible]	[illegible]	.2293	1349.3	.8006	744.[illegible]	24.178	569.095	2.173	.338	.7352	.7621
19	[illegible]	[illegible]	[illegible]	[illegible]	.3440	1353.3	.7730	718.97	23.991	572.309	2.168	.345	.7135	.7424
20	[illegible]	[illegible]	[illegible]	[illegible]	.5692	1330.9	.7533	689.90	23.784	576.203	2.[illegible]9	.350	.6901	.7289
21	[illegible]	[illegible]	[illegible]	[illegible]	.4121	1402.5	.8043	934.87	27.272	581.137	2.141	.368	.6582	.6922

STATION 3 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.131 ISEN. EFF.= .847 POLY. EFF.= .865 DELTA T ON T = .234

STATION 4 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITY TRIB	VELOCITY TANGENTIAL	VELOCITY TOTAL	TEMPERATURE TOTAL	TEMPERATURE RATIO	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.2611	310.17	933.24	1240.14	730.[illegible]83	.[illegible]74	+1.831	20.579	1.0503	48.82	10.93	-2.[illegible]94	.0956
2	7.2611	303.41	929.[illegible]	1[illegible]0.[illegible]	730.[illegible]24	.[illegible]134	+1.[illegible]1	20.849	1.0340	49.15	9.74	-3.[illegible]74	.0965
3	7.2611	295.04	924.[illegible]	1[illegible]8.[illegible]	730.[illegible]02	.[illegible]213	+1.[illegible]1	21.072	1.0273	49.33	8.67	-4.[illegible]32	.0971
4	7.2611	286.14	921.[illegible]	1[illegible]6.[illegible]	730.[illegible]47	.[illegible]280	+1.[illegible]2	21.256	1.0213	49.53	8.01	-6.[illegible]17	.0977
5	7.2611	278.36	918.[illegible]	1[illegible]5.[illegible]	730.[illegible]28	.[illegible]330	+1.[illegible]2	21.405	1.0115	49.60	7.14	-11.427	.0982
6	7.2611	272.[illegible]	916.22	1[illegible]4.[illegible]	730.[illegible]06	.[illegible]364	+0.[illegible]1	21.527	1.00[illegible]	49.00	6.28	-23.[illegible]31	.0985
7	7.2611	272.[illegible]	915.[illegible]	1[illegible]3.[illegible]	729.[illegible]93	.[illegible]385	+0.[illegible]1	21.622	.9997	49.[illegible]8	5.41	79.[illegible]76	.0987
8	7.2611	273.[illegible]	914.[illegible]	1[illegible]3.[illegible]	729.[illegible]44	.[illegible]393	+0.[illegible]1	21.695	.9941	49.[illegible]3	4.24	14.[illegible]25	.0989
9	7.2611	274.10	913.[illegible]	1[illegible]3.[illegible]	729.[illegible]33	.[illegible]389	+0.[illegible]1	21.746	.9933	49.47	3.18	10.[illegible]95	.0989
10	7.2611	275.[illegible]	913.[illegible]	1[illegible]3.[illegible]	729.[illegible]25	.[illegible]382	+0.[illegible]1	21.779	.9944	49.51	2.61	7.956	.0989
11	7.2611	276.[illegible]	913.[illegible]	1[illegible]3.[illegible]	729.[illegible]24	.[illegible]382	+0.[illegible]1	21.790	.9951	50.[illegible]5	1.94	5.411	.0988
12	7.2611	277.[illegible]	913.[illegible]	1[illegible]3.[illegible]	729.[illegible]24	.[illegible]382	+0.[illegible]1	21.803	.9951	50.[illegible]5	1.07	5.[illegible]87	.0988
13	7.2611	278.[illegible]	913.[illegible]	1[illegible]3.[illegible]	729.[illegible]24	.[illegible]382	+0.[illegible]1	21.801	.9952	51.[illegible]9	.20	4.[illegible]87	.0974
14	7.2611	279.[illegible]	913.[illegible]	1[illegible]3.[illegible]	729.[illegible]24	.[illegible]382	+0.[illegible]1	21.795	.9953	52.[illegible]8	-.09	4.677	.0968
15	7.2611	280.[illegible]	913.[illegible]	1[illegible]3.[illegible]	729.[illegible]24	.[illegible]382	+0.[illegible]1	21.787	.9953	53.36	-1.00	4.[illegible]85	.0962
16	7.2611	281.[illegible]	913.[illegible]	1[illegible]3.[illegible]	729.[illegible]24	.[illegible]382	+0.[illegible]1	21.784	.9947	54.[illegible]1	-2.[illegible]6	3.[illegible]74	.0956
17	7.2611	282.[illegible]	913.[illegible]	1[illegible]3.[illegible]	729.[illegible]24	.[illegible]382	+0.[illegible]1	21.802	.9932	55.49	-3.61	3.[illegible]63	.0950
18	7.2611	283.[illegible]	913.[illegible]	1[illegible]3.[illegible]	729.[illegible]24	.[illegible]382	+0.[illegible]1	21.852	.9904	56.[illegible]8	-4.73	3.[illegible]57	.0944
19	7.2611	284.[illegible]	913.[illegible]	1[illegible]3.[illegible]	729.[illegible]24	.[illegible]382	+0.[illegible]1	21.973	.9858	58.[illegible]1	-6.02	4.[illegible]10	.0934
20	7.2611	285.[illegible]	913.[illegible]	1[illegible]3.[illegible]	729.[illegible]24	.[illegible]382	+0.[illegible]1	22.[illegible]41	.9813	60.[illegible]9	-7.61	3.[illegible]27	.0919
21	7.2611	286.[illegible]	913.[illegible]	1[illegible]3.[illegible]	729.[illegible]24	.[illegible]382	+0.[illegible]1	22.[illegible]46	.9734	63.[illegible]2	-8.95	20.[illegible]49	.0907

BLADE DATA

LOCATION	BLADE SECTION	ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-12.677	10.931	-10.431	9.104	.1049	1212.1	.7306	892.46	23.342	540.134	2.812	.358	.9588	.9567
2	-13.353	10.931	-13.704	9.411	.1035	1217.9	.7213	877.78	23.474	541.410	2.808	.358	.9588	.9567
3	-14.041	10.931	-20.303	9.742	.1035	1223.9	.7149	867.22	23.613	542.225	2.803	.358	.9588	.9567
4	-14.732	10.930	-21.329	9.797	.1032	1230.1	.7109	860.33	23.734	542.773	2.798	.358	.9588	.9567
5	-15.507	10.934	-22.300	9.853	.1033	1236.4	.7099	862.73	23.920	545.058	2.794	.360	.9588	.9567
6	-16.291	10.937	-23.313	9.907	.1035	1242.9	.7087	865.35	24.034	545.377	2.789	.360	.9588	.9567
7	-16.957	10.909	-24.333	9.959	.1035	1249.5	.7093	866.94	24.234	545.731	2.783	.361	.9588	.9567
8	-17.666	10.912	-25.733	10.047	.1122	1256.2	.7101	868.47	24.357	545.121	2.774	.361	.9588	.9567
9	-18.329	10.774	-27.433	10.105	.1171	1263.1	.7122	869.52	24.485	545.340	2.765	.361	.9588	.9567
10	-18.912	10.249	-29.200	10.208	.1249	1270.1	.7123	870.35	24.535	545.015	2.754	.362	.9588	.9567
11	-19.441	9.751	-30.811	10.308	.1472	1277.4	.7015	861.19	24.253	543.337	2.733	.365	.9587	.9567
12	-19.927	9.119	-27.431	10.324	.1704	1284.9	.6912	852.41	24.337	545.131	2.712	.368	.9585	.9567
13	-20.371	8.779	-29.192	10.722	.1943	1292.3	.6798	841.57	24.330	545.903	2.690	.373	.9582	.9567
14	-20.772	8.591	-29.713	10.943	.2213	1301.0	.6653	824.41	24.318	545.364	2.669	.379	.9576	.9567
15	-21.134	8.643	-29.414	10.214	.2470	1309.7	.6506	808.11	24.349	545.429	2.646	.384	.9569	.9567
16	-21.450	13.619	-30.133	10.232	.2853	1318.9	.6221	777.23	24.234	545.119	2.623	.394	.9555	.9567
17	-21.719	12.031	-30.203	10.093	.3445	1329.0	.5883	734.64	24.031	544.233	2.599	.412	.9534	.9567
18	-21.900	11.177	-32.144	10.243	.4019	1340.3	.5478	683.43	23.837	543.243	2.577	.432	.9511	.9567
19	-21.944	11.035	-34.411	12.487	.4307	1354.4	.5130	639.43	23.643	542.229	2.557	.443	.9488	.9567
20	-21.719	13.847	-33.372	10.555	.4620	1370.1	.4153	520.77	24.434	543.757	2.539	.436	.9650	.9786
21	-21.371	13.139	-31.337	10.469	.5152	1391.9	.3153	394.04	24.043	548.701	2.510	.477	.9267	.9786

STATION 9 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.692 ISEN. EFF.= .841 POLY. EFF.= .861 DELTA T ON T = .387

STATION 10 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES AXIAL	VELOCITIES TANGT	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES MERIDL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6746	753.74	430.50	1113.74	709.433	537.043	41.312	21.545	1.0073	50.92	7.62	3.348	.0021
2	7.6140	739.54	425.33	1139.22	705.524	537.781	41.278	21.933	1.0042	50.77	7.79	4.873	.0022
3	7.5541	727.53	421.24	1132.70	715.562	586.317	41.111	21.726	1.0047	50.57	7.67	10.551	.0022
4	7.4943	720.24	415.53	1130.93	709.537	586.720	41.122	21.739	.9993	50.33	7.46	111.078	.0022
5	7.7343	763.43	411.93	1133.34	709.028	589.045	41.055	21.743	.9962	50.06	7.24	111.261	.0022
6	7.7735	760.35	407.24	1136.02	709.059	539.332	40.941	21.742	.9903	49.79	6.98	111.119	.0022
7	7.8134	759.55	402.74	1139.24	709.043	589.720	41.018	21.740	.9921	49.55	6.69	100.733	.0022
8	7.8522	770.28	398.23	1143.22	709.744	590.303	41.076	21.740	.9923	49.38	6.39	100.153	.0022
9	7.8931	771.49	393.85	1147.75	709.793	590.833	40.833	21.740	.9949	49.20	6.08	9.981	.0022
10	7.9393	763.04	391.29	1177.50	709.225	591.961	40.460	21.741	.9893	49.19	5.75	8.787	.0022
11	7.9821	759.33	389.59	1172.42	709.134	594.859	41.150	21.742	.9743	49.81	5.41	7.333	.0022
12	8.0228	743.23	388.35	1167.11	710.071	597.843	39.844	21.744	.9724	50.45	5.05	7.228	.0022
13	8.0703	728.06	385.33	1161.80	712.316	601.123	39.543	21.747	.9654	51.20	4.65	6.547	.0022
14	8.1177	709.49	383.52	1155.04	715.174	604.336	39.217	21.753	.9531	52.17	4.20	5.918	.0022
15	8.1655	693.24	381.32	1151.04	718.099	608.996	38.992	21.763	.9503	53.20	3.66	5.348	.0022
16	8.2179	680.31	379.31	1148.41	721.308	615.118	39.022	21.782	.9418	55.08	3.06	4.828	.0022
17	8.2762	672.15	377.34	1148.33	724.945	622.039	39.138	21.825	.9317	58.62	2.24	4.353	.0022
18	8.3333	673.76	1014.93	1137.21	742.686	634.351	37.733	21.911	.9197	63.14	1.06	4.038	.0022
19	8.4172	651.02	1031.26	1129.02	745.412	643.536	37.577	22.054	.9073	65.91	-.62	3.882	.0022
20	8.5033	385.43	1050.37	1116.39	739.139	652.303	37.373	22.247	.8929	69.85	-2.95	3.598	.0022
21	8.6349	211.27	1031.39	1102.23	739.990	656.256	37.841	22.929	.8706	78.95	-6.18	3.853	.0089

STATION 11 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANG	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.0133	425.30	92[illegible]	1[illegible]	7[illegible]	578.774	[illegible]	20.534	1.0497	48.25	9.06	26.367	.0957
2	7.0675	448.99	413.42	1721.65	7[illegible]	576.408	41.203	20.268	1.0617	47.28	8.88	33.913	.0965
3	7.7141	464.19	414.05	1241.31	705.582	574.396	41.140	19.975	1.0713	46.44	8.61	280.957	.0935
4	7.7531	464.46	393.45	1238.38	70[illegible]	572.953	41.12[illegible]	19.764	1.0733	45.78	8.31	-136.489	.0927
5	7.8029	192.94	30[illegible]	1237.27	70[illegible]	572.105	[illegible]	19.626	1.0837	45.27	8.00	-59.275	.0922
6	7.8448	402.90	693.24	1236.34	7[illegible]	571.760	+0.993	19.551	1.0859	44.89	7.70	-41.514	.0919
7	7.8822	399.62	394.72	1235.76	70[illegible]	571.318	+0.899	19.523	1.0948	44.62	7.44	-33.125	.0918
8	7.9277	397.02	395.11	1235.35	70[illegible]	572.560	+0.707	19.532	1.0913	44.47	7.22	-33.839	.0917
9	7.9699	400.85	395.20	1235.04	7[illegible]	573.424	+0.633	19.567	1.0777	44.36	7.06	-36.224	.0917
10	8.0032	401.78	393.48	1235.03	7[illegible]	574.903	+0.467	19.620	1.0721	44.43	6.95	-43.330	.0918
11	8.0307	397.14	397.30	1235.14	70[illegible]	576.262	+0.100	19.685	1.0632	45.03	6.87	-61.188	.0915
12	8.0329	372.58	939.64	1[illegible]	7[illegible]	581.741	39.944	19.757	1.0535	45.56	6.81	-114.876	.0913
13	8.1391	353.17	998.24	1[illegible]	7[illegible]	589.556	39.833	19.834	1.0440	46.41	6.75	530.402	.0911
14	8.1794	333.13	1[illegible]	1234.75	7[illegible]	589.967	39.217	19.915	1.0339	47.35	6.68	74.225	.0908
15	8.2223	313.36	919.34	1[illegible]	7[illegible]	594.542	34.892	20.002	1.0232	48.37	6.57	35.237	.0904
16	8.2638	290.95	894.15	1[illegible]	7[illegible]	601.219	34.[illegible]	20.102	1.0117	50.10	6.36	22.504	.0899
17	8.3179	264.72	871.84	1[illegible]	7[illegible]	611.741	33.134	20.236	.9980	53.26	5.91	16.709	.0889
18	8.3719	269.72	1[illegible]	1[illegible]	7[illegible]	623.962	37.[illegible]	20.445	.9801	57.26	+.95	13.920	.0881
19	8.4435	283.07	102[illegible]	1[illegible]	7[illegible]	636.750	37.[illegible]	20.778	.9609	60.19	3.30	12.553	.0883
20	8.5041	492.03	102[illegible]	1[illegible]	7[illegible]	644.316	37.331	21.303	.9329	64.77	.68	13.490	.0869
21	8.6133	233.57	1[illegible]	1[illegible]	7[illegible]	654.934	32.[illegible]	22.379	.8754	77.84	-4.27	-27.461	.0905

BLADE DATA

LOCATION	BLADE SECTION	BLADE ANGLE	REL FLOW ANGLE	DEVIATION	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	[illegible]	-33.941	[illegible]	[illegible]	[illegible]	[illegible]	1.0497	1239.76	41.[illegible]	705.483	2.812	.340	.9501	.9567
2	[illegible]	-37.333	47.241	[illegible]	[illegible]	[illegible]	1.0617	1241.45	41.2[illegible]	705.224	2.808	.339	.9488	.9549
3	[illegible]	-34.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.0713	1241.31	41.138	705.362	2.803	.339	.9460	.9531
4	[illegible]	-31.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.0733	1238.38	41.122	705.397	2.798	.338	.9440	.9515
5	[illegible]	-29.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.0837	1237.267	41.[illegible]	705.528	2.794	.340	.9422	.9498
6	[illegible]	-28.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.0[illegible]	1237.34	40.[illegible]	705.566	2.783	.340	.9403	.9482
7	[illegible]	-26.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.0[illegible]	1237.[illegible]	40.[illegible]	705.593	2.783	.341	.9378	.9460
8	[illegible]	-24.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.0[illegible]	1237.[illegible]	40.[illegible]	705.744	2.774	.341	.9342	.9428
9	[illegible]	-22.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.0[illegible]	1[illegible]	40.[illegible]	705.793	2.765	.341	.9305	.9396
10	[illegible]	-20.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.0[illegible]	1[illegible]	40.[illegible]	706.225	2.756	.342	.9240	.9339
11	[illegible]	-18.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.0972	1232.[illegible]	40.[illegible]	706.134	2.733	.345	.9067	.9188
12	[illegible]	-16.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.0[illegible]	1247.[illegible]	39.[illegible]	710.471	2.712	.339	.8895	.9037
13	[illegible]	-14.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.0[illegible]	1240.23	39.[illegible]	712.316	2.690	.373	.8712	.8876
14	[illegible]	1.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.0[illegible]	1232.75	39.[illegible]	715.[illegible]	2.669	.373	.8504	.8693
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.0[illegible]	1224.70	38.[illegible]	718.993	2.648	.394	.8297	.8511
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.0117	1217.60	38.[illegible]	723.308	2.623	.394	.8002	.8250
17	[illegible]	13.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.9980	1211.51	38.[illegible]	726.345	2.593	.412	.7569	.7868
18	[illegible]	22.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.9801	1201.42	37.[illegible]	730.[illegible]	2.577	.432	.7134	.7482
19	[illegible]	31.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.9609	1186.09	37.[illegible]	736.[illegible]	2.557	.443	.6903	.7278
20	[illegible]	39.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.9329	1161.45	37.[illegible]	735.139	2.539	.456	.6658	.7050
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.8754	1103.82	36.[illegible]	735.190	2.510	.477	.6267	.6786

STATION 11 INTERSTATION PERFORMANCE PRESSURE RATIO = 2.03[illegible] ISEN. EFF.= .941 POLY. EFF.= .881 DELTA T ON T = .387

STATION 12 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7150	1036.99	000.00	1233.79	705.483	579.935	39.981	20.069	1.0435	32.61	5.21	-3.688	.0938
2	7.7531	1010.31	343.34	1208.15	705.524	585.232	39.916	21.574	1.0172	32.53	4.71	-3.449	.0950
3	7.7911	939.34	323.31	1181.66	705.562	590.485	39.847	21.991	.9906	32.21	4.28	-3.204	.0963
4	7.8291	881.15	310.00	1155.32	705.597	595.605	39.780	22.398	.9644	31.87	3.95	-2.955	.0988
5	7.8670	862.45	331.59	1129.71	705.628	600.472	39.681	22.475	.9392	31.58	3.32	-2.715	.1006
6	7.9051	843.02	373.01	1104.52	705.656	605.148	39.522	23.007	.9148	31.37	2.96	-2.485	.1022
7	7.9431	823.81	360.24	1030.40	705.693	609.538	39.362	23.487	.8913	31.25	2.69	-2.267	.1036
8	7.9822	804.69	547.02	1057.21	705.744	613.681	39.123	23.916	.8693	31.10	2.52	-2.057	.1048
9	8.0217	787.27	534.33	1035.76	705.793	617.437	38.924	24.301	.8493	31.06	2.45	-1.848	.1058
10	8.0613	771.22	522.38	1016.35	705.825	621.159	38.731	24.648	.8309	30.96	2.48	-1.637	.1067
11	8.1027	754.82	511.64	996.27	706.134	626.414	38.451	24.961	.8111	30.90	2.57	-1.423	.1074
12	8.1447	738.38	501.77	977.04	710.071	631.489	38.163	25.242	.7923	30.90	2.72	-1.193	.1079
13	8.1870	722.43	491.55	960.95	712.316	636.315	37.949	25.496	.7763	30.97	2.92	-.9281	.1077
14	8.2294	710.25	483.30	946.30	715.174	641.491	37.740	25.722	.7615	31.18	3.13	-.6569	.1073
15	8.2734	797.18	484.27	932.75	718.099	646.528	37.530	25.917	.7477	31.28	3.34	-.3826	.1078
16	8.3217	785.36	482.64	923.10	723.308	653.235	37.349	26.071	.7362	31.52	3.52	-.0724	.1075
17	8.3663	778.31	485.55	917.77	732.545	663.322	37.151	26.169	.7264	31.94	3.54	+.0111	.1061
18	8.4134	771.48	493.24	915.68	742.886	673.823	36.921	26.181	.7192	32.59	3.27	+.0633	.1045
19	8.4635	769.09	505.93	921.17	748.412	678.747	36.789	26.048	.7209	33.39	2.58	-.7.905	.1032
20	8.5170	773.25	524.75	934.75	755.139	683.432	36.602	25.723	.7290	34.15	1.26	-43.279	.1012
21	8.5730	783.80	539.23	950.74	765.990	691.858	36.226	25.272	.7371	34.56	-2.03	5.947	.0982

BLADE DATA

LOCAT -ION	BLADE SECTION	BLADE ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	31.959	-24.847	32.808	.949	.0651	0.0	1.0435	1233.79	39.981	705.483	2.721	.360	.9158	.9259
2	31.572	-23.334	32.531	.859	.0640	0.0	1.0172	1208.05	39.916	705.524	2.716	.360	.9131	.9243
3	31.335	-21.479	32.207	.872	.0633	0.0	.9906	1181.66	39.847	705.562	2.711	.360	.9110	.9225
4	30.992	-19.204	31.870	.888	.0635	0.0	.9644	1155.32	39.780	705.597	2.706	.360	.9087	.9205
5	30.569	-16.978	31.576	.907	.0647	0.0	.9392	1129.71	39.681	705.628	2.699	.360	.9060	.9181
6	30.447	-14.747	31.374	.928	.0684	0.0	.9148	1104.52	39.522	705.656	2.689	.360	.9020	.9145
7	30.305	-12.629	31.254	.949	.0729	0.0	.8916	1080.40	39.362	705.693	2.677	.361	.8971	.9102
8	30.189	-10.616	31.159	.970	.0772	0.0	.8695	1057.21	39.123	705.744	2.663	.361	.8911	.9049
9	30.070	-8.540	31.060	.990	.0812	0.0	.8493	1035.76	38.924	705.793	2.649	.361	.8854	.8999
10	29.955	-6.409	30.953	1.005	.0829	0.0	.8309	1016.35	38.731	705.825	2.636	.362	.8784	.8937
11	29.878	-4.268	30.901	1.024	.0833	0.0	.8111	996.27	38.451	706.134	2.616	.365	.8613	.8791
12	29.865	-2.168	30.901	1.038	.0839	0.0	.7923	977.04	38.163	710.071	2.597	.369	.8455	.8646
13	29.929	-.034	30.973	1.045	.0845	0.0	.7763	960.95	37.949	712.316	2.582	.373	.8300	.8509
14	30.056	2.135	31.105	1.048	.0765	0.0	.7615	946.30	37.740	715.174	2.568	.379	.8125	.8353
15	30.231	4.240	31.278	1.049	.0721	0.0	.7477	932.75	37.530	718.099	2.554	.384	.7951	.8199
16	30.483	7.803	31.523	1.048	.0653	0.0	.7362	923.10	37.349	723.308	2.541	.394	.7702	.7978
17	30.908	11.352	31.942	1.034	.0580	0.0	.7264	917.77	37.151	732.545	2.528	.412	.7320	.7640
18	31.563	15.404	32.591	1.030	.0505	0.0	.7192	915.68	36.921	742.886	2.512	.432	.6933	.7296
19	32.363	19.751	33.333	1.030	.0466	0.0	.7209	921.17	36.789	748.412	2.503	.443	.6729	.7114
20	33.114	24.039	34.152	1.038	.0441	0.0	.7290	934.75	36.602	755.139	2.491	.456	.6495	.6905
21	33.478	28.225	34.557	1.079	.0451	0.0	.7371	950.74	36.226	765.990	2.465	.477	.6129	.6575

STATION 12 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.602 ISEN. EFF.= .808 POLY. EFF.= .832 DELTA T ON T = .387

STATION 19 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES GRID	VELOCITIES TANGENT	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7150	122.14	295.48	471.22	730.483	627.816	34.874	20.345	.7893	17.58	-2.23	-5.196	.1098
2	7.7334	310.30	288.60	459.35	730.324	630.378	33.333	22.352	.7754	17.55	-2.42	-5.757	.1107
3	7.7511	399.31	283.34	448.22	730.302	632.764	33.513	23.234	.7617	17.54	-2.59	-6.475	.1115
4	7.7692	330.34	278.04	323.77	730.297	639.046	34.395	26.439	.7486	17.55	-2.71	-7.401	.1121
5	7.7876	459.44	272.19	511.63	730.328	637.163	34.243	26.715	.7353	17.55	-2.79	-8.613	.1127
6	7.8063	490.11	266.11	500.41	730.403	639.515	34.055	26.310	.7224	17.54	-2.82	-10.232	.1131
7	7.8251	540.05	259.94	491.73	730.523	641.813	33.811	27.870	.7095	17.49	-2.77	-12.403	.1134
8	7.8441	582.46	253.61	484.28	730.744	644.131	33.522	27.137	.6968	17.42	-2.63	-15.344	.1135
9	7.8631	612.41	247.27	481.27	730.743	645.158	33.225	27.232	.6839	17.38	-2.42	-20.459	.1136
10	7.8821	638.44	240.93	480.33	730.223	645.869	32.931	27.302	.6732	17.39	-2.15	-29.247	.1135
11	7.9011	691.00	234.62	481.44	729.134	645.206	32.774	27.410	.6625	17.43	-1.82	-42.061	.1131
12	7.9199	716.57	228.33	484.03	728.071	644.315	32.631	27.442	.6522	17.46	-1.45	-71.227	.1126
13	7.9387	772.48	222.09	490.78	727.316	643.382	32.532	27.482	.6423	17.48	-1.05	-153.848	.1122
14	7.9573	772.36	215.89	488.29	726.976	643.193	32.231	27.474	.6423	17.49	-.66	-992.401	.1117
15	7.9758	774.36	209.74	487.02	726.943	643.582	32.111	27.480	.6351	17.53	-.28	709.316	.1112
16	7.9942	782.36	203.64	487.32	726.908	643.712	32.004	27.483	.6361	17.60	.07	444.276	.1103
17	8.0125	774.37	197.58	480.49	726.949	644.589	32.004	27.481	.6343	17.73	.39	753.002	.1089
18	8.0307	772.38	191.58	478.45	727.000	645.370	32.011	27.474	.6321	17.97	.65	-2421.225	.1073
19	8.0487	774.41	185.62	479.21	727.048	645.960	32.031	27.455	.6313	18.30	.85	-1012.640	.1064
20	8.0665	777.19	179.71	481.01	727.133	646.202	32.081	27.410	.6307	18.72	.96	503.916	.1052
21	8.0841	774.38	173.84	481.14	727.340	646.463	32.093	27.323	.6274	19.23	.88	76.314	.1033

HUB DATA

LOCATION	RADIUS STATION	RADIUS LOCAL	FLOW ANGLE	DEVIATION ANGLE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	15.264	-7.414	17.[illegible]	1.31	.1274	0.0	.7599	371.[illegible]	38.273	705.463	2.632	.360	.8803	.8953
2	15.[illegible]	-7.[illegible]	17.[illegible]	1.[illegible]	.[illegible]	0.0	.[illegible]	[illegible]	38.[illegible]	705.[illegible]	2.[illegible]	.360	.8778	.8931
3	15.[illegible]	-7.[illegible]	17.[illegible]	[illegible]	.[illegible]	0.0	.[illegible]	[illegible]	38.[illegible]	705.[illegible]	2.[illegible]	.360	.8752	.8907
4	15.[illegible]	-7.[illegible]	17.[illegible]	[illegible]	.[illegible]	0.0	.[illegible]	[illegible]	38.[illegible]	705.[illegible]	2.[illegible]	.360	.8722	.8881
5	[illegible]	-7.[illegible]	[illegible]	[illegible]	.[illegible]	0.0	.[illegible]	[illegible]	38.[illegible]	705.[illegible]	2.[illegible]	.360	.8689	.8851
6	[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]	0.0	.[illegible]	[illegible]	38.[illegible]	705.[illegible]	2.[illegible]	.360	.8650	.8799
7	[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]	0.0	.[illegible]	[illegible]	38.[illegible]	705.[illegible]	2.[illegible]	.361	.8599	.8736
8	15.[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]	0.0	.[illegible]	[illegible]	37.[illegible]	705.[illegible]	2.[illegible]	.361	.8529	.8663
9	15.[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]	0.0	.[illegible]	[illegible]	37.[illegible]	705.744	2.554	.361	.8479	.8594
10	15.[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]	0.0	.[illegible]	[illegible]	37.[illegible]	705.793	2.535	.361	.8401	.8526
11	15.[illegible]	[illegible]	[illegible]	[illegible]	.1639	0.0	.[illegible]	[illegible]	37.[illegible]	706.225	2.521	.362	.8325	.8526
12	15.[illegible]	[illegible]	[illegible]	[illegible]	.1803	0.0	.[illegible]	[illegible]	36.[illegible]	708.134	2.502	.363	.8165	.8383
13	15.[illegible]	[illegible]	[illegible]	[illegible]	.1809	0.0	.[illegible]	[illegible]	36.[illegible]	710.071	2.483	.363	.8006	.8241
14	15.[illegible]	[illegible]	[illegible]	[illegible]	.1811	0.0	.[illegible]	[illegible]	36.[illegible]	712.316	2.474	.373	.7977	.8126
15	15.[illegible]	[illegible]	[illegible]	[illegible]	.1843	0.0	.[illegible]	[illegible]	36.[illegible]	715.174	2.466	.379	.7928	.7993
16	15.[illegible]	[illegible]	[illegible]	[illegible]	.1879	0.0	.[illegible]	[illegible]	36.[illegible]	718.099	2.454	.394	.7595	.7863
17	15.332	1.340	17.[illegible]	1.[illegible]	.1920	0.0	.[illegible]	[illegible]	36.[illegible]	723.708	2.454	.394	.7375	.7679
18	15.[illegible]	2.[illegible]	17.[illegible]	1.[illegible]	.1217	0.0	.[illegible]	[illegible]	36.[illegible]	732.[illegible]	2.[illegible]	.412	.7040	.7382
19	15.[illegible]	4.[illegible]	17.[illegible]	1.[illegible]	.1974	0.0	.[illegible]	[illegible]	35.[illegible]	742.686	2.445	.432	.6782	.7061
20	15.[illegible]	[illegible]	17.[illegible]	1.[illegible]	.1902	0.0	.[illegible]	[illegible]	35.[illegible]	755.[illegible]	2.[illegible]	.443	.6524	.6922
21	17.[illegible]	[illegible]	19.229	1.719	.0859	0.0	.3274	327.14	35.592	759.190	2.422	.477	.5993	.6447

STATION 19 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.513 ISEN. EFF.= .774 POLY. EFF.= .801 DELTA T ON T = .387

STATION 1. FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITY GRID	VELOCITY TANGENT	VELOCITY TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.9740	783.31	99.82	789.99	705.483	694.447	37.372	28.378	.6276	6.16	-4.29	16.241	.1178
2	7.7774	780.11	93.32	786.72	705.524	694.885	37.243	28.342	.6249	6.07	-4.14	16.348	.1176
3	7.7433	777.15	91.24	783.69	705.562	695.329	37.113	28.303	.6222	5.97	-3.96	16.434	.1173
4	7.7337	773.35	89.74	779.98	705.597	695.738	36.983	28.261	.6183	5.88	-3.77	15.488	.1171
5	7.8139	774.94	89.91	781.61	705.628	696.275	36.853	28.219	.6183	5.81	-3.55	16.307	.1168
6	7.8977	771.39	90.32	777.90	705.658	697.410	36.723	28.167	.6088	5.74	-3.30	16.540	.1164
7	7.9831	771.49	90.91	778.19	705.693	698.775	36.593	28.117	.5938	5.68	-3.02	16.668	.1160
8	7.9333	739.81	72.34	743.21	719.744	660.307	37.571	26.367	.5946	5.03	-2.69	17.034	.1165
9	7.9833	729.44	71.24	731.91	705.793	661.775	37.241	28.319	.5737	5.59	-2.31	17.651	.1150
10	8.0242	721.35	70.14	724.75	705.225	663.020	36.322	28.274	.5739	5.55	-1.90	18.526	.1146
11	8.0674	714.24	69.32	717.64	705.134	663.936	36.076	28.234	.5651	5.53	-1.47	19.714	.1140
12	8.1232	708.35	67.44	711.65	710.071	698.592	36.814	28.201	.5574	5.51	-1.04	21.532	.1135
13	8.1712	704.46	67.45	708.20	712.315	671.079	36.773	28.178	.5573	5.50	-.61	24.064	.1129
14	8.2210	705.92	67.17	709.17	713.174	673.631	36.733	28.158	.5578	5.49	-.22	27.445	.1126
15	8.2719	706.49	67.24	709.71	713.049	676.700	36.733	28.139	.5582	5.49	.14	32.170	.1119
16	8.3225	712.47	68.74	715.73	723.308	681.213	36.814	28.174	.5592	5.51	.44	38.947	.1112
17	8.3745	720.30	70.11	723.43	732.542	685.574	36.896	28.132	.5617	5.55	.68	48.941	.1099
18	8.4271	728.78	71.65	730.30	742.606	693.919	36.977	28.217	.5633	5.63	.86	65.776	.1085
19	8.4803	734.09	73.22	737.75	748.412	704.305	37.038	28.250	.5671	5.75	.98	191.884	.1078
20	8.5343	730.17	73.51	733.15	739.139	710.948	36.915	28.238	.5613	5.97	1.05	234.621	.1078
21	8.5903	720.94	73.40	734.15	765.990	721.334	36.991	28.329	.5574	6.33	1.06	-610.607	.1065

BLADE DATA

LOCATION	BLADE SECTION	BLADE LEAN	FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	3.356	-1.024	.133	2.218	.1311	0.0	.5272	787.24	37.372	705.483	2.543	.360	.8447	.8635
2	3.3442	-.949	.074	2.202	.1912	0.0	.5249	784.52	37.243	705.524	2.534	.360	.8410	.8602
3	3.3318	-.838	.022	2.259	.1922	0.0	.5222	781.39	37.113	705.562	2.525	.360	.8372	.8568
4	3.3347	-.734	-.032	2.239	.1943	0.0	.5195	779.05	36.983	705.597	2.516	.360	.8333	.8531
5	3.4481	-.771	.017	2.325	.1975	0.0	.5153	774.61	36.823	705.628	2.506	.360	.8289	.8492
6	3.4307	-.917	-.742	2.377	.2074	0.0	.5088	768.09	36.593	705.658	2.487	.360	.8209	.8424
7	3.4203	-.910	.084	2.434	.2154	0.0	.5998	793.14	36.227	705.693	2.465	.361	.8117	.8337
8	3.4141	-.940	.035	2.442	.2300	0.0	.5896	743.20	35.971	705.744	2.441	.361	.8016	.8246
9	3.4138	-.973	.033	2.424	.2419	0.0	.5797	731.11	35.840	705.793	2.418	.361	.7920	.8158
10	3.4145	-.995	.034	2.419	.2469	0.0	.5738	724.75	35.329	706.225	2.404	.362	.7840	.8086
11	3.4161	-.998	.028	2.407	.2459	0.0	.5681	719.55	35.073	706.134	2.387	.365	.7689	.7950
12	3.4300	-.998	.010	2.710	.2504	0.0	.5578	707.05	34.818	710.071	2.369	.369	.7539	.7815
13	2.7722	-.821	.033	2.733	.2415	0.0	.5573	709.20	34.774	712.315	2.366	.373	.7448	.7726
14	2.7780	-.730	.092	2.742	.2312	0.0	.5570	709.17	34.733	715.174	2.365	.379	.7324	.7622
15	2.7738	-.647	.134	2.725	.2202	0.0	.5562	709.71	34.733	718.099	2.363	.384	.7211	.7527
16	2.8317	-.624	.111	2.934	.2023	0.0	.5992	713.73	34.918	723.308	2.369	.394	.7049	.7378
17	2.8340	-.630	.053	2.903	.1831	0.0	.5917	723.45	34.904	732.545	2.375	.412	.6795	.7170
18	2.8395	-.603	.030	2.845	.1625	0.0	.5833	730.36	34.876	742.566	2.380	.432	.6474	.6888
19	2.8413	-.620	.761	2.948	.1525	0.0	.5831	732.78	35.009	748.412	2.382	.443	.6319	.6737
20	3.3290	-.778	.372	2.682	.1432	0.0	.5616	734.15	35.015	735.139	2.383	.456	.6148	.6570
21	3.3503	-1.035	.329	2.819	.1325	0.0	.5574	734.15	34.958	765.990	2.379	.477	.5656	.6316

STATION 1. INTEGRATED PERFORMANCE PRESSURE RATIO = 2.413 ISEN. EFF.= .738 POLY. EFF.= .768 DELTA T ON T = .387

STATION 19 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES			TEMPERATURES		PRESSURES		MACH NO	ANGLES		RADIUS OF CURVATURE	SPECIFIC WEIGHT
		AXIAL	TANGENTIAL	TOTAL	TOTAL	STATIC	TOTAL	STATIC		WHIRL	SLOPE		
1	7.0000	1110.41	0.0	1110.41	705.4463	646.427	36.064	26.415	.6823	0.00	+1.06	10.624	.1100
2	7.0275	1103.07	0.0	1103.07	705.4524	646.432	35.939	26.358	.6799	0.00	+1.11	11.053	.1096
3	7.0550	1095.67	0.0	1095.67	705.4582	646.437	35.820	26.302	.6775	0.00	+1.17	11.502	.1093
4	7.0825	1088.22	0.0	1088.22	705.4637	646.442	35.706	26.249	.6752	0.00	+1.26	12.250	.1090
5	7.1100	1080.71	0.0	1080.71	705.4689	646.369	35.597	26.197	.6731	0.00	+1.39	13.169	.1087
6	7.1375	1073.15	0.0	1073.15	705.4738	646.450	35.493	26.150	.6709	0.00	+1.29	14.368	.1082
7	7.1650	1065.53	0.0	1065.53	705.4783	646.454	35.394	26.107	.6693	0.00	+1.17	15.954	.1077
8	7.1925	1057.86	0.0	1057.86	705.4826	646.457	35.300	26.069	.6678	0.00	+1.02	17.968	.1073
9	7.2200	1050.14	0.0	1050.14	705.4866	646.460	35.211	26.037	.6665	0.00	+.85	20.738	.1068
10	7.2475	1042.37	0.0	1042.37	705.4903	646.463	35.127	26.012	.6655	0.00	+.66	23.135	.1065
11	7.2750	1034.56	0.0	1034.56	705.4937	646.465	35.047	25.994	.6648	0.00	+.47	26.286	.1059
12	7.3025	1026.71	0.0	1026.71	705.4969	646.467	34.973	25.983	.6643	0.00	+.27	91.300	.1054
13	7.3300	1018.81	0.0	1018.81	705.4998	646.468	34.904	25.979	.6641	0.00	+.08	99.324	.1051
14	7.3575	1010.87	0.0	1010.87	705.5025	646.469	34.840	25.982	.6643	0.00	-.10	-107.224	.1048
15	7.3850	1002.88	0.0	1002.88	705.5049	646.469	34.781	25.992	.6648	0.00	-.29	-39.000	.1044
16	7.4125	994.85	0.0	994.85	705.5071	646.469	34.727	26.007	.6655	0.00	-.47	-24.298	.1039
17	7.4400	986.77	0.0	986.77	705.5090	646.469	34.678	26.029	.6665	0.00	-.64	-17.453	.1033
18	7.4675	978.65	0.0	978.65	705.5107	646.468	34.634	26.057	.6678	0.00	-.80	-13.521	.1028
19	7.4950	970.49	0.0	970.49	705.5121	646.467	34.595	26.090	.6693	0.00	-.94	-11.021	.1017
20	7.5225	962.29	0.0	962.29	705.5133	646.465	34.561	26.129	.6709	0.00	-1.06	-9.3000	.1010
21	7.5500	954.05	0.0	954.05	705.5143	646.463	34.532	26.172	.6727	0.00	-1.17	-8.0000	.1003

STATION 19

FINAL STREAM-LINE	STREAM FUNCTION	AXIAL VELOCITY	TANGENTIAL VELOCITY	RADIUS	AREA	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	.0000	1110.41	0.0	7.0000	.0000	.6823	1110.41	36.064	705.4463	2.3240	.3870	.8083	.9306
2	.0275	1103.07	0.0	7.0275	.0077	.6799	1103.07	35.939	705.4524	2.3240	.3870	.8033	.9261
3	.0550	1095.67	0.0	7.0550	.0154	.6775	1095.67	35.820	705.4582	2.3240	.3870	.7982	.9215
4	.0825	1088.22	0.0	7.0825	.0231	.6752	1088.22	35.706	705.4637	2.3240	.3870	.7929	.9167
5	.1100	1080.71	0.0	7.1100	.0308	.6731	1080.71	35.597	705.4689	2.3240	.3870	.7875	.9117
6	.1375	1073.15	0.0	7.1375	.0385	.6709	1073.15	35.493	705.4738	2.3240	.3870	.7820	.9066
7	.1650	1065.53	0.0	7.1650	.0462	.6693	1065.53	35.394	705.4783	2.3240	.3870	.7763	.9014
8	.1925	1057.86	0.0	7.1925	.0539	.6678	1057.86	35.300	705.4826	2.3240	.3870	.7705	.8960
9	.2200	1050.14	0.0	7.2200	.0616	.6665	1050.14	35.211	705.4866	2.3240	.3870	.7646	.7917
10	.2475	1042.37	0.0	7.2475	.0693	.6655	1042.37	35.127	705.4903	2.3240	.3870	.7586	.7866
11	.2750	1034.56	0.0	7.2750	.0770	.6648	1034.56	35.047	705.4937	2.3240	.3870	.7524	.7805
12	.3025	1026.71	0.0	7.3025	.0847	.6643	1026.71	34.973	705.4969	2.3240	.3870	.7461	.7742
13	.3300	1018.81	0.0	7.3300	.0924	.6641	1018.81	34.904	705.4998	2.3240	.3870	.7398	.7678
14	.3575	1010.87	0.0	7.3575	.1001	.6643	1010.87	34.840	705.5025	2.3240	.3870	.7334	.7613
15	.3850	1002.88	0.0	7.3850	.1078	.6648	1002.88	34.781	705.5049	2.3240	.3870	.7269	.7546
16	.4125	994.85	0.0	7.4125	.1155	.6655	994.85	34.727	705.5071	2.3240	.3870	.7203	.7478
17	.4400	986.77	0.0	7.4400	.1232	.6665	986.77	34.678	705.5090	2.3240	.3870	.7136	.7409
18	.4675	978.65	0.0	7.4675	.1309	.6678	978.65	34.634	705.5107	2.3240	.3870	.7068	.7339
19	.4950	970.49	0.0	7.4950	.1386	.6693	970.49	34.595	705.5121	2.3240	.3870	.6999	.7269
20	.5225	962.29	0.0	7.5225	.1463	.6709	962.29	34.561	705.5133	2.3240	.3870	.6930	.7198
21	.5500	954.05	0.0	7.5500	.1540	.6727	954.05	34.532	705.5143	2.3240	.3870	.6860	.7126

STATION 19 INITIAL PERFORMANCE PRESSURE RATIO = 2.324 ISEN. EFF.= .701 POLY. EFF.= .734 DELTA T ON T = .387

STATION 16 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	365.19	0.00	865.13	705.483	643.875	35.063	26.135	.6943	0.00	0.00	0.000	.1091
2	7.6753	359.14	0.00	859.14	705.524	644.776	35.893	26.135	.6836	0.00	-.02	1690.464	.1090
3	7.7147	352.85	0.00	852.85	705.562	645.703	35.724	26.133	.6840	0.00	-.03	1012.058	.1088
4	7.7537	346.30	0.00	846.30	705.597	646.655	35.543	26.134	.6733	0.00	-.05	728.421	.1086
5	7.7938	339.47	0.00	839.47	705.628	647.635	35.359	26.133	.6723	0.00	-.06	595.500	.1085
6	7.8351	326.10	0.00	826.10	705.656	649.500	35.003	26.132	.6607	0.00	-.06	524.610	.1082
7	7.8731	310.61	0.00	810.61	705.693	651.626	34.610	26.130	.6472	0.00	-.07	487.880	.1078
8	7.9227	793.93	0.00	793.93	705.744	653.882	34.193	26.129	.6328	0.00	-.07	475.635	.1074
9	7.9532	777.78	0.00	777.78	705.793	656.023	33.814	26.128	.6190	0.00	-.07	485.767	.1071
10	8.0172	760.75	0.00	760.75	706.225	657.606	33.533	26.126	.6111	0.00	-.07	520.414	.1068
11	8.0607	760.04	0.00	760.04	708.134	660.619	33.377	26.125	.6028	0.00	-.06	587.117	.1063
12	8.1177	750.77	0.00	750.77	710.071	663.714	33.143	26.124	.5941	0.00	-.05	702.472	.1058
13	8.1997	794.31	0.00	794.31	712.316	665.527	33.193	26.123	.5951	0.00	-.04	916.726	.1055
14	8.2224	758.78	0.00	758.78	715.174	667.836	33.263	26.123	.5986	0.00	-.03	1302.152	.1052
15	8.2735	763.30	0.00	763.30	718.099	670.203	33.323	26.122	.6011	0.00	-.02	2135.849	.1048
16	8.3289	775.44	0.00	775.44	723.308	673.891	33.535	26.122	.6090	0.00	-.01	4630.079	.1042
17	8.3822	790.23	0.00	790.23	732.545	681.253	33.757	26.122	.6173	0.00	.00	33546.875	.1031
18	8.4363	805.43	0.00	805.43	742.686	689.433	33.979	26.122	.6255	0.00	.00	-11494.593	.1019
19	8.4904	813.70	0.00	813.70	748.412	694.080	34.093	26.122	.6298	0.00	.00	-7950.149	.1012
20	8.5449	822.20	0.00	822.20	752.139	699.690	34.211	26.122	.6339	0.00	.00	-10312.963	.1004
21	8.6000	832.98	0.00	832.98	755.990	709.119	34.324	26.122	.6380	0.00	0.00	0.000	.0990

STATION 17 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	365.85	0.00	865.85	705.483	643.782	35.063	26.122	.6955	0.00	0.00	0.000	.1091
2	7.6753	859.79	0.00	859.79	705.524	644.684	35.843	26.122	.6901	0.00	-.00	0.000	.1089
3	7.7147	853.48	0.00	853.48	705.562	645.614	35.724	26.122	.6848	0.00	-.00	0.000	.1088
4	7.7537	846.90	0.00	846.90	705.597	646.572	35.543	26.122	.6788	0.00	-.00	0.000	.1086
5	7.7938	840.03	0.00	840.03	705.628	647.558	35.359	26.122	.6728	0.00	-.00	0.000	.1084
6	7.8351	826.50	0.00	826.50	705.656	649.432	35.003	26.122	.6611	0.00	-.00	0.000	.1081
7	7.8730	811.05	0.00	811.05	705.693	651.567	34.610	26.122	.6479	0.00	-.00	0.000	.1078
8	7.9227	794.31	0.00	794.31	705.744	653.833	34.193	26.122	.6332	0.00	-.00	0.000	.1074
9	7.9631	778.09	0.00	778.09	705.793	655.983	33.814	26.122	.6192	0.00	-.00	0.000	.1071
10	8.0171	769.00	0.00	769.00	706.225	657.570	33.533	26.122	.6113	0.00	-.00	0.000	.1068
11	8.0660	760.21	0.00	760.21	708.134	660.597	33.377	26.122	.6029	0.00	-.00	0.000	.1063
12	8.1170	750.69	0.00	750.69	710.071	663.699	33.143	26.122	.5942	0.00	-.00	0.000	.1058
13	8.1997	794.37	0.00	794.37	712.316	665.518	33.193	26.122	.5961	0.00	-.00	0.000	.1055
14	8.2223	758.81	0.00	758.81	715.174	667.832	33.263	26.122	.5986	0.00	-.00	0.000	.1052
15	8.2735	763.30	0.00	763.30	718.099	670.203	33.323	26.122	.6011	0.00	-.00	0.000	.1048
16	8.3289	775.44	0.00	775.44	723.308	673.892	33.535	26.122	.6090	0.00	-.00	0.000	.1042
17	8.3822	790.22	0.00	790.22	732.545	681.254	33.757	26.122	.6173	0.00	-.00	0.000	.1031
18	8.4363	805.42	0.00	805.42	742.686	689.435	33.979	26.122	.6255	0.00	-.00	0.000	.1019
19	8.4904	813.70	0.00	813.70	748.412	694.081	34.093	26.122	.6298	0.00	-.00	0.000	.1012
20	8.5449	822.20	0.00	822.20	752.139	699.690	34.211	26.122	.6339	0.00	-.00	0.000	.1004
21	8.6000	832.98	0.00	832.98	755.990	709.119	34.324	26.122	.6390	0.00	0.00	0.000	.0990

ROTOR PERFORMANCE

LOCATION	INLET RADIUS	OUTLET RADIUS	INLET M.REL	INCID ANGLE	DEVIATION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	8.7500	7.5494	1.0491	9.307	6.134	.1049	.4176	.4283	.5339	.7470	.7742	-60.937	-12.647	6.070	10.991
2	8.3916	7.1892	1.0329	8.443	6.411	.1028	.4379	.4474	.5347	.7277	.7630	-61.330	-13.353	6.231	10.691
3	8.3721	7.0250	1.0791	8.215	6.536	.1009	.4548	.4631	.5320	.7117	.7556	-61.717	-14.071	6.396	10.384
4	8.3521	7.0059	1.0753	8.115	6.747	.1069	.4666	.4761	.5254	.6984	.7462	-62.062	-14.782	6.420	9.750
5	8.1414	7.0314	1.0111	7.853	6.963	.1073	.4804	.4867	.5186	.6873	.7407	-62.366	-15.507	6.325	9.038
6	8.3507	7.0452	1.0172	7.831	6.907	.1076	.4879	.4950	.5081	.6793	.7331	-62.644	-16.251	6.046	8.267
7	8.3511	7.0531	1.0140	7.813	6.925	.1080	.4962	.5022	.4982	.6702	.7290	-62.911	-16.987	5.581	7.609
8	8.3513	7.0723	1.0139	7.847	7.047	.1132	.5079	.5139	.4962	.6627	.7180	-63.173	-17.686	4.934	7.112
9	8.3524	7.3579	1.0753	7.8[illegible]	7.155	.1173	.5121	.5144	.4733	.6563	.7104	-63.451	-18.329	4.104	6.774
10	8.7524	7.9114	1.0849	7.[illegible]	7.238	.1228	.5196	.5211	.4535	.6431	.7042	-63.734	-18.912	3.108	6.646
11	8.3403	7.8558	1.0037	7.[illegible]	7.333	.1472	.5374	.5387	.4459	.6330	.7034	-64.032	-19.441	1.984	6.761
12	8.3493	8.0035	1.0154	7.[illegible]	7.[illegible]	.1704	.5536	.5544	.4311	.6177	.7046	-64.349	-19.927	.769	7.113
13	8.3584	8.1526	1.0307	7.[illegible]	7.732	.1944	.5700	.5705	.4159	.6020	.7019	-64.649	-20.371	-.553	7.729
14	8.3675	8.3018	1.0461	7.[illegible]	7.[illegible]	.2213	.5901	.5894	.4019	.5841	.7033	-64.956	-20.772	-2.015	8.591
15	8.3915	8.4591	1.0591	7.[illegible]	8.242	.2470	.6088	.6072	.3879	.5664	.7044	-65.451	-21.134	-3.600	9.648
16	8.3554	8.5194	1.0772	7.[illegible]	8.[illegible]	.2605	.6399	.6350	.3734	.5429	.7039	-65.877	-21.450	-5.136	10.819
17	8.3112	8.5797	1.0744	7.[illegible]	8.[illegible]	.2944	.6853	.6828	.3604	.5283	.7339	-66.335	-21.717	-6.316	12.031
18	8.2994	8.5318	1.0731	7.[illegible]	10.243	.4036	.7606	.7476	.3443	.5279	.7555	-66.810	-21.903	-7.035	13.177
19	8.7003	8.4363	1.0175	7.[illegible]	12.438	.4307	.7936	.7803	.3402	.5952	.7739	-67.298	-21.944	-7.607	13.685
20	8.3739	8.3344	1.0325	7.[illegible]	10.999	.4620	.8361	.8329	.3334	.5934	.7790	-67.798	-21.715	-8.541	13.847
21	8.0000	8.0699	1.0674	7.[illegible]	30.435	.5152	.9234	.9200	.3316	.2675	.7747	-68.316	-21.371	-9.607	13.159

STATOR PERFORMANCE

LOCATION	INLET RADIUS	OUTLET RADIUS	INLET M.REL	INCID ANGLE	DEVIATION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	7.6129	7.5484	1.0497	-.[illegible]	7.239	.2538	.4682	.4483	.2807	.9868	0.0000	48.917	-7.233	-39.941	.020
2	7.5775	7.5777	1.0517	-.[illegible]	7.339	.2523	.4618	.4417	.2904	.9777	0.0000	47.975	-7.386	-37.309	.020
3	7.7141	7.7152	1.0714	-.[illegible]	7.542	.2577	.4944	.4744	.2942	.9695	0.0000	47.140	-7.542	-34.452	.019
4	7.7331	7.7545	1.0735	-.[illegible]	7.703	.2612	.5056	.4857	.3035	.9627	0.0000	46.514	-7.703	-31.454	.018
5	7.3025	7.7991	1.0337	-.[illegible]	7.[illegible]	.2658	.5193	.5154	.3020	.9571	0.0000	46.031	-7.865	-28.373	.016
6	7.3465	7.8369	1.0365	-.[illegible]	8.023	.2731	.5288	.5269	.3078	.9475	0.0000	45.560	-8.028	-25.257	.014
7	7.4005	7.8797	1.0343	-.[illegible]	8.191	.2942	.5427	.5423	.3050	.9374	0.0000	45.340	-8.191	-22.160	.012
8	7.3277	7.9243	1.0319	-.[illegible]	8.332	.3033	.5565	.5562	.3079	.9272	0.0000	45.068	-8.352	-19.122	.010
9	7.3935	7.9703	1.0277	-.[illegible]	8.[illegible]	.3238	.5692	.5692	.3071	.9178	0.0000	44.841	-8.509	-16.058	.009
10	8.0035	8.0197	1.0761	-.[illegible]	8.[illegible]	.3295	.5761	.5760	.3066	.9142	0.0000	44.668	-8.655	-12.806	.007
11	8.1007	8.0590	1.0[illegible]	-.[illegible]	8.753	.3313	.5834	.5832	.3031	.9115	0.0000	44.556	-8.783	-9.212	.005
12	8.0929	8.1159	1.0[illegible]	1.[illegible]	8.834	.3335	.5907	.5904	.3039	.9083	0.0000	44.529	-8.894	-5.395	.003
13	8.1351	8.1703	1.[illegible]	1.[illegible]	8.[illegible]	.3321	.5973	.5973	.3114	.9149	0.0000	44.626	-8.982	-1.666	.001
14	8.1724	8.2280	1.0333	2.[illegible]	9.040	.3408	.6062	.6046	.3143	.9221	0.0000	44.972	-9.040	1.707	-.001
15	8.2225	8.2775	1.0[illegible]	3.[illegible]	9.[illegible]	.2945	.5708	.5686	.3171	.9294	0.0000	45.221	-9.062	5.098	-.004
16	8.2933	8.3231	1.0[illegible]	4.[illegible]	9.[illegible]	.2720	.5715	.5694	.3207	.9423	0.0000	45.590	-9.059	9.326	-.008
17	8.3179	8.3529	.9[illegible]	7.330	9.[illegible]	.2[illegible]	.[illegible]	.[illegible]	.3224	.9568	0.0000	45.929	-9.059	15.273	-.012
18	8.3715	8.4353	.9[illegible]	10.[illegible]	9.[illegible]	.2200	.5[illegible]	.5[illegible]	.3228	.9739	0.0000	46.444	-9.092	22.859	-.016
19	8.4362	8.4967	.9[illegible]	12.[illegible]	9.[illegible]	.2[illegible]	.5[illegible]	.5[illegible]	.3193	.9884	0.0000	47.438	-9.125	31.184	-.024
20	8.5041	8.5443	.9[illegible]	11.[illegible]	9.[illegible]	.1935	.5[illegible]	.5[illegible]	.2944	.9891	0.0000	48.365	-9.169	39.049	-.031
21	8.5199	8.5870	.9[illegible]	27.[illegible]	9.213	.1762	.4[illegible]	.4[illegible]	.2543	.9518	0.0000	50.914	-9.213	46.652	-.038

TIP AND BOUNDARY LAYER BLOCKAGES (PERCENT)

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MID BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	5.5	0.0	3.0	11.0	13.0	14.0	23.1	23.9	23.9
DIST FACTOR	1.0	1.0	1.0	1.0	.0	.0	.2	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
INT BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	5.6	0.0	3.0	11.0	13.0	14.0	23.1	23.9	23.9

SUMMARY POINT NO. 1 THE CALCULATION IS CONVERGED PASS 23

TEST POINT TITLE = 301131715830

FLOW = 21.7[illegible] SPEED = 19396.4 PRESSURE RATIO = 2.32[illegible] ISENTROPIC EFFY = .7011 POLYTROPIC EFFY = .7335 DEL T/T = .3866

SUMMARY OF 1 TEST POINTS

POINT NO.	TEST POINT TITLE	STATUS OF CALCULATION	FLOW RATE LBS/SEC	SPEED RPM	ROTOR PRESSURE RATIO	ROTOR ISEN EFFY	STAGE PRESSURE RATIO	STAGE ISEN EFFY	FLOW/ (CHOKE FLOW)
1	301131715830	CONVERGED AFTER 23 PASSES	21.74[illegible]	19396.4	2.092	.841	2.324	.701	.57037

8. TEST POINT 301230515695 (95%)

STATION 1 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	0.0685	331.14	0.00	331.14	518.088	509.579	14.693	13.913	.2939	0.00	20.33	0.000	.0730
2	5.2298	331.14	0.00	331.14	518.088	509.579	14.693	13.813	.2989	0.00	19.72	0.000	.0730
3	5.3837	331.14	0.00	331.14	518.088	509.579	14.693	13.813	.2989	0.00	18.48	0.000	.0730
4	5.5333	331.14	0.00	331.14	518.088	509.579	14.693	13.813	.2989	0.00	17.24	0.000	.0730
5	5.6938	331.14	0.00	331.14	518.088	509.579	14.693	13.813	.2989	0.00	15.99	0.000	.0730
6	6.8473	331.14	0.00	331.14	518.088	509.579	14.693	13.813	.2989	0.00	14.74	0.000	.0730
7	6.9998	331.14	0.00	331.14	518.088	509.579	14.693	13.813	.2989	0.00	13.49	0.000	.0730
8	7.1516	331.14	0.00	331.14	518.088	509.579	14.693	13.813	.2989	0.00	12.25	0.000	.0730
9	7.3027	331.14	0.00	331.14	518.088	509.579	14.693	13.813	.2989	0.00	11.02	0.000	.0730
10	7.4531	331.14	0.00	331.14	518.088	509.579	14.693	13.813	.2989	0.00	9.81	0.000	.0730
11	7.6032	331.14	0.00	331.14	518.088	509.579	14.693	13.813	.2989	0.00	8.63	0.000	.0730
12	7.7527	331.14	0.00	331.14	518.088	509.579	14.693	13.813	.2989	0.00	7.48	0.000	.0730
13	7.9017	331.14	0.00	331.14	518.088	509.579	14.693	13.813	.2989	0.00	6.37	0.000	.0730
14	8.0510	331.14	0.00	331.14	518.088	509.579	14.693	13.813	.2989	0.00	5.31	0.000	.0730
15	8.1993	331.14	0.00	331.14	518.088	509.579	14.693	13.813	.2989	0.00	4.30	0.000	.0730
16	8.3479	331.14	0.00	331.14	518.088	509.579	14.693	13.813	.2989	0.00	3.36	0.000	.0730
17	8.4953	331.14	0.00	331.14	518.088	509.579	14.693	13.813	.2989	0.00	2.49	0.000	.0730
18	8.6447	331.14	0.00	331.14	518.088	509.579	14.693	13.813	.2989	0.00	1.71	0.000	.0730
19	8.7931	331.14	0.00	331.14	518.088	509.579	14.693	13.813	.2989	0.00	1.03	0.000	.0730
20	8.9415	331.14	0.00	331.14	518.088	509.579	14.693	13.813	.2989	0.00	.45	0.000	.0730
21	9.0910	331.14	0.00	331.14	518.088	509.579	14.693	13.813	.2989	0.00	0.00	0.000	.0730

STATION 2 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	0.3749	361.03	0.00	361.03	518.688	507.824	14.893	13.947	.3273	0.00	20.83	-205.758	.0724
2	5.5135	363.04	0.00	363.04	518.088	507.703	14.693	13.835	.3239	0.00	19.53	-114.615	.0723
3	5.6511	365.40	0.00	365.40	518.088	507.597	14.693	13.825	.3305	0.00	18.23	-92.360	.0723
4	5.7970	366.33	0.00	366.33	518.088	507.503	14.693	13.817	.3319	0.00	16.93	-66.053	.0723
5	6.9281	368.23	0.00	368.23	518.088	507.425	14.693	13.809	.3331	0.00	15.62	-56.491	.0722
6	7.0973	369.28	0.00	369.28	518.088	507.360	14.693	13.803	.3341	0.00	14.32	-43.353	.0722
7	7.1913	370.07	0.00	370.07	518.088	507.311	14.693	13.799	.3348	0.00	13.02	-43.894	.0722
8	7.3253	370.80	0.00	370.80	518.088	507.279	14.693	13.796	.3353	0.00	11.73	-39.451	.0722
9	7.4589	370.84	0.00	370.84	518.088	507.264	14.693	13.794	.3355	0.00	10.45	-35.667	.0722
10	7.5919	370.77	0.00	370.77	518.088	507.268	14.693	13.795	.3354	0.00	9.19	-32.343	.0722
11	7.7249	370.36	0.00	370.36	518.088	507.292	14.693	13.797	.3351	0.00	7.94	-29.364	.0722
12	7.8575	369.65	0.00	369.65	518.088	507.337	14.693	13.801	.3344	0.00	6.73	-26.664	.0722
13	7.9910	368.57	0.00	368.57	518.088	507.404	14.693	13.807	.3334	0.00	5.54	-24.201	.0722
14	8.1244	367.10	0.00	367.10	518.088	507.493	14.693	13.816	.3321	0.00	4.39	-21.952	.0723
15	8.2595	365.25	0.00	365.25	518.088	507.606	14.693	13.826	.3303	0.00	3.29	-19.897	.0723
16	8.3949	363.00	0.00	363.00	518.088	507.742	14.693	13.839	.3283	0.00	2.25	-18.019	.0724
17	8.5312	360.33	0.00	360.33	518.088	507.902	14.693	13.854	.3258	0.00	1.26	-16.296	.0724
18	8.0687	357.24	0.00	357.24	518.088	508.087	14.693	13.872	.3229	0.00	.35	-14.706	.0725
19	8.8072	353.69	0.00	353.69	518.088	508.296	14.693	13.891	.3197	0.00	-.49	-13.226	.0726
20	8.9479	349.66	0.00	349.66	518.088	508.532	14.693	13.913	.3160	0.00	-1.24	-11.834	.0726
21	9.0909	345.10	0.00	345.10	518.088	508.795	14.693	13.938	.3117	0.00	-1.91	-10.518	.0727

STATION 6 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.6816	[illegible]	[illegible]	[illegible]	518.638	505.405	14.693	13.421	.3624	0.00	20.54	-83.031	.0715
2	6.7245	+402.65	[illegible]	+402.65	518.638	505.220	14.693	13.403	.3655	0.00	19.15	-74.625	.0715
3	6.8458	+405.24	0.00	+405.24	518.638	505.046	14.638	13.387	.3674	0.00	17.77	-71.741	.0714
4	6.9609	+407.08	0.00	+407.08	518.638	504.887	14.693	13.373	.3699	0.00	16.38	-63.786	.0713
5	7.0697	+409.68	0.00	+409.68	518.638	504.745	14.693	13.360	.3716	0.00	14.99	-55.765	.0713
6	7.2053	+411.47	0.00	+411.47	518.638	504.625	14.693	13.346	.3732	0.00	13.60	-48.139	.0713
7	7.3254	+412.85	0.00	+412.85	518.638	504.528	14.693	13.339	.3745	0.00	12.20	-41.254	.0712
8	7.4442	+413.85	0.00	+413.85	518.638	504.450	14.693	13.333	.3755	0.00	10.80	-35.256	.0712
9	7.5638	+414.58	0.00	+414.58	518.638	504.423	14.693	13.330	.3760	0.00	9.40	-30.154	.0712
10	7.6818	+414.40	0.00	+414.40	518.638	504.422	14.693	13.330	.3760	0.00	8.00	-25.880	.0712
11	7.8003	+413.98	0.00	+413.98	518.638	504.459	14.693	13.333	.3755	0.00	6.61	-22.340	.0712
12	7.9203	+412.71	0.00	+412.71	518.638	504.538	14.693	13.340	.3744	0.00	5.23	-19.419	.0712
13	8.0404	+410.93	0.00	+410.93	518.638	504.660	14.693	13.352	.3727	0.00	3.86	-17.015	.0713
14	8.1614	+408.48	0.00	+408.48	518.638	504.827	14.693	13.367	.3704	0.00	2.52	-15.040	.0713
15	8.2834	+405.35	0.00	+405.35	518.638	505.038	14.693	13.387	.3675	0.00	1.22	-13.423	.0714
16	8.4057	+401.55	0.00	+401.55	518.638	505.293	14.693	13.410	.3640	0.00	-.05	-12.117	.0715
17	8.5315	397.11	0.00	397.11	518.638	505.588	14.693	13.438	.3599	0.00	-1.26	-11.086	.0716
18	8.6530	392.05	0.00	392.05	518.638	505.916	14.693	13.468	.3552	0.00	-2.41	-10.287	.0717
19	8.7805	386.34	0.00	386.34	518.638	506.276	14.693	13.502	.3500	0.00	-3.49	-9.677	.0718
20	8.9171	380.34	0.00	380.34	518.638	506.658	14.693	13.537	.3445	0.00	-4.50	-9.191	.0720
21	9.0510	374.11	0.00	374.11	518.638	507.062	14.693	13.575	.3385	0.00	-5.47	-8.690	.0721

STATION 7 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.7500	+441.90	0.00	+441.90	518.638	502.456	14.693	13.150	.4017	0.00	20.32	-388.054	.0705
2	6.8916	+442.39	0.00	+442.39	518.638	502.171	14.693	13.123	.4054	0.00	18.93	-383.210	.0704
3	6.9723	+442.61	0.00	+442.61	518.638	501.995	14.693	13.107	.4089	0.00	17.53	-446.056	.0703
4	7.0824	+443.00	0.00	+443.00	518.638	501.636	14.693	13.074	.4122	0.00	16.12	-434.348	.0702
5	7.1913	+443.23	0.00	+443.23	518.638	501.396	14.693	13.052	.4152	0.00	14.68	-292.903	.0701
6	7.3047	+443.05	0.00	+443.05	518.638	501.182	14.693	13.032	.4178	0.00	13.22	-167.078	.0700
7	7.4013	+441.42	0.00	+441.42	518.638	501.091	14.693	13.016	.4200	0.00	11.72	-96.745	.0700
8	7.5179	+439.25	0.00	+439.25	518.638	500.860	14.693	13.003	.4218	0.00	10.20	-64.066	.0699
9	7.6237	+436.46	0.00	+436.46	518.638	500.757	14.693	12.995	.4229	0.00	8.66	-44.512	.0699
10	7.7348	+434.99	0.00	+434.99	518.638	500.729	14.693	12.991	.4234	0.00	7.09	-33.018	.0699
11	7.8429	+434.06	0.00	+434.06	518.638	500.751	14.693	12.993	.4231	0.00	5.51	-25.483	.0699
12	7.9517	+433.02	0.00	+433.02	518.638	500.839	14.693	13.001	.4223	0.00	3.92	-20.305	.0699
13	8.0615	+431.49	0.00	+431.49	518.638	500.997	14.693	13.016	.4201	0.00	2.32	-16.444	.0700
14	8.1723	+429.38	0.00	+429.38	518.638	501.233	14.693	13.037	.4172	0.00	.72	-13.511	.0701
15	8.2844	+426.20	0.00	+426.20	518.638	501.550	14.693	13.066	.4132	0.00	-.87	-11.268	.0702
16	8.3931	+422.35	0.00	+422.35	518.638	501.951	14.693	13.103	.4082	0.00	-2.43	-9.584	.0703
17	8.5137	+417.33	0.00	+417.33	518.638	502.430	14.693	13.146	.4021	0.00	-3.92	-8.415	.0705
18	8.6312	+411.93	0.00	+411.93	518.638	502.970	14.693	13.196	.3952	0.00	-5.30	-7.707	.0707
19	8.7217	+406.38	0.00	+406.38	518.638	503.543	14.693	13.248	.3877	0.00	-6.53	-7.417	.0709
20	8.8745	+399.47	0.00	+399.47	518.638	504.106	14.693	13.300	.3802	0.00	-7.56	-7.763	.0711
21	9.0000	+392.12	0.00	+392.12	518.638	504.579	14.693	13.344	.3738	0.00	-8.25	-10.317	.0712

BLADE DATA

LOCATION	BLADE SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-60.937	6.070	-68.837	7.900	0.0000	1141.5	1.1127	1224.05	28.527	626.727	1.000	0.000	1.0000	1.0000
2	-61.342	6.231	-68.980	7.638	0.0000	1160.4	1.1303	1243.09	29.106	630.320	1.000	0.000	1.0000	1.0000
3	-61.722	6.387	-69.127	7.405	0.0000	1179.1	1.1477	1261.91	29.699	633.945	1.000	0.000	1.0000	1.0000
4	-62.068	6.420	-69.280	7.212	0.0000	1197.7	1.1650	1280.53	30.306	637.603	1.000	0.000	1.0000	1.0000
5	-62.373	6.324	-69.438	7.065	0.0000	1216.2	1.1820	1298.97	30.927	641.296	1.000	0.000	1.0000	1.0000
6	-62.650	6.044	-69.604	6.954	0.0000	1234.6	1.1989	1317.21	31.555	645.028	1.000	0.000	1.0000	1.0000
7	-62.917	5.577	-69.783	6.867	0.0000	1253.0	1.2155	1335.25	32.219	648.902	1.000	0.000	1.0000	1.0000
8	-63.183	4.927	-69.979	6.796	0.0000	1271.3	1.2319	1353.07	32.891	652.522	1.000	0.000	1.0000	1.0000
9	-63.454	4.092	-70.193	6.739	0.0000	1289.6	1.2481	1370.69	33.583	656.494	1.000	0.000	1.0000	1.0000
10	-63.736	3.091	-70.430	6.694	0.0000	1307.9	1.2640	1388.09	34.295	660.423	1.000	0.000	1.0000	1.0000
11	-64.034	1.952	-70.692	6.658	0.0000	1326.3	1.2796	1405.31	35.031	664.418	1.000	0.000	1.0000	1.0000
12	-64.352	.742	-70.981	6.629	0.0000	1344.7	1.2950	1422.36	35.792	668.486	1.000	0.000	1.0000	1.0000
13	-64.693	-.536	-71.299	6.606	0.0000	1363.3	1.3102	1439.27	36.581	672.638	1.000	0.000	1.0000	1.0000
14	-65.061	-2.004	-71.651	6.589	0.0000	1382.0	1.3252	1456.06	37.401	676.884	1.000	0.000	1.0000	1.0000
15	-65.460	-3.641	-72.037	6.577	0.0000	1401.0	1.3400	1472.77	38.255	681.236	1.000	0.000	1.0000	1.0000
16	-65.890	-5.170	-72.461	6.571	0.0000	1420.2	1.3546	1489.45	39.148	685.710	1.000	0.000	1.0000	1.0000
17	-66.347	-5.335	-72.920	6.572	0.0000	1439.8	1.3692	1506.19	40.083	690.320	1.000	0.000	1.0000	1.0000
18	-66.822	-7.145	-73.406	6.584	0.0000	1459.7	1.3838	1523.11	41.067	695.081	1.000	0.000	1.0000	1.0000
19	-67.307	-7.696	-73.907	6.600	0.0000	1480.0	1.3987	1540.37	42.103	700.008	1.000	0.000	1.0000	1.0000
20	-67.803	-8.547	-74.402	6.599	0.0000	1500.8	1.4141	1558.16	43.196	705.112	1.000	0.000	1.0000	1.0000
21	-68.316	-9.607	-74.949	6.533	0.0000	1522.0	1.4303	1576.81	44.343	710.391	1.000	0.000	1.0000	1.0000

STATION 5 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.8973	493.27	140.62	512.32	545.928	524.086	17.421	15.107	.4566	15.91	22.32	6.139	.0776
2	6.9335	495.77	136.54	514.31	545.581	523.521	17.331	15.056	.4540	15.43	20.67	5.980	.0774
3	7.0935	498.46	133.72	516.09	545.344	523.231	17.345	15.035	.4595	15.02	18.98	8.267	.0772
4	7.1373	501.44	131.32	518.35	545.231	522.923	17.324	14.967	.4619	14.68	17.24	10.477	.0771
5	7.2953	504.62	129.55	520.99	545.238	522.703	17.315	14.937	.4644	14.40	15.45	14.734	.0770
6	7.3942	507.64	128.37	523.62	545.343	522.579	17.313	14.918	.4668	14.19	13.61	25.530	.0769
7	7.4314	510.37	127.89	525.31	545.550	522.596	17.331	14.909	.4687	14.05	11.72	103.071	.0768
8	7.5892	511.70	127.64	527.38	545.888	522.796	17.350	14.913	.4700	14.01	9.78	-48.564	.0768
9	7.6848	512.66	127.96	528.39	545.303	523.123	17.379	14.930	.4708	14.01	7.80	-13.421	.0769
10	7.7413	512.30	128.24	528.96	546.802	523.642	17.415	14.961	.4710	14.11	5.79	-12.150	.0770
11	7.8780	512.14	131.54	528.77	547.788	524.576	17.460	15.004	.4705	14.40	3.78	-8.941	.0770
12	7.9751	510.98	134.46	529.38	548.801	525.624	17.513	15.060	.4697	14.74	1.77	-7.233	.0772
13	8.0729	509.07	137.83	527.40	549.333	526.843	17.573	15.127	.4682	15.15	-.21	-6.265	.0773
14	8.1715	505.36	141.72	525.44	551.212	528.294	17.643	15.203	.4659	15.65	-2.13	-5.737	.0775
15	8.2713	501.54	145.21	522.14	552.414	529.784	17.694	15.283	.4623	16.15	-3.97	-5.516	.0777
16	8.3726	496.92	148.92	516.84	553.699	531.527	17.729	15.365	.4569	16.75	-5.70	-5.552	.0779
17	8.4767	485.41	153.10	508.93	555.126	533.624	17.735	15.443	.4491	17.50	-7.26	-5.971	.0780
18	8.5849	473.10	157.94	498.11	556.247	535.655	17.709	15.515	.4386	18.23	-8.54	-6.632	.0780
19	8.6950	458.27	164.24	483.93	556.342	536.938	17.639	15.573	.4253	18.60	-9.48	-8.346	.0781
20	8.8110	439.02	150.85	464.21	556.008	538.123	17.504	15.610	.4079	18.96	-9.90	-13.497	.0781
21	8.9340	411.63	145.89	436.72	555.284	539.455	17.280	15.615	.3832	19.51	-9.38	-1665.883	.0780

BLADE DATA

LOCATION	BLADE SECTION	ANGLE BLADE	MEAN FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-99.346	+0.223	-64.571	5.375	.0194	1166.9	1.0133	1135.31	29.046	531.502	1.186	.053	.9505	.9517
2	-99.442	+0.235	-64.699	5.211	.0171	1133.5	1.0314	1154.19	29.568	534.509	1.183	.052	.9468	.9488
3	-99.302	+0.274	-64.524	5.050	.0177	1200.4	1.0489	1177.42	30.102	538.142	1.180	.051	.9433	.9446
4	-99.312	3.712	-69.213	+0.101	.0153	1217.2	1.0659	1196.09	30.647	541.498	1.179	.051	.9481	.9415
5	-99.374	3.237	-69.447	4.793	.0188	1233.9	1.0822	1214.14	31.202	544.876	1.178	.051	.9373	.9387
6	-99.390	2.892	-69.597	4.651	.0193	1250.4	1.0978	1231.59	31.769	548.274	1.179	.051	.9347	.9362
7	-99.293	2.594	-69.479	4.536	.0201	1266.9	1.1126	1248.17	32.341	551.695	1.179	.052	.9314	.9329
8	-99.379	2.249	-69.119	4.248	.0215	1283.3	1.1264	1263.83	32.913	555.145	1.181	.052	.9260	.9278
9	-99.322	1.975	-69.357	4.015	.0229	1299.6	1.1394	1279.67	33.497	558.530	1.182	.053	.9212	.9238
10	-99.127	1.653	-69.230	3.903	.0249	1315.9	1.1515	1293.04	34.093	562.156	1.185	.054	.9147	.9167
11	-98.909	1.311	-69.104	3.855	.0274	1332.3	1.1615	1305.38	34.620	565.737	1.188	.056	.8993	.9017
12	-98.992	.979	-69.177	3.844	.0344	1348.7	1.1709	1317.20	35.175	569.368	1.192	.058	.8857	.8885
13	-98.993	.123	-67.473	3.430	.0395	1365.2	1.1797	1325.78	35.734	573.069	1.196	.060	.8713	.8745
14	-98.816	-.358	-67.305	3.459	.0459	1381.9	1.1875	1334.97	36.277	576.659	1.200	.063	.8538	.8575
15	-98.999	-.835	-69.134	3.920	.0520	1398.8	1.1954	1350.15	36.845	580.722	1.204	.065	.8375	.8417
16	-99.056	-1.411	-69.293	4.093	.0602	1415.9	1.2024	1360.24	37.373	584.708	1.206	.067	.8155	.8204
17	-99.091	-1.739	-69.330	4.207	.0717	1433.5	1.2080	1369.53	37.843	588.538	1.207	.070	.7850	.7906
18	-99.345	-1.913	-69.349	4.249	.0809	1451.6	1.2147	1379.45	38.356	593.149	1.209	.072	.7548	.7612
19	-99.498	-1.993	-70.033	4.947	.0842	1470.4	1.2257	1393.67	39.066	597.874	1.200	.073	.7362	.7429
20	-98.323	-2.430	-71.353	5.801	.0943	1490.0	1.2351	1404.30	39.837	702.460	1.191	.072	.7118	.7188
21	-98.994	-3.111	-73.218	6.974	.1042	1510.8	1.2510	1425.67	40.505	707.903	1.176	.071	.6709	.6784

STATION 5 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.191 ISEN. EFF.= .848 POLY. EFF.= .852 DELTA T ON T = .068

STATION 5 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGL'N	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.0734	314.68	375.73	637.27	537.330	543.659	23.140	18.854	.5491	36.13	24.47	68.453	.0907
2	7.1634	317.99	372.10	637.50	538.469	539.762	23.137	19.846	.5493	35.69	22.59	65.610	.0907
3	7.2479	321.50	369.07	638.05	539.264	539.840	23.137	18.837	.5502	35.26	20.63	60.863	.0906
4	7.3307	325.31	366.42	639.91	539.597	539.907	23.140	18.825	.5512	34.82	18.61	52.537	.0906
5	7.4129	329.45	364.32	641.96	539.354	539.830	23.141	18.809	.5525	34.38	16.54	42.386	.0905
6	7.4944	333.86	362.30	643.91	539.249	539.816	23.143	18.789	.5543	33.94	14.43	32.670	.0904
7	7.5752	338.28	360.70	645.74	539.510	539.939	23.153	18.766	.5562	33.53	12.31	24.661	.0903
8	7.6555	342.17	359.00	647.66	539.875	540.078	23.152	18.742	.5580	33.19	10.17	18.617	.0901
9	7.7356	345.56	357.32	649.53	539.162	539.168	23.141	18.714	.5598	32.85	8.02	14.313	.0900
10	7.8152	348.00	355.11	650.29	535.409	535.436	23.113	18.683	.5599	32.57	5.86	11.331	.0898
11	7.8934	347.55	350.03	649.33	536.242	536.210	23.059	18.649	.5592	32.54	3.73	9.305	.0895
12	7.9734	343.37	344.02	648.00	538.805	538.994	22.979	18.613	.5571	32.59	1.62	7.970	.0892
13	8.0537	342.22	347.71	644.15	537.313	537.914	22.871	18.576	.5534	32.67	-.43	7.126	.0889
14	8.1429	335.37	343.99	635.21	537.357	544.192	22.733	18.541	.5477	32.93	-2.40	6.643	.0885
15	8.2239	326.59	343.37	624.93	538.363	545.906	22.564	18.510	.5396	33.24	-4.28	6.466	.0882
16	8.3162	313.08	344.51	618.07	539.114	547.455	22.363	18.487	.5293	33.69	-6.03	6.583	.0878
17	8.4115	303.44	343.89	603.15	540.249	550.398	22.131	18.474	.5143	35.10	-7.58	7.024	.0872
18	8.5113	298.06	347.49	592.93	541.660	553.439	21.869	18.473	.4962	36.59	-8.83	7.952	.0868
19	8.6142	298.37	339.40	584.40	540.759	555.283	21.521	18.487	.4712	37.75	-9.71	10.038	.0866
20	8.7349	299.05	330.32	578.10	539.658	557.415	21.141	18.515	.4395	39.62	-10.07	15.788	.0864
21	8.8579	340.44	322.45	469.92	538.922	480.700	20.681	13.556	.3957	43.45	-9.38	1665.883	.0861

BLADE DATA

LOCATION	BLADE SECTION ANGLES	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-52.585	2.438	-57.324	5.413	.0333	1197.0	.8358	969.19	29.771	637.469	1.575	.144	.9614	.9638
2	-53.085	2.288	-58.318	5.233	.0346	1211.4	.8497	986.27	30.211	641.342	1.574	.143	.9628	.9652
3	-53.632	1.915	-58.678	5.046	.0357	1225.6	.8642	1003.16	30.658	643.197	1.574	.145	.9604	.9628
4	-54.139	1.206	-59.008	4.861	.0368	1239.7	.8786	1019.95	31.118	646.063	1.575	.145	.9567	.9591
5	-54.604	.486	-59.289	4.694	.0377	1253.6	.8938	1036.69	31.567	648.331	1.575	.145	.9528	.9552
6	-55.029	-.074	-59.549	4.529	.0386	1267.4	.9074	1053.39	32.038	651.882	1.575	.144	.9501	.9526
7	-55.411	-.284	-59.787	4.375	.0402	1281.1	.9214	1069.66	32.486	654.679	1.575	.144	.9476	.9501
8	-55.763	-.328	-60.024	4.260	.0430	1294.6	.9346	1085.12	32.921	657.367	1.575	.147	.9438	.9464
9	-56.092	-.268	-60.288	4.188	.0457	1308.1	.9478	1100.53	33.363	660.473	1.575	.147	.9384	.9412
10	-56.402	-.228	-60.575	4.172	.0497	1321.6	.9604	1115.43	33.785	663.405	1.573	.149	.9328	.9356
11	-56.699	-.035	-60.930	4.230	.0595	1335.2	.9698	1127.13	34.086	666.388	1.567	.150	.9177	.9207
12	-56.988	.142	-61.364	4.376	.0637	1348.9	.9795	1139.23	34.402	669.416	1.564	.151	.9036	.9064
13	-57.275	.471	-61.989	4.614	.0790	1362.8	.9887	1150.85	34.708	672.229	1.556	.152	.8878	.8904
14	-57.572	.882	-62.924	4.952	.0918	1377.0	.9963	1161.01	34.941	675.739	1.547	.153	.8672	.8696
15	-57.893	1.361	-63.289	5.397	.1042	1391.6	1.0042	1171.53	35.204	679.072	1.535	.154	.8479	.8504
16	-58.252	1.900	-64.215	5.963	.1208	1406.7	1.0093	1179.52	35.371	682.569	1.522	.155	.8210	.8233
17	-58.675	2.524	-65.358	6.683	.1440	1422.5	1.0101	1183.46	35.378	686.254	1.506	.158	.7853	.7877
18	-59.179	3.322	-66.797	7.619	.1665	1439.4	1.0112	1188.00	35.424	690.225	1.487	.160	.7497	.7521
19	-59.788	4.146	-68.590	8.803	.1770	1457.4	1.0286	1200.90	35.846	694.342	1.464	.158	.7269	.7294
20	-60.543	4.685	-70.814	10.271	.1890	1477.2	1.0301	1214.24	36.384	699.317	1.438	.156	.7084	.7113
21	-61.540	4.918	-73.670	12.330	.2085	1499.7	1.0367	1225.43	36.671	704.831	1.407	.155	.6628	.6678

STATION 6 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.538 ISEN. EFF.= .865 POLY. EFF.= .873 DELTA T ON T = .151

250

STATION 7 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES NHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.2628	616.81	572.44	840.93	635.247	576.685	29.176	28.777	.7138	42.98	24.87	59.518	.0970
2	7.3314	621.92	565.30	840.44	634.894	576.399	29.072	28.708	.7136	42.27	22.68	-114.215	.0968
3	7.3937	626.81	559.34	840.09	634.740	576.294	29.002	28.662	.7134	41.74	20.48	-34.768	.0966
4	7.4671	632.80	554.26	839.78	634.733	576.340	28.955	28.636	.7138	41.38	18.31	-22.723	.0964
5	7.5339	634.09	549.91	839.33	634.851	576.512	28.931	28.626	.7126	40.93	16.16	-18.124	.0964
6	7.6001	636.88	546.25	839.05	635.092	576.791	28.925	28.638	.7122	40.62	14.06	-15.822	.0963
7	7.6668	639.02	543.05	839.12	635.584	577.275	28.943	28.647	.7119	40.48	12.08	-14.830	.0963
8	7.7317	640.03	543.06	839.37	636.415	578.073	28.973	28.678	.7117	40.31	9.99	-14.425	.0963
9	7.7975	640.48	542.64	839.45	637.322	578.971	29.027	28.721	.7112	40.27	8.03	-14.526	.0964
10	7.8635	639.34	543.24	839.97	638.455	580.175	29.073	28.776	.7108	40.35	6.12	-15.083	.0965
11	7.9291	633.45	548.09	837.66	640.544	582.451	29.100	28.842	.7076	40.87	4.24	-16.881	.0964
12	7.9978	626.23	552.34	835.01	642.531	584.810	29.112	28.919	.7039	41.41	2.41	-19.644	.0963
13	8.0669	616.35	555.90	830.72	644.640	587.518	29.095	21.086	.6987	42.18	.61	-19.934	.0963
14	8.1379	602.22	563.22	824.55	647.170	590.988	29.050	21.186	.6915	43.08	-1.17	-23.194	.0962
15	8.2116	585.18	568.21	815.69	649.472	594.417	28.962	21.218	.6821	44.16	-2.91	-37.873	.0961
16	8.2863	561.07	576.17	804.22	652.538	599.025	28.827	21.343	.6699	45.76	-4.68	-35.883	.0960
17	8.3703	526.60	589.86	778.72	657.859	605.341	28.654	21.482	.6553	48.24	-6.17	-47.341	.0956
18	8.4596	484.77	601.73	772.71	661.336	611.961	28.413	21.635	.6369	51.14	-7.51	-79.854	.0952
19	8.5581	442.11	597.15	742.99	661.896	616.258	28.024	21.799	.6103	53.49	-8.59	-245.817	.0943
20	8.6683	387.63	591.53	707.23	662.385	621.833	27.560	21.971	.5787	56.76	-9.36	185.199	.0933
21	8.8819	387.28	591.88	666.14	664.478	627.791	27.055	22.158	.5422	62.54	-9.37	**********	.0951

BLADE DATA

LOCATION	BLADE SECTION	BLADE ANGLES MEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-40.428	1.512	-42.759	30.357	.0503	1228.1	.7037	899.63	30.563	943.695	1.989	.225	.9613	.9649
2	-41.089	1.234	-42.324	30.234	.0521	1239.8	.7190	917.48	30.915	944.090	1.978	.224	.9587	.9625
3	-41.722	.955	-42.681	30.103	.0538	1251.4	.7329	933.70	31.268	945.468	1.973	.224	.9562	.9602
4	-42.337	.133	-42.471	30.334	.0555	1262.8	.8055	948.63	31.622	950.387	1.970	.224	.9539	.9580
5	-42.935	-.689	-43.623	30.824	.0567	1274.1	.8172	962.53	31.980	953.202	1.969	.224	.9516	.9559
6	-43.511	-1.191	-44.249	30.734	.0531	1285.3	.8281	975.68	32.341	955.578	1.968	.224	.9493	.9539
7	-44.048	-1.239	-44.324	30.610	.0514	1296.4	.8376	987.20	32.685	957.147	1.969	.225	.9482	.9511
8	-44.540	-1.092	-43.803	30.517	.0646	1307.2	.8453	997.01	32.935	960.339	1.973	.227	.9414	.9467
9	-45.012	-.737	-43.433	30.453	.0697	1318.0	.8524	1006.18	33.309	962.751	1.978	.229	.9367	.9425
10	-45.453	-.281	-43.393	30.442	.0745	1329.8	.8579	1013.62	33.587	965.191	1.978	.231	.9302	.9366
11	-45.875	.238	-43.311	30.506	.0842	1341.1	.8573	1014.92	33.673	967.077	1.980	.235	.9156	.9233
12	-46.284	1.025	-43.353	30.669	.1031	1352.2	.8506	1016.09	33.771	970.223	1.981	.239	.9014	.9104
13	-46.695	1.913	-43.417	30.952	.1194	1364.2	.8542	1015.64	33.830	972.943	1.980	.243	.8856	.8960
14	-47.099	2.959	-43.471	31.355	.1377	1376.2	.8485	1014.74	33.788	975.259	1.977	.246	.8658	.8780
15	-47.492	4.121	-43.611	31.909	.1502	1388.6	.8427	1007.74	33.702	976.395	1.971	.247	.8464	.8603
16	-47.862	5.435	-43.796	32.575	.1810	1401.6	.8314	998.10	33.570	981.388	1.962	.250	.8207	.8368
17	-48.395	6.792	-47.470	34.078	.2158	1415.5	.8116	979.29	33.114	984.511	1.950	.267	.7868	.8050
18	-48.348	8.134	-50.579	10.791	.2494	1430.6	.7915	960.24	32.630	988.156	1.934	.275	.7521	.7738
19	-49.547	9.427	-62.523	12.920	.2643	1447.3	.7871	959.21	32.795	992.106	1.907	.279	.7317	.7547
20	-50.360	11.313	-69.033	13.751	.2854	1466.8	.7827	956.53	32.913	996.907	1.875	.277	.7086	.7330
21	-51.301	10.840	-71.105	13.745	.3127	1488.5	.7721	948.54	32.849	702.083	1.841	.251	.6761	.7023

STATION 7 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.956 ISEN. EFF.= .861 POLY. EFF.= .874 DELTA T ON T = .245

STATION 8 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.4432	348.48	931.42	1032.03	862.333	803.268	33.552	19.025	.9382	39.05	19.79	-2.220	.0909
2	7.4977	335.65	643.50	1082.75	863.341	804.253	33.694	19.109	.9274	39.43	17.65	-2.373	.0918
3	7.5494	323.34	956.85	1073.56	864.354	805.241	33.793	19.585	.9175	39.91	15.59	-2.558	.0927
4	7.5954	312.14	949.14	1065.11	865.365	571.403	33.865	19.349	.9092	40.32	13.62	-2.782	.0936
5	7.6448	301.45	939.13	1058.39	866.385	575.847	33.964	20.098	.8994	40.69	11.72	-3.048	.0943
6	7.6947	291.01	930.32	1049.42	867.226	576.093	34.057	20.432	.8913	41.03	9.89	-3.362	.0951
7	7.7432	282.26	923.96	1042.78	868.322	578.347	34.152	20.552	.8833	41.39	8.13	-3.729	.0957
8	7.7934	272.75	891.97	1037.08	869.773	580.780	34.251	20.762	.8773	41.83	6.43	-4.164	.0963
9	7.8433	264.22	894.23	1032.50	871.350	583.155	34.383	20.963	.8716	42.29	4.79	-4.688	.0968
10	7.9033	255.15	893.35	1029.58	873.273	585.756	34.510	21.157	.8666	42.76	3.21	-5.338	.0973
11	7.9544	240.39	708.02	1024.43	876.464	589.666	34.587	21.340	.8601	43.72	1.67	-6.164	.0975
12	4.0101	25.76	717.71	1020.71	879.724	593.572	34.673	21.533	.8541	44.98	.19	-7.279	.0977
13	8.0671	709.69	723.33	1016.40	883.269	597.859	34.731	21.719	.8475	45.78	-1.26	-8.660	.0979
14	8.1203	696.73	741.40	1010.38	887.422	603.006	34.723	21.906	.8391	47.19	-2.66	-11.461	.0979
15	8.1442	961.76	752.73	1002.20	891.289	608.277	34.654	22.096	.8289	48.68	-4.83	-16.281	.0978
16	8.2538	922.90	767.35	990.03	896.144	615.874	34.463	22.292	.8142	50.82	-5.34	-27.526	.0976
17	8.3284	872.50	791.90	977.19	703.257	624.408	34.143	22.502	.7979	54.14	-6.58	-69.465	.0971
18	8.4059	809.10	816.30	962.05	713.746	634.357	33.928	22.733	.7730	58.85	-7.62	355.184	.0965
19	8.4973	734.10	817.80	939.30	713.147	640.965	33.675	22.987	.7543	60.95	-8.52	94.988	.0966
20	8.6030	687.48	821.30	907.49	716.438	648.506	33.054	23.269	.7269	64.84	-9.35	2593.632	.0966
21	8.7359	295.99	842.05	889.23	724.586	659.389	32.894	23.589	.7035	71.24	-9.37	**********	.0964

BLADE DATA

LOCATION	BLADE SECTION	ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-24.143	2.853	-33.164	9.611	.0673	1253.7	.8783	1022.90	31.438	630.285	2.283	.277	.9576	.9683
2	-24.927	2.833	-34.737	9.610	.0696	1297.4	.9718	1016.89	31.753	631.917	2.290	.279	.9554	.9668
3	-25.807	2.733	-35.494	9.607	.0718	1276.2	.8644	1011.51	31.882	633.347	2.297	.281	.9529	.9652
4	-26.643	2.308	-36.243	9.600	.0738	1284.5	.8586	1006.99	32.116	635.401	2.304	.283	.9501	.9636
5	-27.242	1.713	-36.389	9.787	.0756	1292.8	.8538	1003.37	32.355	637.181	2.311	.285	.9477	.9624
6	-27.955	1.223	-37.722	9.707	.0774	1301.3	.8500	1000.79	32.600	638.790	2.317	.286	.9452	.9611
7	-28.672	1.113	-38.412	9.740	.0804	1309.8	.8462	998.34	32.829	640.832	2.324	.288	.9416	.9594
8	-29.333	1.255	-39.048	9.713	.0801	1318.4	.8417	994.99	33.003	642.710	2.331	.291	.9366	.9572
9	-29.988	1.577	-39.832	9.695	.0911	1327.2	.8377	992.19	33.136	644.827	2.340	.294	.9314	.9550
10	-30.688	2.048	-41.183	9.625	.0944	1336.1	.8326	988.42	33.313	646.588	2.348	.298	.9242	.9517
11	-30.991	2.677	-40.717	9.727	.1190	1345.2	.8201	976.84	33.132	648.505	2.354	.304	.9181	.9484
12	-31.453	3.488	-41.269	9.815	.1374	1354.6	.8080	965.58	33.077	650.587	2.359	.310	.9122	.9452
13	-31.879	4.432	-41.931	10.012	.1579	1364.2	.7940	952.77	32.902	652.852	2.361	.317	.8752	.9402
14	-32.274	5.643	-42.662	10.307	.1836	1374.2	.7754	933.06	32.584	655.114	2.363	.325	.8534	.9337
15	-32.645	7.026	-43.382	10.034	.2082	1384.7	.7565	915.08	32.277	657.498	2.358	.333	.8319	.9274
16	-33.009	8.438	-42.094	12.066	.2415	1395.8	.7290	885.62	31.734	660.043	2.348	.342	.8032	.9201
17	-33.387	10.047	-47.096	13.713	.2677	1407.3	.6803	840.97	30.925	662.340	2.327	.336	.7643	.9082
18	-33.817	11.592	-48.930	15.113	.3324	1421.5	.6404	790.87	29.944	664.017	2.309	.370	.7268	.8971
19	-34.317	12.775	-50.750	15.435	.3530	1437.0	.6187	767.97	29.346	664.564	2.276	.375	.7048	.8902
20	-34.848	13.304	-50.954	23.809	.3773	1454.9	.5942	741.78	29.532	663.325	2.249	.391	.6809	.8843
21	-35.617	13.234	-65.764	30.147	.4170	1477.3	.5515	696.69	29.035	659.356	2.236	.397	.6497	.8863

STATION 3 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.321 ISEN. EFF.= .845 POLY. EFF.= .862 DELTA T ON T = .321

STATION 3 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES AXIAL	TANGEN	TOTAL	TEMPERATURES TOTAL	STATIC	PRESSURES TOTAL	STATIC	MACH NO	ANGLES WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.5439	376.83	332.46	1324.32	726.317	583.421	45.957	21.335	1.1177	48.54	10.63	-2.464	.8985
2	7.5850	361.45	387.52	1310.72	728.266	586.373	46.413	21.651	1.1035	48.83	9.70	-3.284	.8995
3	7.6230	343.93	442.49	1299.10	728.219	588.536	46.273	21.770	1.0914	49.14	8.80	-4.587	.1002
4	7.6610	340.91	377.35	1289.15	728.169	590.921	46.133	22.122	1.0812	49.30	7.91	-5.936	.1008
5	7.6938	333.50	372.21	1280.59	728.118	592.691	45.993	22.293	1.0724	49.39	7.02	-12.412	.1013
6	7.7336	328.82	366.98	1273.25	728.066	594.193	45.853	22.429	1.0643	49.42	6.14	-39.812	.1017
7	7.7302	323.60	361.68	1266.09	727.996	595.624	45.669	22.534	1.0577	49.42	5.26	41.978	.1019
8	7.8219	317.59	355.00	1258.80	727.331	597.216	45.372	22.610	1.0495	49.46	4.38	14.849	.1020
9	7.8645	313.08	350.33	1250.84	727.765	598.626	45.077	22.661	1.0422	49.45	3.50	9.424	.1020
10	7.9038	307.36	343.92	1244.73	728.170	600.254	44.799	22.690	1.0355	49.52	2.63	7.103	.1018
11	7.9535	295.73	353.52	1241.33	730.845	603.514	44.541	22.781	1.0306	50.13	1.76	5.826	.1015
12	8.0004	286.03	360.03	1239.58	733.547	606.723	44.293	22.898	1.0261	50.76	.89	5.035	.1008
13	8.0433	279.32	367.30	1236.06	736.468	610.386	43.992	22.986	1.0201	51.58	.01	4.504	.1001
14	8.1007	267.17	375.15	1229.24	739.842	615.168	43.627	22.998	1.0109	52.57	-.87	4.147	.0993
15	8.1721	253.42	384.36	1222.07	743.311	620.126	43.231	22.951	1.0007	53.70	-1.77	3.912	.0984
16	8.2435	237.75	1004.51	1217.64	749.441	627.196	42.417	22.642	.9915	55.61	-2.71	3.760	.0972
17	8.2781	227.82	1043.18	1217.46	760.043	637.915	42.039	22.602	.9831	58.96	-3.70	3.738	.0957
18	8.3526	250.79	1082.82	1214.86	771.402	649.888	41.638	22.734	.9721	63.04	-4.77	3.967	.0942
19	8.4388	301.09	1099.80	1209.48	777.946	657.577	41.403	22.868	.9621	65.42	-5.99	4.324	.0937
20	8.5372	345.35	1117.50	1200.32	795.621	667.025	41.133	23.072	.9483	68.76	-7.54	5.284	.0932
21	8.4699	279.35	1151.85	1195.24	797.498	632.067	40.711	23.421	.9261	76.37	-8.95	20.749	.0925

BLADE DATA

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.7760	321.77	31.517	523.774	1.165	.404	.9623	.9670
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.7670	311.05	31.348	555.064	1.158	.404	.9505	.9644
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.7591	303.56	32.035	556.395	1.149	.404	.9558	.9622
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.7533	299.71	32.135	557.755	1.139	.404	.9531	.9599
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.7507	299.46	32.144	559.179	1.140	.404	.9503	.9576
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.7495	299.10	32.244	559.226	1.126	.404	.9476	.9552
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.7469	298.91	32.643	562.116	1.107	.404	.9459	.9520
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.7477	299.17	32.724	563.250	1.087	.403	.9360	.9470
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.7477	299.35	32.642	565.230	1.06	.403	.9322	.9419
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.7484	299.40	32.643	566.860	1.046	.404	.9293	.9351
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.7508	300.63	32.529	568.353	1.031	.404	.9272	.9284
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.7200	8.7.01	32.227	570.321	1.014	.414	.9304	.9259
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.7166	304.43	31.991	572.174	2.991	.420	.8713	.8893
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.6944	[illegible]	31.279	574.133	2.955	.426	.8470	.8642
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.6746	293.84	30.715	576.221	2.919	.433	.8228	.8470
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.6515	287.78	29.953	578.475	2.886	.443	.7911	.8194
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.6331	283.13	29.520	580.378	2.861	.452	.7688	.7824
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.6136	278.34	29.084	582.410	2.833	.463	.7473	.7660
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.5774	268.14	28.221	584.306	2.817	.500	.6851	.7264
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.5482	260.64	27.553	586.265	2.779	.515	.6604	.7046
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.5266	421.12	29.234	588.048	2.771	.531	.6268	.6731

STATION 1 - INTERVAL FLOW PARAMETERS PRESSURE RATIO = 2.485 ISEN. EFF.= .841 POLY. EFF.= .863 DELTA T ON T = .435

STATION 11 FLOW FIELD DESCRIPTION

	RADIUS	VELOCITY			TEMPERATURE		PRESSURES		MACH NO	ANGLES		RADIUS OF CURVATURE	SPECIFIC WEIGHT
		AXIAL	TANG	TOTAL	TOTAL	STATIC	TOTAL	STATIC		WHIRL	SLOPE		
[illegible]	7.0740	1178.93	934.23	1274.44	778.317	595.349	30.927	22.641	1.0783	50.69	7.82	9.349	.1027
[illegible]	7.0134	1179.02	948.92	1282.44	778.258	594.184	30.941	22.679	1.0833	50.55	7.78	9.627	.1028
[illegible]	6.9527	1181.3	963.47	1291.07	778.215	593.805	30.977	22.699	1.0886	50.35	7.66	10.158	.1028
[illegible]	6.8921	1183.64	978.11	1299.84	778.181	593.594	31.013	22.702	1.0939	50.12	7.48	10.482	.1027
[illegible]	6.8314	1186.02	992.88	1308.74	778.156	593.548	31.047	22.694	1.0993	49.86	7.26	10.518	.1026
[illegible]	6.7707	1188.42	1007.71	1317.71	778.138	593.657	31.080	22.682	1.1052	49.61	7.02	10.295	.1025
[illegible]	6.7101	1190.83	1022.59	1326.72	778.126	593.907	31.113	22.669	1.1107	49.40	6.79	9.890	.1023
[illegible]	6.6494	1193.24	1037.49	1335.77	778.120	594.284	31.145	22.658	1.1162	49.28	6.67	9.361	.1021
[illegible]	6.5888	1195.67	1052.41	1344.85	778.119	594.780	31.177	22.650	1.1217	49.17	6.57	8.744	.1019
[illegible]	6.5281	1198.09	1067.34	1353.94	778.122	595.386	31.208	22.644	1.1272	49.09	6.54	8.082	.1017
[illegible]	6.4675	1200.52	1082.28	1363.05	778.129	596.093	31.239	22.641	1.1327	49.03	6.56	7.413	.1014
[illegible]	6.4068	1202.95	1097.23	1372.17	778.140	596.894	31.269	22.640	1.1382	49.01	6.64	6.761	.1011
[illegible]	6.3462	1205.38	1112.18	1381.30	778.154	597.781	31.299	22.641	1.1437	49.03	6.78	6.150	.1006
[illegible]	6.2855	1207.81	1127.13	1390.44	778.171	598.747	31.328	22.644	1.1492	49.09	6.98	5.599	.0999
[illegible]	6.2249	1210.24	1142.09	1399.58	778.191	599.785	31.357	22.650	1.1547	49.19	7.24	5.120	.0991
[illegible]	6.1642	1212.67	1157.05	1408.73	778.214	600.889	31.386	22.658	1.1602	49.33	7.56	4.722	.0983
[illegible]	6.1036	1215.10	1172.01	1417.89	778.240	602.053	31.414	22.669	1.1657	49.52	7.96	4.410	.0974
[illegible]	6.0429	1217.53	1186.97	1427.05	778.268	603.272	31.442	22.682	1.1712	49.76	8.44	4.189	.0965
[illegible]	5.9823	1219.96	1201.94	1436.22	778.299	604.541	31.470	22.698	1.1767	50.06	9.02	4.064	.0955
[illegible]	5.9216	1222.39	1216.91	1445.39	778.332	605.856	31.497	22.716	1.1822	50.43	9.71	4.037	.0944
[illegible]	5.8610	1224.82	1231.88	1454.57	778.367	607.213	31.524	22.736	1.1877	50.88	10.53	4.110	.0933
[illegible]	5.8003	1227.25	1246.85	1463.75	778.404	608.608	31.551	22.758	1.1932	51.42	11.49	4.284	.0921
[illegible]	5.7397	1229.68	1261.82	1472.93	778.443	610.038	31.578	22.783	1.1987	52.05	12.61	4.560	.0908
[illegible]	5.6790	1232.11	1276.79	1482.12	778.484	611.499	31.604	22.809	1.2042	52.78	13.91	4.939	.0895
[illegible]	5.6184	1234.54	1291.76	1491.31	778.527	612.988	31.630	22.838	1.2097	53.62	15.41	5.422	.0881
[illegible]	5.5577	1236.97	1306.73	1500.50	778.572	614.503	31.656	22.868	1.2152	54.58	17.14	6.010	.0866
[illegible]	5.4971	1239.40	1321.70	1509.69	778.619	616.040	31.681	22.900	1.2207	55.68	19.13	6.707	.0851
[illegible]	5.4364	1241.83	1336.67	1518.89	778.668	617.597	31.706	22.933	1.2262	56.94	21.42	7.516	.0835
[illegible]	5.3758	1244.26	1351.64	1528.09	778.719	619.170	31.731	22.968	1.2317	58.39	24.05	8.443	.0819
[illegible]	5.3151	1246.69	1366.61	1537.29	778.772	620.757	31.756	23.004	1.2372	60.06	27.07	9.494	.0802
[illegible]	5.2545	1249.12	1381.58	1546.49	778.827	622.356	31.780	23.041	1.2427	61.99	30.56	10.676	.0785
[illegible]	5.1938	1251.55	1396.55	1555.70	778.884	623.964	31.804	23.079	1.2482	64.23	34.61	12.000	.0767
[illegible]	5.1332	1253.98	1411.52	1564.90	778.943	625.579	31.828	23.119	1.2537	66.84	39.34	13.477	.0749
[illegible]	5.0725	1256.41	1426.49	1574.11	779.004	627.199	31.852	23.159	1.2592	69.92	44.91	15.120	.0730
[illegible]	5.0119	1258.84	1441.46	1583.32	779.066	628.822	31.875	23.200	1.2647	73.63	51.54	16.944	.0711
[illegible]	4.9512	1261.27	1456.43	1592.53	779.130	630.446	31.898	23.241	1.2702	78.26	59.54	18.966	.0691
[illegible]	4.8906	1263.70	1471.40	1601.74	779.196	632.069	31.921	23.282	1.2757	84.32	69.36	21.206	.0671
[illegible]	4.8299	1266.13	1486.37	1610.95	779.263	633.689	31.943	23.323	1.2812	92.70	82.01	23.687	.0650
[illegible]	4.7693	1268.56	1501.34	1620.16	779.331	635.303	31.965	23.364	1.2867	105.77	99.91	26.436	.0628
[illegible]	4.7086	1270.99	1516.31	1629.37	779.401	636.910	31.987	23.404	1.2922	129.00	125.00	29.481	.0606
[illegible]	4.6480	1273.42	1531.28	1638.58	779.472	638.508	32.008	23.444	1.2977	180.00	180.00	32.852	.0583
[illegible]	4.5873	1275.85	1546.25	1647.79	779.544	640.094	32.029	23.483	1.3032	231.00	235.00	36.581	.0560
[illegible]	4.5267	1278.28	1561.22	1657.00	779.618	641.668	32.050	23.521	1.3087	257.70	280.01	40.700	.0536
[illegible]	4.4660	1280.71	1576.19	1666.21	779.693	643.227	32.070	23.559	1.3142	271.37	324.01	45.245	.0512
[illegible]	4.4054	1283.14	1591.16	1675.42	779.769	644.769	32.090	23.596	1.3197	280.01	368.01	50.256	.0487
[illegible]	4.3447	1285.57	1606.13	1684.63	779.846	646.293	32.110	23.632	1.3252	286.30	412.01	55.773	.0462
[illegible]	4.2841	1288.00	1621.10	1693.84	779.925	647.797	32.129	23.667	1.3307	291.21	456.01	61.840	.0436
[illegible]	4.2234	1290.43	1636.07	1703.05	780.004	649.280	32.148	23.702	1.3362	295.31	500.01	68.506	.0410
[illegible]	4.1628	1292.86	1651.04	1712.26	780.085	650.741	32.167	23.735	1.3417	298.85	544.01	75.824	.0383
[illegible]	4.1021	1295.29	1666.01	1721.47	780.167	652.178	32.185	23.768	1.3472	301.97	588.01	83.855	.0356
[illegible]	4.0415	1297.72	1680.98	1730.68	780.250	653.590	32.203	23.800	1.3527	304.76	632.01	92.670	.0328

STATION 11 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6199	361.15	987.35	1333.81	728.317	581.361	46.557	21.068	1.1277	47.58	9.86	26.367	.0976
2	7.6697	324.95	977.11	1345.47	728.268	578.722	46.416	20.976	1.1401	46.87	8.91	47.348	.0984
3	7.7128	364.94	971.05	1354.34	728.219	576.553	46.275	20.349	1.1503	46.28	8.68	134.739	.0991
4	7.7574	359.66	968.23	1361.25	728.169	575.060	46.136	20.111	1.1571	45.16	8.40	-247.221	.0996
5	7.8007	369.88	958.64	1364.39	728.118	574.318	45.997	19.963	1.1606	44.70	8.12	-69.567	.0998
6	7.8430	375.87	954.23	1364.87	728.066	574.157	45.857	19.887	1.1611	44.36	7.84	-43.814	.0999
7	7.8845	377.77	948.87	1362.49	727.996	574.625	45.666	19.868	1.1586	44.14	7.58	-34.387	.0997
8	7.9250	375.17	943.45	1356.85	727.891	575.792	45.372	19.891	1.1527	44.05	7.38	-31.243	.0993
9	7.9672	370.82	938.09	1350.00	727.785	577.223	45.077	19.945	1.1454	44.02	7.22	-31.769	.0987
10	8.0084	363.34	934.94	1342.90	728.170	579.196	44.790	20.019	1.1375	44.13	7.10	-32.835	.0981
11	8.0498	350.10	942.10	1338.00	730.842	582.977	44.540	20.105	1.1297	44.76	7.02	-42.241	.0977
12	8.0919	335.49	949.23	1332.73	733.547	586.870	44.289	20.198	1.1215	45.42	6.95	-58.208	.0972
13	8.1345	317.48	957.17	1325.66	736.468	591.326	43.952	20.296	1.1116	46.21	6.89	-111.312	.0966
14	8.1781	292.28	969.91	1315.70	739.842	596.954	43.427	20.399	1.0979	47.38	6.84	1083.544	.0958
15	8.2230	265.05	976.82	1304.79	743.311	602.820	42.891	20.508	1.0835	48.47	6.67	77.179	.0948
16	8.2696	227.37	997.99	1296.36	749.441	610.817	42.417	20.633	1.0695	50.34	6.43	37.644	.0939
17	8.3133	768.63	1037.93	1291.55	760.043	622.538	42.039	20.800	1.0556	53.48	5.91	25.432	.0918
18	8.3742	392.00	1080.00	1282.70	771.402	635.860	41.636	21.057	1.0374	57.35	4.88	20.497	.0892
19	8.4357	628.91	1100.14	1267.21	777.946	645.747	41.405	21.453	1.0172	60.25	3.17	18.418	.0875
20	8.5073	529.72	1123.36	1241.99	795.621	658.718	41.136	22.075	.9872	64.75	.53	21.147	.0903
21	8.6199	281.63	1156.53	1192.27	797.496	680.688	40.719	23.254	.9325	76.34	-4.27	-27.461	.0920

BLADE DATA

LOCATION	BLADE SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	48.817	-33.541	47.438	-1.320	0.0000	0.0	1.1277	1333.81	46.557	728.317	3.168	.404	.9613	.9670
2	47.971	-37.356	46.571	-1.400	0.0000	0.0	1.1401	1345.47	46.416	728.268	3.158	.404	.9585	.9646
3	47.127	-34.538	45.701	-1.346	0.0000	0.0	1.1503	1354.34	46.275	728.219	3.149	.404	.9558	.9622
4	46.489	-31.568	45.160	-1.329	0.0000	0.0	1.1571	1361.25	46.136	728.169	3.139	.404	.9531	.9599
5	46.001	-29.504	44.696	-1.305	0.0000	0.0	1.1606	1364.39	45.997	728.118	3.130	.404	.9503	.9576
6	45.629	-25.335	44.358	-1.271	0.0000	0.0	1.1611	1364.87	45.856	728.066	3.120	.404	.9476	.9553
7	45.311	-22.296	44.141	-1.170	0.0000	0.0	1.1586	1362.49	45.666	727.996	3.107	.404	.9435	.9525
8	45.041	-19.248	44.053	-.988	0.0000	0.0	1.1527	1356.85	45.372	727.891	3.087	.403	.9380	.9478
9	44.818	-16.171	44.018	-.800	0.0000	0.0	1.1454	1350.00	45.077	727.785	3.067	.403	.9322	.9429
10	44.649	-12.903	44.127	-.522	0.0000	0.0	1.1375	1342.90	44.790	728.170	3.048	.404	.9243	.9351
11	44.542	-9.292	44.758	.216	0.0000	0.0	1.1297	1338.00	44.540	730.842	3.031	.409	.9072	.9204
12	44.520	-5.456	45.418	.898	0.0000	0.0	1.1215	1332.73	44.289	733.547	3.014	.414	.8904	.9059
13	44.621	-1.711	46.213	1.592	0.0000	0.0	1.1116	1325.66	43.952	736.468	2.991	.420	.8713	.8893
14	44.874	1.684	47.299	2.425	0.0000	0.0	1.0979	1315.70	43.427	739.842	2.955	.426	.8470	.8682
15	45.230	5.109	48.473	3.242	0.0000	0.0	1.0835	1304.79	42.891	743.311	2.919	.433	.8228	.8470
16	45.604	9.413	50.340	4.736	0.0000	0.0	1.0695	1296.36	42.417	749.441	2.886	.445	.7911	.8194
17	45.945	15.494	53.478	7.533	0.0000	0.0	1.0556	1291.55	42.039	760.043	2.861	.465	.7488	.7824
18	46.471	23.204	57.351	10.880	0.0000	0.0	1.0374	1282.70	41.636	771.402	2.833	.487	.7073	.7468
19	47.494	31.497	60.245	12.751	0.0000	0.0	1.0172	1267.21	41.405	777.946	2.817	.500	.6851	.7264
20	48.941	39.406	64.754	15.813	0.0000	0.0	.9872	1241.99	41.136	795.621	2.795	.515	.6604	.7046
21	50.814	46.652	76.337	25.523	0.0000	0.0	.9325	1192.27	40.719	797.496	2.771	.538	.6248	.6731

STATION 11 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.988 ISEN. EFF.= .841 POLY. EFF.= .863 DELTA T ON T = .435

STATION 1 FLOW FIELD DESCRIPTION

STATION LOCATION	RADIUS	VELOCITIES AXIAL	TANGENTIAL	TOTAL	TEMPERATURES TOTAL	STATIC	PRESSURES TOTAL	STATIC	MACH NO.	ANGLES WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.215	1097.10	737.13	1322.38	738.317	707.580	44.569	20.335	1.0373	32.81	5.21	-3.688	.0960
2	7.2751	1079.19	838.27	1324.82	738.208	695.740	44.453	21.264	1.0371	32.53	4.73	-3.421	.0983
3	7.3311	1054.85	944.77	1324.33	738.109	683.911	44.331	22.407	1.0377	32.20	4.25	-3.214	.1006
4	7.3887	1026.84	1054.41	1324.84	738.189	671.932	44.191	23.739	1.0379	31.86	3.79	-3.070	.1029
5	7.4507	993.777	1165.04	1324.77	738.114	659.669	44.022	25.334	.9743	31.57	3.37	-2.985	.1050
6	7.5174	955.677	1276.63	1324.84	738.099	647.179	43.799	27.474	.9515	31.37	3.00	-2.947	.1069
7	7.5904	912.463	1388.61	1324.77	738.096	634.357	43.515	29.850	.9249	31.25	2.73	-2.942	.1084
8	7.6724	863.463	1500.98	1324.90	738.091	621.354	43.158	32.562	.8958	31.16	2.55	-2.959	.1096
9	7.7651	808.603	1613.14	1324.97	738.091	608.872	42.807	35.518	.8644	31.06	2.48	-2.993	.1104
10	7.8715	747.866	1725.06	1324.93	738.085	596.221	42.425	38.744	.8307	30.96	2.55	-3.040	.1110
11	7.9944	681.241	1836.79	1324.90	738.085	583.157	42.026	42.255	.7949	30.90	2.74	-3.107	.1114
12	8.1369	608.741	1948.32	1324.82	738.082	570.113	41.613	46.099	.7570	30.90	3.04	-3.197	.1117
13	8.3014	530.400	2059.73	1324.79	738.082	557.052	41.201	50.276	.7170	30.97	3.43	-3.315	.1119
14	8.4911	446.252	2170.99	1324.77	738.080	543.985	40.795	54.802	.6749	31.10	3.93	-3.468	.1120
15	8.7097	356.333	2282.12	1324.77	738.080	530.905	40.402	59.696	.6307	31.27	4.53	-3.665	.1121
16	8.9624	260.686	2393.14	1324.77	738.080	517.811	40.033	64.980	.5845	31.52	5.26	-3.931	.1121
17	9.2557	159.369	2504.04	1324.77	738.080	504.703	39.693	70.680	.5363	31.93	6.16	-4.305	.1120
18	9.6000	52.4159	2614.84	1324.77	738.080	491.590	39.390	76.827	.4862	32.56	7.33	-4.865	.1117
19	10.000	-59.5579	2725.52	1324.77	738.080	478.477	39.133	83.456	.4343	33.54	8.89	-5.742	.1112
20	10.465	-173.062	2836.09	1324.77	738.080	465.369	38.931	90.607	.3809	35.09	11.03	-7.271	.1104
21	11.000	-293.739	2946.57	1324.77	738.080	452.271	38.793	98.330	.3262	37.56	14.03	-10.532	.1091
22	11.615	-422.437	3056.96	1324.77	738.080	439.188	38.730	106.68	.2705	41.47	18.33	-16.947	.1071
23	12.324	-559.978	3167.27	1324.77	738.080	426.123	38.753	115.73	.2142	47.56	25.03	-30.000	.1041
24	13.144	-707.239	3277.50	1324.77	738.080	413.080	38.878	125.56	.1577	58.56	37.03	-70.000	.0997
25	14.094	-865.178	3387.66	1324.77	738.080	400.062	39.126	136.27	.1015	90.00	70.00	-1000.0	.0936

BLADE DATA

LOCATION	BLADE ANGLES STAGGER	INCIDENCE	FLOW ANGLE	DEVIATION INCIDENCE	DEVIATION LOSS	LOSS COEFF.	BLADE SPEED	RELATIVE MACH NO.	RELAT. VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	31.359	-24.847	32.303	.944	.0731	0.00	1.0373	1305.38	44.569	726.317	3.033	.404	.9186	.9304
2	31.385	-24.345	32.725	.9402	.0702	0.00	1.0371	1276.38	44.453	726.368	3.025	.404	.9166	.9284
3	31.420	-23.843	33.183	.9373	.0670	0.00	1.0377	1246.99	44.331	726.219	3.017	.404	.9141	.9262
4	31.463	-23.339	33.689	.9344	.0638	0.00	1.0379	1216.84	44.191	726.169	3.007	.404	.9113	.9238
5	31.514	-22.833	34.253	.9315	.0605	0.00	1.0373	1185.81	44.022	726.116	2.996	.404	.9079	.9209
6	31.574	-22.324	34.883	.9286	.0572	0.00	.9743	1153.19	43.799	726.065	2.980	.404	.9031	.9167
7	31.643	-21.813	35.589	.9257	.0538	0.00	.9515	1119.18	43.515	726.016	2.961	.404	.8972	.9115
8	31.723	-21.298	36.383	.9228	.0503	0.00	.9249	1083.87	43.158	725.971	2.936	.403	.8898	.9049
9	31.815	-20.780	37.284	.9199	.0468	0.00	.8958	1047.27	42.807	725.931	2.909	.403	.8824	.8985
10	31.920	-20.258	38.314	.9170	.0433	0.00	.8644	1009.32	42.425	725.895	2.879	.403	.8743	.8914
11	32.040	-19.732	39.502	.9141	.0397	0.00	.8307	969.93	42.026	725.863	2.847	.403	.8656	.8839
12	32.177	-19.201	40.884	.9112	.0361	0.00	.7949	928.93	41.613	725.835	2.813	.403	.8562	.8759
13	32.333	-18.665	42.513	.9083	.0324	0.00	.7570	886.08	41.201	725.811	2.778	.403	.8459	.8672
14	32.512	-18.123	44.468	.9054	.0286	0.00	.7170	841.08	40.795	725.791	2.742	.403	.8346	.8577
15	32.717	-17.573	46.868	.9025	.0248	0.00	.6749	793.52	40.402	725.776	2.705	.403	.8220	.8472
16	32.952	-17.014	49.902	.8996	.0209	0.00	.6307	742.87	40.033	725.765	2.668	.403	.8080	.8355
17	33.223	-16.444	53.917	.8967	.0169	0.00	.5845	688.39	39.693	725.759	2.631	.403	.7923	.8224
18	33.536	-15.861	59.441	.8938	.0128	0.00	.5363	629.05	39.390	725.759	2.595	.403	.7746	.8076
19	33.900	-15.263	67.373	.8909	.0087	0.00	.4862	563.31	39.133	725.768	2.561	.403	.7545	.7907
20	34.325	-14.646	80.089	.8880	.0045	0.00	.4343	488.34	38.931	725.787	2.531	.403	.7315	.7711
21	34.829	-14.000	90.000	.8851	.0002	0.00	.3809	399.00	38.793	725.821	2.507	.403	.7045	.7482
22	35.435	-13.312	90.000	.8822	-.0041	0.00	.3262	288.00	38.730	725.876	2.493	.403	.6722	.7208
23	36.180	-12.545	90.000	.8793	-.0088	0.00	.2705	144.00	38.753	725.963	2.494	.403	.6328	.6875
24	37.120	-11.600	90.000	.8764	-.0137	0.00	.2142	0.0000	38.878	726.102	2.519	.403	.5835	.6460
25	38.350	-10.350	90.000	.8735	-.0189	0.00	.1577	-144.00	39.126	726.327	2.580	.403	.5190	.5918
26	40.000	-8.6500	90.000	.8706	-.0245	0.00	.1015	-288.00	39.548	726.694	2.711	.403	.4299	.5168

STATION 12 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.867 ISEN. EFF.= .804 POLY. EFF.= .830 DELTA T ON T = .435

STATION 13 FLOW FIELD DESCRIPTION

STRM LIN.	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7230	370.41	307.55	1017.98	728.317	642.854	42.693	27.472	.8184	17.58	-2.23	-2.136	.1151
2	7.7552	354.38	301.34	1000.98	728.208	645.643	42.520	27.817	.8035	17.55	-2.43	-5.790	.1160
3	7.7852	338.96	295.80	984.55	728.219	648.256	42.391	28.132	.7889	17.54	-2.59	-6.560	.1169
4	7.8219	324.09	292.22	969.20	728.169	650.718	42.239	28.414	.7750	17.55	-2.72	-7.574	.1176
5	7.8569	309.32	287.89	954.27	728.116	653.039	42.084	28.661	.7617	17.56	-2.80	-8.929	.1182
6	7.8921	293.52	282.45	937.20	728.066	655.255	41.914	28.869	.7488	17.54	-2.81	-10.794	.1186
7	7.9239	277.17	276.39	919.68	727.996	658.272	41.414	29.039	.7312	17.49	-2.75	-13.461	.1188
8	7.9671	259.37	269.89	901.31	727.891	660.930	40.933	29.169	.7152	17.42	-2.60	-17.451	.1189
9	8.0068	244.32	264.29	884.71	727.785	663.271	40.593	29.264	.7008	17.38	-2.37	-23.871	.1188
10	8.0479	232.76	260.78	872.54	728.170	665.411	40.308	29.331	.6902	17.39	-2.08	-35.258	.1187
11	8.0909	223.03	254.52	863.35	730.342	669.438	40.033	29.376	.6807	17.43	-1.73	-59.318	.1182
12	8.1345	215.12	250.40	854.50	733.547	673.395	39.787	29.405	.6719	17.46	-1.34	-138.239	.1176
13	8.1797	211.66	253.66	851.17	736.468	676.796	39.644	29.422	.6676	17.48	-.92	7342.532	.1171
14	8.2231	206.22	254.14	845.34	739.542	680.999	39.433	29.433	.6619	17.50	-.52	206.661	.1164
15	8.2737	200.01	252.97	839.93	743.311	685.276	39.233	29.441	.6545	17.53	-.12	143.954	.1157
16	8.3224	202.32	254.64	841.75	749.441	691.135	39.202	29.448	.6534	17.61	.23	146.570	.1148
17	8.3713	207.89	254.56	848.20	760.043	700.874	39.225	29.454	.6550	17.75	.53	289.603	.1132
18	8.4223	212.35	263.93	854.72	774.402	714.379	39.233	29.457	.6542	17.99	.76	504.248	.1115
19	8.4735	215.05	269.85	858.37	777.946	717.407	39.223	29.449	.6544	18.32	.93	1795.100	.1106
20	8.5229	217.16	277.11	862.37	785.621	724.508	39.181	29.412	.6545	18.73	.99	344.555	.1093
21	8.5735	218.87	285.56	867.04	797.496	735.846	39.004	29.326	.6527	19.23	.88	76.314	.1073

BLADE DATA

LOCATION	BLADE SECTION	BLADE-ANGLES CLAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	16.234	-3.414	17.585	1.351	.1532	0.0	.8189	1017.98	42.693	728.317	2.902	.404	.8767	.8935
2	16.193	-3.947	17.559	1.361	.1511	0.0	.8035	1000.98	42.520	728.208	2.894	.404	.8740	.8912
3	16.166	-3.421	17.541	1.375	.1493	0.0	.7889	984.55	42.391	728.219	2.885	.404	.8712	.8887
4	16.154	-7.826	17.548	1.395	.1493	0.0	.7750	969.20	42.239	728.169	2.874	.404	.8680	.8859
5	16.136	-7.151	17.557	1.421	.1510	0.0	.7617	954.27	42.084	728.116	2.862	.404	.8643	.8826
6	16.087	-3.330	17.540	1.454	.1574	0.0	.7466	937.20	41.768	728.066	2.842	.404	.8578	.8768
7	16.071	-3.513	17.484	1.490	.1648	0.0	.7312	919.68	41.414	727.996	2.818	.404	.8500	.8699
8	16.095	-4.578	17.421	1.527	.1719	0.0	.7152	901.31	40.933	727.891	2.789	.403	.8408	.8617
9	16.318	-3.613	17.381	1.563	.1782	0.0	.7008	884.71	40.598	727.785	2.763	.403	.8320	.8539
10	16.742	-2.607	17.383	1.596	.1809	0.0	.6902	872.54	40.308	728.170	2.743	.404	.8237	.8466
11	16.800	-1.789	17.426	1.625	.1843	0.0	.6807	863.35	40.036	730.342	2.724	.409	.8079	.8319
12	16.912	-1.029	17.481	1.650	.1877	0.0	.6719	854.50	39.787	733.547	2.706	.414	.7907	.8174
13	16.814	-.411	17.481	1.667	.1821	0.0	.6676	851.17	39.644	736.468	2.698	.420	.7772	.8056
14	16.824	.205	17.439	1.676	.1733	0.0	.6610	842.34	39.436	739.542	2.683	.426	.7606	.7903
15	16.961	.931	17.535	1.674	.1636	0.0	.6545	839.63	39.230	743.311	2.669	.433	.7443	.7744
16	15.944	1.637	17.608	1.665	.1476	0.0	.6534	841.76	39.202	749.441	2.668	.445	.7238	.7584
17	16.095	2.884	17.748	1.653	.1324	0.0	.6540	843.20	39.225	760.043	2.669	.465	.6922	.7308
18	16.342	4.044	17.936	1.644	.1167	0.0	.6542	844.72	39.233	771.402	2.670	.487	.6611	.7034
19	16.680	5.345	18.321	1.640	.1091	0.0	.6544	846.57	39.223	777.946	2.669	.500	.6441	.6886
20	17.081	6.841	18.733	1.652	.1026	0.0	.6545	862.87	39.181	785.621	2.666	.515	.6246	.6713
21	17.510	8.542	19.229	1.719	.0982	0.0	.6527	867.04	39.004	797.496	2.654	.538	.5946	.6447

STATION 13 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.743 ISEN. EFF.= .765 POLY. EFF.= .795 DELTA T ON T = .435

STATION 14 FLOW FIELD DESCRIPTION

STREAMLINE	RADIUS	MERIDIONAL VELOCITY	TANGENTIAL VELOCITY	TOTAL VELOCITY	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.67	[illegible]	83.13	[illegible]	725.317	671.876	40.725	30.642	.6515	6.13	-4.29	15.241	.1228
2	[illegible]	[illegible]	[illegible]	[illegible]	724.208	672.258	40.561	30.585	.6453	6.08	-4.11	15.070	.1225
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	672.543	41.337	30.522	[illegible]	5.98	-3.91	15.864	.1222
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	673.051	41.202	30.454	.6432	5.89	-3.65	15.676	.1219
5	[illegible]	[illegible]	[illegible]	[illegible]	728.116	673.433	41.033	30.392	.6431	5.81	-3.43	15.445	.1215
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	674.739	39.635	30.307	.6311	5.75	-3.16	15.260	.1210
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	675.221	39.215	30.224	.6223	5.69	-2.84	15.237	.1204
8	[illegible]	[illegible]	[illegible]	[illegible]	727.541	677.922	38.751	30.152	[illegible]	5.64	-2.49	15.492	.1198
9	[illegible]	[illegible]	[illegible]	[illegible]	727.785	679.495	38.322	30.077	[illegible]	5.59	-2.10	15.104	.1192
10	[illegible]	[illegible]	[illegible]	[illegible]	728.170	680.332	38.043	30.010	.5928	5.56	-1.68	17.114	.1187
11	[illegible]	[illegible]	[illegible]	[illegible]	733.542	[illegible]	37.771	29.952	[illegible]	5.53	-1.26	18.554	.1179
12	[illegible]	[illegible]	[illegible]	[illegible]	733.547	684.002	[illegible]	29.909	.5736	5.51	-.81	20.674	.1171
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	680.523	[illegible]	29.842	.5735	5.50	-.38	23.635	.1165
14	[illegible]	[illegible]	[illegible]	[illegible]	739.342	[illegible]	[illegible]	29.874	[illegible]	5.49	.11	27.699	.1160
15	[illegible]	[illegible]	[illegible]	[illegible]	743.311	637.527	[illegible]	[illegible]	[illegible]	[illegible]	.35	33.909	.1154
16	[illegible]	[illegible]	[illegible]	[illegible]	749.441	732.522	[illegible]	29.316	[illegible]	5.51	.62	43.021	.1147
17	[illegible]	[illegible]	[illegible]	[illegible]	750.043	711.529	[illegible]	29.306	.5871	5.56	.83	57.494	.1134
18	[illegible]	[illegible]	[illegible]	[illegible]	771.402	721.543	[illegible]	30.016	[illegible]	5.64	.97	73.131	.1120
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	30.081	[illegible]	5.77	1.05	123.757	.1113
20	[illegible]	[illegible]	[illegible]	[illegible]	756.621	735.093	33.150	30.132	[illegible]	5.98	1.09	247.717	.1105
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	746.790	33.109	30.225	[illegible]	6.33	1.06	-619.607	.1090

BLADE DATA

STREAMLINE	[illegible]	[illegible]	[illegible]	DEVIATION ANGLE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	[illegible]	[illegible]	40.725	728.317	2.771	.404	.8329	.8548
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	.6438	824.46	40.561	728.208	2.760	.404	.8292	.8515
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	[illegible]	821.27	40.337	726.219	2.748	.404	.8254	.8461
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.6432	817.05	40.202	[illegible]	2.736	.404	.8213	.8444
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	40.003	728.116	2.722	.404	.8168	.8404
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	728.066	2.697	.404	.8064	.8326
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	39.216	727.395	2.669	.404	.7987	.8241
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	727.591	2.637	.403	.7880	.8145
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	727.785	2.608	.403	.7781	.8055
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	38.043	728.170	2.589	.404	.7699	.7981
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	751.24	37.771	[illegible]	2.570	.409	.7536	.7835
12	[illegible]	[illegible]	[illegible]	[illegible]	.2817	0.0	[illegible]	743.71	[illegible]	[illegible]	2.552	.414	.7377	.7693
13	[illegible]	[illegible]	[illegible]	[illegible]	.2730	0.0	.5795	745.23	37.494	[illegible]	2.551	.420	.7275	.7603
14	[illegible]	[illegible]	[illegible]	[illegible]	.2547	0.0	.5762	[illegible]	37.443	739.342	2.546	.426	.7152	.7495
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	.5732	743.06	[illegible]	743.311	2.545	.433	.7032	.7388
16	[illegible]	[illegible]	[illegible]	[illegible]	.2214	0.0	.5816	759.24	[illegible]	749.441	2.553	.445	.6886	.7261
17	[illegible]	[illegible]	[illegible]	.6601	.1343	0.0	.5871	767.25	37.407	750.043	2.573	.457	.6626	.7034
18	[illegible]	[illegible]	[illegible]	[illegible]	.1757	0.0	.5915	773.34	33.004	771.402	[illegible]	.487	.6366	.6806
19	[illegible]	[illegible]	[illegible]	[illegible]	.1659	0.0	[illegible]	[illegible]	[illegible]	777.345	2.592	.500	.6222	.6680
20	[illegible]	[illegible]	[illegible]	[illegible]	.1562	0.0	.5910	784.75	38.100	735.621	2.597	.515	.6054	.6532
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	.5970	[illegible]	[illegible]	737.490	2.597	.538	.5794	.6302

STATION 14 INT [illegible] PRESSURE RATIO = 2.618 ISEN. EFF. = .725 POLY. EFF. = .759 DELTA T ON T = .435

STATION 15 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6430	949.19	0.00	949.19	728.317	654.038	38.803	26.559	.7571	0.00	-1.66	10.624	.1094
2	7.6770	945.84	0.00	945.84	728.268	654.513	38.598	26.489	.7542	0.00	-1.59	11.179	.1090
3	7.7101	942.15	0.00	942.15	728.219	655.040	38.382	26.422	.7509	0.00	-1.50	11.881	.1086
4	7.7557	938.05	0.00	938.05	728.169	655.626	38.160	26.358	.7473	0.00	-1.40	12.768	.1083
5	7.7953	933.51	0.00	933.51	728.118	656.277	37.932	26.299	.7434	0.00	-1.29	13.984	.1079
6	7.8391	928.54	0.00	928.54	728.066	658.044	37.488	26.244	.7329	0.00	-1.17	15.624	.1074
7	7.8815	907.61	0.00	907.61	727.996	650.094	36.999	26.196	.7207	0.00	-1.02	17.998	.1069
8	7.9205	892.05	0.00	892.05	727.931	692.302	36.491	26.156	.7071	0.00	-.86	21.604	.1064
9	7.9732	877.41	0.00	877.41	727.785	684.334	35.033	26.123	.6945	0.00	-.69	27.523	.1059
10	8.0213	863.54	0.00	863.54	728.170	665.856	35.779	26.098	.6875	0.00	-.51	39.586	.1056
11	8.0709	862.16	0.00	862.16	730.842	669.594	35.516	26.081	.6798	0.00	-.32	65.715	.1049
12	8.1218	854.13	0.00	854.13	733.547	673.447	35.252	26.073	.6715	0.00	-.13	230.214	.1043
13	8.1736	859.57	0.00	859.57	736.468	675.611	35.351	26.074	.6749	0.00	.06	-163.300	.1040
14	8.2203	864.86	0.00	864.86	739.842	678.244	35.451	26.083	.6776	0.00	.22	-65.363	.1036
15	8.2792	869.87	0.00	869.87	743.311	681.012	35.550	26.099	.6802	0.00	.36	-44.057	.1032
16	8.3324	886.83	0.00	886.83	749.441	684.710	35.938	26.122	.6916	0.00	.46	-35.527	.1028
17	8.3899	906.07	0.00	906.07	760.043	692.516	36.328	26.149	.7027	0.00	.54	-31.482	.1017
18	8.4397	925.37	0.00	925.37	771.402	701.017	36.719	26.179	.7133	0.00	.58	-29.735	.1006
19	8.4920	934.79	0.00	934.79	777.946	706.151	36.920	26.211	.7180	0.00	.59	-29.473	.1000
20	8.5458	944.74	0.00	944.74	785.621	712.329	37.117	26.243	.7226	0.00	.57	-30.590	.0992
21	8.6000	957.30	0.00	957.30	797.496	722.305	37.316	26.274	.7272	0.00	.52	-33.905	.0980

BLADE DATA

LOCAT -ION	BLADE-ANGLES SECTION	LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-7.239	.020	0.000	7.239	.3040	0.0	.7571	949.19	38.803	728.317	2.641	.404	.7878	.8143
2	-7.387	.020	0.000	7.387	.3037	0.0	.7542	945.84	38.598	728.268	2.626	.404	.7929	.8099
3	-7.545	.019	0.000	7.545	.3044	0.0	.7509	942.15	38.382	728.219	2.612	.404	.7979	.8054
4	-7.707	.018	0.000	7.707	.3065	0.0	.7473	938.05	38.160	728.169	2.597	.404	.7727	.8007
5	-7.871	.016	0.000	7.871	.3098	0.0	.7434	933.51	37.932	728.118	2.581	.404	.7674	.7958
6	-8.034	.014	0.000	8.034	.3222	0.0	.7329	921.64	37.488	728.066	2.551	.404	.7567	.7861
7	-8.198	.012	0.000	8.198	.3359	0.0	.7207	907.61	36.999	727.996	2.518	.404	.7449	.7753
8	-8.360	.010	0.000	8.360	.3465	0.0	.7071	892.05	35.491	727.931	2.483	.403	.7326	.7640
9	-8.517	.008	0.000	8.517	.3597	0.0	.6945	877.41	36.033	727.785	2.452	.403	.7215	.7538
10	-8.662	.007	0.000	8.662	.3637	0.0	.6875	863.54	35.779	728.170	2.435	.404	.7137	.7466
11	-8.790	.005	0.000	8.790	.3693	0.0	.6798	862.16	35.516	730.842	2.417	.403	.6980	.7324
12	-8.900	.003	0.000	8.900	.3751	0.0	.6715	854.13	35.252	733.547	2.399	.414	.6826	.7185
13	-8.987	.001	0.000	8.987	.3636	0.0	.6748	859.57	35.351	736.468	2.405	.420	.6758	.7125
14	-9.043	-.001	0.000	9.043	.3464	0.0	.6776	864.86	35.450	739.842	2.412	.426	.6679	.7056
15	-9.062	-.004	0.000	9.062	.3280	0.0	.6802	869.87	35.550	743.311	2.419	.433	.6599	.6986
16	-9.058	-.008	0.000	9.058	.2974	0.0	.6916	886.83	35.938	749.441	2.445	.445	.6512	.6912
17	-9.060	-.012	0.000	9.060	.2689	0.0	.7027	906.07	36.328	760.043	2.472	.465	.6309	.6737
18	-9.086	-.018	0.000	9.086	.2359	0.0	.7133	925.37	36.719	771.402	2.499	.487	.6184	.6568
19	-9.127	-.024	0.000	9.127	.2248	0.0	.7180	934.79	36.920	777.946	2.512	.500	.5989	.6460
20	-9.170	-.031	0.000	9.170	.2109	0.0	.7226	944.74	37.117	785.621	2.526	.515	.5854	.6343
21	-9.213	-.038	0.000	9.213	.1949	0.0	.7272	957.30	37.316	797.496	2.539	.538	.5639	.6155

STATION 15 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.492 ISEN. EFF.= .682 POLY. EFF.= .720 DELTA T ON T = .435

STATION 15 FLOW FIELD DESCRIPTION

STRLAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6410	961.40	0.00	961.40	728.317	652.111	38.803	26.285	.7580	0.00	0.00	0.000	.1086
2	7.6772	955.01	0.00	955.01	728.268	653.073	38.534	26.285	.7623	0.00	-.01	2418.948	.1084
3	7.7155	948.37	0.00	948.37	728.219	654.068	38.382	26.284	.7564	0.00	-.03	1300.941	.1082
4	7.7549	941.46	0.00	941.46	728.169	655.097	38.160	26.284	.7503	0.00	-.04	941.358	.1081
5	7.7953	934.26	0.00	934.26	728.118	656.162	37.932	26.283	.7440	0.00	-.04	774.377	.1079
6	7.8370	926.77	0.00	926.77	728.066	657.266	37.699	26.281	.7374	0.00	-.05	687.666	.1075
7	7.8803	919.01	0.00	919.01	728.066	658.308	37.433	26.281	.7314	0.00	-.05	646.801	.1075
8	7.9252	903.60	0.00	903.60	727.996	660.694	36.993	26.280	.7172	0.00	-.05	646.801	.1071
9	7.9718	886.02	0.00	886.02	727.891	663.188	36.491	26.279	.7015	0.00	-.05	640.817	.1067
10	8.0203	869.66	0.00	869.66	727.785	665.452	36.035	26.278	.6878	0.00	-.05	669.620	.1064
11	8.0708	850.49	0.00	850.49	728.170	667.149	35.774	26.276	.6797	0.00	-.05	740.399	.1061
12	8.1233	832.17	0.00	832.17	730.842	671.007	35.515	25.275	.6712	0.00	-.04	873.854	.1055
13	8.1211	843.63	0.00	843.63	733.547	674.918	35.252	26.275	.6626	0.00	-.03	1129.839	.1049
14	8.1783	849.17	0.00	849.17	736.468	677.076	35.351	26.274	.6659	0.00	-.02	1652.451	.1045
15	8.2292	854.99	0.00	854.99	739.842	679.645	35.451	26.274	.6692	0.00	-.01	2937.869	.1041
16	8.2742	860.87	0.00	860.87	743.311	682.297	35.550	26.273	.6725	0.00	-.00	9339.534	.1037
17	8.3325	879.10	0.00	879.10	749.441	685.836	35.933	26.273	.6850	0.00	.00	-13958.021	.1032
18	8.3857	899.78	0.00	899.78	756.043	693.452	36.323	26.273	.6973	0.00	.01	-5511.283	.1021
19	8.4338	920.64	0.00	920.64	762.402	701.736	36.719	26.274	.7093	0.00	.01	-4472.826	.1008
20	8.4922	931.67	0.00	931.67	777.946	706.631	36.920	26.274	.7154	0.00	.01	-4900.048	.1002
21	8.5459	943.21	0.00	943.21	795.621	712.566	37.117	26.274	.7213	0.00	.00	-7801.394	.0993
22	8.6000	957.30	0.00	957.30	797.496	722.305	37.316	26.274	.7272	0.00	0.00	0.000	.0980

STATION 17 FLOW FIELD DESCRIPTION

STRLAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	961.88	0.00	961.88	728.317	652.034	38.803	26.274	.7684	0.00	0.00	0.000	.1085
2	7.6772	955.49	0.00	955.49	728.268	652.998	38.534	26.274	.7627	0.00	-.00	0.000	.1084
3	7.7155	948.83	0.00	948.83	728.219	653.996	38.382	26.274	.7569	0.00	-.00	0.000	.1082
4	7.7548	941.89	0.00	941.89	728.169	655.030	38.160	26.274	.7507	0.00	-.00	0.000	.1080
5	7.7953	934.65	0.00	934.65	728.118	656.102	37.932	26.274	.7444	0.00	-.00	0.000	.1079
6	7.8370	920.26	0.00	920.26	728.066	658.255	37.699	26.274	.7317	0.00	-.00	0.000	.1075
7	7.8803	903.90	0.00	903.90	727.996	660.650	37.434	26.274	.7174	0.00	-.00	0.000	.1071
8	7.9252	886.25	0.00	886.25	727.891	663.153	36.491	26.274	.7021	0.00	-.00	0.000	.1067
9	7.9720	869.84	0.00	869.84	727.785	665.427	36.035	26.274	.6879	0.00	-.00	0.000	.1064
10	8.0203	850.61	0.00	860.61	728.170	667.132	35.774	26.274	.6798	0.00	-.00	0.000	.1061
11	8.0708	832.24	0.00	832.24	730.842	670.997	35.515	26.274	.6713	0.00	-.00	0.000	.1055
12	8.1211	843.65	0.00	843.65	733.547	674.915	35.252	26.274	.6626	0.00	-.00	0.000	.1049
13	8.1783	849.17	0.00	849.17	736.468	677.077	35.351	26.274	.6659	0.00	-.00	0.000	.1045
14	8.2292	854.96	0.00	854.96	739.842	679.649	35.450	26.274	.6692	0.00	-.00	0.000	.1041
15	8.2741	860.83	0.00	860.83	743.311	682.302	35.551	26.274	.6725	0.00	-.00	0.000	.1037
16	8.3324	879.06	0.00	879.06	749.441	685.842	35.933	26.274	.6850	0.00	-.00	0.000	.1032
17	8.3856	899.75	0.00	899.75	756.043	693.457	36.324	26.274	.6973	0.00	-.00	0.000	.1021
18	8.4338	920.62	0.00	920.62	762.402	701.740	36.719	26.274	.7093	0.00	-.00	0.000	.1009
19	8.4922	931.66	0.00	931.66	777.946	706.633	36.920	26.274	.7154	0.00	-.00	0.000	.1002
20	8.5459	943.21	0.00	943.21	795.621	712.566	37.117	26.274	.7213	0.00	-.00	0.000	.0993
21	8.6000	957.30	0.00	957.30	797.496	722.305	37.316	26.274	.7272	0.00	0.00	0.000	.0980

ROTOR PERFORMANCE

LOCAT -ION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID -ENCE	DEVIA -TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	6.7500	7.5499	1.1127	7.900	5.317	.0832	.4124	.4231	.5323	.7773	.7773	-61.937	-12.647	6.070	10.991
2	6.8816	7.5360	1.1303	7.638	5.580	.0862	.4335	.4430	.5535	.7329	.7698	-61.342	-13.336	6.234	10.695
3	6.9723	7.5230	1.1477	7.405	5.810	.0890	.4511	.4595	.5709	.7100	.7621	-61.722	-14.039	6.367	10.316
4	7.0824	7.5110	1.1650	7.212	5.934	.0915	.4658	.4732	.5291	.7019	.7544	-62.068	-14.738	6.420	9.775
5	7.1918	7.5998	1.1820	7.065	6.144	.0940	.4782	.4844	.5170	.6901	.7436	-62.373	-15.451	6.324	9.077
6	7.3007	7.7396	1.1989	6.954	6.242	.0963	.4884	.4937	.5070	.6803	.7388	-62.650	-16.186	6.044	8.312
7	7.4093	7.7802	1.2155	6.867	6.350	.1002	.4975	.5019	.4955	.6714	.7309	-62.917	-16.916	5.577	7.649
8	7.5176	7.9219	1.2319	6.796	6.543	.1073	.5057	.5102	.4830	.6623	.7227	-63.183	-17.615	4.927	7.144
9	7.6257	7.9999	1.2481	6.739	6.709	.1142	.5143	.5170	.4695	.6547	.7145	-63.454	-18.261	4.092	6.793
10	7.7340	7.9063	1.2640	6.694	6.990	.1241	.5226	.5246	.4553	.6469	.7080	-63.736	-18.849	3.091	6.647
11	7.8426	7.9535	1.2795	6.658	6.815	.1436	.5400	.5412	.4403	.6311	.7089	-64.034	-19.382	1.962	6.745
12	7.9517	8.0004	1.2950	6.629	6.749	.1718	.5560	.5566	.4255	.6163	.7096	-64.352	-19.870	.742	7.086
13	8.0615	8.0493	1.3102	6.606	6.737	.1974	.5735	.5734	.4114	.6005	.7106	-64.693	-20.312	-.586	7.678
14	8.1723	8.1007	1.3252	6.589	7.077	.2296	.5956	.5949	.3963	.5860	.7126	-65.061	-20.714	-2.054	8.528
15	8.2844	8.1551	1.3400	6.577	7.515	.2603	.6175	.6162	.3805	.5694	.7142	-65.460	-21.081	-3.641	9.588
16	8.3981	8.2135	1.3545	6.571	7.730	.3017	.6500	.6489	.3653	.5533	.7234	-65.890	-21.409	-5.170	10.780
17	8.5137	8.2761	1.3692	6.572	7.925	.3596	.7058	.7033	.3532	.5474	.7451	-66.347	-21.689	-6.335	12.021
18	8.6312	8.3526	1.3833	6.584	9.000	.4155	.7688	.7658	.3422	.5417	.7666	-66.822	-21.897	-7.045	13.167
19	8.7517	8.4363	1.3987	6.600	11.082	.4418	.8013	.7980	.3334	.5393	.7707	-67.307	-21.957	-7.696	13.893
20	8.8746	8.5372	1.4141	6.939	15.002	.4721	.8436	.8400	.3258	.5479	.7754	-67.803	-21.736	-8.547	13.836
21	9.0000	8.6699	1.4303	8.533	26.949	.5212	.9261	.9227	.3250	.5657	.7856	-68.316	-21.371	-9.607	13.159

STATOR PERFORMANCE

LOCAT -ION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID -ENCE	DEVIA -TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	7.6139	7.5400	1.1277	-1.320	7.239	.3040	.4417	.4415	.2154	.7110	0.0000	48.817	-7.239	-39.941	.020
2	7.6967	7.6776	1.1401	-1.400	7.347	.3037	.4546	.4545	.2258	.7030	0.0000	47.971	-7.397	-37.356	.020
3	7.7729	7.7101	1.1503	-1.346	7.545	.3044	.4666	.4660	.2342	.6953	0.0000	47.127	-7.545	-34.538	.019
4	7.7574	7.7557	1.1571	-1.329	7.707	.3065	.4772	.4772	.2400	.6891	0.0000	46.489	-7.707	-31.568	.018
5	7.8007	7.7993	1.1605	-1.305	7.871	.3098	.4863	.4864	.2434	.6842	0.0000	46.001	-7.871	-28.504	.016
6	7.8430	7.8381	1.1611	-1.271	8.034	.3222	.4992	.4993	.2448	.6753	0.0000	45.629	-8.034	-25.395	.014
7	7.8846	7.8815	1.1585	-1.170	8.199	.3359	.5122	.5123	.2453	.6661	0.0000	45.311	-8.198	-22.295	.012
8	7.9260	7.9265	1.1527	-.988	8.360	.3485	.5248	.5248	.2459	.6574	0.0000	45.041	-8.360	-19.248	.010
9	7.9672	7.9732	1.1454	-.800	8.517	.3597	.5358	.5356	.2458	.6499	0.0000	44.818	-8.517	-16.171	.008
10	8.0084	8.0217	1.1375	-.622	8.592	.3837	.5418	.5410	.2454	.6475	0.0000	44.649	-8.662	-12.903	.007
11	8.0498	8.0709	1.1297	-.216	8.730	.3633	.5496	.5494	.2445	.6444	0.0000	44.542	-8.730	-9.292	.005
12	8.0919	8.1215	1.1215	.599	8.300	.3751	.5573	.5569	.2439	.6409	0.0000	44.520	-8.900	-5.456	.003
13	8.1345	8.1733	1.1115	1.592	8.937	.3636	.5538	.5533	.2443	.6433	0.0000	44.621	-8.987	-1.711	.001
14	8.1781	8.2293	1.0979	2.425	9.043	.3464	.5488	.5482	.2469	.6573	0.0000	44.874	-9.043	1.683	-.001
15	8.2230	8.2792	1.0833	3.242	9.062	.3280	.5429	.5422	.2498	.6667	0.0000	45.230	-9.062	5.109	-.004
16	8.2696	8.3324	1.0695	4.736	9.058	.2974	.5301	.5293	.2520	.6841	0.0000	45.604	-9.058	9.413	-.008
17	8.3193	8.3854	1.0525	7.533	9.060	.2689	.5196	.5187	.2514	.7015	0.0000	45.945	-9.060	15.494	-.012
18	8.3742	8.4367	1.0374	10.680	9.056	.2339	.5060	.5051	.2489	.7214	0.0000	46.471	-9.056	23.204	-.018
19	8.4357	8.4920	1.0172	12.751	9.127	.2248	.4902	.4894	.2385	.7377	0.0000	47.494	-9.127	31.497	-.024
20	8.5079	8.5688	.9972	15.813	9.170	.2109	.4665	.4660	.2187	.7607	0.0000	48.941	-9.170	39.406	-.031
21	8.6199	8.5000	.9325	25.523	9.213	.1949	.4224	.4227	.1729	.8029	0.0000	50.614	-9.213	46.652	-.038

WAKE AND BOUNDARY LAYER BLOCKAGES (PERCENT)

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MID BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	5.5	0.0	3.0	11.0	13.0	14.0	24.3	25.6	25.6
DIST FACTOR	1.0	1.0	1.0	1.0	.8	.6	.4	.2	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
INT BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	5.6	0.0	3.0	11.0	13.0	14.0	24.3	25.6	25.6

SUMMARY POINT NO. 1 THE CALCULATION IS CONVERGED PASS 25

TEST POINT TITLE = 301230515695

FLOW = 23.74 SPEED = 19378.7 PRESSURE RATIO = 2.492 ISENTROPIC EFFY = .8825 POLYTROPIC EFFY = .7198 DEL T/T = .4347

SUMMARY OF 1 TEST POINTS

POINT NO.	TEST POINT TITLE	STATUS OF CALCULATION	FLOW RATE LBS/SEC	SPEED RPM	----ROTOR---- PRESSURE RATIO	ROTOR ISEN EFFY	----STAGE---- PRESSURE RATIO	STAGE ISEN EFFY	FLOW/ (CHOKE FLOW)
1	301230515695	CONVERGED AFTER 25 PASSES	23.742	19378.7	2.988	.841	2.492	.682	.62207

9. TEST POINT 301231615700 (100%)

PASS	2	STATION	1	STREAMLINE	21	ITERATION	2	VM/VM(MID) =	3.114	VM(MID) =	.9048E+03		
PASS	2	STATION	10	STREAMLINE	21	ITERATION	3	VM/VM(MID) =	******	VM(MID) =	.8860E+03		
PASS	2	STATION	11	STREAMLINE	21	ITERATION	4	VM/VM(MID) =	******	VM(MID) =	.8294E+03		
PASS	2	STATION	12	STREAMLINE	21	ITERATION	5	VM/VM(MID) =	******	VM(MID) =	.8181E+03		
PASS	2	STATION	13	STREAMLINE	21	ITERATION	7	VM/VM(MID) =	******	VM(MID) =	.8050E+03		
PASS	2	STATION	14	STREAMLINE	21	ITERATION	8	VM/VM(MID) =	******	VM(MID) =	.8233E+03		
PASS	2	STATION	15	STREAMLINE	21	ITERATION	11	VM/VM(MID) =	******	VM(MID) =	.8543E+03		
PASS	2	STATION	16	STREAMLINE	21	ITERATION	12	VM/VM(MID) =	******	VM(MID) =	.8234E+03		
PASS	2	STATION	17	STREAMLINE	21	ITERATION	13	VM/VM(MID) =	******	VM(MID) =	.8341E+03		
PASS	2	STATION	18	STREAMLINE	21	ITERATION	15	VM/VM(MID) =	******	VM(MID) =	.8236E+03		
PASS	2	STATION	19	STREAMLINE	21	ITERATION	16	VM/VM(MID) =	******	VM(MID) =	.8533E+03		
PASS	2	STATION	20	STREAMLINE	21	ITERATION	20	VM/VM(MID) =	******	VM(MID) =	.8235E+03		

STATION 1 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES			TEMPERATURES		PRESSURES		MACH NO	ANGLES		RADIUS OF CURVATURE	SPECIFIC WEIGHT
		MERID	TANGTL	TOTAL	TOTAL	STATIC	TOTAL	STATIC		WHIRL	SLOPE		
1	0.0000	361.15	0.00	390.55	518.688	507.890	14.696	13.953	.3260	0.00	20.93	0.000	.0724
2	0.2271	360.15	0.00	390.55	518.688	507.890	14.696	13.953	.3260	0.00	19.72	0.000	.0724
3	0.3654	360.15	0.00	390.55	518.688	507.890	14.696	13.953	.3260	0.00	18.50	0.000	.0724
4	0.3393	360.15	0.00	390.55	518.688	507.890	14.696	13.953	.3260	0.00	17.27	0.000	.0724
5	0.0930	360.15	0.00	390.55	518.688	507.890	14.696	13.953	.3260	0.00	16.03	0.000	.0724
6	0.8473	360.15	0.00	390.55	518.688	507.890	14.696	13.953	.3260	0.00	14.78	0.000	.0724
7	0.3333	360.15	0.00	390.55	518.688	507.890	14.696	13.953	.3260	0.00	13.54	0.000	.0724
8	0.1113	360.15	0.00	390.55	518.688	507.890	14.696	13.953	.3260	0.00	12.31	0.000	.0724
9	0.3027	360.15	0.00	390.55	518.688	507.890	14.696	13.953	.3260	0.00	11.09	0.000	.0724
10	0.4932	360.15	0.00	390.55	518.688	507.890	14.696	13.953	.3260	0.00	9.89	0.000	.0724
11	0.6071	360.15	0.00	390.55	518.688	507.890	14.696	13.953	.3260	0.00	8.71	0.000	.0724
12	0.7525	360.15	0.00	390.55	518.688	507.890	14.696	13.953	.3260	0.00	7.56	0.000	.0724
13	0.9010	360.15	0.00	390.55	518.688	507.890	14.696	13.953	.3260	0.00	6.45	0.000	.0724
14	0.0507	360.15	0.00	390.55	518.688	507.890	14.696	13.953	.3260	0.00	5.39	0.000	.0724
15	0.1934	360.15	0.00	390.55	518.688	507.890	14.696	13.953	.3260	0.00	4.38	0.000	.0724
16	0.3477	360.15	0.00	390.55	518.688	507.890	14.696	13.953	.3260	0.00	3.45	0.000	.0724
17	0.4884	360.15	0.00	390.55	518.688	507.890	14.696	13.953	.3260	0.00	2.59	0.000	.0724
18	0.6344	360.15	0.00	390.55	518.688	507.890	14.696	13.953	.3260	0.00	1.76	0.000	.0724
19	0.7862	360.15	0.00	390.55	518.688	507.890	14.696	13.953	.3260	0.00	1.00	0.000	.0724
20	0.9410	360.15	0.00	390.55	518.688	507.890	14.696	13.953	.3260	0.00	.47	0.000	.0724
21	0.9410	360.15	0.00	390.55	518.688	507.890	14.696	13.953	.3260	0.00	0.00	0.000	.0724

STATION 2 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES			TEMPERATURES		PRESSURES		MACH NO	ANGLES		RADIUS OF CURVATURE	SPECIFIC WEIGHT
		MERID	TANGTL	TOTAL	TOTAL	STATIC	TOTAL	STATIC		WHIRL	SLOPE		
1	0.3744	394.65	0.00	394.65	518.688	505.790	14.696	13.456	.3573	0.00	20.63	-205.738	.0717
2	0.2133	396.27	0.00	396.27	518.688	505.844	14.696	13.443	.3581	0.00	19.54	-115.058	.0716
3	0.3914	398.23	0.00	398.23	518.688	505.515	14.696	13.431	.3609	0.00	18.22	-63.298	.0716
4	0.7544	399.44	0.00	399.44	518.688	505.401	14.696	13.420	.3625	0.00	16.95	-65.324	.0715
5	0.9263	+01.39	0.00	+01.39	518.688	505.305	14.696	13.411	.3638	0.00	15.66	-56.744	.0715
6	7.0984	+02.58	0.00	+02.58	518.688	505.226	14.696	13.404	.3648	0.00	14.37	-49.621	.0715
7	7.2703	+03.49	0.00	+03.49	518.688	505.165	14.696	13.399	.3653	0.00	13.08	-44.197	.0714
8	7.4422	+04.11	0.00	+04.11	518.688	505.123	14.696	13.394	.3654	0.00	11.80	-39.796	.0714
9	7.6139	+04.42	0.00	+04.42	518.688	505.102	14.696	13.393	.3657	0.00	10.52	-36.053	.0714
10	7.7857	+04.43	0.00	+04.43	518.688	505.103	14.696	13.393	.3660	0.00	9.27	-32.760	.0714
11	7.9575	+04.04	0.00	+04.04	518.688	505.128	14.696	13.395	.3663	0.00	8.03	-29.797	.0714
12	8.1293	+03.31	0.00	+03.31	518.688	505.177	14.696	13.399	.3659	0.00	6.82	-27.035	.0714
13	8.3012	+02.19	0.00	+02.19	518.688	505.252	14.696	13.405	.3643	0.00	5.63	-24.611	.0715
14	8.4731	+00.66	0.00	+00.66	518.688	505.353	14.696	13.416	.3632	0.00	4.49	-22.322	.0715
15	8.6449	398.71	0.00	398.71	518.688	505.483	14.696	13.428	.3613	0.00	3.38	-20.212	.0715
16	8.8167	396.32	0.00	396.32	518.688	505.641	14.696	13.443	.3591	0.00	2.33	-19.270	.0715
17	8.9321	393.47	0.00	393.47	518.688	505.824	14.696	13.460	.3565	0.00	1.34	-18.480	.0717
18	9.0034	390.14	0.00	390.14	518.688	506.045	14.696	13.480	.3534	0.00	.41	-14.827	.0717
19	9.0393	386.30	0.00	386.30	518.688	506.292	14.696	13.503	.3499	0.00	-.44	-13.292	.0718
20	9.0452	381.92	0.00	381.92	518.688	506.572	14.696	13.529	.3458	0.00	-1.22	-11.859	.0719
21	9.0500	378.94	0.00	378.94	518.688	506.886	14.696	13.559	.3411	0.00	-1.91	-10.518	.0720

STATION 3 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGENT	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	9.6015	+36.33	0.00	+36.33	518.638	502.873	14.69	13.187	.3955	0.00	20.54	-83.031	.0706
2	9.7244	+39.45	0.00	+39.45	518.688	502.646	14.69	13.166	.3994	0.00	19.16	-77.518	.0706
3	9.8493	+42.35	0.00	+42.35	518.688	502.433	14.69	13.147	.4021	0.00	17.78	-70.169	.0705
4	9.9673	+45.00	0.00	+45.00	518.688	502.235	14.69	13.129	.4043	0.00	16.40	-62.492	.0704
5	10.0877	+47.34	0.00	+47.34	518.638	502.055	14.69	13.113	.4059	0.00	15.02	-54.949	.0703
6	10.2074	+49.34	0.00	+49.34	518.688	501.915	14.69	13.099	.4067	0.00	13.64	-47.813	.0703
7	10.3288	+50.98	0.00	+50.98	518.688	501.795	14.69	13.088	.4102	0.00	12.26	-41.344	.0703
8	10.4488	+52.13	0.00	+52.13	518.688	501.707	14.69	13.080	.4113	0.00	10.87	-35.960	.0702
9	10.5645	+52.80	0.00	+52.80	518.638	501.656	14.69	13.076	.4119	0.00	9.49	-30.771	.0702
10	10.6833	+52.93	0.00	+52.93	518.688	501.646	14.69	13.075	.4121	0.00	8.10	-26.627	.0702
11	10.8033	+52.48	0.00	+52.48	518.688	501.681	14.69	13.078	.4116	0.00	6.73	-23.152	.0702
12	10.9229	+51.38	0.00	+51.38	518.688	501.753	14.69	13.085	.4106	0.00	5.36	-20.244	.0702
13	11.0429	+49.61	0.00	+49.61	518.688	501.895	14.69	13.097	.4088	0.00	4.01	-17.810	.0703
14	11.1637	+47.15	0.00	+47.15	518.688	502.079	14.69	13.114	.4063	0.00	2.66	-15.773	.0704
15	11.2838	+43.99	0.00	+43.99	518.688	502.316	14.69	13.136	.4032	0.00	1.37	-14.075	.0704
16	11.4038	+40.03	0.00	+40.03	518.688	502.604	14.69	13.162	.3993	0.00	.10	-12.675	.0705
17	11.5233	+35.39	0.00	+35.39	518.688	502.941	14.69	13.193	.3946	0.00	-1.12	-11.543	.0707
18	11.6435	+30.08	0.00	+30.08	518.688	503.323	14.69	13.228	.3890	0.00	-2.29	-10.637	.0708
19	11.7579	+24.15	0.00	+24.15	518.638	503.743	14.69	13.267	.3825	0.00	-3.40	-9.913	.0709
20	11.8177	+17.07	0.00	+17.07	518.688	504.197	14.69	13.309	.3751	0.00	-4.46	-9.306	.0711
21	11.8503	+10.52	0.00	+10.52	518.638	504.653	14.69	13.354	.3724	0.00	-5.47	-8.690	.0713

STATION 4 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGENT	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	9.7510	+33.97	0.00	+33.97	518.638	439.254	14.69	12.858	.4411	0.00	20.32	-388.054	.0694
2	9.8914	+36.11	0.00	+36.11	518.638	438.996	14.69	12.832	.4443	0.00	18.94	-426.475	.0692
3	9.9724	+32.29	0.00	+32.29	518.638	438.959	14.69	12.795	.4492	0.00	17.54	-568.757	.0691
4	10.0876	+36.10	0.00	+36.10	518.638	438.242	14.69	12.767	.4523	0.00	16.14	-601.052	.0690
5	10.1951	+39.34	0.00	+39.34	518.638	437.949	14.69	12.741	.4552	0.00	14.72	-378.504	.0689
6	10.3022	+42.79	0.00	+42.79	518.638	437.657	14.69	12.717	.4582	0.00	13.27	-197.826	.0688
7	10.4111	+45.45	0.00	+45.45	518.638	437.404	14.69	12.697	.4617	0.00	11.80	-111.646	.0687
8	10.5197	+47.53	0.00	+47.53	518.638	437.290	14.69	12.682	.4637	0.00	10.30	-70.377	.0687
9	10.6243	+48.93	0.00	+48.93	518.638	437.171	14.69	12.671	.4651	0.00	8.78	-48.151	.0686
10	10.7339	+49.38	0.00	+49.38	518.638	437.116	14.69	12.669	.4657	0.00	7.24	-36.076	.0686
11	10.8434	+49.42	0.00	+49.42	518.688	437.129	14.69	12.667	.4655	0.00	5.69	-27.950	.0686
12	10.9531	+48.40	0.00	+48.40	518.648	437.216	14.69	12.675	.4646	0.00	4.14	-22.442	.0687
13	11.0631	+46.49	0.00	+46.49	518.649	437.379	14.69	12.690	.4627	0.00	2.57	-18.258	.0687
14	11.1750	+43.50	0.00	+43.50	518.688	437.628	14.69	12.712	.4599	0.00	1.00	-14.964	.0688
15	11.2891	+39.40	0.00	+39.40	518.688	437.969	14.69	12.742	.4561	0.00	-.57	-12.372	.0689
16	11.4016	+34.08	0.00	+34.08	518.688	438.409	14.69	12.782	.4509	0.00	-2.13	-10.418	.0691
17	11.5133	+27.56	0.00	+27.56	518.638	438.941	14.69	12.830	.4447	0.00	-3.63	-9.066	.0693
18	11.6341	+80.00	0.00	+80.00	518.638	439.548	14.69	12.884	.4376	0.00	-5.04	-8.235	.0695
19	11.7535	+71.74	0.00	+71.74	518.638	500.201	14.69	12.943	.4298	0.00	-6.32	-7.851	.0697
20	11.8756	+63.34	0.00	+63.34	518.688	500.854	14.69	13.003	.4219	0.00	-7.43	-7.899	.0699
21	12.0000	+55.94	0.00	+55.94	518.688	501.419	14.69	13.054	.4149	0.00	-8.25	-10.317	.0701

BLADE DATA

STREAM-LINE	[illegible]	[illegible]	[illegible] FLOW [illegible]	[illegible]	[illegible]	BLADE [illegible]	RELATIVE MACH NO.	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	[illegible]	[illegible]	[illegible]	.147	0.0000	1232.2	1.1917	1235.59	30.450	530.497	1.000	0.000	1.0000	1.0000
2	-1.341	.232	[illegible]	[illegible]	0.0000	1222.2	1.2005	1315.04	31.130	642.490	1.000	0.000	1.0000	1.0000
3	[illegible]	.307	[illegible]	[illegible]	0.0000	[illegible]	1.2191	[illegible]	31.822	545.519	1.000	0.000	1.0000	1.0000
4	[illegible]	[illegible]	[illegible]	[illegible]	0.0000	1261.5	1.2375	[illegible]	32.532	550.585	1.000	0.000	1.0000	1.0000
5	[illegible]	.322	[illegible]	[illegible]	0.0000	1241.1	1.2556	[illegible]	33.250	554.592	1.000	0.000	1.0000	1.0000
6	[illegible]	[illegible]	[illegible]	[illegible]	0.0000	1330.5	1.2735	1394.41	34.035	555.342	1.000	0.000	1.0000	1.0000
7	[illegible]	[illegible]	[illegible]	[illegible]	0.0000	1320.0	1.2912	1413.46	34.775	563.038	1.000	0.000	1.0000	1.0000
8	[illegible]	[illegible]	[illegible]	[illegible]	0.0000	1339.5	1.3087	1432.25	35.567	567.267	1.000	0.000	1.0000	1.0000
9	[illegible]	[illegible]	[illegible]	[illegible]	0.0000	1358.7	1.3255	1453.67	36.332	571.592	1.000	0.000	1.0000	1.0000
10	-13.735	[illegible]	[illegible]	[illegible]	0.0000	1378.0	1.3427	1464.23	37.222	575.462	1.000	0.000	1.0000	1.0000
11	[illegible]	1.575	[illegible]	[illegible]	0.0000	1397.4	1.3597	[illegible]	39.031	530.403	1.000	0.000	1.0000	1.0000
12	[illegible]	[illegible]	[illegible]	[illegible]	0.0000	1416.3	1.3755	[illegible]	38.330	534.924	1.000	0.000	1.0000	1.0000
13	[illegible]	-.232	[illegible]	[illegible]	0.0000	[illegible]	1.3916	1523.15	39.423	539.534	1.000	0.000	1.0000	1.0000
14	[illegible]	[illegible]	-71.327	[illegible]	0.0000	[illegible]	1.4074	[illegible]	40.534	594.245	1.000	0.000	1.0000	1.0000
15	[illegible]	-3.633	-71.359	.335	0.0000	1476.2	1.4229	1558.35	41.305	[illegible]	1.000	0.000	1.0000	1.0000
16	[illegible]	[illegible]	-71.725	.324	0.0000	[illegible]	1.4355	1575.37	42.961	734.020	1.000	0.000	1.0000	1.0000
17	[illegible]	-5.399	[illegible]	[illegible]	0.0000	[illegible]	1.4535	1593.37	44.005	739.114	1.000	0.000	1.0000	1.0000
18	[illegible]	[illegible]	[illegible]	[illegible]	0.0000	1537.5	1.4686	1611.00	45.231	714.367	1.000	0.000	1.0000	1.0000
19	[illegible]	-7.737	-73.100	.347	0.0000	[illegible]	1.4842	1625.92	46.457	719.794	1.000	0.000	1.0000	1.0000
20	-7.311	[illegible]	[illegible]	[illegible]	0.0000	1580.5	1.4938	1647.35	47.743	725.407	1.000	0.000	1.0000	1.0000
21	[illegible]	-4.617	[illegible]	[illegible]	0.0000	1593.0	1.5165	[illegible]	49.112	731.207	1.000	0.000	1.0000	1.0000

STATION [illegible] FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN.	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	[illegible]	533.57	[illegible]	[illegible]	[illegible]	520.303	[illegible]	14.704	[illegible]	14.19	22.32	6.139	.0764
2	[illegible]	542.34	132.5?	[illegible]	[illegible]	520.253	[illegible]	14.704	[illegible]	13.74	20.06	7.657	.0761
3	7.0?42	545.17	[illegible]	[illegible]	[illegible]	[illegible]	17.39?	14.674	.5008	13.37	19.96	8.522	.0759
4	[illegible]	[illegible]	127.25	552.?2	545.785	[illegible]	[illegible]	14.615	.5032	13.07	17.20	11.230	.0758
5	[illegible]	551.43	[illegible]	[illegible]	[illegible]	519.271	[illegible]	14.538	[illegible]	12.95	15.39	17.033	.0757
6	7.3452	[illegible]	[illegible]	[illegible]	[illegible]	519.158	[illegible]	14.574	[illegible]	12.69	13.53	[illegible]	.0756
7	[illegible]	[illegible]	[illegible]	571.11	[illegible]	519.257	[illegible]	14.574	[illegible]	12.61	11.62	-151.336	.0756
8	[illegible]	557.63	[illegible]	571.43	[illegible]	[illegible]	17.43?	14.591	.5105	12.62	9.66	-24.465	.0755
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14.624	[illegible]	12.69	7.67	-13.192	.0757
10	[illegible]	[illegible]	127.47	572.04	[illegible]	[illegible]	[illegible]	14.675	[illegible]	12.87	[illegible]	[illegible]	.0759
11	[illegible]	[illegible]	131.?2	571.?3	543.847	522.225	17.601	14.742	[illegible]	13.30	[illegible]	-5.976	.0760
12	[illegible]	[illegible]	[illegible]	571.11	550.749	523.723	[illegible]	14.324	.5035	13.79	1.65	-5.805	.0762
13	[illegible]	557.44	[illegible]	570.11	[illegible]	525.353	17.73?	14.320	[illegible]	14.30	-.29	-5.131	.0765
14	[illegible]	[illegible]	[illegible]	[illegible]	555.314	527.054	[illegible]	15.026	[illegible]	14.85	-2.17	-4.772	.0768
15	[illegible]	[illegible]	150.02	[illegible]	555.416	525.367	[illegible]	15.130	[illegible]	15.38	-3.98	[illegible]	.0771
16	[illegible]	533.74	[illegible]	[illegible]	557.007	530.933	18.033	15.246	[illegible]	16.02	[illegible]	-4.737	.0773
17	[illegible]	[illegible]	[illegible]	[illegible]	558.700	533.336	18.053	15.350	[illegible]	16.77	-7.13	-5.072	.0775
18	[illegible]	517.13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.444	[illegible]	17.46	-8.43	-5.909	.0777
19	[illegible]	[illegible]	161.27	527.53	560.173	[illegible]	[illegible]	15.519	.4040	17.80	-9.35	-7.429	.0778
20	[illegible]	483.24	157.43	[illegible]	553.516	538.373	[illegible]	15.566	[illegible]	18.05	-9.60	-12.256	.0779
21	[illegible]	450.15	[illegible]	483.34	558.952	539.758	[illegible]	15.571	.4213	18.48	-9.35	-1555.583	.0777

BLADE DATA

LOCATION	BLADE SECTION	BLADE ANGLE	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	[illegible]	[illegible]	-63.704	[illegible]	.0171	1228.0	1.0877	1219.19	31.052	[illegible]	1.189	.054	.9461	.9474
2	[illegible]	[illegible]	-64.[illegible]	[illegible]	.0175	1240.0	1.1009	1235.9[illegible]	31.[illegible]	[illegible]	1.189	.053	.9428	.9442
3	[illegible]	[illegible]	-64.[illegible]	[illegible]	.0179	1204.[illegible]	1.1203	1299.04	32.[illegible]	[illegible]	1.183	.052	.9399	.9413
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.0183	1252.2	1.1430	1273.[illegible]	32.938	[illegible]	1.182	.052	.9373	.9388
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.0188	1234.8	1.1599	1297.12	33.[illegible]	[illegible]	1.182	.052	.9351	.9366
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.0193	1317.6	1.1751	1315.[illegible]	34.[illegible]	[illegible]	1.183	.053	.9331	.9347
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.0197	1334.7	1.1911	1332.04	34.943	956.270	1.184	.053	.9303	.9320
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.0214	1362.1	1.2050	1347.[illegible]	35.[illegible]	970.119	1.186	.054	.9258	.9276
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.0221	1359.[illegible]	1.2161	1363.[illegible]	36.[illegible]	974.002	1.189	.055	.9217	.9236
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.0245	1348.7	1.2296	1377.17	37.[illegible]	977.934	1.193	.057	.9142	.9163
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.0309	1404.1	1.2384	1385.[illegible]	37.[illegible]	981.824	1.198	.059	.8944	.8971
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.0370	1421.[illegible]	1.2496	1399.[illegible]	38.[illegible]	985.980	1.203	.062	.8773	.8805
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.0462	1438.[illegible]	1.2663	1410.74	38.[illegible]	990.107	1.210	.065	.8620	.8657
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.0467	1420.[illegible]	1.2616	1421.[illegible]	38.[illegible]	994.315	1.217	.068	.8476	.8518
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.0542	1474.3	1.2691	1432.[illegible]	40.[illegible]	998.[illegible]	1.223	.071	.8345	.8391
16	[illegible]	[illegible]	[illegible]	[illegible]	.0622	1492.[illegible]	1.2755	1442.[illegible]	40.[illegible]	703.031	1.227	.074	.8147	.8200
17	[illegible]	[illegible]	[illegible]	[illegible]	.0735	1510.3	1.2907	1451.[illegible]	41.[illegible]	707.[illegible]	1.229	.077	.7807	.7928
18	[illegible]	[illegible]	[illegible]	[illegible]	.0842	1529.[illegible]	1.3071	1461.[illegible]	42.[illegible]	712.339	1.228	.080	.7593	.7663
19	[illegible]	[illegible]	[illegible]	[illegible]	.0843	1549.[illegible]	1.2981	1447.[illegible]	42.[illegible]	717.303	1.224	.080	.7424	.7497
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.0803	1569.3	1.3107	1492.33	43.773	722.[illegible]	1.214	.079	.7196	.7272
21	[illegible]	[illegible]	[illegible]	[illegible]	.0716	1591.2	1.3240	1503.[illegible]	[illegible]	728.119	1.198	.078	.6804	.6885

STATION 2 INTEGRATED PERFORMANCE PRESSUR RATIO = 1.203 ISEN. EFF.= .849 POLY. EFF.= .850 DELTA T ON T = .064

STATION 2 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.0714	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19.315	.[illegible]742	35.97	24.47	63.453	.0923
2	7.1635	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19.316	.[illegible]743	35.[illegible]	22.[illegible]	54.790	.0922
3	7.2477	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19.313	.[illegible]737	35.12	20.62	48.869	.0922
[illegible]	7.3319	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19.308	.[illegible]609	34.69	18.98	38.606	.0922
[illegible]	7.4132	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19.281	.[illegible]524	34.25	10.49	23.918	.0921
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19.269	.[illegible]341	33.79	14.36	22.630	.0920
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19.241	.[illegible]223	33.36	12.21	17.605	.0919
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19.208	.[illegible]372	32.98	10.03	13.735	.0917
8	7.7331	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19.170	.[illegible]342	32.60	7.85	10.460	.0915
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.[illegible]344	32.32	5.56	8.997	.0913
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19.[illegible]	.[illegible]673	32.[illegible]	3.49	7.933	.0909
12	7.9752	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19.023	.[illegible]4	32.49	1.38	6.720	.0904
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18.[illegible]	.[illegible]913	32.98	-.66	6.146	.0900
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18.[illegible]	.[illegible]728	32.71	-2.61	5.839	.0896
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18.[illegible]	.[illegible]633	32.[illegible]	-4.46	5.780	.0892
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18.[illegible]	.[illegible]579	33.41	-5.17	5.975	.0887
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18.[illegible]	.[illegible]435	34.47	-7.07	6.459	.0881
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18.[illegible]	.[illegible]244	35.74	-8.86	7.433	.0876
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18.[illegible]	.[illegible]999	36.72	-9.69	9.529	.0874
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.[illegible]	.[illegible]003	38.34	-10.03	16.211	.0871
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18.[illegible]	.[illegible]222	41.71	-8.38	1665.683	.0868

BLADE DATA

STREAM-LINE									RELATIV- PRESSURE	RELATIV TEMPERATURE	TOTAL PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21	-21.540	+.910	-73.742	11.752	.2107	1577.19	1.0964	1391.03	40.347	725.049	1.451	.196	.6055	.6825

STATION 6 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.603 ISEN. EFF.= .806 POLY. EFF.= .875 DELTA T ON T = .167

STATION 7 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES			TEMPERATURES		PRESSURES		MACH NO	ANGLES		RADIUS OF CURVATURE	SPECIFIC WEIGHT
		MERID	TANGENT	TOTAL	TOTAL	STATIC	TOTAL	STATIC		WHIRL	SLOPE		
1	7.0591	044.73	603.31	653.32	643.132	513.545	31.227	21.599	.7455	43.12	24.87	53.510	.0997
2	7.3317	031.44	590.11	643.03	647.714	543.173	31.114	21.522	.7434	42.46	22.69	-119.572	.0994
3	7.4005	037.03	584.98	642.33	647.607	542.146	31.031	21.471	.7454	41.91	20.82	-34.761	.0992
4	7.4618	041.29	584.05	642.23	647.455	541.982	30.991	21.442	.7451	41.44	18.36	-22.599	.0991
5	7.5231	045.32	583.29	642.15	647.335	541.822	30.964	21.432	.7447	41.04	16.22	-17.926	.0990
6	7.6011	051.36	582.15	642.04	647.240	541.687	30.957	21.438	.7442	40.71	14.12	-15.668	.0990
7	7.6934	058.27	582.23	642.04	647.205	541.662	30.973	21.459	.7437	40.48	12.06	-14.511	.0990
8	7.7326	061.58	581.43	641.94	647.194	541.643	31.003	21.495	.7431	40.36	10.05	-14.030	.0990
9	7.7636	063.97	581.93	641.99	647.170	541.625	31.057	21.546	.7422	40.30	8.08	-14.058	.0991
10	7.7947	066.36	582.42	642.04	647.146	541.606	31.111	21.598	.7409	40.42	6.14	-14.521	.0991
11	7.8119	067.68	582.67	642.07	647.133	541.596	31.141	21.626	.7403	40.52	5.17	-15.355	.0991
12	7.8593	071.32	583.36	642.15	647.096	541.568	31.224	21.705	.7375	41.17	4.25	-16.822	.0992
13	7.9065	074.96	584.05	642.23	647.058	541.539	31.307	21.784	.7334	41.99	2.40	-18.431	.0993
14	7.9412	077.62	584.57	642.29	647.031	541.519	31.372	21.847	.7288	42.65	.59	-19.431	.0994
15	7.9733	080.08	585.04	642.34	647.006	541.500	31.429	21.903	.7238	43.26	-1.19	-20.020	.0995
16	8.0054	082.54	585.51	642.39	646.981	541.481	31.486	21.958	.7184	43.84	-2.97	-20.518	.0996
17	8.0375	084.99	585.98	642.44	646.956	541.462	31.543	22.013	.7129	44.39	-4.74	-21.183	.0996
18	8.0696	087.44	586.45	642.49	646.931	541.443	31.600	22.068	.7072	44.92	-6.50	-22.088	.0997
19	8.1017	089.89	586.92	642.54	646.906	541.424	31.657	22.123	.7014	45.43	-8.25	-23.345	.0997
20	8.1338	092.33	587.39	642.59	646.881	541.405	31.714	22.178	.6955	45.92	-9.99	-25.131	.0998
21	8.1659	094.77	587.86	642.64	646.856	541.386	31.771	22.233	.6895	46.39	-11.72	-27.731	.0998

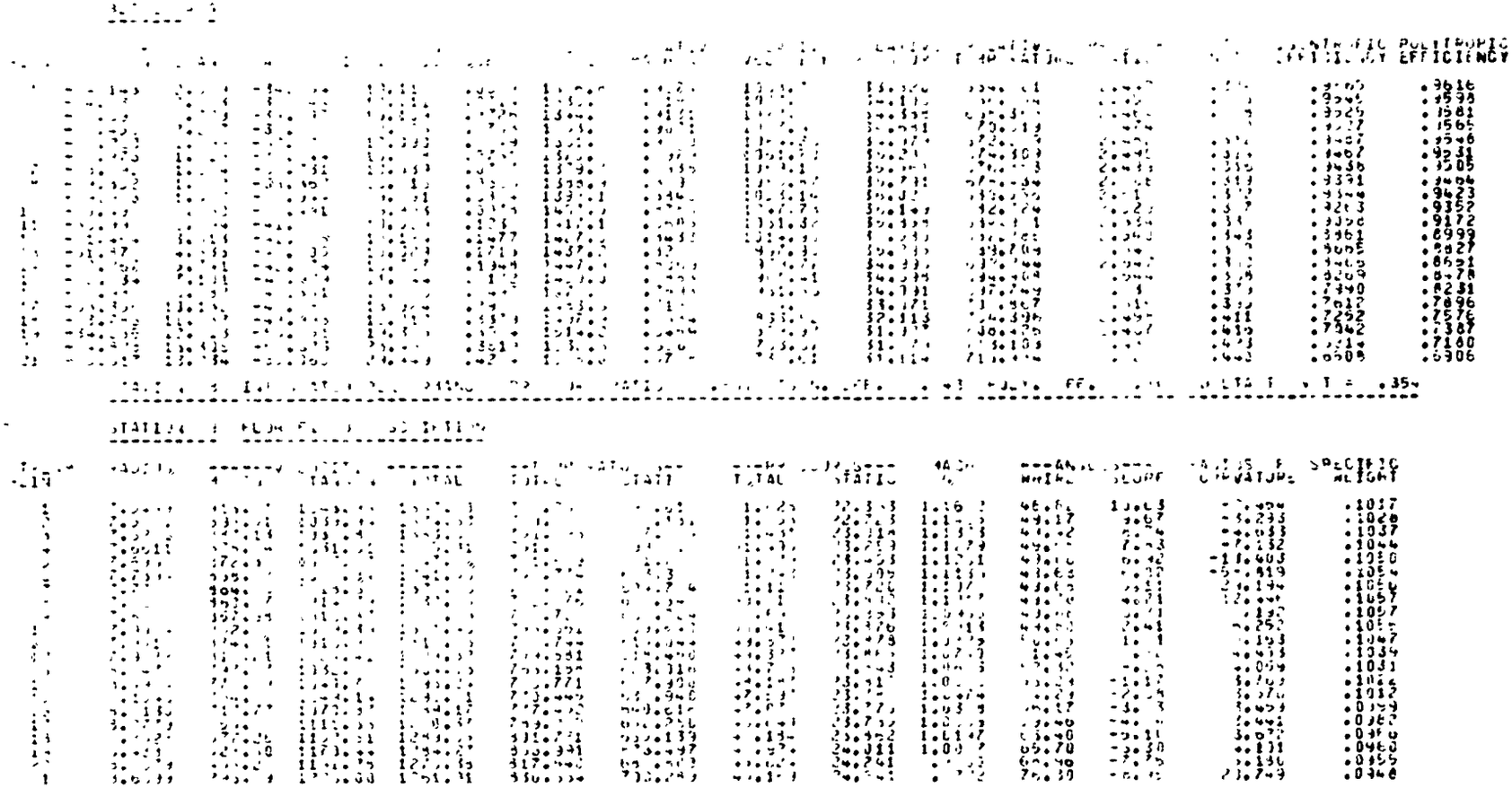
BLADE DATA

LOCATION	BLADE-A SECTION	NGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-.628	1.512	-49.369	0.498	.0523	1233.4	.7967	944.11	32.310	637.306	2.125	.250	.9607	.9646
2	-1.187	1.233	-47.452	0.365	.0534	1305.9	.8132	961.36	33.235	659.371	2.117	.243	.9586	.9628
3	-1.717	.821	-47.144	0.231	.0544	1314.1	.8202	980.09	33.692	668.246	2.112	.243	.9584	.9618
4	-2.332	.172	-45.432	0.100	.0523	1330.1	.8319	997.11	34.032	665.246	2.109	.248	.9549	.9594
5	-2.930	-.553	-43.493	0.973	.0502	1342.0	.8444	1012.13	34.324	667.373	2.107	.248	.9531	.9578
6	-3.506	-1.139	-41.498	0.855	.0571	1353.8	.8561	1026.19	34.554	670.503	2.106	.249	.9513	.9561
7	-4.046	-1.235	-41.793	0.750	.0541	1365.5	.8754	1033.77	35.374	673.141	2.108	.250	.9486	.9537
8	-4.544	-1.085	-39.213	0.659	.0527	1377.3	.8848	1049.45	35.754	675.792	2.110	.251	.9446	.9499
9	-5.014	-.730	-50.338	5.625	.0603	1389.0	.8926	1059.54	36.133	678.771	2.113	.251	.9402	.9461
10	-5.457	-.271	-51.038	5.631	.0734	1400.8	.8975	1066.76	36.462	681.180	2.116	.252	.9328	.9395
11	-5.883	.312	-51.936	5.704	.0925	1412.7	.8942	1065.45	36.439	683.344	2.116	.251	.9145	.9230
12	-6.245	1.048	-52.151	5.369	.1108	1424.4	.8906	1063.95	36.450	686.787	2.119	.266	.8968	.9070
13	-6.701	1.949	-52.141	5.140	.1239	1437.3	.8865	1061.96	36.495	689.720	2.118	.271	.8792	.8912
14	-7.107	3.001	-53.205	5.259	.1491	1450.0	.8816	1059.23	36.491	692.760	2.115	.270	.8613	.8751
15	-7.520	4.134	-54.997	7.147	.1629	1463.2	.8757	1056.44	36.493	695.328	2.110	.261	.8438	.8592
16	-7.952	5.478	-55.322	7.970	.1573	1477.1	.8703	1047.01	36.238	699.264	2.101	.238	.8121	.8308
17	-8.430	6.841	-57.239	9.109	.2213	1491.7	.8492	1029.43	35.735	702.949	2.079	.237	.7859	.8087
18	-8.957	8.262	-54.064	10.978	.2535	1507.6	.8295	1010.36	35.329	706.781	2.072	.303	.7538	.7776
19	-9.535	9.671	-62.391	12.756	.2659	1525.0	.8214	1009.65	35.304	711.143	2.043	.307	.7345	.7595
20	-10.149	10.930	-65.799	13.948	.2802	1544.9	.8172	1007.82	35.230	716.070	2.009	.309	.7126	.7391
21	-11.301	11.690	-70.535	14.175	.3153	1547.7	.8063	994.41	35.034	722.305	1.970	.313	.6814	.7099

STATION 7 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.034 ISEN. EFF.= .802 POLY. EFF.= .875 DELTA T ON T = .272

STATION 8 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES AERID	TANGEN	TOTAL	TEMPERATURES TOTAL	STATIC	PRESSURES TOTAL	STATIC	MACH NO	ANGLES WHIRL	SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.4432	333.77	710.74	1147.25	876.218	557.312	33.983	19.407	.9914	38.67	13.79	-2.220	.0921
2	7.4931	352.39	710.33	1130.73	877.211	570.305	35.032	19.732	.9763	39.08	17.64	-2.359	.0932
3	7.5471	369.73	710.73	1127.03	878.277	573.196	35.214	20.048	.9738	39.49	15.57	-2.328	.0935
4	7.6033	387.79	710.39	1117.39	879.334	579.959	35.352	20.353	.9445	39.69	13.58	-2.724	.0952
5	7.6599	406.24	710.72	1109.19	880.345	586.562	35.473	20.642	.9408	40.25	11.67	-2.365	.0961
6	7.7160	424.23	711.17	1099.30	881.340	591.064	35.533	20.912	.9312	40.59	9.82	-3.239	.0969
7	7.7722	442.23	711.17	1093.30	882.344	583.566	36.721	21.173	.9232	40.45	8.03	-3.554	.0977
8	7.8277	459.34	711.20	1087.47	883.111	586.231	35.853	21.420	.9163	41.36	6.30	-3.317	.0984
9	7.8832	477.41	721.32	1083.03	885.832	588.839	37.023	21.659	.9099	41.80	4.62	-3.342	.0991
10	7.9021	480.34	727.13	1078.71	886.149	591.950	37.171	21.892	.9039	42.38	2.99	-3.849	.0996
11	7.9260	778.08	740.11	1073.54	892.341	597.031	37.239	22.121	.8930	43.57	1.41	-5.479	.0998
12	8.0117	759.19	753.44	1069.03	895.056	602.151	37.321	22.348	.8857	44.78	-.11	-8.300	.1000
13	8.0893	739.20	766.55	1065.12	701.139	607.417	37.401	22.575	.8812	46.05	-1.58	-7.447	.1001
14	8.1281	719.36	780.01	1059.33	702.622	612.932	37.445	22.805	.8725	47.42	-2.99	-6.109	.1002
15	8.1691	701.93	791.41	1051.17	719.730	618.567	37.391	23.038	.8619	48.84	-4.36	-11.972	.1003
16	8.2579	654.71	807.35	1039.94	715.335	626.075	37.221	23.278	.8479	50.98	-5.68	-10.943	.1001
17	8.3295	633.31	833.31	1027.27	723.371	636.310	35.972	23.534	.8305	54.27	-6.91	-20.524	.0996
18	8.4102	639.80	833.49	1012.78	731.635	647.067	35.717	23.813	.8121	58.06	-7.93	-41.786	.0991
19	8.5014	680.04	861.36	996.53	734.531	654.315	36.254	24.115	.7987	60.86	-8.77	-103.677	.0993
20	8.6050	711.21	906.41	959.04	739.319	662.539	35.613	24.444	.7811	64.61	-9.51	-73.425	.0994
21	8.7339	810.93	883.30	940.73	747.131	674.206	35.631	24.809	.7542	70.73	-9.37	**********	.0991



BLADE DATA

LOCATION	BLADE SECTION	BLADE ANGLES CLAN	FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-12.997	10.991	-19.230	[illegible]	.0534	1344.7	.7056	961.47	34.270	998.477	3.513	.447	.9683	.9666
2	-13.334	10.534	-19.135	[illegible]	.0604	1331.2	.7947	950.00	34.[illegible]	999.311	3.508	.448	[illegible]	.9647
3	-14.034	10.315	-19.345	[illegible]	.0900	1307.6	.7870	943.77	34.030	971.367	3.503	.448	.9559	.9629
4	-14.729	9.773	-20.753	[illegible]	.0824	1304.5	.7820	933.90	34.323	972.985	3.498	.449	.9538	.9611
5	-15.439	9.077	-21.531	[illegible]	.0931	1371.4	.7734	937.74	33.022	974.464	3.493	.449	.9516	.9598
6	-16.169	8.316	-22.277	[illegible]	.0947	1376.5	.7787	933.10	35.226	976.063	3.487	.449	.9493	.9573
7	-16.893	7.629	-23.003	[illegible]	.0949	1385.7	.7787	939.24	35.397	977.703	3.476	.450	.9461	.9546
8	-17.584	7.153	-23.725	[illegible]	.1042	1393.0	.7784	940.01	35.[illegible]	979.388	3.464	.451	.9418	.9503
9	-18.222	6.931	-24.425	[illegible]	.1163	1400.[illegible]	.7734	942.32	35.619	981.119	3.451	.451	.9359	.9459
10	-18.901	6.965	-25.122	[illegible]	.1221	1408.2	.7775	941.91	35.[illegible]37	982.902	3.430	.452	.9270	.9384
11	-19.569	7.134	-25.787	[illegible]	.1243	1415.2	.7612	925.04	35.036	984.702	3.394	.453	.9055	.9201
12	-19.919	7.[illegible]	-26.117	[illegible]	.1302	1402.[illegible]	.7454	903.02	34.[illegible]94	986.722	3.357	.453	.8842	.9019
13	-20.253	7.[illegible]2	-26.715	[illegible]	.2141	1433.3	.7290	892.33	33.[illegible]41	988.792	3.319	.471	.8624	.8833
14	-20.[illegible]1	8.[illegible]5	-27.[illegible]70	[illegible]	.2716	1442.[illegible]	.7113	873.97	33.[illegible]55	990.385	3.279	.478	.8399	.8638
15	-21.024	8.971	-28.138	7.111	.2710	1452.[illegible]	.[illegible]932	859.09	32.731	993.317	3.239	.485	.8174	.8449
16	-21.[illegible]45	10.770	-28.[illegible]38	7.292	.3122	1462.[illegible]	.[illegible]730	817.31	31.[illegible]01	995.[illegible]29	3.203	.[illegible]99	.7864	.8177
17	-21.[illegible]15	12.015	-28.372	7.[illegible]7	.3[illegible]58	1472.[illegible]	.[illegible]556	744.[illegible]4	30.231	998.528	3.174	.522	.7447	.7818
18	-21.[illegible]13	13.139	-30.139	[illegible]319	.[illegible]724	1482.7	.[illegible]280	697.42	29.[illegible]40	1001.102	3.143	.[illegible]46	.7046	.7478
19	-21.[illegible]43	13.[illegible]35	-32.179	10.[illegible]29	.[illegible]4[illegible]0	1493.[illegible]0	.[illegible]916	624.53	28.302	1003.658	3.125	.560	.6828	.7281
20	-21.[illegible]90	13.[illegible]34	-30.710	11.[illegible]23	.[illegible]774	1502.7	.[illegible]804	[illegible]4.36	27.[illegible]35	1006.350	3.105	.57[illegible]	.6586	.7070
21	-21.371	13.153	-[illegible]40.793	20.421	.[illegible]2[illegible]5	1512.2	.[illegible]3[illegible]7	[illegible]3[illegible].[illegible]5	26.[illegible]47	1[illegible]15.985	3.074	.602	.6237	.6764

STATION 9 INTEGRATED PERFORMANCE PRESSURE RATIO = 3.[illegible]23 I[illegible]n. EFF.= .[illegible]839 POLY. EFF.= .863 DELTA T ON T = .486

STATION 10 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES AERIO	VELOCITIES TANGENT	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.[illegible]7[illegible]	[illegible]43.34	1043.[illegible]4	1333.[illegible]1	7[illegible]0.7[illegible]	[illegible]82.741	[illegible]1.623	23.[illegible]17	1.1124	50.37	7.[illegible]2	9.3[illegible]9	.1064
2	7.[illegible]13[illegible]	[illegible]44.03	1033.21	1330.[illegible]5	7[illegible]0.[illegible]51	[illegible]03.636	[illegible]1.[illegible]5[illegible]	23.[illegible]83	1.1091	50.84	7.79	9.[illegible]38	.1066
3	7.[illegible]527	[illegible]40.[illegible]9	1031.83	1334.[illegible]3	7[illegible]1.133	[illegible]04.[illegible]40	[illegible]1.431	23.310	1.1071	50.63	7.69	9.[illegible]93	.1066
4	7.[illegible]9[illegible]4	350.[illegible]0	1027.[illegible]1	1333.70	7[illegible]1.[illegible]39	[illegible]0[illegible].[illegible]62	[illegible]1.[illegible]0[illegible]	23.311	1.1053	50.39	7.53	9.[illegible]26	.1065
5	7.[illegible]323	[illegible]34.[illegible]4	1022.37	1333.12	7[illegible]1.[illegible]39	[illegible]04.[illegible]35	[illegible]1.[illegible]21	23.[illegible]98	1.1051	50.12	7.33	9.550	.1064
6	7.[illegible]723	[illegible]59.[illegible]6	1018.[illegible]1	1332.[illegible]3	7[illegible]1.774	[illegible]02.[illegible]70	[illegible]1.[illegible]4[illegible]	23.876	1.1[illegible]3	49.[illegible]4	7.11	[illegible].269	.1062
7	7.[illegible]12[illegible]	[illegible]62.[illegible]7	1[illegible]1[illegible].[illegible]3[illegible]	1331.72	7[illegible]2.021	[illegible]05.732	[illegible]1.[illegible]1[illegible]	23.[illegible]52	1.1033	49.61	6.86	[illegible].[illegible]94	.1061
8	7.[illegible]527	[illegible]63.[illegible]6	1[illegible]10.70	1329.64	7[illegible]2.[illegible]76	[illegible]06.[illegible]47	[illegible]0.[illegible]1[illegible]	23.830	1.1008	49.48	6.60	[illegible].[illegible]15	.1058
9	7.[illegible]933	[illegible]0[illegible].75	1007.01	1327.[illegible]5	7[illegible]2.725	[illegible]07.[illegible]03	[illegible]1.[illegible]0[illegible]	23.[illegible]09	1.[illegible]9[illegible]	49.[illegible]5	6.33	7.[illegible]74	.1056
10	7.[illegible]3[illegible]	[illegible]61.[illegible]4	1006.[illegible]4	1324.[illegible]7	7[illegible]3.[illegible]61	[illegible]08.[illegible]62	[illegible]1.[illegible]1[illegible]	23.798	1.[illegible]3[illegible]	49.[illegible]2	6.03	7.[illegible]00	.1052
11	7.[illegible]7[illegible]	[illegible]4[illegible].[illegible]9	1[illegible]13.[illegible]5	1319.15	7[illegible]3.[illegible]4[illegible]	[illegible]13.[illegible]55	[illegible]0.[illegible]8[illegible]	23.770	1.[illegible]8[illegible]	50.[illegible]2	5.[illegible]2	[illegible].732	.1044
12	[illegible].[illegible]202	[illegible]29.[illegible]6	1021.[illegible]1	1313.[illegible]4	7[illegible]3.[illegible]61	[illegible]17.[illegible]41	[illegible]0.32[illegible]	23.756	1.[illegible]7[illegible]	51.[illegible]5	[illegible].37	[illegible].185	.1036
13	[illegible].[illegible]7	[illegible]05.[illegible]5	1029.[illegible]3	1307.[illegible]0	7[illegible]3.[illegible]36	[illegible]22.[illegible]29	[illegible]0.[illegible]0[illegible]	23.[illegible]45	1.[illegible]0[illegible]	51.97	4.[illegible]8	[illegible].664	.1028
14	[illegible].[illegible]31	[illegible]32.[illegible]2	1039.[illegible]7	1[illegible]00.[illegible]7	7[illegible]6.771	627.333	[illegible]0.[illegible]87	23.739	1.[illegible]0[illegible]	[illegible]5.[illegible]0	4.[illegible]3	[illegible].[illegible]73	.1019
15	[illegible].[illegible]27	[illegible]6[illegible].24	1[illegible]43.07	1293.[illegible]9	770.[illegible]45	[illegible]32.[illegible]01	[illegible]7.[illegible]3[illegible]	23.742	1.[illegible]0[illegible]9	54.12	[illegible].01	[illegible].714	.1011
16	[illegible].[illegible]52	[illegible]19.71	1070.[illegible]3	1293.[illegible]5	777.[illegible]52	[illegible]40.[illegible]56	[illegible]7.[illegible]7[illegible]	23.762	1.[illegible]3[illegible]	56.13	3.36	[illegible].294	.0999
17	[illegible].[illegible]730	[illegible]52.22	1112.[illegible]4	1283.[illegible]9	739.[illegible]62	[illegible]52.[illegible]31	[illegible]2.[illegible]4[illegible]	23.917	1.[illegible]2[illegible]	59.61	2.[illegible]9	3.931	.0983
18	[illegible].[illegible]95	[illegible]67.31	1[illegible]2[illegible].[illegible]3	1[illegible][illegible]0.[illegible]0	[illegible]01.721	[illegible]65.726	[illegible]0.[illegible]9[illegible]	23.[illegible]36	1.[illegible]1[illegible]	63.93	1.25	[illegible].665	.0965
19	[illegible].[illegible]2[illegible]	[illegible]10.[illegible]3	1173.[illegible]3	1273.[illegible]9	[illegible]16.[illegible]91	[illegible]74.431	[illegible]2.92[illegible]	24.[illegible]29	1.[illegible]0[illegible]	66.48	-.52	[illegible].484	.0964
20	[illegible].[illegible]19[illegible]	[illegible]30.[illegible]9	1193.41	1270.[illegible]2	[illegible]17.[illegible]40	[illegible]95.[illegible]91	[illegible]2.62[illegible]	24.397	.[illegible]905	70.21	-2.92	[illegible].314	.0959
21	[illegible].[illegible]3[illegible]	[illegible]50.24	1230.25	1256.[illegible]3	[illegible]30.[illegible]64	701.378	[illegible]2.161	24.777	.[illegible]695	78.23	-[illegible].18	[illegible].053	.0951

STATION 11 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITY MERID	VELOCITY TANG	VELOCITY TOTAL	TEMPERATURE TOTAL	TEMPERATURE STATIC	PRESSURE TOTAL	PRESSURE STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.8139	925.70	1033.39	1388.13	749.769	531.764	51.823	22.330	1.1633	48.17	9.06	29.367	.1016
2	7.6572	956.46	1023.72	1404.42	750.491	538.110	51.993	21.796	1.1819	47.09	8.99	43.180	.0990
3	7.7136	983.57	1020.65	1419.05	751.193	544.859	51.491	21.325	1.1967	46.14	8.87	88.337	.0982
4	7.7535	1005.04	1019.54	1430.33	751.349	552.378	51.409	20.980	1.2093	45.38	8.64	912.073	.0969
5	7.8022	1020.63	1019.80	1438.50	751.299	558.762	51.324	20.706	1.2183	44.81	8.37	-115.514	.0960
6	7.8447	1031.44	1020.11	1442.83	751.774	579.906	51.243	20.547	1.2215	44.37	8.13	-58.823	.0954
7	7.8865	1037.47	1020.34	1444.85	752.021	579.333	51.113	20.462	1.2227	44.08	7.91	-42.933	.0951
8	7.9273	1038.92	1021.13	1442.75	752.376	580.959	50.911	20.436	1.2207	43.94	7.73	-37.326	.0948
9	7.9539	1038.03	1021.93	1438.29	752.725	581.673	50.837	20.454	1.2168	43.86	7.59	-33.123	.0947
10	8.0044	1032.42	1020.37	1434.79	753.061	583.763	50.410	20.505	1.2106	43.98	7.48	-37.984	.0946
11	8.0213	1014.00	1018.34	1427.62	753.744	588.577	49.872	20.580	1.1938	44.71	7.39	-42.949	.0942
12	8.0933	995.11	1012.38	1419.56	754.381	593.647	49.327	20.627	1.1793	45.49	7.30	-53.565	.0938
13	8.1352	973.41	1007.92	1410.63	755.188	599.030	48.768	20.779	1.1723	46.37	7.21	-80.802	.0934
14	8.1800	949.62	1030.47	1400.79	756.771	604.995	48.187	20.901	1.1611	47.36	7.08	-230.459	.0931
15	8.2249	921.90	1048.14	1389.89	770.445	611.218	47.587	21.041	1.1483	48.45	6.91	171.808	.0927
16	8.2714	892.41	1063.32	1361.79	777.452	620.160	47.075	21.208	1.1315	50.31	6.62	57.057	.0921
17	8.3210	920.35	1107.92	1376.73	799.262	633.239	46.640	21.432	1.1158	53.43	6.07	34.633	.0912
18	8.3756	740.07	1149.45	1357.10	801.721	648.014	46.164	21.769	1.0994	57.22	4.99	25.901	.0905
19	8.4337	671.36	1179.74	1359.58	808.991	659.296	45.924	22.275	1.0722	60.17	3.23	21.311	.0910
20	8.5034	563.35	1195.40	1321.58	817.540	674.112	45.652	23.052	1.0395	64.76	.55	22.943	.0921
21	8.6139	296.13	1233.11	1264.17	830.864	698.983	45.161	24.490	.9730	76.50	-4.27	-27.461	.0943

BLADE DATA

LOCATION	BLADE SECTION	ANGLES CLAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	48.817	-33.941	48.173	-.644	.0001	0.0	1.1633	1388.10	51.828	750.765	3.213	.447	.9603	.9666
2	47.904	-37.330	47.031	-.813	0.0000	0.0	1.1819	1404.82	51.553	750.981	3.508	.445	.9501	.9547
3	47.011	-34.432	46.145	-.865	0.0000	0.0	1.1967	1413.63	51.431	751.193	3.503	.448	.9559	.9629
4	46.339	-31.453	45.335	-.971	0.0000	0.0	1.2093	1430.99	51.409	751.395	3.496	.449	.9538	.9611
5	45.866	-29.334	44.489	-1.090	0.0000	0.0	1.2183	1438.60	51.329	751.589	3.493	.444	.9516	.9593
6	45.499	-28.287	44.173	-1.126	0.0000	0.0	1.2215	1442.98	51.243	751.774	3.487	.449	.9493	.9573
7	45.190	-22.159	43.063	-1.103	0.0000	0.0	1.2227	1444.32	51.115	752.021	3.476	.450	.9461	.9546
8	44.935	-19.111	43.939	-.997	0.0000	0.0	1.2207	1442.76	50.910	752.376	3.464	.451	.9410	.9503
9	44.731	-16.039	43.858	-.873	0.0000	0.0	1.2168	1439.53	50.837	752.725	3.458	.451	.9359	.9459
10	44.584	-12.773	43.981	-.603	0.0000	0.0	1.2105	1434.79	50.410	753.061	3.430	.453	.9270	.9384
11	44.499	-9.163	44.709	.210	0.0000	0.0	1.1990	1427.62	49.872	753.744	3.394	.459	.9055	.9201
12	44.499	-5.322	45.493	.994	0.0000	0.0	1.1878	1419.56	49.327	754.381	3.357	.462	.8842	.9019
13	44.623	-1.271	46.365	1.742	0.0000	0.0	1.1750	1410.63	48.768	755.188	3.318	.471	.8624	.8833
14	44.897	1.824	47.362	2.465	0.0000	0.0	1.1611	1400.79	48.187	756.771	3.279	.478	.8399	.8639
15	45.286	5.257	48.449	3.162	0.0000	0.0	1.1463	1389.89	47.587	770.445	3.239	.493	.8174	.8445
16	45.843	9.814	50.312	4.469	0.0000	0.0	1.1315	1391.70	47.075	777.452	3.243	.493	.7884	.8177
17	46.382	15.726	53.425	7.043	0.0000	0.0	1.1158	1376.73	46.640	799.262	3.174	.522	.7447	.7818
18	46.917	23.476	57.229	10.705	0.0000	0.0	1.0994	1367.10	46.164	801.721	3.143	.540	.7046	.7470
19	47.539	31.620	60.166	12.627	0.0000	0.0	1.0722	1349.58	45.924	808.991	3.125	.590	.6828	.7201
20	48.303	39.451	64.759	15.797	0.0000	0.0	1.0395	1321.58	45.652	817.540	3.109	.576	.6546	.7070
21	50.814	49.042	70.496	20.682	0.0000	0.0	.9730	1264.17	45.159	830.864	3.074	.602	.6237	.6764

STATION 11 INTEGRATED PERFORMANCE PRESSURE RATIO = 3.323 ISEN. EFF.= .839 POLY. EFF.= .863 DELTA T ON T = .486

STATION 12 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7130	1214.01	782.30	1444.90	720.765	678.547	43.242	19.876	1.2241	32.81	5.21	-3.648	.0916
2	7.7548	1192.21	752.56	1413.77	750.981	706.020	43.170	20.531	1.1906	32.51	4.71	-3.323	.0944
3	7.7941	1170.01	735.99	1382.25	731.191	693.357	43.094	21.412	1.1567	32.17	4.21	-3.047	.0972
4	7.8330	1147.54	712.31	1350.64	731.395	680.898	43.033	22.295	1.1234	31.83	3.73	-2.852	.0999
5	7.8710	1124.72	690.45	1319.75	731.589	607.924	43.893	23.142	1.0914	31.55	3.29	-2.708	.1025
6	7.9100	1101.00	671.00	1289.36	731.774	614.676	45.051	23.934	1.0604	31.36	2.90	-2.618	.1049
7	7.9434	1077.44	653.80	1260.32	732.021	621.052	45.402	24.658	1.0313	31.25	2.61	-2.577	.1069
8	7.9872	1054.64	637.63	1232.44	732.378	627.161	44.091	25.313	1.0035	31.16	2.43	-2.574	.1087
9	8.0264	1033.98	622.49	1206.57	732.725	632.738	47.798	25.905	.9753	31.06	2.35	-2.594	.1103
10	8.0651	1014.37	608.61	1182.95	733.081	638.343	47.449	26.443	.9549	30.96	2.36	-2.643	.1116
11	8.1007	996.21	595.11	1158.71	733.744	646.141	47.023	26.928	.9298	30.90	2.44	-2.747	.1122
12	8.1432	974.35	581.24	1135.37	733.881	653.888	46.547	27.362	.9050	30.90	2.59	-2.894	.1127
13	8.1907	956.52	571.35	1115.37	733.198	659.892	46.183	27.750	.8857	30.98	2.77	-2.970	.1131
14	8.2341	939.79	560.34	1097.55	732.771	665.634	45.804	28.090	.8682	31.10	2.96	-3.129	.1133
15	8.2784	923.67	560.88	1080.63	732.445	674.377	45.425	28.377	.8490	31.27	3.16	-3.352	.1133
16	8.3230	912.57	553.41	1070.38	732.452	683.249	45.143	28.599	.8358	31.51	3.41	-3.615	.1127
17	8.3649	900.41	544.91	1067.88	732.282	695.288	44.937	28.738	.8263	31.92	3.80	-4.136	.1113
18	8.4173	901.73	537.70	1069.64	731.721	707.763	44.705	28.752	.8208	32.50	4.50	-5.388	.1094
19	8.4692	901.23	532.79	1070.71	730.991	713.337	44.565	28.563	.8243	33.34	2.30	-8.930	.1078
20	8.5174	908.91	544.80	1097.07	817.540	718.364	44.358	28.114	.8353	34.08	.99	-137.290	.1053
21	8.5730	922.91	633.64	1120.02	830.864	728.000	43.920	27.479	.8480	34.56	-2.03	5.347	.1017

BLADE DATA

LOCATION	BLADE-SECTION	BLADE-LEAN	BLADE-ANGLES	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	31.939	-24.847		32.807	.849	.0814	0.0	1.2241	1444.90	49.242	750.765	3.351	.447	.9176	.9302
2	31.931	-23.319		32.512	.860	.0801	0.0	1.1906	1413.77	49.170	750.361	3.346	.448	.9154	.9283
3	31.938	-21.813		32.172	.874	.0792	0.0	1.1567	1382.25	49.094	751.193	3.341	.448	.9132	.9264
4	30.338	-19.827		31.429	.891	.0782	0.0	1.1234	1350.64	48.936	751.395	3.334	.449	.9106	.9242
5	30.635	-16.638		31.349	.914	.0504	0.0	1.0914	1319.75	48.868	751.589	3.325	.449	.9075	.9216
6	30.429	-14.475		31.368	.931	.0841	0.0	1.0604	1289.36	48.651	751.774	3.311	.449	.9030	.9177
7	30.239	-12.334		31.232	.952	.0854	0.0	1.0313	1260.32	48.405	752.021	3.294	.450	.8974	.9128
8	30.108	-10.358		31.193	.973	.0925	0.0	1.0036	1232.44	48.091	752.378	3.272	.451	.8902	.9067
9	30.067	-8.230		31.059	.992	.0991	0.0	.9763	1206.57	47.730	752.725	3.252	.451	.8834	.9008
10	29.953	-6.178	1.0100	30.363	1.010	.0974	0.0	.9549	1182.95	47.449	753.081	3.232	.453	.8744	.8931
11	29.879	-4.804	1.0225	30.304	1.025	.0973	0.0	.9298	1158.71	47.023	736.744	3.200	.453	.8543	.8758
12	29.368	-1.937	1.0370	30.105	1.037	.0970	0.0	.9050	1133.57	46.547	739.101	3.167	.453	.8348	.8587
13	29.938	.058	1.0435	30.375	1.043	.0923	0.0	.8857	1115.97	46.180	733.188	3.142	.471	.8165	.8433
14	30.063	2.298	1.0448	31.401	1.048	.0873	0.0	.8666	1097.55	45.804	796.771	3.117	.478	.7979	.8278
15	30.222	4.808	1.0445	31.266	1.045	.0917	0.0	.8498	1088.63	45.429	770.492	3.091	.485	.7795	.8118
16	30.465	7.911	1.0400	31.308	1.040	.0755	0.0	.8356	1079.38	45.149	777.622	3.072	.493	.7536	.7884
17	30.849	11.479	1.0334	31.913	1.034	.0675	0.0	.8263	1067.88	44.937	799.592	3.058	.502	.7187	.7566
18	31.525	15.506	1.0311	32.556	1.031	.0607	0.0	.8209	1069.94	44.703	801.721	3.042	.506	.6813	.7209
19	32.384	19.815	1.0332	33.335	1.032	.0575	0.0	.8243	1078.71	44.565	808.391	3.032	.508	.6613	.7008
20	33.044	24.021	1.0410	34.084	1.040	.0562	0.0	.8353	1097.07	44.326	817.340	3.018	.509	.6395	.6804
21	33.478	28.229	1.0734	34.957	1.073	.0604	0.0	.8480	1120.62	43.920	830.864	2.989	.602	.6356	.6695

STATION 12 INTEGRATED PERFORMANCE PRESSURE RATIO = 3.175 ISEN. EFF.= .808 POLY. EFF.= .829 DELTA T ON T = .486

STATION 13 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES AERIO	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES NMIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC HEIGHT
1	7.721	1124.65	324.95	1170.17	750.745	699.649	29.105	20.105	.8561	17.58	-2.23	-2.136	.1196
2	7.7933	1107.72	313.77	1150.48	750.931	702.971	29.336	20.336	.8439	17.59	-2.51	-3.335	.1207
3	7.7837	991.94	313.93	1040.36	751.193	698.055	29.328	20.328	.8248	17.55	-2.76	-6.953	.1216
4	7.8429	970.34	309.15	1032.53	751.335	699.931	30.611	30.276	.8107	17.96	-2.93	-9.402	.1226
5	7.5772	962.74	304.85	1009.29	751.289	697.617	30.377	30.377	.7974	17.57	-3.06	-10.953	.1234
6	7.8423	945.30	298.23	993.15	751.774	670.565	30.429	30.429	.7823	17.56	-3.11	-13.394	.1238
7	7.8235	931.39	293.75	977.27	752.021	673.509	31.028	31.028	.7676	17.50	-3.07	-19.874	.1241
8	7.3074	916.04	287.83	960.21	752.376	676.432	31.175	31.175	.7533	17.43	-2.94	-31.992	.1241
9	8.0033	902.09	282.03	945.92	752.725	679.095	31.270	31.270	.7406	17.38	-2.72	-65.244	.1240
10	8.0473	892.50	278.20	935.27	753.061	681.672	31.339	31.339	.7303	17.39	-2.52	-1329.135	.1238
11	8.0835	884.96	274.55	923.35	753.744	686.598	31.374	31.374	.7191	17.43	-2.07	99.410	.1231
12	8.1338	884.53	274.50	911.54	753.881	691.492	31.801	31.387	.7073	17.46	-1.67	53.613	.1223
13	8.1733	882.21	272.43	907.39	753.148	689.482	31.387	31.387	.7022	17.48	-1.24	44.306	.1218
14	8.2292	861.22	271.40	903.11	753.771	699.693	31.379	31.379	.6970	17.49	-.82	42.133	.1208
15	8.2729	857.59	271.79	899.41	750.442	703.981	31.370	31.370	.6919	17.52	-.41	45.286	.1200
16	8.3214	859.48	272.47	901.72	777.492	710.676	31.300	31.300	.6904	17.59	-.03	53.151	.1189
17	8.3710	865.05	273.34	908.19	799.262	721.567	31.350	31.350	.6902	17.73	.30	73.347	.1178
18	8.4215	870.25	275.17	914.95	801.721	733.093	31.336	31.336	.6899	17.96	.59	147.186	.1151
19	8.4750	872.48	283.77	914.50	806.941	739.704	31.309	31.309	.6904	18.30	.81	336.418	.1140
20	8.5253	875.78	290.33	924.71	817.540	747.911	31.248	31.248	.6907	18.72	.94	263.746	.1126
21	8.5739	878.17	300.32	930.06	830.804	750.102	42.704	31.126	.6991	19.23	.98	76.314	.1103

BLADE DATA

LOCATION	BLADE-SECTION ANGLE	INCIDENCE ANGLE	N-L FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	16.234	-3.641	17.235	1.361	.1599	0.0	.8561	1074.57	46.342	750.769	3.194	.447	.8750	.8934
2	16.133	-3.343	17.334	1.391	.1532	0.0	.8439	1059.93	46.845	750.961	3.188	.448	.8723	.8911
3	16.174	-3.412	17.299	1.375	.1573	0.0	.8248	1040.26	46.739	751.193	3.180	.448	.8695	.8887
4	16.169	-3.314	17.350	1.334	.1555	0.0	.8107	1024.69	46.944	751.395	3.172	.449	.8664	.8859
5	16.171	-3.137	17.372	1.421	.1542	0.0	.7974	1008.36	46.934	751.289	3.161	.449	.8627	.8821
6	16.103	-3.334	17.350	1.423	.1557	0.0	.7825	993.18	49.159	751.774	3.141	.449	.8563	.8772
7	16.315	-3.439	17.384	1.459	.1735	0.0	.7678	975.97	49.739	752.021	3.115	.450	.8486	.8704
8	17.408	-4.509	17.434	1.520	.1315	0.0	.7533	960.20	45.330	752.376	3.088	.451	.8393	.8623
9	15.825	-3.312	17.490	1.592	.1908	0.0	.7406	949.82	44.957	752.725	3.061	.451	.8305	.8546
10	15.744	-2.975	17.534	1.595	.1917	0.0	.7309	935.27	44.575	753.061	3.040	.453	.8212	.8465
11	15.934	-1.813	17.423	1.622	.1923	0.0	.7191	923.35	44.240	756.744	3.010	.459	.8022	.8299
12	17.311	-1.043	17.454	1.643	.1926	0.0	.7076	911.84	43.801	759.161	2.980	.465	.7833	.8134
13	15.938	-.416	17.473	1.667	.1921	0.0	.7022	907.39	43.237	763.189	2.960	.471	.7686	.8005
14	15.812	.133	17.489	1.677	.1754	0.0	.6970	903.30	43.373	766.771	2.921	.478	.7535	.7873
15	15.945	.515	17.520	1.679	.1609	0.0	.6919	899.41	43.164	770.445	2.937	.485	.7385	.7742
16	15.824	1.310	16.338	1.668	.1541	0.0	.6904	901.52	43.035	777.492	2.932	.499	.7171	.7596
17	15.873	2.034	17.728	1.695	.1417	0.0	.6902	903.19	43.004	783.262	2.931	.522	.6851	.7279
18	15.819	2.636	17.199	1.646	.1290	0.0	.6899	904.85	43.034	801.721	2.927	.546	.6541	.7009
19	16.361	3.311	16.113	1.642	.1231	0.0	.6904	913.50	43.012	806.391	2.927	.560	.6373	.6862
20	17.377	3.852	16.727	1.693	.1190	0.0	.6907	924.71	42.939	817.540	2.922	.576	.6217	.6691
21	17.514	4.702	19.224	1.719	.1190	0.0	.6891	930.06	42.705	830.864	2.906	.602	.5876	.6427

STATION 13 INTEGRATED PERFORMANCE PRESSURE RATIO = 3.022 ISEN. EFF.= .760 POLY. EFF.= .794 DELTA T ON T = .486

STATION 1+ FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6720	380.35	30.01	831.23	750.705	685.354	++.632	32.346	.6949	6.18	-+.29	16.241	.1271
2	7.7075	384.42	94.13	803.42	750.981	695.881	++.993	32.280	.6930	6.08	-+.13	16.281	.1268
3	7.7430	382.48	92.33	797.30	751.193	636.404	++.232	32.206	.6911	5.97	-3.95	16.323	.1264
4	7.7809	390.29	90.72	804.35	751.395	636.921	++.10+	32.131	.6890	5.88	-3.74	16.366	.1260
5	7.8133	377.70	89.28	802.23	751.539	637.541	41.893	32.049	.6866	5.81	-3.58	16.402	.1256
6	7.8510	869.29	87.44	873.09	751.774	638.960	43.001	31.954	.6832	5.74	-3.33	16.453	.1251
7	7.8944	358.91	85.52	883.16	752.021	690.721	43.047	31.870	.6802	5.69	-3.02	16.510	.1245
8	7.9402	349.88	83.55	850.39	752.376	632.795	42.547	31.790	.6533	5.63	-2.56	16.576	.1238
9	7.9935	339.43	81.78	843.42	752.725	634.758	+2.08.	31.707	.6499	5.59	-2.16	16.656	.1230
10	8.0284	329.06	80.04	832.97	753.601	636.588	41.771	31.530	.6441	5.56	-1.73	16.748	.1220
11	8.0740	320.30	78.43	824.74	756.744	700.808	41.401	31.395	.6359	5.53	-1.28	16.807	.1214
12	8.1224	311.73	76.83	815.50	759.881	705.205	+1.033	31.514	.6208	5.51	-.84	16.869	.1207
13	8.1714	313.97	78.37	817.64	758.188	700.238	41.802	31.481	.6271	5.50	-.42	16.948	.1199
14	8.2212	315.43	79.43	819.19	756.771	711.626	40.977	31.469	.6206	5.49	-.05	17.016	.1192
15	8.2716	316.25	79.54	820.02	770.445	715.203	40.953	31.479	.6229	5.50	.28	17.722	.1185
16	8.3230	823.74	79.23	827.57	777.452	721.215	41.100	31.507	.6291	5.51	.55	18.453	.1177
17	8.3743	833.35	81.15	837.69	749.262	731.664	41.261	31.552	.6323	5.50	.75	19.369	.1162
18	8.4272	343.29	83.22	847.39	801.721	742.805	+1.42.	31.611	.6343	5.64	.90	20.298	.1145
19	8.4804	349.24	85.47	858.33	808.991	749.729	+1.493	31.632	.6344	5.77	1.00	21.242	.1128
20	8.5345	347.98	83.31	852.02	817.540	758.031	+1.537	31.701	.6329	5.98	1.00	220.993	.1129
21	8.9900	348.69	94.09	853.13	830.864	771.245	41.497	31.846	.6282	6.33	1.06	-613.607	.1112

BLADE DATA

LOCATION	BLADE-SECTION	ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	3.965	-1.034	5.183	2.214	.2389	0.0	.9949	891.54	44.632	750.765	3.037	.447	.8387	.8546
2	3.942	-.939	5.072	2.233	.2382	0.0	.9930	889.42	44.466	750.981	3.026	.448	.8398	.8538
3	3.717	-.931	5.373	2.256	.2384	0.0	.9911	887.30	44.292	751.193	3.014	.448	.8229	.8476
4	3.597	-.834	5.384	2.287	.2399	0.0	.9890	884.95	44.104	751.395	3.001	.449	.8141	.8435
5	3.480	-.778	5.305	2.329	.2426	0.0	.9876	882.23	43.898	751.589	2.987	.449	.8133	.8393
6	3.366	-.037	5.744	2.378	.2522	0.0	.9732	873.68	43.501	751.774	2.960	.452	.8048	.8318
7	3.252	-.609	5.036	2.434	.2933	0.0	.9702	863.16	43.045	752.021	2.929	.450	.7949	.8230
8	3.140	-.540	5.934	2.494	.2744	0.0	.9598	858.99	42.547	752.376	2.895	.451	.7838	.8130
9	3.034	-.479	5.891	2.556	.2843	0.0	.9449	839.42	42.084	752.725	2.864	.453	.7732	.8036
10	2.940	-.426	5.833	2.616	.2838	0.0	.9441	832.97	+1.779	753.061	2.843	.453	.7648	.7954
11	2.861	-.374	5.830	2.669	.2890	0.0	.9359	824.74	41.408	756.744	2.818	.452	.7466	.7808
12	2.801	-.333	5.812	2.711	.2894	0.0	.9268	815.50	+1.035	759.881	2.792	.455	.7294	.7668
13	2.763	-.221	5.788	2.737	.2774	0.0	.9271	817.64	41.002	763.188	2.790	.47.	.7188	.7595
14	2.751	-.178	5.794	2.743	.2642	0.0	.9288	819.19	40.977	766.771	2.788	.47.	.7079	.7520
15	2.770	-.147	5.796	2.728	.2500	0.0	.9259	820.02	40.956	770.445	2.787	.483	.6971	.7366
16	2.819	-.234	5.815	2.696	.2310	0.0	.9291	827.57	41.[illegible]	777.452	2.797	.493	.6807	.7224
17	2.892	-.397	5.838	2.666	.2131	0.0	.9325	837.69	41.259	784.262	2.808	.522	.6538	.6990
18	2.987	-.603	5.933	2.643	.1949	0.0	.9349	847.39	41.425	801.721	2.819	.546	.6274	.6761
19	3.114	-.820	5.988	2.653	.1871	0.0	.9344	850.33	41.499	808.991	2.824	.560	.6127	.6633
20	3.290	-.970	5.930	2.690	.1811	0.0	.9326	852.02	41.537	817.540	2.826	.570	.5956	.6484
21	3.908	-1.055	6.326	2.316	.1779	0.0	.9282	853.89	41.497	830.864	2.824	.602	.5093	.6283

STATION 1+ INTEGRATED PERFORMANCE PRESSURE RATIO = 2.869 ISEN. EFF.= .718 POLY. EFF.= .756 DELTA T ON T = .486

STATION 15 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	992.33	0.00	992.33	750.765	699.589	42.329	28.202	.7823	0.00	-1.66	10.624	.1137
2	7.6774	989.79	0.00	989.79	750.981	670.319	42.090	28.182	.7800	0.00	-1.60	11.847	.1132
3	7.7159	986.32	0.00	986.32	751.193	671.097	41.844	28.104	.7768	0.00	-1.54	11.602	.1128
4	7.7553	982.48	0.00	982.48	751.395	671.925	41.590	28.029	.7731	0.00	-1.45	12.334	.1124
5	7.7958	978.21	0.00	978.21	751.589	672.611	41.330	27.957	.7694	0.00	-1.35	13.311	.1119
6	7.8375	973.53	0.00	973.53	751.774	674.872	40.827	27.892	.7591	0.00	-1.24	14.669	.1113
7	7.8808	968.62	0.00	968.62	752.021	677.322	40.270	27.832	.7469	0.00	-1.10	16.645	.1107
8	7.9257	963.24	0.00	963.24	752.376	680.077	39.692	27.751	.7333	0.00	-.94	19.705	.1100
9	7.9723	957.52	0.00	957.52	752.725	682.671	39.163	27.739	.7205	0.00	-.75	24.853	.1094
10	8.0203	951.29	0.00	951.29	753.061	684.722	38.882	27.707	.7138	0.00	-.56	34.692	.1090
11	8.0697	944.32	0.00	944.32	753.744	688.868	38.533	27.686	.7052	0.00	-.39	58.207	.1063
12	8.1205	936.85	0.00	936.85	754.881	693.209	38.295	27.675	.6979	0.00	-.15	176.609	.1075
13	8.1723	929.20	0.00	929.20	755.511	695.511	38.426	27.675	.7020	0.00	.03	-208.385	.1072
14	8.2245	921.34	0.00	921.34	756.771	698.115	38.571	27.684	.7059	0.00	.20	-70.688	.1068
15	8.2772	913.14	0.00	913.14	758.445	700.854	38.717	27.702	.7094	0.00	.34	-46.236	.1065
16	8.3302	904.40	0.00	904.40	760.452	703.718	38.851	27.727	.7123	0.00	.44	-35.670	.1058
17	8.3834	895.06	0.00	895.06	762.792	706.730	38.997	27.757	.7265	0.00	.52	-32.158	.1046
18	8.4368	885.05	0.00	885.05	765.486	709.911	39.145	27.791	.7348	0.00	.56	-30.173	.1033
19	8.4907	874.54	0.00	874.54	768.553	713.281	39.293	27.827	.7434	0.00	.58	-29.761	.1026
20	8.5450	863.70	0.00	863.70	772.018	716.860	39.442	27.864	.7520	0.00	.57	-30.723	.1017
21	8.6000	852.84	0.00	852.84	775.904	720.670	39.592	27.902	.7608	0.00	.55	-33.905	.1008

BLADE DATA

LOCAT -ION	BLADE SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-7.239	.020	0.000	7.239	.3174	0.0	.7829	992.93	42.329	750.765	2.888	.447	.7848	.8138
2	-7.387	.020	0.000	7.387	.3140	0.0	.7800	989.79	42.090	750.981	2.864	.446	.7792	.8068
3	-7.544	.019	0.000	7.544	.3196	0.0	.7768	986.32	41.844	751.193	2.847	.446	.7735	.8037
4	-7.705	.018	0.000	7.706	.3224	0.0	.7733	982.48	41.590	751.395	2.838	.445	.7676	.7985
5	-7.869	.016	0.000	7.869	.3205	0.0	.7694	978.21	41.330	751.589	2.832	.445	.7616	.7931
6	-8.032	.014	0.000	8.032	.3193	0.0	.7591	969.53	40.827	751.774	2.778	.445	.7486	.7832
7	-8.195	.012	0.000	8.195	.3938	0.0	.7469	958.62	40.270	752.021	2.740	.444	.7383	.7719
8	-8.357	.010	0.000	8.357	.3641	0.0	.7333	937.24	39.692	752.376	2.701	.441	.7250	.7599
9	-8.514	.003	0.000	8.514	.3412	0.0	.7205	922.62	39.163	752.725	2.665	.441	.7128	.7485
10	-8.669	.007	0.000	8.669	.3655	0.0	.7138	915.29	38.882	753.061	2.646	.439	.7039	.7407
11	-8.788	.005	0.000	8.788	.3652	0.0	.7062	903.32	38.533	753.744	2.626	.439	.6885	.7269
12	-8.898	.003	0.000	8.898	.3953	0.0	.6979	900.35	38.295	754.881	2.605	.439	.6731	.7131
13	-8.984	.001	0.000	8.984	.3625	0.0	.7020	907.20	38.426	755.511	2.615	.439	.6669	.7078
14	-9.041	-.001	0.000	9.041	.3224	0.0	.7059	913.84	38.571	756.771	2.625	.438	.6601	.7019
15	-9.062	-.004	0.000	9.062	.3344	0.0	.7094	920.14	38.717	758.445	2.635	.439	.6533	.6961
16	-9.059	-.003	0.000	9.059	.3102	0.0	.7179	934.48	39.051	760.452	2.657	.439	.6428	.6864
17	-9.060	-.012	0.000	9.060	.2873	0.0	.7265	951.56	39.397	762.792	2.681	.439	.6281	.6776
18	-9.085	-.018	0.000	9.085	.2637	0.0	.7348	968.85	39.745	765.486	2.704	.439	.5986	.6691
19	-9.126	-.024	0.000	9.126	.2535	0.0	.7384	977.54	39.930	768.553	2.717	.440	.5866	.6647
20	-9.169	-.031	0.000	9.169	.2444	0.0	.7418	986.70	40.107	772.018	2.729	.439	.5725	.6606
21	-9.213	-.038	0.000	9.213	.2361	0.0	.7453	995.84	40.285	775.904	2.741	.439	.5586	.6575

STATION 15 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.788 ISEN. EFF.= .674 POLY. EFF.= .715 DELTA T ON T = .439

STATION 16 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.0500	1007.26	0.00	1007.26	750.705	667.222	+2.324	27.912	.7955	0.00	0.00	0.000	.1127
2	7.0771	1000.92	0.00	1000.92	750.941	668.430	+2.033	27.912	.7898	0.00	-.01	2500.647	.1125
3	7.1153	994.31	0.00	994.31	751.193	669.791	+1.644	27.912	.7839	0.00	-.02	1339.702	.1122
4	7.1542	987.42	0.00	987.42	751.399	671.122	+1.540	27.911	.7775	0.00	-.03	963.352	.1120
5	7.1943	980.22	0.00	980.22	751.569	672.485	+1.333	27.910	.7712	0.00	-.04	787.408	.1118
6	7.2353	965.30	0.00	965.30	751.774	674.988	+0.827	27.908	.7555	0.00	-.05	694.431	.1114
7	7.2739	949.34	0.00	949.34	752.021	677.838	+0.271	27.907	.7440	0.00	-.05	648.205	.1109
8	7.3245	931.04	0.00	931.04	752.376	680.940	-0.632	27.906	.7285	0.00	-.05	636.735	.1104
9	7.3711	915.03	0.00	915.03	752.725	683.821	-1.163	27.904	.7140	0.00	-.05	650.867	.1099
10	8.0192	906.19	0.00	906.19	753.661	686.090	-1.833	27.903	.7004	0.00	-.05	719.344	.1095
11	8.0688	898.13	0.00	898.13	754.744	690.387	-2.583	27.901	.6873	0.00	-.04	850.015	.1089
12	8.1193	889.53	0.00	889.53	755.881	694.805	-3.245	27.900	.6737	0.00	-.03	1052.930	.1082
13	8.1719	880.45	0.00	880.45	757.188	697.109	-3.825	27.900	.6629	0.00	-.02	1466.221	.1078
14	8.2242	903.01	0.00	903.01	758.771	699.647	-3.971	27.899	.6972	0.00	-.02	2333.107	.1074
15	8.2770	910.81	0.00	910.81	770.445	702.262	-4.717	27.899	.7015	0.00	-.01	4585.234	.1070
16	8.3302	926.32	0.00	926.32	777.452	706.957	-5.051	27.899	.7111	0.00	-.00	36340.532	.1063
17	8.3834	944.34	0.00	944.34	739.252	715.966	-5.397	27.899	.7209	0.00	.00	-10932.807	.1050
18	8.4363	963.33	0.00	963.33	801.721	725.527	-5.744	27.899	.7305	0.00	.00	-6642.446	.1036
19	8.4905	974.23	0.00	974.23	838.991	731.186	-5.930	27.899	.7355	0.00	.00	-6544.632	.1028
20	8.5431	985.08	0.00	985.08	817.540	738.041	-6.107	27.899	.7404	0.00	.00	-9844.431	.1018
21	8.6000	998.34	0.00	998.34	830.804	749.212	-6.295	27.899	.7453	0.00	0.00	0.000	.1003

STATION 17 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.0500	1007.79	0.00	1007.79	750.705	667.133	+2.323	27.899	.7951	0.00	0.00	0.000	.1126
2	7.0771	1001.45	0.00	1001.45	750.941	668.402	+2.033	27.899	.7893	0.00	-.00	0.000	.1124
3	7.1153	994.83	0.00	994.83	751.193	669.706	+1.644	27.899	.7833	0.00	-.00	0.000	.1122
4	7.1542	987.91	0.00	987.91	751.395	671.042	+1.539	27.899	.7771	0.00	-.00	0.000	.1120
5	7.1943	980.67	0.00	980.67	751.589	672.413	+1.331	27.899	.7710	0.00	-.00	0.000	.1114
6	7.2353	965.20	0.00	965.20	751.774	674.924	+0.827	27.899	.7558	0.00	-.00	0.000	.1113
7	7.2739	949.33	0.00	949.33	752.021	677.784	+0.271	27.899	.7443	0.00	-.00	0.000	.1109
8	7.3245	931.33	0.00	931.33	752.376	680.896	-0.632	27.899	.7287	0.00	-.00	0.000	.1104
9	7.3710	915.25	0.00	915.25	752.725	683.787	-1.163	27.899	.7142	0.00	-.00	0.000	.1099
10	8.0192	906.35	0.00	906.35	753.661	686.069	-1.832	27.899	.7001	0.00	-.00	0.000	.1093
11	8.0687	898.24	0.00	898.24	754.744	690.371	-2.583	27.899	.6870	0.00	-.00	0.000	.1088
12	8.1197	889.59	0.00	889.59	755.881	694.790	-3.245	27.899	.6733	0.00	-.00	0.000	.1082
13	8.1717	880.48	0.00	880.48	757.188	697.105	-3.825	27.899	.6631	0.00	-.00	0.000	.1078
14	8.2242	903.60	0.00	903.60	758.771	699.648	-3.971	27.899	.6972	0.00	-.00	0.000	.1074
15	8.2770	910.79	0.00	910.79	770.445	702.265	-4.717	27.899	.7015	0.00	-.00	0.000	.1070
16	8.3301	926.30	0.00	926.30	777.452	706.961	-5.051	27.899	.7111	0.00	-.00	0.000	.1063
17	8.3834	944.32	0.00	944.32	739.252	715.966	-5.397	27.899	.7209	0.00	-.00	0.000	.1058
18	8.4364	963.33	0.00	963.33	801.721	725.527	-5.744	27.899	.7305	0.00	-.00	0.000	.1036
19	8.4908	974.22	0.00	974.22	838.991	731.186	-5.930	27.899	.7355	0.00	-.00	0.000	.1028
20	8.5431	985.07	0.00	985.07	817.540	738.041	-6.107	27.899	.7404	0.00	-.00	0.000	.1018
21	8.6000	998.34	0.00	998.34	830.804	749.212	-6.295	27.899	.7453	0.00	0.00	0.000	.1003

ROTOR PERFORMANCE

LOCATION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCIDENCE	DEVIATION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	6.7508	7.0433	1.1817	7.147	9.532	.0834	.4224	.4330	.5401	.7413	.7763	-60.337	-12.647	6.870	10.991
2	6.8619	7.0351	1.2005	6.038	9.771	.0994	.4429	.4524	.5607	.7225	.7697	-61.341	-13.334	6.232	10.694
3	6.9729	7.0231	1.2141	5.011	5.411	.0900	.4601	.4684	.5373	.7065	.7629	-61.721	-14.034	6.397	10.312
4	7.0833	7.0611	1.2337	4.023	6.024	.0935	.4741	.4815	.5303	.6951	.7560	-62.067	-14.724	6.420	9.773
5	7.1950	7.0948	1.2554	3.032	6.042	.0931	.4861	.4922	.5221	.6831	.7431	-62.371	-15.439	6.322	9.877
6	7.3022	7.1344	1.2755	2.218	6.108	.0947	.4959	.5012	.5124	.6724	.7420	-62.645	-16.107	6.039	9.316
7	7.4111	7.1795	1.2917	1.132	6.110	.0960	.5047	.5091	.4993	.6645	.7351	-62.915	-16.893	5.568	7.656
8	7.5197	7.2210	1.3097	0.055	6.141	.1042	.5134	.5169	.4859	.6593	.7295	-63.181	-17.594	4.912	7.153
9	7.6293	7.2642	1.3254	-0.012	6.203	.1103	.5205	.5233	.4719	.6492	.7218	-63.453	-18.222	4.071	6.881
10	7.7389	7.3094	1.3427	-0.070	6.294	.1222	.5296	.5317	.4555	.6415	.7165	-63.736	-18.801	3.063	6.648
11	7.8490	7.3572	1.3592	-0.135	6.287	.1343	.5366	.5410	.4409	.6328	.7101	-64.036	-19.329	1.925	6.734
12	7.9591	7.4062	1.3755	-0.190	6.302	.1346	.5704	.5709	.4232	.6039	.7191	-64.359	-19.815	-.702	7.064
13	8.0691	8.0775	1.3916	0.830	6.426	.2141	.5899	.5997	.4093	.5858	.7201	-64.699	-20.253	-2.642	7.652
14	8.1760	8.1994	1.4074	0.857	6.715	.2436	.6099	.6191	.3948	.5672	.7214	-65.070	-20.661	-2.105	8.585
15	8.2881	8.1543	1.4229	0.838	7.111	.2716	.6295	.6380	.3787	.5487	.7224	-65.471	-21.024	-3.693	9.571
16	8.4010	8.2138	1.4383	0.824	7.232	.3122	.9521	.6501	.3641	.5198	.7321	-65.904	-21.345	-5.213	10.770
17	8.5168	8.2779	1.4535	0.820	7.397	.3039	.7152	.7130	.3507	.4704	.7533	-66.362	-21.615	-6.359	12.010
18	8.6341	8.3523	1.4683	0.829	8.319	.4224	.7772	.7741	.3344	.4143	.7747	-66.838	-21.814	-7.954	13.189
19	8.7536	8.4398	1.4840	0.847	10.296	.4479	.8087	.8053	.3312	.3834	.7737	-67.319	-21.883	-7.707	13.095
20	8.8756	8.5379	1.4998	0.854	14.029	.4774	.8500	.8464	.3234	.3426	.7834	-67.811	-21.890	-8.535	13.034
21	9.0000	8.6099	1.5109	5.807	25.421	.5255	.9321	.4267	.3214	.2619	.7939	-68.316	-21.371	-9.607	13.159

STATOR PERFORMANCE

LOCATION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCIDENCE	DEVIATION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	7.6199	7.6980	1.1633	-6.044	7.239	.3174	.4397	.4395	.2025	.7153	0.0000	48.617	-7.239	-39.941	.020
2	7.6672	7.6774	1.1310	-6.613	7.337	.3140	.4544	.4543	.2146	.7046	0.0000	47.904	-7.387	-37.330	.020
3	7.7130	7.7159	1.1907	-6.988	7.544	.3136	.4683	.4683	.2243	.6948	0.0000	47.011	-7.544	-34.482	.019
4	7.7580	7.7554	1.2094	-6.970	7.706	.3224	.4806	.4805	.2322	.6865	0.0000	46.355	-7.705	-31.483	.018
5	7.8022	7.7958	1.2269	-1.080	7.333	.3265	.4910	.4911	.2363	.6800	0.0000	45.866	-7.864	-28.394	.018
6	7.8447	7.8376	1.2215	-1.125	8.132	.3343	.5049	.5150	.2393	.6698	0.0000	45.499	-8.032	-25.267	.014
7	7.8865	7.8808	1.2227	-1.106	8.145	.3538	.5188	.5189	.2404	.6539	0.0000	45.190	-8.195	-22.154	.012
8	7.9278	7.9257	1.2207	-.937	8.357	.3681	.5324	.5324	.2410	.6435	0.0000	44.935	-8.357	-19.111	.010
9	7.9683	7.9723	1.2184	-.673	8.514	.3812	.5445	.5444	.2409	.6403	0.0000	44.731	-8.514	-16.036	.007
10	8.0099	8.0203	1.2103	-.603	8.659	.3899	.5509	.5509	.2403	.6373	0.0000	44.584	-8.653	-12.773	.007
11	8.0513	8.0697	1.1995	.210	8.738	.3852	.5575	.5574	.2426	.6382	0.0000	44.499	-8.783	-9.163	.005
12	8.0933	8.1205	1.1978	.934	8.838	.3853	.5642	.5638	.2444	.6342	0.0000	44.499	-8.895	-5.322	.003
13	8.1362	8.1723	1.1758	1.742	8.934	.3895	.5595	.5590	.2469	.6431	0.0000	44.623	-8.984	-1.571	.001
14	8.1800	8.2245	1.1611	2.405	9.041	.3524	.5539	.5534	.2486	.6524	0.0000	44.497	-9.041	1.824	-.001
15	8.2249	8.2772	1.1463	3.182	9.092	.3344	.5474	.5468	.2503	.6620	0.0000	45.266	-9.062	5.267	-.004
16	8.2714	8.3302	1.1315	4.059	9.039	.3102	.5378	.5370	.2520	.6762	0.0000	45.643	-9.059	9.614	-.008
17	8.3210	8.3834	1.1159	7.440	9.060	.2873	.5296	.5288	.2512	.6912	0.0000	45.985	-9.060	15.726	-.012
18	8.3756	8.4364	1.0954	10.708	9.035	.2637	.5183	.5175	.2480	.7037	0.0000	46.517	-9.049	23.406	-.018
19	8.4307	8.4907	1.0722	12.629	9.128	.2535	.5032	.5025	.2343	.7243	0.0000	47.539	-9.126	31.620	-.024
20	8.5084	8.5620	1.0385	15.797	9.159	.2444	.4805	.4800	.2132	.7495	0.0000	48.953	-9.159	39.451	-.031
21	8.5199	8.6000	.9790	29.682	9.213	.2301	.4378	.4381	.1653	.7875	0.0000	50.314	-9.213	46.652	-.038

WAKE AND BOUNDARY LAYER BLOCKAGES (PERCENT)

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MID BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	5.5	0.0	3.0	13.0	15.0	17.0	25.2	25.9	25.9
DIST FACTOR	1.0	1.0	1.0	1.0	.8	.6	.4	.2	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
INT BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	5.6	0.0	3.0	13.0	15.0	17.0	25.2	25.9	25.9

SUMMARY POINT NO. 1 THE CALCULATION IS CONVERGED PASS 25

TEST POINT TITLE = 301231615700

FLOW = 25.63 SPEED = 20410.0 PRESSURE RATIO = 2.708 ISENTROPIC EFFY = .8739 POLYTROPIC EFFY = .7149 DEL T/T = .4861

SUMMARY OF 1 TEST POINTS

POINT NO.	TEST POINT TITLE	STATUS OF CALCULATION	FLOW RATE LBS/SEC	SPEED RPM	ROTOR PRESSURE RATIO	ROTOR ISEN EFFY	STAGE PRESSURE RATIO	STAGE ISEN EFFY	FLOW/(CHOKE FLOW)
1	301231615700	CONVERGED AFTER 25 PASSES	25.633	20410.0	3.328	.839	2.708	.674	.67163

10. TEST POINT 301240915602 (102%)

STATION 1 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.0680	369.42	0.00	369.42	518.688	507.342	14.69	13.502	.3343	0.00	20.93	0.000	.0723
2	6.2258	369.42	0.00	369.42	518.688	507.342	14.69	13.502	.3343	0.00	13.73	0.000	.0723
3	6.3837	369.42	0.00	369.42	518.688	507.342	14.69	13.502	.3343	0.00	18.50	0.000	.0723
4	6.5393	369.42	0.00	369.42	518.688	507.342	14.69	13.502	.3343	0.00	17.27	0.000	.0723
5	6.6930	369.42	0.00	369.42	518.688	507.342	14.69	13.502	.3343	0.00	16.03	0.000	.0723
6	6.8473	369.42	0.00	369.42	518.688	507.342	14.69	13.502	.3343	0.00	14.79	0.000	.0723
7	6.9999	369.42	0.00	369.42	518.688	507.342	14.69	13.502	.3343	0.00	13.55	0.000	.0723
8	7.1519	369.42	0.00	369.42	518.688	507.342	14.69	13.502	.3343	0.00	12.32	0.000	.0723
9	7.3027	369.42	0.00	369.42	518.688	507.342	14.69	13.502	.3343	0.00	11.10	0.000	.0723
10	7.4532	369.42	0.00	369.42	518.688	507.342	14.69	13.502	.3343	0.00	9.90	0.000	.0723
11	7.6031	369.42	0.00	369.42	518.688	507.342	14.69	13.502	.3343	0.00	8.73	0.000	.0723
12	7.7527	369.42	0.00	369.42	518.688	507.342	14.69	13.502	.3343	0.00	7.58	0.000	.0723
13	7.9018	369.42	0.00	369.42	518.688	507.342	14.69	13.502	.3343	0.00	6.49	0.000	.0723
14	8.0507	369.42	0.00	369.42	518.688	507.342	14.69	13.502	.3343	0.00	5.42	0.000	.0723
15	8.1994	369.42	0.00	369.42	518.688	507.342	14.69	13.502	.3343	0.00	4.41	0.000	.0723
16	8.3490	369.42	0.00	369.42	518.688	507.342	14.69	13.502	.3343	0.00	3.46	0.000	.0723
17	8.4994	369.42	0.00	369.42	518.688	507.342	14.69	13.502	.3343	0.00	2.58	0.000	.0723
18	8.6448	369.42	0.00	369.42	518.688	507.342	14.69	13.502	.3343	0.00	1.79	0.000	.0723
19	8.7932	369.42	0.00	369.42	518.688	507.342	14.69	13.502	.3343	0.00	1.06	0.000	.0723
20	8.9416	369.42	0.00	369.42	518.688	507.342	14.69	13.502	.3343	0.00	.48	0.000	.0723
21	9.0900	369.42	0.00	369.42	518.688	507.342	14.69	13.502	.3343	0.00	0.00	0.000	.0723

STATION 2 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	5.37+0	+403.91	0.00	403.91	518.688	505.124	14.69	13.395	.3663	0.00	20.83	-205.758	.0715
2	5.5137	+406.21	0.00	406.21	518.688	504.969	14.69	13.381	.3684	0.00	19.54	-113.430	.0714
3	6.6514	+408.24	0.00	408.24	518.688	504.831	14.69	13.368	.3703	0.00	18.25	-81.424	.0714
4	6.7880	+410.00	0.00	410.00	518.688	504.712	14.69	13.357	.3720	0.00	16.95	-65.087	.0713
5	6.9237	+411.48	0.00	411.48	518.688	504.611	14.69	13.347	.3733	0.00	15.65	-55.082	.0713
6	7.0585	+412.68	0.00	412.68	518.688	504.529	14.69	13.340	.3743	0.00	14.36	-48.216	.0713
7	7.1927	+413.59	0.00	413.59	518.688	504.466	14.69	13.334	.3753	0.00	13.07	-43.098	.0712
8	7.3264	+414.19	0.00	414.19	518.688	504.424	14.69	13.330	.3759	0.00	11.80	-39.022	.0712
9	7.4597	+414.49	0.00	414.49	518.688	504.404	14.69	13.328	.3761	0.00	10.53	-35.535	.0712
10	7.5929	+414.45	0.00	414.45	518.688	504.407	14.69	13.328	.3761	0.00	9.27	-32.588	.0712
11	7.7250	+414.07	0.00	414.07	518.688	504.433	14.69	13.331	.3756	0.00	8.05	-29.868	.0712
12	7.8592	+413.33	0.00	413.33	518.688	504.484	14.69	13.336	.3751	0.00	6.85	-27.354	.0712
13	7.9927	+412.21	0.00	412.21	518.688	504.561	14.69	13.343	.3740	0.00	5.67	-25.001	.0713
14	8.1265	+410.69	0.00	410.69	518.688	504.665	14.69	13.352	.3726	0.00	4.53	-22.782	.0713
15	8.2611	+408.75	0.00	408.75	518.688	504.797	14.69	13.365	.3704	0.00	3.44	-20.686	.0714
16	8.3963	+406.37	0.00	406.37	518.688	504.958	14.69	13.380	.3680	0.00	2.39	-18.705	.0714
17	8.5325	403.53	0.00	403.53	518.688	505.150	14.69	13.397	.3653	0.00	1.39	-16.837	.0715
18	8.6697	400.18	0.00	400.18	518.688	505.373	14.69	13.418	.3623	0.00	.46	-15.064	.0716
19	8.8093	396.31	0.00	396.31	518.688	505.630	14.69	13.442	.3592	0.00	-.41	-13.444	.0716
20	8.9493	391.95	0.00	391.95	518.688	505.922	14.69	13.469	.3554	0.00	-1.20	-11.921	.0718
21	9.0900	388.75	0.00	388.75	518.688	506.252	14.69	13.500	.3503	0.00	-1.91	-10.518	.0719

STATION 3 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.9015	+47.50	0.00	+47.50	518.688	502.816	14.696	13.109	.+373	0.00	20.24	-83.031	.0704
2	6.7244	+51.07	0.00	+51.07	518.688	501.771	14.696	13.085	.+410	0.00	19.14	-72.443	.0703
3	6.8402	+54.65	0.00	+54.65	518.688	501.595	14.696	13.066	.+442	0.00	17.74	-63.194	.0702
4	6.9572	+58.71	0.00	+58.71	518.688	501.365	14.696	13.048	.+477	0.00	15.35	-53.904	.0701
5	7.0870	+58.39	0.00	+58.39	518.688	501.171	14.696	13.032	.+474	0.00	14.76	-47.250	.0701
6	7.2074	+59.19	0.00	+59.19	518.688	501.027	14.696	13.019	.+497	0.00	13.28	-41.718	.0700
7	7.3298	+59.38	0.00	+59.38	518.688	500.913	14.696	13.008	.+519	0.00	12.26	-36.977	.0700
8	7.4453	+63.39	0.00	+63.39	518.688	500.834	14.696	13.001	.+542	0.00	11.83	-32.817	.0700
9	7.5692	+63.33	0.00	+63.33	518.688	500.793	14.696	12.997	.+542	0.00	9.46	-28.132	.0699
10	7.6842	+63.35	0.00	+63.35	518.688	500.791	14.696	12.997	.+542	0.00	8.10	-24.572	.0699
11	7.8035	+63.41	0.00	+63.41	518.688	500.832	14.696	13.001	.+542	0.00	6.75	-21.045	.0700
12	7.9234	+62.29	0.00	+62.29	518.688	500.919	14.696	13.009	.+521	0.00	5.41	-18.539	.0700
13	8.0437	+60.23	0.00	+60.23	518.688	501.053	14.696	13.021	.+499	0.00	4.09	-16.000	.0700
14	8.1643	+58.17	0.00	+58.17	518.688	501.234	14.696	13.038	.+477	0.00	2.79	-13.702	.0701
15	8.2853	+56.15	0.00	+56.15	518.688	501.467	14.696	13.058	.+456	0.00	1.52	-11.150	.0702
16	8.4111	+54.44	0.00	+54.44	518.688	501.740	14.696	13.084	.+434	0.00	.28	-13.802	.0703
17	8.5346	+47.14	0.00	+47.14	518.688	502.064	14.696	13.113	.+405	0.00	-.93	-12.613	.0704
18	8.6516	+42.14	0.00	+42.14	518.688	502.434	14.696	13.147	.+402	0.00	-2.11	-11.549	.0705
19	8.7834	+36.45	0.00	+36.45	518.688	502.850	14.696	13.185	.+390	0.00	-3.26	-10.557	.0707
20	8.9191	+30.04	0.00	+30.04	518.688	503.312	14.696	13.228	.+390	0.00	-4.38	-9.613	.0708
21	9.0510	+22.82	0.00	+22.82	518.688	503.824	14.696	13.275	.+383	0.00	-5.47	-8.690	.0710

STATION 4 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	5.7208	+97.39	0.00	+97.39	518.688	498.076	14.696	12.752	.+927	0.00	20.32	-384.054	.0690
2	5.8949	+92.98	0.00	+92.98	518.688	497.578	14.696	12.717	.+832	0.00	19.02	-112.143	.0689
3	6.0724	+86.73	0.00	+86.73	518.688	497.337	14.696	12.687	.+681	0.00	17.36	-82.731	.0688
4	7.0327	+10.22	0.00	+10.22	518.688	497.042	14.696	12.660	.+604	0.00	15.91	-74.060	.0686
5	7.1921	+13.26	0.00	+13.26	518.688	496.784	14.696	12.637	.+633	0.00	14.48	-69.699	.0686
6	7.3514	+15.47	0.00	+15.47	518.688	496.561	14.696	12.617	.+714	0.00	13.04	-64.200	.0685
7	7.4114	+18.02	0.00	+18.02	518.688	+96.375	14.696	12.601	.+739	0.00	11.60	-56.139	.0684
8	7.5132	+19.05	0.00	+19.05	518.688	496.235	14.696	12.588	.+754	0.00	10.13	-46.909	.0684
9	7.6231	+20.68	0.00	+20.68	518.688	+96.146	14.696	12.581	.+764	0.00	8.06	-39.323	.0683
10	7.7371	+21.01	0.00	+21.01	518.688	496.110	14.696	12.578	.+767	0.00	7.16	-34.481	.0683
11	7.8455	+20.38	0.00	+20.38	518.688	496.154	14.696	12.581	.+770	0.00	5.66	-29.252	.0683
12	7.9603	+19.32	0.00	+19.32	518.688	496.263	14.696	12.591	.+751	0.00	+.17	-21.200	.0684
13	8.0669	+17.22	0.00	+17.22	518.688	496.444	14.696	12.607	.+731	0.00	2.66	-18.122	.0684
14	8.1784	+14.27	0.00	+14.27	518.688	496.697	14.696	12.629	.+703	0.00	1.21	-15.772	.0685
15	8.2933	+10.43	0.00	+10.43	518.688	497.020	14.696	12.658	.+667	0.00	-.25	-13.967	.0686
16	8.4043	+05.33	0.00	+05.33	518.688	497.409	14.696	12.693	.+623	0.00	-1.67	-12.617	.0688
17	8.5211	+10.57	0.00	+10.57	518.688	497.853	14.696	12.733	.+572	0.00	-3.05	-11.716	.0689
18	8.6372	+34.99	0.00	+34.99	518.688	498.341	14.696	12.776	.+515	0.00	-4.38	-11.193	.0691
19	8.7500	+38.33	0.00	+38.33	518.688	+98.860	14.696	12.823	.+456	0.00	-5.68	-10.828	.0693
20	8.8769	+41.53	0.00	+41.53	518.688	499.409	14.696	12.872	.+392	0.00	-6.98	-10.478	.0695
21	9.0093	+74.34	0.00	+74.34	518.688	499.980	14.696	12.924	.+324	0.00	-1.25	-10.317	.0697

BLADE DATA

LOCATION	BLADE SECTION	BLADE ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-61.337	0.070	-67.306	0.929	0.0000	1224.1	1.2068	1321.49	31.210	942.995	1.000	0.000	1.0000	1.0000
2	-61.354	3.251	-66.003	0.699	0.0000	1244.3	1.2261	1342.05	31.921	947.128	1.000	0.000	1.0000	1.0000
3	-61.740	6.257	-66.161	0.421	0.0000	1264.4	1.2449	1362.19	32.550	951.296	1.000	0.000	1.0000	1.0000
4	-62.087	5.420	-66.335	0.248	0.0000	1284.4	1.2634	1382.04	33.198	955.506	1.000	0.000	1.0000	1.0000
5	-62.390	6.324	-66.520	0.130	0.0000	1304.3	1.2817	1401.64	34.197	959.761	1.000	0.000	1.0000	1.0000
6	-62.664	6.042	-66.714	0.050	0.0000	1324.1	1.2997	1421.05	34.358	964.065	1.000	0.000	1.0000	1.0000
7	-62.926	5.572	-66.920	-.003	0.0000	1343.9	1.3175	1440.25	35.772	968.424	1.000	0.000	1.0000	1.0000
8	-63.189	4.916	-69.139	5.950	0.0000	1363.6	1.3351	1459.27	36.611	972.840	1.000	0.000	1.0000	1.0000
9	-63.458	4.072	-69.374	5.316	0.0000	1383.4	1.3524	1478.10	37.477	977.320	1.000	0.000	1.0000	1.0000
10	-63.740	3.040	-69.629	5.859	0.0000	1403.1	1.3695	1496.73	38.371	981.869	1.000	0.000	1.0000	1.0000
11	-64.033	1.820	-69.905	5.867	0.0000	1423.0	1.3864	1515.13	39.296	986.490	1.000	0.000	1.0000	1.0000
12	-64.358	-.038	-70.209	5.848	0.0000	1442.9	1.4030	1533.49	40.255	991.208	1.000	0.000	1.0000	1.0000
13	-64.702	-1.634	-70.529	5.827	0.0000	1462.9	1.4193	1551.67	41.251	996.015	1.000	0.000	1.0000	1.0000
14	-65.075	-3.438	-70.879	5.802	0.0000	1483.1	1.4355	1569.77	42.287	1000.927	1.000	0.000	1.0000	1.0000
15	-65.479	-5.433	-71.247	5.769	0.0000	1503.6	1.4510	1587.85	43.366	1005.959	1.000	0.000	1.0000	1.0000
16	-65.915	-5.292	-71.639	5.724	0.0000	1524.2	1.4670	1605.98	44.494	1011.107	1.000	0.000	1.0000	1.0000
17	-66.378	-5.333	-72.049	5.672	0.0000	1545.1	1.4826	1624.19	45.673	1016.398	1.000	0.000	1.0000	1.0000
18	-66.858	-7.075	-72.473	5.617	0.0000	1566.3	1.4997	1642.61	46.910	1021.838	1.000	0.000	1.0000	1.0000
19	-67.340	-7.722	-72.906	5.565	0.0000	1587.9	1.5159	1661.30	48.208	1027.437	1.000	0.000	1.0000	1.0000
20	-67.826	-8.365	-73.347	5.521	0.0000	1609.9	1.5325	1680.30	49.573	1033.207	1.000	0.000	1.0000	1.0000
21	-68.319	-9.037	-73.795	5.479	0.0000	1632.1	1.5492	1699.68	51.010	1039.159	1.000	0.000	1.0000	1.0000

STATION 5 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	6.8379	565.66	138.82	582.44	547.548	519.359	17.623	14.946	.5209	13.79	22.32	6.199	.0768
2	6.9971	565.07	133.54	581.22	546.850	519.779	17.533	14.974	.5201	13.28	20.64	6.434	.0765
3	7.0933	565.33	129.87	580.42	546.251	518.256	17.442	14.917	.5197	12.93	18.93	7.126	.0763
4	7.1953	565.53	125.02	580.69	545.800	517.820	17.363	14.868	.5197	12.44	17.17	8.541	.0761
5	7.2941	567.79	122.08	580.75	545.525	517.498	17.343	14.822	.5204	12.13	15.35	11.477	.0758
6	7.3927	569.15	120.09	581.97	545.430	517.320	17.337	14.804	.5213	11.91	13.47	17.201	.0756
7	7.4933	570.38	118.02	582.60	545.560	517.348	17.362	14.824	.5221	11.79	11.54	34.859	.0754
8	7.5899	571.03	115.23	583.33	545.938	517.680	17.434	14.893	.5229	11.79	9.56	-35.755	.0749
9	7.6808	571.13	120.17	583.83	546.529	518.223	17.574	14.998	.5229	11.88	7.54	-14.122	.0752
10	7.7845	570.66	121.83	583.33	547.285	519.009	17.823	14.975	.5213	12.06	5.448	-8.770	.0755
11	7.8829	568.22	125.75	581.33	548.565	520.421	17.434	14.949	.5203	12.48	3.442	-5.391	.0756
12	7.9817	565.07	130.03	579.34	549.907	522.031	17.571	14.944	.5173	12.96	1.37	-3.081	.0756
13	8.0812	560.90	134.72	576.83	551.497	523.850	17.671	14.700	.5137	13.51	-.63	-2.279	.0755
14	8.1617	555.33	139.35	572.95	553.196	525.923	17.773	14.893	.5043	14.14	-2.57	-1.793	.0753
15	8.2835	548.35	143.22	568.22	554.338	527.116	17.884	15.040	.5040	14.81	-4.43	-1.434	.0768
16	8.3833	542.03	151.63	562.74	556.915	530.609	18.003	15.197	.4980	15.59	-6.15	-1.245	.0772
17	8.4928	533.65	159.75	556.77	559.310	533.561	18.114	15.358	.4913	16.57	-7.67	-1.197	.0776
18	8.5933	525.08	165.96	550.63	561.065	536.480	18.213	15.515	.4843	17.53	-8.90	-1.350	.0779
19	8.7037	517.34	169.79	544.43	563.190	538.573	18.307	15.654	.4782	18.13	-9.74	-1.910	.0783
20	8.8242	509.25	172.12	537.52	564.406	540.410	18.344	15.755	.4714	18.66	-10.05	-2.917	.0786
21	8.9346	499.38	173.21	529.05	565.319	542.070	18.282	15.732	.4632	19.11	-9.38	-1665.883	.0785

BLADE DATA

LOCATION	BLADE SECTION	BLADE ANGLES LEAV	FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-[illegible]	[illegible]	-63.[illegible]	[illegible]	.0139	1250.9	1.1159	1247.70	[illegible]	[illegible]	1.199	.056	.9570	.9581
2	-59.[illegible]	[illegible]	-[illegible]	[illegible]	.0147	1268.9	1.1352	1268.43	32.534	932.237	1.193	.054	.9522	.9533
3	-59.[illegible]	[illegible]	-[illegible]	[illegible]	.0156	1286.9	1.1540	1288.92	33.113	936.038	1.186	.053	.9472	.9485
4	-60.319	3.723	-[illegible]	[illegible]	.0165	1304.9	1.1724	1308.86	33.345	939.386	1.183	.052	.9423	.9436
5	-60.651	[illegible]	-[illegible]	[illegible]	.0174	1322.8	1.1901	1328.19	34.531	943.779	1.180	.052	.9375	.9390
6	-61.007	2.937	-[illegible]	[illegible]	.0142	1340.7	1.2069	1346.76	35.231	947.712	1.179	.052	.9331	.9347
7	-61.386	2.[illegible]	-[illegible]	[illegible]	.0134	1358.5	1.2227	1364.39	35.942	951.985	1.179	.052	.9281	.9297
8	-61.591	2.243	-61.[illegible]	[illegible]	.0216	1376.3	1.2368	[illegible]	36.665	956.701	1.180	.053	.9199	.9217
9	-61.809	1.[illegible]	-[illegible]	[illegible]	.0256	1394.0	1.2500	[illegible]	37.338	959.763	1.182	.054	.9127	.9147
10	-62.142	1.437	-[illegible]	[illegible]	.0298	1411.8	1.2619	1410.39	39.105	963.377	1.186	.055	.9055	.9078
11	-62.425	.989	-[illegible]	[illegible]	.0318	1429.5	1.2708	1422.26	38.760	966.053	1.190	.058	.8863	.8891
12	-62.714	.5[illegible]	-[illegible]	[illegible]	.0376	1447.2	1.2789	1433.52	39.441	968.309	1.196	.060	.8698	.8731
13	-63.019	.090	-67.1[illegible]	[illegible]	.0432	1465.5	1.2862	1444.18	40.146	970.542	1.202	.063	.8550	.8587
14	-63.347	-.[illegible]	-[illegible]	[illegible]	.0493	1483.8	1.2925	1454.12	40.859	972.076	1.210	.067	.8398	.8448
15	-63.707	-.[illegible]	-[illegible]	[illegible]	.[illegible]	1502.2	1.2985	1463.95	[illegible]	[illegible]	1.217	.070	.8266	.8314
16	-64.103	-1.[illegible]	-[illegible]	[illegible]	.0626	1520.9	1.3035	1473.03	42.822	978.288	1.225	.074	.8099	.8153
17	-64.535	-1.7[illegible]	-[illegible]	[illegible]	.0735	1540.0	1.3068	1480.77	42.959	979.177	1.233	.078	.7859	.7922
18	-65.003	-1.8[illegible]	-[illegible]	[illegible]	.0842	1559.5	1.3107	1489.29	43.531	980.070	1.240	.083	.7648	.7711
19	-65.511	-1.9[illegible]	-[illegible]	[illegible]	.0892	1579.3	1.3191	1501.67	44.[illegible]	725.200	1.245	.086	.7549	.7624
20	-66.068	-2.4[illegible]	-[illegible]	[illegible]	.0991	1599.5	1.3291	1515.63	45.[illegible]	730.[illegible]	1.248	.088	.7417	.7497
21	-66.694	-3.111	-70.[illegible]	[illegible]	.1051	1620.2	1.3404	1530.89	46.230	735.957	1.244	.090	.7158	.7245

STATION 2 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.205 ISEN. EFF.= .845 POLY. EFF.= .849 DELTA T ON T = .065

STATION 2 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.0714	358.[illegible]	395.35	03[illegible]	603.060	56[illegible]	24.532	19.420	.5877	35.32	24.47	66.453	.0928
2	7.1[illegible]	361.[illegible]	392.35	03[illegible]	603.[illegible]	59[illegible]	24.[illegible]	19.427	.5853	34.98	22.66	87.367	.0928
3	7.2457	364.31	390.20	0[illegible]	603.83[illegible]	59[illegible]	24.57[illegible]	19.433	.5830	34.63	20.74	93.958	.0927
4	7.3793	368.42	387.57	0[illegible]	604.227	564.303	24.59[illegible]	19.433	.5801	34.29	18.72	73.364	.0927
5	7.4117	372.27	384.99	0[illegible]	604.600	565.140	24.613	19.427	.5915	33.93	16.63	46.379	.0926
6	7.4930	376.[illegible]	382.27	0[illegible]	604.937	565.245	24.625	19.411	.5932	33.55	14.47	30.929	.0926
7	7.5737	380.79	379.82	0[illegible]	605.308	565.359	24.632	19.388	.5951	33.18	12.27	20.607	.0924
8	7.[illegible]	385.[illegible]	377.[illegible]	0[illegible]	605.[illegible]	565.[illegible]	24.[illegible]	19.358	.5968	32.90	10.04	14.[illegible]	.0922
9	7.7740	389.07	375.00	0[illegible]	606.247	565.834	24.[illegible]	19.319	.5983	32.[illegible]	7.80	10.758	.0920
10	7.8139	393.31	373.35	0[illegible]	606.537	566.008	24.560	19.271	.5990	32.29	5.54	8.378	.0918
11	7.8[illegible]	397.56	371.70	0[illegible]	606.828	566.003	24.[illegible]	19.214	.5985	32.33	3.30	6.816	.0913
12	7.9735	401.21	370.84	0[illegible]	607.232	567.904	24.359	19.148	.5966	32.33	1.10	5.778	.0909
13	8.0531	405.08	370.37	0[illegible]	607.693	568.738	24.[illegible]	19.[illegible]70	.5930	32.33	-1.05	5.087	.0904
14	8.1424	409.[illegible]5	368.63	0[illegible]	608.060	569.845	23.935	19.001	.[illegible]5[illegible]	32.42	-3.14	4.641	.0899
15	8.2230	412.31	366.[illegible]	0[illegible]	608.095	570.187	23.752	18.925	.5792	32.52	-5.15	4.390	.0893
16	8.3145	416.[illegible]	361.90	0[illegible]	609.320	572.[illegible]2	23.463	18.[illegible]53	.5650	32.[illegible]	-7.0[illegible]	4.317	.0888
17	8.[illegible]12[illegible]	240.[illegible]	361.44	0[illegible]	610.234	575.160	21.[illegible]26	18.791	.5523	33.76	-8.66	4.[illegible]36	.0881
18	8.5113	313.00	359.11	0[illegible]	610.720	578.032	22.731	18.742	.[illegible]325	34.89	-9.94	4.847	.0874
19	8.[illegible]187	[illegible]83.44	347.73	0[illegible]	608.936	579.493	[illegible]2.269	18.712	.5047	35.71	-10.73	5.918	.0870
20	8.7351	[illegible]41.16	335.06	0[illegible]	606.813	581.366	21.733	18.705	.[illegible]545	37.22	-10.79	9.[illegible]00	.0867
21	8.8673	374.28	322.62	0[illegible]	604.835	584.588	21.101	18.726	.4167	40.76	-9.38	1665.883	.0863

BLADE DATA

LOCATION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-52.505	2.438	-57.822	5.318	.0280	1283.7	.3004	1048.93	32.854	635.349	1.669	.163	.9683	.9785
2	-53.071	2.239	-58.204	5.133	.0298	1299.0	.9148	1066.04	33.389	638.629	1.671	.163	.9686	.9788
3	-53.612	1.920	-58.559	4.947	.0315	1314.2	.3292	1083.00	33.931	641.905	1.672	.164	.9690	.9790
4	-54.119	1.275	-58.883	4.764	.0332	1329.2	.9435	1099.91	34.478	645.189	1.674	.165	.9692	.9793
5	-54.590	.437	-59.178	4.588	.0349	1344.1	.3579	1116.91	35.031	648.478	1.675	.166	.9695	.9795
6	-55.025	-.067	-59.447	4.425	.0366	1358.9	.9725	1134.04	35.590	651.772	1.676	.166	.9697	.9798
7	-55.413	-.282	-59.694	4.281	.0380	1373.7	.3869	1150.96	36.143	655.075	1.678	.167	.9701	.9800
8	-55.774	-.320	-59.937	4.166	.0431	1388.5	1.0003	1166.86	36.652	658.394	1.676	.168	.9680	.9804
9	-56.103	-.289	-60.194	4.090	.0471	1402.5	1.0140	1183.06	37.172	661.736	1.674	.169	.9658	.9811
10	-56.414	-.222	-60.432	4.060	.0515	1417.0	1.0278	1199.33	37.689	665.110	1.671	.170	.9631	.9818
11	-56.708	-.058	-60.823	4.115	.0637	1431.6	1.0374	1211.58	38.009	668.537	1.666	.171	.9515	.9825
12	-56.990	.139	-61.238	4.248	.0751	1446.4	1.0477	1224.54	38.349	672.038	1.657	.173	.8988	.9835
13	-57.268	.468	-61.742	4.474	.0864	1461.3	1.0583	1237.90	38.697	675.631	1.646	.174	.8814	.9845
14	-57.552	.881	-62.351	4.799	.0983	1476.6	1.0684	1250.84	39.018	679.336	1.633	.174	.8621	.9855
15	-57.855	1.382	-63.087	5.232	.1107	1492.3	1.0790	1264.38	39.368	703.181	1.616	.174	.8426	.9865
16	-58.195	1.903	-63.980	5.786	.1261	1508.6	1.0874	1276.05	39.628	707.200	1.597	.175	.8179	.9852
17	-58.598	2.528	-65.089	6.493	.1483	1525.6	1.0913	1283.56	39.684	711.454	1.574	.176	.7827	.9841
18	-59.085	3.328	-66.502	7.417	.1700	1543.6	1.0954	1291.63	39.785	716.019	1.547	.177	.7411	.9832
19	-59.691	4.149	-68.290	8.599	.1800	1563.0	1.1079	1308.00	40.342	720.374	1.515	.176	.7235	.9822
20	-60.472	4.635	-70.547	10.075	.1914	1584.1	1.1203	1324.67	40.952	726.446	1.479	.170	.6958	.9728
21	-61.540	4.918	-73.768	12.227	.2102	1608.2	1.1292	1338.94	41.463	732.773	1.436	.166	.6550	.9720

STATION 6 INTEGRATED PERFORMANCE PRESSURE RATIO = 1.620 ISEN. EFF.= .866 POLY. EFF.= .875 DELTA T ON T = .178

STATION 7 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.2620	657.29	605.83	893.93	691.092	584.855	31.873	21.873	.7537	42.67	24.87	59.510	.1088
2	7.3312	663.81	599.70	893.91	690.730	584.534	31.753	21.788	.7539	42.05	22.70	-123.256	.1085
3	7.3993	669.22	592.82	894.03	690.647	584.435	31.673	21.729	.7541	41.54	20.54	-36.181	.1082
4	7.4655	673.55	587.51	894.06	690.744	584.526	31.621	21.694	.7541	41.11	18.38	-23.858	.1080
5	7.5330	677.13	583.80	894.05	690.989	584.774	31.593	21.678	.7539	40.77	16.24	-18.789	.0999
6	7.5991	680.04	580.40	894.04	691.371	585.158	31.587	21.679	.7536	40.48	14.14	-16.538	.0999
7	7.6649	682.21	577.24	894.30	691.892	585.771	31.606	21.696	.7533	40.28	12.08	-15.464	.0998
8	7.7306	682.71	576.29	894.70	692.168	586.863	31.644	21.729	.7531	40.27	10.07	-15.058	.0998
9	7.7964	682.65	575.63	894.92	692.403	586.069	31.690	21.778	.7525	40.29	8.11	-15.268	.0998
10	7.8624	681.58	575.55	894.61	692.754	589.471	31.752	21.840	.7514	40.38	6.19	-15.963	.0999
11	7.9231	674.33	586.40	893.65	693.542	592.409	31.781	21.915	.7487	41.01	4.32	-17.218	.0997
12	7.9971	665.92	592.70	891.48	691.248	595.444	31.797	22.003	.7450	41.67	2.49	-19.224	.0996
13	8.0665	655.73	595.57	887.52	693.902	593.676	31.787	22.103	.7398	42.40	.69	-22.488	.0995
14	8.1379	641.41	604.87	881.64	696.718	602.379	31.735	22.217	.7320	43.32	-1.08	-27.987	.0994
15	8.2114	624.38	609.65	872.59	699.224	606.212	31.628	22.343	.7228	44.32	-2.81	-38.406	.0993
16	8.2883	600.22	615.39	860.35	672.308	611.060	31.452	22.482	.7099	45.76	-4.51	-54.504	.0992
17	8.3701	564.72	628.98	845.30	676.975	617.869	31.211	22.636	.6936	48.08	-6.09	-215.954	.0987
18	8.4591	520.69	633.29	824.50	681.263	625.045	30.873	22.805	.6727	50.84	-7.45	143.993	.0983
19	8.5774	+74.55	732.02	790.29	681.277	629.634	30.331	22.985	.6422	53.10	-8.55	59.230	.0984
20	8.6677	+14.25	622.88	748.06	680.998	634.733	29.605	23.176	.6057	56.37	-9.35	53.878	.0986
21	8.8019	321.46	617.36	696.03	682.044	641.999	28.933	23.389	.5604	62.49	-9.37	**********	.0982

BLADE DATA

LOCATION	DEA... SECTION	...ANGLE	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	[illegible]	1.212	[illegible]	[illegible]	.0422	1317.0	.8165	959.33	33.841	892.307	2.169	.285	.9082	.9715
2	[illegible]	1.235	[illegible]	[illegible]	.0449	1329.5	.8327	987.23	34.917	899.251	2.181	.289	.9053	.9688
3	[illegible]	[illegible]	[illegible]	[illegible]	.0474	1341.9	.8472	1004.44	34.741	897.977	2.195	.294	.9023	.9662
4	[illegible]	[illegible]	[illegible]	[illegible]	.0503	1354.0	.8604	1020.13	35.165	870.092	2.152	.295	.9593	.9635
5	[illegible]	[illegible]	[illegible]	[illegible]	.0535	1366.1	.8725	103[illegible]	35.599	873.404	2.190	.295	.9563	.9608
6	[illegible]	[illegible]	[illegible]	[illegible]	.0570	1378.1	.8836	1048.23	36.015	876.121	2.149	.296	.9533	.9580
7	[illegible]	[illegible]	[illegible]	[illegible]	.0613	1390.0	.8934	1060.38	36.425	878.548	2.191	.297	.9435	.9546
8	[illegible]	[illegible]	[illegible]	[illegible]	.0713	1401.8	.9005	1069.82	36.783	881.595	2.153	.299	.9430	.9438
9	[illegible]	[illegible]	[illegible]	[illegible]	.0709	1413.9	.9071	1078.64	37.107	884.368	2.157	.282	.9366	.9431
10	[illegible]	[illegible]	[illegible]	[illegible]	.0773	1425.8	.9126	1086.58	37.439	887.174	2.161	.294	.9297	.9369
11	[illegible]	[illegible]	[illegible]	[illegible]	.0929	1437.4	.9181	1092.22	37.653	890.035	2.163	.270	.9123	.9213
12	[illegible]	[illegible]	[illegible]	[illegible]	.1173	1449.3	.9074	1085.76	37.503	892.972	2.164	.275	.8956	.9003
13	[illegible]	[illegible]	[illegible]	[illegible]	.1295	1462.3	.9041	1084.70	37.537	895.997	2.163	.280	.8788	.8911
14	[illegible]	[illegible]	[illegible]	[illegible]	.1468	1475.8	.8988	1081.01	37.512	899.131	2.159	.285	.8600	.8742
15	[illegible]	[illegible]	[illegible]	[illegible]	.1658	1489.1	.8934	1079.55	37.506	902.392	2.152	.290	.8415	.8575
16	[illegible]	[illegible]	[illegible]	[illegible]	.1884	1503.1	.8934	1078.74	37.337	905.937	2.140	.290	.8179	.8361
17	[illegible]	[illegible]	[illegible]	[illegible]	.2221	1517.3	.8947	1083.15	36.551	909.331	2.124	.305	.7948	.8061
18	[illegible]	[illegible]	[illegible]	[illegible]	.2545	1534.1	.8446	1029.23	36.356	913.589	2.101	.313	.7517	.7760
19	[illegible]	[illegible]	[illegible]	[illegible]	.2696	1551.8	.8414	1034.97	36.519	918.110	2.084	.313	.7318	.7574
20	[illegible]	[illegible]	[illegible]	[illegible]	.2863	1571.9	.8384	1035.47	36.710	923.263	2.060	.313	.7090	.7360
21	[illegible]	[illegible]	[illegible]	[illegible]	.3153	1595.2	.8296	1030.30	36.711	929.316	1.969	.319	.6765	.7054

STATION 7 INT.GRATED PERFORMANCE PRESSURE RATIO = 2.131 ISEN. EFF.= .861 POLY. EFF.= .879 DELTA T ON T = .280

STATION 8 FLOW FIELD DESCRIPTION

STREAM LINE	RAD IS	VELOCITIES MERID	VELOCITIES TANGN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.966	3[illegible].79	711.71	11[illegible].33	678.058	5[illegible].320	3[illegible].83[illegible]	13.291	1.0003	37.58	19.79	-2.220	.0920
2	7.9497	340.39	712.01	1155.[illegible]	679.183	5[illegible].[illegible]	35.[illegible]	19.334	.9840	36.04	17.64	-2.351	.0931
3	7.[illegible]	[illegible].35	712.70	11[illegible].36	680.336	571.033	36.[illegible]	19.970	.9752	36.50	15.57	-2.509	.0941
4	7.[illegible]	382.72	713.[illegible]	1134.[illegible]	681.594	574.340	36.[illegible]	20.[illegible]	.9671	36.95	13.58	-2.696	.0951
5	7.[illegible]	370.11	714.71	1125.43	682.778	577.512	37.[illegible]	20.600	.9549	39.38	11.65	-2.911	.0961
6	7.[illegible]	353.[illegible]	715.[illegible]	1116.51	683.956	580.746	37.11[illegible]	20.892	.9448	39.75	9.78	-3.155	.0970
7	7.[illegible]	3[illegible].[illegible]	716.[illegible]	1108.80	685.[illegible]	583.[illegible]	37.[illegible]	21.169	.9333	40.21	7.98	-3.427	.0978
8	7.[illegible]	334.94	717.[illegible]	1101.[illegible]	687.321	586.828	37.360	21.437	.9222	40.77	6.23	-3.727	.0985
9	7.[illegible]	323.37	718.[illegible]	1095.[illegible]	688.[illegible]	590.000	37.[illegible]	21.[illegible]	.9113	41.33	4.53	-4.061	.0991
10	7.[illegible]	312.20	720.43	1091.30	691.972	593.259	37.63[illegible]	21.353	.9012	41.82	2.89	-4.436	.0997
11	7.[illegible]	3[illegible].[illegible]	742.53	1087.[illegible]	696.[illegible]	596.[illegible]	37.80[illegible]	21.[illegible]	.8902	42.09	1.30	-4.869	.1000
12	8.[illegible]103	292.28	755.12	1082.47	700.694	603.706	37.931[illegible]	22.461	.8789	44.26	-.24	-5.330	.1003
13	8.[illegible]677	285.[illegible]	770.07	1078.74	705.352	609.146	38.05[illegible]	22.717	.8914	45.55	-1.72	-5.947	.1005
14	8.1274	281.75	785.19	1073.29	710.338	615.192	39.12[illegible]	22.979	.8822	47.02	-3.15	-6.915	.1007
15	8.1837	285.04	731.53	1065.33	715.105	621.383	39.[illegible]3	23.245	.8714	48.56	-4.55	-8.100	.1008
16	8.[illegible]59	296.25	815.14	1054.11	720.806	629.034	37.995[illegible]	23.521	.8573	50.05	-6.07	-9.755	.1008
17	8.3071	312.04	841.40	1040.31	729.008	639.643	37.751[illegible]	23.812	.8373	53.94	-7.10	-11.997	.1003
18	8.[illegible]74	349.90	867.32	1025.24	737.713	650.999	37.[illegible]3	24.124	.8133	57.83	-8.13	-15.254	.0998
19	8.[illegible]84	487.12	893.39	996.59	740.497	658.363	39.97[illegible]	24.456	.7924	60.74	-8.96	-18.281	.1001
20	8.[illegible]3[illegible]	413.31	922.03	955.26	743.873	667.962	35.44[illegible]	24.812	.7627	64.61	-9.69	-20.399	.1002
21	8.7359	302.38	955.73	933.35	751.075	679.036	30.061[illegible]	25.195	.7354	71.18	-9.37	**********	.1000

BLADE DATA

LOCATION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	R-L FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-24.143	2.869	-34.653	10.510	.0565	1330.9	.3639	1124.11	35.026	669.392	2.486	.307	.9646	.9684
2	-24.028	2.893	-34.440	10.512	.0593	1356.7	.3551	1117.03	35.233	671.362	2.494	.309	.9633	.9674
3	-23.889	2.923	-34.200	10.511	.0633	1366.3	.3468	1110.45	35.331	673.352	2.502	.312	.9583	.9633
4	-23.730	2.958	-33.938	10.508	.0667	1377.4	.3393	1104.56	35.432	675.366	2.510	.314	.9551	.9609
5	-23.557	2.995	-33.668	10.503	.0700	1386.4	.3326	1099.54	36.105	678.010	2.518	.316	.9518	.9579
6	-23.377	3.034	-33.398	10.497	.0737	1395.5	.3269	1093.43	36.343	680.040	2.526	.319	.9484	.9547
7	-23.190	3.076	-33.120	10.447	.0777	1404.5	.3213	1091.43	36.037	682.200	2.534	.321	.9442	.9510
8	-23.000	3.120	-32.835	10.420	.0862	1413.8	.3138	1088.53	36.795	684.356	2.542	.325	.9369	.9443
9	-22.809	3.165	-32.548	10.400	.0943	1423.2	.3069	1080.20	36.921	686.359	2.551	.329	.9298	.9381
10	-22.618	3.212	-32.260	10.397	.1031	1432.8	.8997	1074.63	37.107	688.817	2.559	.332	.8988	.9148
11	-22.430	3.261	-31.974	10.423	.1274	1442.6	.8823	1059.40	36.838	691.145	2.567	.341	.8838	.9001
12	-22.245	3.312	-31.691	10.501	.1502	1452.7	.8651	1042.20	36.583	693.345	2.581	.351	.8693	.8851
13	-22.065	3.365	-31.412	10.680	.1726	1463.1	.8471	1025.15	36.313	696.051	2.589	.360	.8551	.8717
14	-21.890	3.420	-31.136	11.029	.1978	1473.9	.8263	1004.86	35.952	698.572	2.594	.370	.8441	.8633
15	-21.720	3.478	-30.865	11.637	.2211	1485.2	.8053	984.10	35.605	701.430	2.574	.379	.8295	.8533
16	-21.556	3.539	-30.598	12.636	.2515	1497.1	.7786	956.82	35.024	704.367	2.565	.390	.7971	.8220
17	-21.398	3.603	-30.338	14.203	.2959	1510.1	.7316	906.92	33.975	707.584	2.569	.406	.7599	.7891
18	-21.246	10.008	-30.085	16.340	.3391	1524.7	.6830	854.08	32.949	711.226	2.551	.422	.7234	.7567
19	-21.100	114.957	-29.839	19.232	.3598	1541.2	.6398	809.80	32.733	715.565	2.516	.428	.7024	.7378
20	-20.960	120.765	-29.600	22.213	.3821	1560.2	.6345	802.99	32.539	720.289	2.488	.434	.6795	.7169
21	-20.827	125.304	-29.369	24.213	.4204	1584.3	.5941	753.56	31.372	726.483	2.454	.449	.6488	.6886

STATION 5 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.543 ISEN. EFF.= .842 PO.Y. EFF.= .861 DELTA T ON T = .362

STATION 3 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES AXIAL	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.5439	323.85	1062.78	1404.13	759.488	535.680	54.165	23.029	1.1766	49.00	18.63	-2.464	.1042
2	7.5836	305.15	1053.38	1395.33	759.767	539.028	54.067	23.404	1.1627	49.39	9.65	-3.278	.1052
3	7.6222	286.53	1043.84	1384.47	760.118	601.691	53.959	23.717	1.1503	49.70	8.69	-4.588	.1062
4	7.6599	268.48	1032.15	1375.15	760.457	604.358	53.841	23.9	1.1408	49.92	7.74	-7.023	.1069
5	7.6979	277.63	1045.34	1367.24	760.783	606.492	53.711	24.16	1.1323	50.06	6.81	-13.145	.1074
6	7.7371	271.88	1044.41	1360.50	761.100	608.334	53.572	24.328	1.1250	50.14	5.88	-53.317	.1078
7	7.7779	266.42	1042.63	1357.41	761.402	610.091	53.422	24.449	1.1184	50.21	4.96	27.676	.1080
8	7.8173	259.60	1037.83	1347.64	761.697	612.228	53.273	24.535	1.1109	50.27	4.04	11.917	.1080
9	7.8538	253.43	1034.98	1341.75	762.710	614.158	52.761	24.589	1.1043	50.48	3.12	7.758	.1079
10	7.9023	248.77	1032.64	1336.70	763.486	616.063	52.432	24.614	1.0984	50.58	2.20	5.803	.1077
11	7.9473	241.13	1040.41	1331.83	766.692	620.419	51.917	24.613	1.0905	51.38	1.29	4.827	.1069
12	7.9939	235.55	1045.08	1326.96	769.959	624.742	51.402	24.598	1.0823	52.17	.38	4.246	.1062
13	8.0425	230.51	1050.03	1322.13	773.280	629.254	50.853	24.569	1.0732	53.01	-.52	3.724	.1054
14	8.0937	227.15	1060.24	1315.99	777.208	634.532	50.173	24.532	1.0655	53.06	-1.42	3.470	.1047
15	8.1480	224.49	1071.41	1305.85	781.151	639.989	49.493	24.494	1.0555	55.17	-2.34	3.282	.1032
16	8.2061	221.31	1093.17	1304.32	786.583	647.486	48.653	24.464	1.0457	56.95	-3.27	3.154	.1016
17	8.2704	218.82	1112.06	1303.69	792.255	654.327	47.891	24.466	1.0361	60.26	-4.26	3.050	.1000
18	8.3449	216.08	1132.33	1300.92	798.055	661.288	47.350	24.477	1.0234	64.40	-5.28	3.003	.0983
19	8.4310	214.84	1149.72	1294.75	803.926	668.288	46.961	24.477	1.0124	66.76	-6.42	3.004	.0976
20	8.5310	213.07	1170.07	1285.24	809.761	675.216	46.664	24.470	.9973	70.18	-7.84	3.025	.0970
21	8.6539	259.09	1239.99	1266.77	840.354	708.744	46.377	25.352	.9715	78.20	-8.95	20.749	.0964

BLADE DATA

LOCATION	BLADE DESCRIPTION	ANGLES	REL FLOW ANGLE	D.FACTOR	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-12.647	10.931	-13.144	[illegible]	.0691	1389.2	.8133	973.33	35.564	674.096	3.686	.404	.9682	.9734
2	-13.320	14.534	-14.202	[illegible]	.0742	1372.6	.8013	961.65	35.712	675.564	3.679	.405	.9651	.9708
3	-14.000	13.326	-20.023	[illegible]	.0785	1382.3	.7924	953.18	35.863	677.175	3.672	.405	.9620	.9682
4	-14.649	3.736	-20.352	[illegible]	.0927	1389.1	.7960	947.42	36.017	676.530	3.664	.406	.9587	.9654
5	-15.656	8.113	-21.510	[illegible]	.0373	1396.0	.7818	944.04	36.175	680.227	3.655	.407	.9552	.9625
6	-16.106	4.359	-22.[illegible]	[illegible]	.0911	1403.1	.7796	942.78	36.335	681.866	3.645	.407	.9517	.9596
7	-16.363	7.838	-23.[illegible]	[illegible]	.0967	1410.4	.7781	942.35	36.464	683.549	3.633	.408	.9472	.9558
8	-17.311	7.166	-21.442	[illegible]	.1075	1417.8	.7747	939.79	36.469	685.280	3.612	.409	.9397	.9494
9	-18.149	6.823	-25.[illegible]	[illegible]	.1177	1425.4	.7727	938.90	36.481	687.064	3.590	.410	.9321	.9430
10	-18.729	6.972	-25.252	[illegible]	.1287	1433.2	.7712	938.52	36.465	688.303	3.568	.412	.9237	.9359
11	-19.255	6.715	-25.[illegible]	[illegible]	.1391	1441.2	.7556	922.73	35.924	690.817	3.533	.418	.9032	.9186
12	-19.738	7.023	-25.203	[illegible]	.1577	1449.4	.7406	907.54	35.397	692.629	3.498	.424	.8830	.9015
13	-20.176	7.531	-25.[illegible]	[illegible]	.2154	1457.8	.7250	891.93	34.845	694.348	3.460	.431	.8622	.8837
14	-20.572	8.412	-27.[illegible]	[illegible]	.2570	1466.5	.7052	870.79	34.173	697.192	3.414	.438	.8385	.8635
15	-20.929	8.444	-28.344	[illegible]	.2765	1477.5	.6849	849.31	33.511	699.563	3.366	.506	.8149	.8422
16	-21.247	10.931	-29.[illegible]	[illegible]	.3140	1488.2	.6524	813.62	32.545	702.160	3.324	.518	.7852	.8176
17	-21.520	11.832	-29.522	[illegible]	.3624	1499.3	.6313	794.07	30.981	705.034	3.286	.541	.7438	.7820
18	-21.737	14.036	-31.203	[illegible]	.4239	1513.4	.6171	957.14	29.427	708.387	3.245	.565	.7026	.7494
19	-21.327	15.893	-33.339	11.752	.4490	1529.0	.4795	813.19	28.871	712.304	3.222	.579	.6808	.7274
20	-21.554	15.539	-37.[illegible]	16.141	.4730	1547.1	.4281	551.58	28.245	716.902	3.196	.595	.6565	.7063
21	-21.371	13.159	-52.[illegible]	30.055	.5255	1572.3	.3232	421.36	27.249	723.372	3.156	.620	.6220	.6760

STATION 9 INTERSTATIO PERFORMANCE PRESSURE RATIO = 3.402 ISEN. EFF.= .839 POLY. EFF.= .864 DELTA T ON T = .505

STATION 10 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES AXIAL	VELOCITIES TANGENT	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.5745	359.73	1053.81	1353.00	778.408	605.413	54.109	24.448	1.1233	50.97	7.82	9.349	.1067
2	7.6127	361.19	1052.33	1352.33	778.767	606.577	54.067	24.456	1.1231	50.79	7.72	9.560	.1067
3	7.6213	364.41	1051.31	1351.99	778.118	607.175	53.959	24.437	1.1221	50.57	7.58	9.781	.1065
4	7.6383	368.94	1047.35	1351.35	778.457	607.434	53.943	24.404	1.1205	50.34	7.39	9.968	.1063
5	7.7236	373.18	1044.05	1351.05	778.783	607.389	53.711	24.364	1.1203	50.09	7.18	9.733	.1060
6	7.7698	377.25	1040.14	1350.55	779.100	606.238	53.577	24.323	1.1252	49.86	6.95	9.427	.1078
7	7.8057	379.90	1035.47	1349.60	781.482	608.823	53.332	24.285	1.1237	49.67	6.70	9.006	.1075
8	7.8438	379.39	1033.43	1346.81	782.097	610.219	53.077	24.254	1.1201	49.55	6.44	8.523	.1071
9	7.8538	376.48	1031.14	1353.32	782.710	611.874	52.761	24.228	1.1101	49.04	6.17	7.994	.1068
10	7.8330	373.47	1029.10	1349.53	783.486	613.140	52.432	24.207	1.1118	49.68	5.90	7.436	.1064
11	7.8722	367.17	1026.11	1343.43	784.692	617.345	51.917	24.183	1.1045	50.43	5.60	6.874	.1056
12	7.9122	359.95	1024.20	1341.22	785.979	621.571	51.402	24.177	1.0989	51.22	5.28	6.324	.1048
13	7.9519	352.98	1023.05	1339.33	787.380	626.313	50.853	24.168	1.0885	52.09	4.94	5.792	.1040
14	7.9879	345.33	1023.43	1338.84	788.806	631.822	50.171	24.166	1.0770	53.20	4.54	5.287	.1031
15	8.0173	338.29	1023.20	1339.05	790.496	637.596	49.496	24.174	1.0653	54.40	4.08	4.815	.1022
16	8.0298	334.92	1022.03	1313.21	791.233	645.475	48.853	24.198	1.0543	56.29	3.52	4.378	.1010
17	8.0279	330.09	1132.49	1311.23	799.225	657.731	48.231	24.258	1.0432	59.73	2.76	3.987	.0994
18	8.0361	321.39	1174.42	1300.04	811.635	671.286	47.287	24.383	1.0239	64.06	1.63	3.666	.0979
19	8.0413	312.92	1192.42	1298.12	813.306	680.566	47.350	24.545	1.0156	66.73	-.00	3.404	.0974
20	8.0334	305.75	1213.07	1299.35	827.451	691.539	46.961	24.874	.9987	70.53	-2.33	3.139	.0969
21	8.0339	237.35	1244.29	1266.73	840.354	708.752	45.377	25.353	.9719	79.20	-6.18	3.053	.0964

STATION 11 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6199	1081.02	1853.02	1452.89	739.408	585.074	54.165	21.623	1.2248	46.45	9.86	26.367	.0896
2	7.6659	1023.78	1849.31	1495.24	739.767	582.447	54.867	21.210	1.2380	45.68	8.89	43.914	.0881
3	7.7107	1041.13	1843.71	1474.20	760.118	580.615	53.959	20.928	1.2475	45.07	8.65	111.887	.0878
4	7.7547	1052.69	1839.26	1473.26	760.457	579.719	53.840	20.710	1.2527	44.63	8.38	-132.767	.0863
5	7.7974	1059.01	1834.97	1480.76	760.783	579.679	53.711	20.624	1.2541	44.34	8.09	-61.761	.0859
6	7.8393	1061.26	1830.60	1479.47	761.100	580.317	53.572	20.620	1.2523	44.17	7.81	-38.705	.0858
7	7.8806	1059.65	1827.02	1475.69	761.402	581.537	53.392	20.677	1.2477	44.10	7.55	-27.792	.0858
8	7.9216	1052.34	1824.31	1468.98	762.097	583.891	53.075	20.777	1.2396	44.21	7.34	-23.978	.0859
9	7.9626	1044.69	1821.62	1461.20	762.710	586.401	52.761	20.907	1.2304	44.36	7.17	-22.815	.0861
10	8.0036	1034.84	1819.64	1452.78	763.486	589.220	52.432	21.052	1.2205	44.58	7.04	-22.493	.0863
11	8.0445	1014.89	1817.97	1443.85	766.692	594.604	51.917	21.204	1.2075	45.38	6.95	-23.402	.0866
12	8.0857	992.53	1815.38	1434.70	768.959	600.088	51.402	21.357	1.1944	46.23	6.87	-25.618	.0869
13	8.1303	969.21	1814.63	1425.00	773.388	605.844	50.852	21.507	1.1807	47.17	6.80	-29.477	.0873
14	8.1745	941.19	1814.73	1413.91	777.208	612.392	50.176	21.656	1.1651	48.26	6.72	-36.768	.0877
15	8.2139	911.36	1813.02	1401.73	781.151	619.146	49.496	21.805	1.1490	49.45	6.60	-54.133	.0883
16	8.2672	871.75	1815.11	1391.91	787.583	627.918	48.853	21.963	1.1331	51.22	6.38	-121.964	.0893
17	8.3176	808.75	1123.66	1386.07	799.225	641.027	48.291	22.160	1.1169	54.30	5.92	913.834	.0922
18	8.3733	726.52	1164.92	1376.30	811.832	656.009	47.687	22.450	1.0984	58.14	4.98	147.771	.0952
19	8.4336	661.14	1189.07	1360.51	819.036	666.863	47.350	22.686	1.0751	64.93	3.56	103.582	.0925
20	8.5095	559.68	1212.28	1335.24	827.451	681.001	46.961	23.564	1.0443	65.22	.81	206.209	.0933
21	8.6199	308.07	1247.18	1284.67	840.354	704.979	46.377	24.380	.9878	76.12	-4.27	-27.461	.0951

BLADE DATA

LOCATION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	48.817	-39.941	45.430	-2.367	0.0000	0.0	1.2248	1452.89	54.165	739.408	3.686	.464	.9682	.9734
2	48.818	-37.722	43.630	-2.330	0.0000	0.0	1.2380	1495.24	54.867	739.767	3.679	.465	.9651	.9708
3	48.187	-34.669	45.071	-2.116	0.0000	0.0	1.2475	1474.20	53.959	760.118	3.672	.465	.9820	.9882
4	48.548	-31.758	44.632	-1.916	0.0000	0.0	1.2527	1473.26	53.840	760.457	3.664	.466	.9587	.9654
5	48.897	-28.971	44.342	-1.715	0.0000	0.0	1.2541	1480.76	53.711	760.783	3.655	.467	.9552	.9625
6	49.237	-26.294	44.166	-1.513	0.0000	0.0	1.2523	1479.47	53.572	761.100	3.645	.467	.9517	.9596
7	49.579	-23.709	44.104	-1.258	0.0000	0.0	1.2477	1475.69	53.392	761.402	3.633	.468	.9472	.9558
8	49.958	-21.197	44.104	-1.258	0.0000	0.0	1.2396	1468.98	53.075	762.097	3.612	.469	.9397	.9494
9	49.083	-19.569	44.210	-.873	0.0000	0.0	1.2304	1461.20	52.761	762.710	3.590	.470	.9321	.9430
10	49.053	-16.519	44.360	-.493	0.0000	0.0	1.2205	1452.78	52.432	763.486	3.568	.472	.9242	.9363
11	49.076	-13.234	44.570	-.100	0.0000	0.0	1.2075	1443.85	51.917	766.692	3.533	.478	.9082	.9186
12	49.559	-9.723	43.384	.825	0.0000	0.0	1.1944	1434.70	51.402	768.959	3.498	.484	.8938	.9015
13	49.522	-5.874	45.227	1.705	0.0000	0.0	1.1807	1425.00	50.852	773.388	3.460	.491	.8822	.8837
14	49.607	-2.061	47.145	2.538	0.0000	0.0	1.1651	1413.91	50.176	777.208	3.414	.498	.8705	.8665
15	49.846	1.414	48.256	3.410	0.0000	0.0	1.1490	1401.73	49.496	781.151	3.368	.506	.8648	.8532
16	49.498	4.893	49.440	4.247	0.0000	0.0	1.1331	1391.91	48.853	787.583	3.324	.518	.7852	.8176
17	49.379	8.139	51.223	5.043	0.0000	0.0	1.1169	1386.07	48.291	799.225	3.286	.541	.7438	.7828
18	49.934	11.664	53.337	6.373	0.0000	0.0	1.0984	1376.30	47.687	811.832	3.245	.568	.7026	.7484
19	49.774	15.384	56.155	11.664	0.0000	0.0	1.0751	1360.51	47.350	819.036	3.222	.579	.6888	.7274
20	47.342	19.492	60.326	13.384	0.0000	0.0	1.0443	1335.24	46.961	827.451	3.196	.595	.6565	.7063
21	49.059	39.458	65.218	16.159	0.0000	0.0	.9878	1284.67	46.377	840.354	3.156	.620	.6228	.6768

STATION 11 INTEGRATED PERFORMANCE PRESSURE RATIO = 3.402 ISEN. EFF.= .839 POLY. EFF.= .864 DELTA T ON T = .585

STATION 12 FLOW FIELD DESCRIPTION

STREAM LINE	RADIUS	MERID	TANG	TOTAL	TEMPERATURE TOTAL	TEMPERATURE STATIC	PRESSURE TOTAL	PRESSURE STATIC	MACH NO	ANGLE WHIRL	ANGLE SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7150	1102.36	719.77	1311.81	759.408	617.409	51.493	24.826	1.0798	32.61	5.21	-3.686	.1084
2	7.7521	1079.42	691.41	1280.30	759.767	624.557	51.405	25.780	1.0450	32.53	4.76	-3.445	.1112
3	7.7891	1056.02	665.27	1248.10	760.118	631.032	51.305	26.706	1.0131	32.21	4.30	-3.260	.1140
4	7.8230	1032.39	642.19	1216.00	760.457	636. 21	51.172	27.529	.9817	31.88	3.86	-3.137	.1166
5	7.8630	1009.27	620.57	1184.79	760.753	645.049	51.003	28.496	.9517	31.53	3.44	-3.073	.1191
6	7.9002	985.29	601.00	1153.12	761.100	651.302	50.741	29.265	.9227	31.38	3.07	-3.055	.1212
7	7.9379	961.63	583.76	1122.12	761.402	657.195	50.421	29.982	.8934	31.26	2.77	-3.072	.1230
8	7.9757	939.02	567.43	1090.81	762.097	663.003	49.993	30.588	.8658	31.17	2.58	-3.112	.1243
9	8.0149	916.46	552.37	1059.55	762.710	668.381	49.597	31.114	.8447	31.68	2.48	-3.170	.1255
10	8.0541	897.91	538.19	1047.34	763.480	673.135	49.229	31.573	.8238	30.96	2.47	-3.241	.1264
11	8.0947	879.13	529.41	1062.08	764.092	680.238	48.734	31.973	.8019	30.91	2.53	-3.331	.1267
12	8.1352	860.98	515.20	1003.27	764.959	687.109	48.327	32.321	.7812	30.90	2.64	-3.446	.1268
13	8.1734	844.77	503.97	985.05	765.380	693.538	47.959	32.523	.7635	30.95	2.78	-3.584	.1268
14	8.2234	827.51	493.54	966.14	767.208	700.438	47.493	32.881	.7452	31.07	2.94	-3.743	.1265
15	8.2537	810.37	481.87	948.37	768.202	707.202	47.042	33.090	.7281	31.23	3.10	-3.941	.1261
16	8.3131	795.75	474.44	930.23	769.505	713.552	46.674	33.239	.7147	31.49	3.22	-4.214	.1252
17	8.3625	781.78	491.41	911.93	769.229	721.931	46.372	33.304	.7034	31.83	3.19	-4.732	.1233
18	8.4121	786.38	494.83	931.74	811.835	740.629	46.032	33.241	.6994	32.44	2.87	-6.034	.1210
19	8.4627	787.31	510.14	941.43	819.036	748.325	45.843	32.960	.7043	33.23	2.16	-13.343	.1190
20	8.5137	797.51	533.25	962.15	827.461	751.012	45.562	32.390	.7170	34.02	.88	1209.239	.1161
21	8.5730	812.25	554.44	986.25	840.364	758.743	45.027	31.914	.7305	34.56	-2.05	5.347	.1120

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BLADE DATA

LOCATION	BLADE ANGLES SECTION	BLADE ANGLES FLOW	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	31.359	-24.847	32.414	.349	.0822	0.0	1.0798	1311.81	51.493	759.408	3.504	.496	.9236	.9357
2	31.670	-23.440	32.331	.409	.0810	0.0	1.0450	1280.30	51.405	759.767	3.448	.455	.9207	.9332
3	31.337	-21.532	32.213	.373	.0803	0.0	1.0131	1248.10	51.305	760.118	3.391	.415	.9177	.9306
4	30.340	-19.449	31.876	.383	.0805	0.0	.9817	1216.00	51.172	760.457	3.462	.406	.9141	.9276
5	30.279	-17.200	31.938	.367	.0818	0.0	.9517	1184.79	51.003	760.753	3.471	.457	.9100	.9241
6	30.454	-15.024	31.342	.403	.0859	0.0	.9227	1154.12	50.741	761.100	3.453	.467	.9043	.9193
7	30.311	-12.906	31.260	.344	.0905	0.0	.8954	1124.95	50.421	761.402	3.431	.468	.8974	.9134
8	30.202	-10.959	31.172	.370	.0954	0.0	.8638	1096.31	49.996	762.097	3.402	.469	.8879	.9052
9	30.388	-9.220	31.374	.440	.0435	0.0	.8447	1070.05	49.597	762.710	3.374	.470	.8786	.8972
10	29.975	-7.814	30.382	1.173	.1012	0.0	.8238	1047.34	49.229	763.480	3.352	.472	.8701	.8899
11	29.889	-6.631	30.913	1.024	.1013	0.0	.8019	1024.69	48.734	764.092	3.320	.478	.8586	.8734
12	29.362	-5.570	30.999	1.036	.1023	0.0	.7812	1003.27	48.327	764.959	3.288	.494	.8318	.8570
13	29.319	-4.637	30.934	1.045	.0389	0.0	.7635	985.05	47.959	765.380	3.263	.441	.8142	.8419
14	30.325	1.779	31.170	1.393	.0941	0.0	.7452	966.14	47.493	767.208	3.232	.498	.7944	.8248
15	30.179	-.236	31.227	1.008	.0380	0.0	.7281	948.37	47.042	768.202	3.201	.508	.7749	.8079
16	30.403	7.337	31.440	1.043	.0810	0.0	.7147	930.23	46.674	769.505	3.179	.513	.7502	.7865
17	30.799	19.816	31.726	1.037	.1734	0.0	.7054	911.93	46.372	769.229	3.155	.541	.7141	.7553
18	31.407	15.049	32.441	1.034	.0699	0.0	.6994	931.74	46.032	811.835	3.132	.569	.6779	.7240
19	32.147	18.512	33.231	1.034	.0617	0.0	.7043	941.43	45.843	819.036	3.119	.579	.6587	.7073
20	32.974	23.327	34.116	1.042	.0537	0.0	.7170	962.15	45.562	827.461	3.101	.595	.6366	.6880
21	33.473	28.225	34.657	1.080	.0628	0.0	.7306	986.26	45.027	840.364	3.064	.620	.6033	.6586

STATION 12 INTEGRATED PERFORMANCE PRESSURE RATIO = 3.233 ISEN. EFF.= .793 PO.Y. EFF.= .829 DELTA T ON T = .505

STATION 13 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.7230	987.01	312.81	1035.33	739.408	671.038	48.915	31.615	.8157	17.59	-2.23	-5.196	.1278
2	7.7547	972.66	307.62	1020.15	739.767	674.038	48.792	31.372	.8019	17.55	-2.54	-5.728	.1278
3	7.7871	955.88	303.07	1005.64	740.118	676.819	48.651	32.294	.7859	17.54	-2.55	-6.300	.1278
4	7.8203	938.53	298.95	991.66	740.457	679.465	48.487	32.577	.7765	17.55	-2.66	-7.261	.1278
5	7.8543	922.59	295.01	978.14	740.783	681.992	48.287	32.920	.7645	17.55	-2.72	-8.376	.1297
6	7.8833	917.21	294.67	961.32	741.108	684.908	47.923	33.021	.7502	17.54	-2.72	-9.859	.1299
7	7.9254	901.36	294.02	949.05	741.482	687.949	47.493	33.180	.7355	17.49	-2.65	-11.915	.1308
8	7.9530	884.42	277.56	926.96	732.097	691.362	46.974	33.299	.7196	17.42	-2.50	-14.893	.1298
9	8.0021	868.71	271.83	910.26	762.710	694.509	46.483	33.384	.7051	17.38	-2.26	-19.528	.1296
10	8.0429	857.72	268.51	899.77	763.486	697.003	46.146	33.443	.6930	17.38	-1.95	-27.377	.1293
11	8.0847	845.81	263.35	886.40	758.692	702.037	45.717	33.483	.6830	17.42	-1.61	-42.493	.1287
12	8.1283	834.01	262.29	874.28	799.959	707.086	45.283	33.510	.6713	17.46	-1.22	-81.424	.1277
13	8.1733	826.01	260.74	863.10	773.380	711.411	45.054	33.530	.6645	17.48	-.82	-314.976	.1278
14	8.2197	820.81	258.42	860.53	777.208	716.317	44.779	33.552	.6569	17.50	-.43	313.752	.1282
15	8.2674	816.37	256.39	853.00	781.151	721.358	44.510	33.578	.6489	17.53	-.07	141.897	.1289
16	8.3153	810.75	257.21	850.58	787.583	728.160	44.375	33.612	.6437	17.60	.26	117.886	.1244
17	8.3634	811.80	259.60	852.29	789.225	739.616	44.293	33.953	.6401	17.73	.53	129.314	.1226
18	8.4177	811.73	264.16	854.35	811.835	752.442	44.184	33.701	.6357	17.96	.75	177.394	.1206
19	8.4702	809.97	267.45	853.11	819.036	759.410	44.133	33.746	.6325	18.30	.90	247.885	.1198
20	8.5239	807.44	273.39	852.53	827.451	767.949	44.015	33.765	.6287	18.72	.97	192.444	.1185
21	8.5795	802.80	280.03	850.24	840.354	781.240	43.714	33.728	.6217	19.23	.88	76.314	.1164

BLADE DATA

LOCATION	BLADE-SECTION	BLADE-ANGLES MEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	16.234	-3.414	17.245	1.351	.1613	0.0	.8157	1035.39	48.916	739.408	3.329	.464	.8798	.8974
2	16.199	-3.935	17.550	1.362	.1605	0.0	.8019	1020.15	48.792	739.767	3.320	.465	.8754	.8943
3	16.164	-4.439	17.840	1.375	.1605	0.0	.7869	1005.64	48.653	740.118	3.311	.465	.8717	.8911
4	16.131	-7.936	17.546	1.395	.1616	0.0	.7765	991.66	48.487	740.457	3.299	.466	.8676	.8875
5	16.133	-7.137	17.354	1.420	.1639	0.0	.7645	978.14	48.287	740.783	3.286	.467	.8629	.8835
6	16.087	-8.444	17.338	1.452	.1713	0.0	.7502	961.92	47.929	741.100	3.261	.467	.8554	.8770
7	16.003	-9.536	17.490	1.487	.1802	0.0	.7355	945.05	47.498	741.482	3.232	.468	.8463	.8691
8	15.900	-4.970	17.424	1.524	.1869	0.0	.7196	926.96	46.978	732.097	3.197	.469	.8349	.8592
9	15.819	-3.725	17.373	1.560	.1971	0.0	.7051	910.26	46.483	762.710	3.163	.470	.8239	.8495
10	15.789	-2.735	17.393	1.593	.2003	0.0	.6930	899.77	46.149	793.486	3.140	.472	.8152	.8419
11	15.796	-1.902	17.419	1.623	.2019	0.0	.6830	886.40	45.717	758.692	3.111	.478	.7969	.8268
12	15.811	-1.126	17.436	1.647	.2035	0.0	.6713	874.28	45.238	799.959	3.082	.484	.7788	.8103
13	15.816	-.485	17.462	1.666	.1976	0.0	.6645	868.10	45.054	773.380	3.069	.491	.7641	.7975
14	15.825	.118	17.201	1.676	.1893	0.0	.6566	860.65	44.779	777.208	3.047	.498	.7478	.7834
15	15.859	.824	17.535	1.676	.1800	0.0	.6485	853.00	44.510	781.151	3.029	.506	.7328	.7695
16	15.934	1.715	17.602	1.667	.1665	0.0	.6437	850.58	44.375	787.583	3.020	.518	.7128	.7511
17	16.077	2.703	17.733	1.696	.1530	0.0	.6401	852.29	44.293	789.225	3.014	.541	.6889	.7292
18	16.316	3.934	17.384	1.948	.1386	0.0	.6357	853.33	44.193	811.835	3.007	.595	.6497	.6983
19	16.654	5.254	18.693	1.645	.1315	0.0	.6325	853.11	44.133	819.036	3.003	.579	.6331	.6837
20	17.063	6.784	18.718	1.655	.1259	0.0	.6287	852.53	44.016	827.451	2.995	.595	.6139	.6669
21	17.510	8.542	19.229	1.719	.1237	0.0	.5217	850.24	43.715	840.354	2.975	.620	.5848	.6413

STATION 13 INTEGRATED PERFORMANCE PRESSURE RATIO = 3.122 ISEN. EFF.= .757 POLY. EFF.= .792 DELTA T ON T = .585

STATION 1↔ FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES AERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6720	353.20	92.↔2	838.19	759.↔08	693.787	↔0.323	34.528	.6629	6.18	-↔.29	16.241	.1332
2	7.7066	350.96	90.↔3	829.73	759.767	699.↔89	↔0.124	34.↔44	.6508	6.08	-↔.11	15.899	.1327
3	7.7421	348.05	88.39	823.29	760.118	700.193	↔0.920	34.353	.6563	5.98	-3.↔0	15.516	.1322
↔	7.7784	346.02	87.31	850.51	760.↔57	700.923	↔1.091	34.255	.↔553	5.89	-3.67	15.099	.1317
5	7.8157	342.35	85.83	847.31	760.783	701.699	45.↔65	34.151	.6533	5.82	-3.↔2	14.648	.1312
6	7.85↔1	333.21	85.↔4	837.↔2	761.100	703.390	↔↔.984	34.↔42	.6↔65	5.75	-3.13	14.243	.1304
7	7.89↔0	320.91	81.37	824.↔3	761.↔82	705.↔80	↔↔.↔43	33.330	.↔3↔1	5.70	-2.80	14.001	.1296
8	7.933↔	306.21	77.57	810.1↔	762.097	708.098	↔3.851	33.↔18	.6216	5.64	-2.↔2	14.014	.1287
9	7.3717	791.91	77.62	795.71	762.710	710.624	↔3.238	33.710	.6↔33	5.60	-2.00	14.↔73	.1279
10	8.0235	785.↔0	75.↔3	789.12	763.↔86	712.263	↔2.↔63	33.↔11	.6↔37	5.↔6	-1.56	15.↔40	.1272
11	8.0537	777.50	73.34	781.1↔	756.692	716.513	↔2.↔↔3	33.↔26	.5↔53	5.53	-1.11	16.039	.1261
12	8.1175	765.↔0	7↔.13	771.↔7	759.↔↔9	720.↔65	↔2.223	33.↔61	.5871	5.51	-.65	17.623	.1251
13	8.1↔↔7	763.50	7↔.1↔	773.15	773.380	724.↔47	↔2.153	33.↔20	.5↔↔7	5.50	-.22	19.↔91	.1244
14	8.2137	769.↔5	7↔.03	773.30	777.208	728.109	↔3.↔↔8	33.↔09	.5↔53	5.50	.16	22.↔25	.1237
15	8.2579	783.10	73.↔2	771.71	781.151	732.231	↔2.↔29	33.↔28	.5↔25	5.50	.↔9	27.313	.1230
16	8.3132	773.38	7↔.↔↔	770.↔↔	787.↔↔3	738.018	↔2.↔↔0	33.↔73	.5↔42	5.51	.76	33.↔98	.1222
17	8.3714	781.27	75.82	784.↔↔	739.225	7↔8.↔↔0	↔2.283	33.↔42	.5↔61	5.56	.↔5	↔2.782	.1207
18	8.↔2↔5	787.37	77.73	791.70	811.835	760.↔71	↔2.↔10	33.↔30	.5↔↔3	5.↔↔	1.07	56.↔75	.1192
19	3.↔73↔	788.↔0	79.53	792.↔1	819.03↔	767.↔11	↔2.↔↔↔	33.733	.5↔↔↔	5.↔7	1.13	↔9.↔68	.1184
20	8.5↔3↔	787.↔5	↔2.↔3	791.37	↔27.↔↔1	776.198	↔2.↔5↔	33.348	.5↔05	5.↔8	1.13	186.↔40	.1175
21	↔.5↔↔↔	783.51	↔5.3↔	7↔↔.31	↔↔0.↔54	789.557	↔2.↔07	33.971	.5735	↔.33	1.↔6	-↔10.↔07	.1160

BLADE DATA

LOCATION	BLADE SECTION	BLADE ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	3.↔↔5	-1.0↔↔	↔.133	2.213	.↔↔03	0.0	.↔628	↔58.19	↔6.328	739.↔08	3.152	.↔↔↔	.8324	.8↔68
2	3.↔↔3	-1.031	↔.079	2.↔34	.↔↔10	0.0	.↔606	↔55.78	↔6.129	759.767	3.139	.↔↔5	.8275	.8525
3	3.723	-.↔35	5.↔↔0	2.↔57	.↔↔32	0.0	.↔583	↔53.29	↔5.↔20	730.118	3.125	.↔↔5	.8225	.8↔81
↔	3.604	-.↔↔↔	↔.↔92	2.↔88	.↔↔↔9	0.0	.↔558	850.51	↔5.↔33	7↔0.↔57	3.109	.↔↔6	.8171	.8↔34
5	3.↔↔9	-.↔777	5.↔17	2.↔28	.↔↔↔↔	0.0	.↔530	847.31	↔5.↔↔5	760.783	3.092	.↔↔7	.8↔14	.8↔84
6	3.376	-.↔↔35	↔.↔↔3	2.↔77	.↔↔05	0.0	.↔↔↔6	↔37.↔2	↔↔.↔84	761.100	3.061	.↔↔7	.↔↔18	.8↔99
7	3.264	-.↔↔17	↔.↔↔↔	2.↔31	.↔↔↔↔	0.0	.↔↔↔1	824.↔8	↔↔.↔↔8	7↔1.↔82	3.↔24	.↔↔8	.7↔05	.8↔↔6
8	3.152	-.↔↔7	↔.↔↔3	2.↔↔1	.↔↔↔7	0.0	.↔↔15	810.14	↔3.↔↔1	762.097	2.↔↔↔	.↔↔9	.↔↔73	.↔↔↔2
9	3.↔↔5	-.↔↔35	↔.↔↔8	2.↔↔3	.↔↔↔↔	0.0	.↔↔↔5	795.71	↔3.↔↔8	762.710	2.↔↔6	.↔↔7	.↔↔↔7	.↔↔↔↔
10	2.↔↔3	-.↔↔12	↔.↔↔2	2.↔↔3	.↔↔↔↔	0.0	.↔↔↔7	783.12	↔2.↔↔6	763.↔↔6	2.↔↔↔	.↔↔↔	.↔↔↔↔	.↔↔↔↔
11	2.↔↔↔	-.↔↔↔	↔.↔↔↔	2.↔↔↔	.↔↔↔↔	0.0	.↔↔↔↔	781.1↔	↔2.↔↔↔	766.↔↔2	2.↔↔↔	.↔↔↔	.↔↔↔↔	.↔↔↔↔
12	2.↔↔7	-.↔↔↔	↔.↔↔↔	2.↔↔↔	.↔↔↔↔	0.0	.↔↔↔↔	771.↔↔	↔2.↔↔↔	7↔↔.↔↔↔	2.↔↔↔	.↔↔↔	.↔↔↔↔	.↔↔↔↔
13	2.↔↔↔	-.↔↔↔	↔.↔↔↔	2.↔↔↔	.↔↔↔↔	0.0	.↔↔↔↔	773.↔↔	↔2.↔↔↔	773.↔↔↔	2.↔↔↔	.↔↔↔	.↔↔↔↔	.↔↔↔↔
14	2.↔↔↔	-.↔↔↔	↔.↔↔↔	2.↔↔↔	.↔↔↔↔	0.0	.↔↔↔↔	771.↔↔	↔2.↔↔↔	777.↔↔↔	2.↔↔↔	.↔↔↔	.↔↔↔↔	.↔↔↔↔
15	2.↔↔↔	-.↔↔↔	↔.↔↔↔	2.↔↔↔	.↔↔↔↔	0.0	.↔↔↔↔	771.↔↔	↔2.↔↔↔	7↔1.↔↔↔	2.↔↔↔	.↔↔↔	.↔↔↔↔	.↔↔↔↔
16	2.↔↔↔	-.↔↔↔	↔.↔↔↔	2.↔↔↔	.↔↔↔↔	0.0	.↔↔↔↔	776.↔↔	↔2.↔↔↔	7↔7.↔↔↔	2.↔↔↔	.↔↔↔	.↔↔↔↔	.↔↔↔↔
17	2.↔↔↔	-.↔↔↔	↔.↔↔↔	2.↔↔↔	.↔↔↔↔	0.0	.↔↔↔↔	784.↔↔	↔2.↔↔↔	739.↔↔↔	2.↔↔↔	.↔↔↔	.↔↔↔↔	.↔↔↔↔
18	2.↔↔↔	-.↔↔↔	↔.↔↔↔	2.↔↔↔	.↔↔↔↔	0.0	.↔↔↔↔	791.↔↔	↔2.↔↔↔	811.↔↔↔	2.↔↔↔	.↔↔↔	.↔↔↔↔	.↔↔↔↔
19	3.↔↔↔	-.↔↔↔	↔.↔↔↔	2.↔↔↔	.↔↔↔↔	0.0	.↔↔↔↔	792.↔↔	↔2.↔↔↔	819.↔↔↔	2.↔↔↔	.↔↔↔	.↔↔↔↔	.↔↔↔↔
20	3.↔↔↔	-.↔↔↔	↔.↔↔↔	2.↔↔↔	.↔↔↔↔	0.0	.↔↔↔↔	791.37	↔2.↔↔↔	827.↔↔↔	2.↔↔↔	.↔↔↔	.↔↔↔↔	.↔↔↔↔
21	3.5↔↔	-1.0↔↔	↔.↔↔↔	2.↔↔↔	.↔↔↔↔	0.0	.↔↔↔↔	788.31	↔2.↔↔↔	↔↔0.↔↔↔	2.↔↔↔	.↔↔↔	.↔↔↔↔	.↔↔↔↔

STATION 1↔ INTEGRATED PERFORMANCE PRESSURE RATIO = 2.↔↔↔ ISEN. EFF.= .↔↔↔ POLY. EFF.= .↔↔↔ DELTA T ON T = .↔↔↔

STATION 15 FLOW FIELD DESCRIPTION

STREAM-LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	1031.15	0.00	1031.15	759.408	671.812	43.747	28.382	.8113	0.00	-1.66	10.624	.1139
2	7.6774	1027.59	0.00	1027.59	759.767	672.779	43.470	28.298	.8085	0.00	-1.56	11.204	.1134
3	7.7151	1023.61	0.00	1023.61	760.118	673.807	43.183	28.218	.8048	0.00	-1.48	11.904	.1129
4	7.7542	1019.16	0.00	1019.16	760.457	674.899	42.892	28.142	.8006	0.00	-1.37	12.764	.1124
5	7.7943	1014.17	0.00	1014.17	760.783	676.064	42.591	28.072	.7960	0.00	-1.25	14.000	.1118
6	7.8357	1001.32	0.00	1001.32	761.100	678.521	42.013	28.009	.7846	0.00	-1.11	16.282	.1106
7	7.8767	985.63	0.00	985.63	761.482	681.480	41.372	27.954	.7706	0.00	-.95	19.144	.1092
8	7.9234	968.25	0.00	968.25	762.097	684.902	40.698	27.909	.7552	0.00	-.77	23.882	.1078
9	7.9699	951.31	0.00	951.31	762.710	688.203	40.079	27.874	.7402	0.00	-.58	32.234	.1062
10	8.0180	943.73	0.00	943.73	763.486	690.169	39.786	27.850	.7333	0.00	-.38	51.335	.1050
11	8.0673	936.70	0.00	936.70	766.692	694.481	39.486	27.837	.7256	0.00	-.18	127.128	.1038
12	8.1191	928.69	0.00	928.69	769.959	698.997	39.177	27.835	.7171	0.00	.02	-298.918	.1073
13	8.1736	933.56	0.00	933.56	773.380	701.688	39.274	27.843	.7195	0.00	.20	-73.010	.1069
14	8.2283	938.88	0.00	938.88	777.208	704.714	39.391	27.862	.7221	0.00	.36	-44.296	.1066
15	8.2752	943.92	0.00	943.92	781.151	707.897	39.503	27.888	.7243	0.00	.49	-33.811	.1062
16	8.3254	957.01	0.00	957.01	787.563	712.314	39.840	27.921	.7321	0.00	.58	-28.983	.1056
17	8.3819	973.61	0.00	973.61	799.225	721.384	40.193	27.960	.7402	0.00	.64	-26.647	.1045
18	8.4358	990.60	0.00	990.60	811.835	731.327	40.547	28.001	.7481	0.00	.67	-25.979	.1032
19	8.4900	999.06	0.00	999.06	819.036	737.191	40.733	28.044	.7516	0.00	.66	-26.616	.1025
20	8.5447	1007.93	0.00	1007.93	827.451	744.198	40.919	28.085	.7547	0.00	.61	-28.744	.1017
21	8.6000	1019.75	0.00	1019.75	840.354	755.226	41.100	28.122	.7581	0.00	.52	-33.985	.1004

BLADE DATA

LOCATION	BLADE-ANGLES SECTION	BLADE-ANGLES LEAN	REL FLOW ANGLE	DEVIATION INCIDENCE	LOSS COEFF	BLADE SPEED	RELATIVE MACH NO	RELATIVE VELOCITY	RELATIVE PRESSURE	RELATIVE TEMPERATURE	PRESSURE RATIO	DELTA T ON T	ISENTROPIC EFFICIENCY	POLYTROPIC EFFICIENCY
1	-7.239	.020	0.000	7.239	.3202	0.0	.8119	1031.15	43.747	759.408	2.977	.464	.7841	.8148
2	-7.385	.020	0.000	7.385	.3225	0.0	.8085	1027.59	43.470	759.767	2.958	.465	.7776	.8083
3	-7.541	.019	0.000	7.541	.3250	0.0	.8048	1023.61	43.183	760.118	2.939	.465	.7718	.8024
4	-7.704	.018	0.000	7.704	.3304	0.0	.8006	1019.16	42.892	760.457	2.919	.466	.7663	.7964
5	-7.863	.016	0.000	7.863	.3361	0.0	.7960	1014.17	42.591	760.783	2.898	.467	.7574	.7883
6	-8.023	.014	0.000	8.023	.3506	0.0	.7846	1001.32	42.013	761.100	2.859	.467	.7453	.7753
7	-8.188	.012	0.000	8.188	.3674	0.0	.7706	985.63	41.372	761.482	2.815	.468	.7314	.7608
8	-8.350	.010	0.000	8.350	.3833	0.0	.7552	968.25	40.698	762.097	2.769	.469	.7163	.7451
9	-8.507	.009	0.000	8.507	.3951	0.0	.7402	951.31	40.079	762.710	2.727	.470	.7021	.7302
10	-8.653	.007	0.000	8.653	.4030	0.0	.7333	943.73	39.786	763.486	2.707	.472	.6944	.7224
11	-8.782	.005	0.000	8.782	.4047	0.0	.7256	936.70	39.486	766.692	2.687	.478	.6798	.7104
12	-8.893	.003	0.000	8.893	.4069	0.0	.7171	928.69	39.177	769.959	2.666	.484	.6648	.7059
13	-8.981	.001	0.000	8.981	.3946	0.0	.7195	933.56	39.274	773.380	2.672	.491	.6569	.6998
14	-9.040	-.001	0.000	9.040	.3782	0.0	.7221	938.88	39.391	777.208	2.680	.498	.6493	.6937
15	-9.062	-.004	0.000	9.062	.3606	0.0	.7243	943.92	39.589	781.151	2.688	.506	.6417	.6867
16	-9.059	-.007	0.000	9.059	.3352	0.0	.7321	957.01	39.840	787.563	2.711	.518	.6323	.6788
17	-9.059	-.012	0.000	9.059	.3099	0.0	.7402	973.61	40.193	799.225	2.735	.541	.6128	.6613
18	-9.066	-.018	0.000	9.066	.4929	0.0	.7481	990.60	40.547	811.835	2.759	.565	.5931	.6436
19	-9.125	-.024	0.000	9.125	.2702	0.0	.7516	999.06	40.739	819.036	2.772	.579	.5831	.6326
20	-9.169	-.031	0.000	9.169	.2583	0.0	.7547	1007.93	40.919	827.451	2.784	.595	.5740	.6226
21	-9.213	-.038	0.000	9.213	.2455	0.0	.7581	1019.75	41.100	840.354	2.797	.620	.5466	.6058

STATION 15 INTEGRATED PERFORMANCE PRESSURE RATIO = 2.773 ISEN. EFF.= .666 POLY. EFF.= .709 DELTA T ON T = .585

STATION 15 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	1041.04	0.00	1041.04	759.408	670.119	43.747	28.131	.8207	0.00	0.00	0.000	.1131
2	7.6763	1034.24	0.00	1034.24	759.767	671.647	43.473	28.130	.8144	0.00	-.01	2982.600	.1129
3	7.7146	1027.12	0.00	1027.12	760.118	673.212	43.195	28.130	.8079	0.00	-.02	1601.410	.1126
4	7.7539	1019.68	0.00	1019.68	760.457	674.811	42.892	28.129	.8011	0.00	-.03	1157.766	.1123
5	7.7935	1011.88	0.00	1011.88	760.783	676.448	42.591	28.128	.7940	0.00	-.03	952.515	.1121
6	7.8344	996.40	0.00	996.40	761.100	679.333	42.013	28.127	.7802	0.00	-.04	847.991	.1116
7	7.8777	978.32	0.00	978.32	761.482	682.666	41.372	28.126	.7642	0.00	-.04	803.404	.1110
8	7.9225	958.84	0.00	958.84	762.097	686.400	40.693	28.125	.7470	0.00	-.04	807.790	.1104
9	7.9630	940.15	0.00	940.15	762.710	689.945	40.079	28.124	.7306	0.00	-.04	867.029	.1099
10	8.0172	931.39	0.00	931.39	763.486	692.078	39.786	28.122	.7227	0.00	-.03	1000.210	.1095
11	8.0557	923.63	0.00	923.63	764.692	696.488	39.483	28.122	.7144	0.00	-.03	1253.691	.1088
12	8.1177	915.35	0.00	915.35	765.959	701.026	39.177	28.121	.7056	0.00	-.02	1830.410	.1081
13	8.1637	920.66	0.00	920.66	773.380	703.661	39.271	28.120	.7036	0.00	-.01	3458.729	.1077
14	8.2222	926.35	0.00	926.35	777.208	706.563	39.391	28.120	.7119	0.00	-.00	17564.756	.1073
15	8.2753	933.15	0.00	933.15	781.151	709.563	39.509	28.120	.7152	0.00	.00	-7370.626	.1068
16	8.3238	947.86	0.00	947.86	787.583	713.751	39.840	28.121	.7244	0.00	.01	-3679.855	.1062
17	8.3822	966.25	0.00	966.25	799.225	722.360	40.193	28.121	.7341	0.00	.01	-2936.702	.1049
18	8.4360	985.14	0.00	985.14	811.835	732.214	40.547	28.121	.7439	0.00	.01	-2921.880	.1035
19	8.4902	995.52	0.00	995.52	819.036	737.771	40.731	28.122	.7486	0.00	.01	-3542.644	.1027
20	8.5444	1006.25	0.00	1006.25	827.451	744.477	40.913	28.122	.7533	0.00	.01	-6013.742	.1018
21	8.6000	1019.75	0.00	1019.75	840.354	755.225	41.100	28.122	.7581	0.00	0.00	0.000	.1004

STATION 17 FLOW FIELD DESCRIPTION

STREAM -LINE	RADIUS	VELOCITIES MERID	VELOCITIES TANGEN	VELOCITIES TOTAL	TEMPERATURES TOTAL	TEMPERATURES STATIC	PRESSURES TOTAL	PRESSURES STATIC	MACH NO	ANGLES WHIRL	ANGLES SLOPE	RADIUS OF CURVATURE	SPECIFIC WEIGHT
1	7.6400	1041.38	0.00	1041.38	759.408	670.061	43.747	28.122	.8210	0.00	0.00	0.000	.1131
2	7.6763	1034.57	0.00	1034.57	759.767	671.589	43.473	28.122	.8147	0.00	-.00	0.000	.1129
3	7.7146	1027.44	0.00	1027.44	760.118	673.157	43.195	28.122	.8082	0.00	-.00	0.000	.1126
4	7.7539	1019.97	0.00	1019.97	760.457	674.762	42.892	28.122	.8014	0.00	-.00	0.000	.1123
5	7.7935	1012.13	0.00	1012.13	760.783	676.405	42.591	28.122	.7943	0.00	-.00	0.000	.1121
6	7.8344	996.62	0.00	996.62	761.100	679.297	42.013	28.122	.7804	0.00	-.00	0.000	.1116
7	7.8777	978.49	0.00	978.49	761.482	682.638	41.372	28.122	.7644	0.00	-.00	0.000	.1110
8	7.9225	959.06	0.00	959.06	762.097	686.381	40.693	28.122	.7471	0.00	-.00	0.000	.1104
9	7.9630	940.22	0.00	940.22	762.710	689.934	40.079	28.122	.7307	0.00	-.00	0.000	.1099
10	8.0172	931.41	0.00	931.41	763.486	692.075	39.786	28.122	.7227	0.00	-.00	0.000	.1095
11	8.0557	923.61	0.00	923.61	764.692	696.491	39.483	28.122	.7144	0.00	-.00	0.000	.1088
12	8.1177	915.30	0.00	915.30	765.959	701.034	39.177	28.122	.7057	0.00	-.00	0.000	.1081
13	8.1637	920.58	0.00	920.58	773.380	703.672	39.271	28.122	.7035	0.00	-.00	0.000	.1077
14	8.2222	926.73	0.00	926.73	777.208	706.575	39.391	28.122	.7119	0.00	-.00	0.000	.1073
15	8.2753	933.07	0.00	933.07	781.151	709.575	39.509	28.122	.7152	0.00	-.00	0.000	.1068
16	8.3238	947.79	0.00	947.79	787.583	713.762	39.840	28.122	.7244	0.00	-.00	0.000	.1062
17	8.3822	966.20	0.00	966.20	799.225	722.568	40.193	28.122	.7340	0.00	-.00	0.000	.1049
18	8.4360	985.11	0.00	985.11	811.835	732.220	40.547	28.122	.7435	0.00	-.00	0.000	.1035
19	8.4902	995.51	0.00	995.51	819.035	737.773	40.733	28.122	.7486	0.00	-.00	0.000	.1027
20	8.5444	1006.25	0.00	1006.25	827.451	744.477	40.913	28.122	.7533	0.00	-.00	0.000	.1018
21	8.6000	1019.75	0.00	1019.75	840.354	755.225	41.100	28.122	.7581	0.00	0.00	0.000	.1004

ROTOR PERFORMANCE

LOCAT -ION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID -ENCE	DEVIA -TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	6.7500	7.5439	1.2069	6.929	5.701	.0638	.4275	.4181	.5968	.7369	.7762	-60.937	-12.647	6.070	10.991
2	6.8815	7.5856	1.2261	6.549	5.382	.0742	.4488	.4382	.5553	.7193	.7701	-61.354	-13.320	6.231	10.698
3	6.9724	7.6222	1.2443	6.421	6.023	.0795	.4667	.4751	.5523	.6997	.7636	-61.740	-14.006	6.367	10.326
4	7.0825	7.6595	1.2634	6.243	6.143	.0827	.4819	.4992	.5451	.6851	.7574	-62.087	-14.689	6.420	9.796
5	7.1921	7.6979	1.2817	6.130	6.224	.0870	.4948	.5111	.5356	.6735	.7510	-62.390	-15.386	6.324	9.113
6	7.3014	7.7371	1.2997	6.050	6.257	.0911	.5060	.5209	.5242	.6634	.7444	-62.664	-16.106	6.042	8.359
7	7.4104	7.7770	1.3175	5.993	6.273	.0967	.5155	.5298	.5113	.6543	.7379	-62.926	-16.823	5.572	7.696
8	7.5192	7.8179	1.3351	5.950	6.331	.1075	.5264	.5399	.5041	.6461	.7321	-63.199	-17.511	4.916	7.186
9	7.6281	7.8598	1.3524	5.916	6.421	.1177	.5358	.5484	.4824	.6352	.7251	-63.458	-18.149	4.072	6.823
10	7.7371	7.9028	1.3695	5.889	6.533	.1287	.5444	.5563	.4663	.6270	.7205	-63.740	-18.729	3.060	6.652
11	7.8465	7.9473	1.3864	5.867	6.690	.1591	.5645	.5756	.4504	.6090	.7219	-64.038	-19.256	1.920	6.717
12	7.9563	7.9938	1.4030	5.849	6.926	.1877	.5834	.5935	.4340	.5919	.7230	-64.358	-19.738	.686	7.023
13	8.0669	8.0425	1.4193	5.827	6.950	.2159	.6022	.6019	.4176	.5745	.7241	-64.702	-20.176	-.654	7.581
14	8.1784	8.1937	1.4355	5.802	6.954	.2470	.6235	.6225	.4014	.5547	.7257	-65.075	-20.572	-2.138	8.402
15	8.2909	8.1480	1.4515	5.768	7.416	.2765	.6444	.6429	.3854	.5369	.7271	-65.479	-20.929	-3.733	9.444
16	8.4048	8.2061	1.4675	5.724	7.738	.3146	.6750	.6729	.3702	.5060	.7346	-65.915	-21.247	-5.252	10.631
17	8.5201	8.2704	1.4835	5.672	8.104	.3639	.7286	.7259	.3562	.4581	.7548	-66.378	-21.520	-6.383	11.882
18	8.6372	8.3449	1.4997	5.617	9.467	.4239	.7914	.7882	.3444	.4001	.7750	-66.856	-21.737	-7.072	13.086
19	8.7560	8.4310	1.5159	5.566	11.794	.4430	.8226	.8192	.3350	.3691	.7781	-67.340	-21.827	-7.722	13.863
20	8.8769	8.5310	1.5325	5.521	16.142	.4730	.8636	.8600	.3283	.3503	.7815	-67.826	-21.854	-8.565	13.859
21	9.0000	8.6699	1.5492	5.479	30.645	.5255	.9446	.9412	.3263	.2479	.7887	-68.316	-21.371	-9.607	13.159

STATOR PERFORMANCE

LOCAT -ION	INLET RADIUS	OUTLET RADIUS	INLET M. NO	INCID -ENCE	DEVIA -TION	LOSS COEFF	2-D D FACTOR	3-D D FACTOR	DELTA P ON Q	REL V RATIO	DELTA H/U**2	SECTION-ANGLES INLET	SECTION-ANGLES OUTLET	LEAN-ANGLES INLET	LEAN-ANGLES OUTLET
1	7.5199	7.6400	1.2248	-2.367	7.239	.3202	.4411	.4409	.2077	.7097	0.0000	48.317	-7.239	-39.941	.020
2	7.6055	7.6770	1.2380	-2.330	7.395	.3225	.4538	.4537	.2137	.7013	0.0000	48.010	-7.385	-37.422	.020
3	7.7107	7.7151	1.2475	-2.116	7.541	.3259	.4654	.4653	.2213	.6943	0.0000	47.187	-7.541	-34.669	.019
4	7.7547	7.7542	1.2527	-1.916	7.701	.3304	.4755	.4755	.2243	.6890	0.0000	46.548	-7.701	-31.756	.018
5	7.7974	7.7943	1.2581	-1.715	7.863	.3361	.4842	.4842	.2251	.6844	0.0000	46.057	-7.863	-28.741	.016
6	7.8393	7.8357	1.2523	-1.514	8.025	.3506	.4967	.4967	.2242	.6788	0.0000	45.679	-8.025	-25.670	.014
7	7.8805	7.8767	1.2477	-1.254	8.184	.3674	.5099	.5100	.2224	.6673	0.0000	45.358	-8.188	-22.597	.012
8	7.9216	7.9234	1.2396	-.873	8.350	.3833	.5232	.5232	.2208	.6591	0.0000	45.083	-8.350	-19.569	.010
9	7.9626	7.9699	1.2304	-.493	8.507	.3981	.5355	.5354	.2187	.6510	0.0000	44.853	-8.507	-16.519	.009
10	8.0036	8.0140	1.2202	-.100	8.653	.4030	.5409	.5407	.2163	.6428	0.0000	44.676	-8.653	-13.294	.007
11	8.0451	8.0673	1.2075	.825	8.732	.4047	.5471	.5468	.2160	.6408	0.0000	44.559	-8.732	-9.723	.005
12	8.0873	8.1181	1.1944	1.705	8.393	.4069	.5534	.5530	.2136	.6473	0.0000	44.522	-8.893	-5.874	.003
13	8.1303	8.1699	1.1807	2.533	8.981	.3946	.5500	.5495	.2159	.6551	0.0000	44.607	-8.981	-2.061	.001
14	8.1742	8.2223	1.1551	3.410	9.040	.3782	.5451	.5445	.2179	.6642	0.0000	44.946	-9.040	1.414	-.001
15	8.2199	8.2752	1.1490	4.247	9.392	.3606	.5394	.5387	.2197	.6734	0.0000	45.198	-9.062	4.865	-.004
16	8.2672	8.3284	1.1341	5.043	9.059	.3352	.5294	.5286	.2216	.6875	0.0000	45.579	-9.059	9.159	-.007
17	8.3176	8.3819	1.1159	8.373	9.059	.3099	.5211	.5202	.2220	.7024	0.0000	45.931	-9.059	15.261	-.012
18	8.3733	8.4358	1.0964	11.664	9.084	.2829	.5097	.5089	.2200	.7195	0.0000	46.474	-9.084	23.074	-.018
19	8.4355	8.4900	1.0752	13.384	9.125	.2702	.4951	.4943	.2105	.7343	0.0000	47.542	-9.125	31.492	-.024
20	8.5085	8.5447	1.0473	16.159	9.169	.2583	.4730	.4726	.1932	.7543	0.0000	49.059	-9.169	39.458	-.031
21	8.6199	8.6000	.9579	25.311	9.213	.2455	.4313	.4316	.1508	.7933	0.0000	50.914	-9.213	46.652	-.038

WAKE AND BOUNDARY LAYER BLOCKAGES (PERCENT)

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MID BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	3.6	0.0	3.0	11.0	13.0	14.0	25.6	26.3	26.3
DIST FACTOR	1.0	1.0	1.0	1.0	.8	.5	.4	.2	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
INT BLOCKAGE	0.0	0.0	0.0	0.0	0.0	.1	.3	1.0	3.7	0.0	3.0	11.0	13.0	14.0	25.6	26.3	26.3

SUMMARY POINT NO. 1 THE CALCULATION IS CONVERGED PASS 26

TEST POINT TITLE = 301240915602

FLOW = 26.21 SPEED = 20781.1 PRESSURE RATIO = 2.773 ISENTROPIC EFFY = .6663 POLYTROPIC EFFY = .7095 DEL T/T = .5050

SUMMARY OF 1 TEST POINTS

POINT NO.	TEST POINT TITLE	STATUS OF CALCULATION	FLOW RATE LBS/SEC	SPEED RPM	ROTOR PRESSURE RATIO	ROTOR ISEN EFFY	STAGE PRESSURE RATIO	STAGE ISEN EFFY	FLOW/ (CHOKE FLOW)
1	301240915602	CONVERGED AFTER 26 PASSES	26.208	20781.1	3.462	.639	2.773	.666	.68647

APPENDIX B

COMPUTER INPUT DATA FOR DATA REDUCTION

KEY

SECTION 1. Common Phase I Data

SECTION 2. Common Phase II Fixed Data (Log 1) Across Blade

SECTION 3. Common Phase II Input and Test Point Data (Log 3, Log 4) Across Blade

SECTION 4. Common Phase II Fixed Data (Log 1) Within Blade

SECTION 5. Common Phase II Input and Test Point Data (Log 3, Log 4) Within Blade

SECTION 6. Individual Test Input Data

a. Exceptions to Section 1 Data (indicated by (1))

b. Exceptions to Section 2 Data (indicated by (2))

c. Exceptions to Section 3 Data (indicated by (3))

d. Exceptions to Section 4, Data (indicated by (4))

e. Exceptions to Section 5 Data (indicated by (5))

SECTION 1. COMMON PHASE I DATA

```
BASIC DATA DECK
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 516.0000  518.0000  520.0000  522.0000  524.0000  526.0000  528.0000  530.0000
 532.0000  534.0000  536.0000  538.0000  540.0000  542.0000  544.0000  546.0000
 548.0000  550.0000  552.0000  554.0000  556.0000  558.0000  560.0000
    .0105     .0309     .0505     .0808     .0885     .0961     .1041     .1126
    .1217     .1315     .1428     .1532     .1652     .1788     .1918     .2063
    .2219     .2384     .2561     .2749     .2949     .3162     .3388     .3628
    .3883     .4153     .4440     .4744     .5067     .5409     .5772     .6153
    .6555     .6980     .7425     .7902     .8403     .8930     .9487
  -2.0000   -.2500    2.2500    6.1010
  12.6870   29.5155
    .7217     .8997     .3781     .0189    1.0000    1.0000
 18   1
 470.0000  480.0000  490.0000  500.0000  510.0000  520.0000  530.0000  540.0000
 550.0000  560.0000
9850.0000 5650.0000 3609.0000 2445.1000 1704.9000 1208.1000  860.9000  633.7000
 468.4000  350.0000
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 494.0000  546.0000  561.0000
    .9998    1.0000    1.0010
  8   1
    .2000     .4000     .6000     .8000    1.2000    1.4000    1.6000    1.8000
    .9998     .9978     .9966     .9944     .9919     .9887     .9900     .9895
  14.6960
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 410.0000  420.0000  430.0000  440.0000  450.0000  460.0000  470.0000  480.0000
 490.0000  500.0000  510.0000  520.0000  530.0000  540.0000  550.0000  560.0000

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    .27497128E-12      -.85548936E-16
  6
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   -.79236516E-12       .22724483E-15
  4
  1  24
101 103 105 107 109 111 113 115 117 119 121 123 125 127 129 131 133 135 137 139
141 143 145 147
  2  24
201 203 205 207 209 211 213 215 217 219 221 223 225 227 229 231 233 235 237 239
241 243 245 247
  3  24
301 303 305 307 309 311 313 315 317 319 321 323 325 327 329 331 333 335 337 339
341 343 345 347
  4  24
401 403 405 407 409 411 413 415 417 419 421 423 425 427 429 431 433 435 437 439
441 443 445 447
  1
  1  40
 58  60  61  62  63  64  65  66  67  68  69  70  71  72  73  74  75  76  77  78
 79  80  81  82  83  84  85  86  87  88  89  90  91  92  93  94  57  96  97  98
  1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20
 21  22  23  24  25  26  27  28  29  30  31  32  33  34  35  36  37  38  39  40
 42   1
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    .0011     .0013     .0015     .0018     .0020     .0022     .0024     .0027
    .0029     .0031     .0034     .0036     .0038     .0041     .0043     .0045
    .0048     .0050     .0052     .0054     .0057     .0059     .0061     .0063
    .0065     .0068     .0070     .0072     .0074     .0076     .0079     .0081
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 620.0000  630.0000  640.0000  650.0000  660.0000  670.0000  680.0000  690.0000
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 780.0000  790.0000  800.0000  810.0000  820.0000  830.0000  840.0000  850.0000
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   1.4666     2.9228     4.4122     5.8684     7.3412
   7.8718     8.8810     8.1210     8.2518     8.3718
   7.8888     7.5600     8.1280     9.2888     8.4488
  14.6960   518.6888    53.3420    85.7750   778.1288
  1   2
107 207
  2   4
  2   3   4   5
  3  10
327 323 319 315 311 329 325 321 317 313
  4  10
 14  12  10   8   6  15  13  11   9   7
  5  25
335 405 415 425 435 331 401 411 421 431 337 407 417 427 437 333 403 413 423 433
339 409 419 429 439
  6  25
 36  31  26  21  16  39  34  29  24  19  37  32  27  22  17  40  35  30  25  20
 30  33  28  23  18
  7   8
233 235 237 239 225 227 229 231
  8   4
105 103 205 203
  9   4
213 215 217 219
 10   9
   0.0000     .2500     .5000     .7500    1.0000    1.2500    1.5000    1.7500
   2.0000
113 115 117 119 121 123 125 127 129
 11   7
131 133 135 137 139 209 211
 12   3
305 307 309
 13   3
  1
143 145 147
  1
243 245 247


  1
343 345 347
  1
443 445 447
 14   2
223 221
 15   2
109 111
 16   2
101 201
 99  50
  1

OTHER DATA
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       .5000     .5000     .5000


EDITING DATA DECK
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```

SECTION 2. COMMON PHASE II FIXED DATA (LOG 1)
ACROSS BLADE

FIXED DATA PRINTOUT

OVERALL RUN TITLE

NUMBER OF STATIONS	= 10
NUMBER OF STREAMLINES	= 21
MAXIMUM NUMBER OF ITERATIONS	= 40
MAXIMUM NUMBER OF ARBITRARY ITERATIONS	= 15
TOTAL PRESSURE SOURCE INDICATOR	= 0
TOTAL TEMPERATURE SOURCE INDICATOR	= 0
STATION NUMBER FOR ROTOR EXIT DATA	= 7
STATION NUMBER FOR STAGE EXIT DATA	= 8
NUMBER OF ROTOR BLADES	= 30
NUMBER OF STATOR BLADES	= 49
MAXIMUM NUMBER OF LINES PER PAGE	= 60
NPLOT	= 3

ANNULUS SPECIFICATION

STATION 1 SPECIFIED BY 2 POINTS

RSTN	XSTN
6.0636	-1.8000
9.0900	-1.3000

STATION 2 SPECIFIED BY 2 POINTS

RSTN	XSTN
6.0740	-1.3000
9.0900	-1.0000

STATION 3 SPECIFIED BY 2 POINTS

RSTN	XSTN
6.0610	-.4000
9.0900	-.4000

STATION 4 SPECIFIED BY 2 POINTS

RSTN	XSTN
6.7501	0.0000
9.0000	0.0000

STATION 5 SPECIFIED BY 2 POINTS

RSTN	XSTN
7.3439	2.0000
8.0999	2.0000

STATION 6 SPECIFIED BY 6 POINTS

RSTN	XSTN
7.3746	2.2000
7.3000	2.3350
9.3030	2.3350
8.2000	2.4030
8.4000	2.3300
8.3333	2.2000

STATION 7 SPECIFIED BY 8 POINTS

RSTN	XSTN
7.3133	2.5000
7.7743	2.6593
7.8730	2.8402
8.0049	2.9252
8.1427	2.9431
8.2873	2.9390
8.4401	2.7625
8.5199	2.5000

STATION 8 SPECIFIED BY 2 POINTS

RSTN	XSTN
7.9400	4.7250
8.5000	4.7250

STATION 9 SPECIFIED BY 2 POINTS

RSTN	XSTN
7.9400	5.4000
8.5000	5.4000

STATION 10 SPECIFIED BY 2 POINTS

RSTN	XSTN
7.9400	7.0000
8.5000	7.0000

STATION CALCULATION SPECIFICATION AND BLADING DATA

STATION 2 NCALC = 0 NDATA = 0 NBL = 0

STATION 3 NCALC = 0 NDATA = 0 NBL = 0

(2) STATION 4 NCALC = 1 NDATA = 15 NBL = 0

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
7.7986	-62.0011	6.0825	.01450	.2192
8.9386	-62.2938	6.2938	.01420	.2168
7.0504	-62.5801	6.5192	.01410	.2144
7.2131	-62.8379	6.7846	.01390	.2120
7.3566	-63.0938	5.7816	.01370	.2097
7.5216	-63.3790	4.6992	.01350	.2078
7.6776	-63.7062	3.6317	.01330	.2062
7.8346	-64.0815	2.5451	.01320	.2052
7.9927	-64.5112	.2588	.01320	.2048
8.1529	-65.0037	-1.7858	.01330	.2051
8.3143	-65.5623	-4.0672	.01340	.2061
8.4791	-66.1881	-6.6474	.01360	.2078
8.6462	-66.8700	-7.1213	.01380	.2101
8.8166	-67.5768	-8.1121	.01420	.2127
8.9900	-68.2847	-9.9200	.01450	.2157

(2) STATION 5 NCALC = 4 NDATA = 15 NBL = 0

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
7.5585	-11.0761	10.9221	.04437	-.1061
7.6197	-12.5921	10.3557	.04309	-.1076
7.6839	-14.1312	9.3776	.04185	-.1091
7.7508	-15.6750	8.1114	.04100	-.1104
7.8204	-17.1350	7.1593	.04024	-.1116
7.8926	-18.3596	6.6712	.03956	-.1127
7.9673	-19.3791	6.2211	.03882	-.1138
8.0442	-20.2566	7.6047	.03806	-.1151
8.1233	-21.0485	8.9547	.03752	-.1165
8.2047	-21.7990	10.6021	.03690	-.1182
8.2882	-22.4822	12.2000	.03633	-.1202
8.3739	-23.0480	13.4357	.03584	-.1226
8.4623	-23.4032	13.9543	.03545	-.1252
8.5549	-23.4990	13.7640	.03496	-.1279
8.6556	-23.4256	13.2395	.03437	-.1307

(2) STATION 6 NCALC = 0 NDATA = 0 NBL = 0

(2) STATION 7 NCALC = 1 NDATA = 10 NBL = 0

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
7.5000	55.1561	-43.7538	.01614	-.1043
7.6295	53.5860	-37.7735	.01723	-.0952
7.7778	49.8380	-30.1445	.01536	-.0847
7.8185	47.1487	-24.6481	.01445	-.0773
8.0211	45.3735	-11.8297	.01392	-.0727
8.1454	44.4992	-.8196	.01358	-.0710
8.2714	44.6432	9.6085	.01338	-.0722
8.3997	45.8152	26.7782	.01333	-.0770
8.5330	48.5428	41.5535	.01370	-.0882
8.6721	54.4829	48.7546	.01130	-.1047

STATION 8 NCALC = 3 NDATA = 10 NBL = 0

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
7.5000	-6.7608	.0181	.00994	.0001
7.6250	-7.1856	.0202	.00979	.0001
7.7500	-7.6668	.0180	.00964	.0001
7.8750	-8.1755	.0121	.00950	.0001
8.0000	-8.6805	.0076	.00936	0.0000
8.1250	-8.9062	.0030	.00923	0.0000
8.2500	-9.0563	-.0025	.00910	0.0000
8.3750	-9.0583	-.0113	.00896	0.0000
8.5000	-9.1339	-.0255	.00884	.0001
8.6250	-9.2331	-.0416	.00873	.0001

(2) STATION 9 NCALC = 0 NDATA = 0 NBL = 1

STATION 10 NCALC = 0 NDATA = 0 NBL = 1

ROTOR GENERALISED PERFORMANCE LOSS 2 POINTS DEVIATION 2 POINTS

M-COORD	LOSS COEFF/TOTAL LOSS COEFF
0.0000	0.0000
1.0000	1.0000

OUTLET RADIUS = 0.0000

M-COORD	DEVIATION ANGLE (DEGREES)
0.0000	0.0000
1.0000	1.0000

STATOR GENERALISED PERFORMANCE LOSS 2 POINTS DEVIATION 2 POINTS

M-COORD	LOSS COEFF/TOTAL LOSS COEFF
0.0000	0.0000
1.0000	1.0000

OUTLET RADIUS = 0.0000

M-COORD	DEVIATION ANGLE (DEGREES)
0.0000	0.0000
1.0000	1.0000

NUMBER OF TEST POINTS TO BE ANALYSED = 4

(3) PSCALE= 4.00 PLOWER= 12.00 CAMFF= 4.000 NSAVE= 1 NNMAX= 0 MFORCE= 0 NEX= 2

SECTION 3. COMMON PHASE II INPUT AND TEST POINT DATA (LOG 3, LOG 4) WITHIN BLADE

TEST DATA PRINTOUT FOR POINT NO. 1

TEST POINT TITLE

GAS CONSTANT	= 53.4631
AIR MASS FRACTION	= .99627
FLOWRAT	= 25.6325
ROTOR SPEED	= 20410.0
INLET TOTAL PRESSURE	= 14.6960
INLET TOTAL TEMPERATURE	= 518.688
T IN/I IN(STD)	= .95350
P IN/P IN(STD)	= .98028

ROTOR OUTLET TOTAL PRESSURE (5 POINTS)

RADIUS	PRESSURE
7.8710	20.6306
8.0010	20.0974
8.1210	19.7060
8.2510	19.4134
8.3710	19.1991

ROTOR OUTLET TOTAL TEMPERATURE (5 POINTS)

RADIUS	TEMPERATURE
7.8710	749.170
8.0010	750.294
8.1210	752.174
8.2510	755.757
8.3710	793.239

STAGE OUTLET TOTAL PRESSURES (5 POINTS)

RADIUS	MEAN PRES	PEAK PRES
7.8000	41.2973	45.6975
7.9500	39.2335	43.5872
8.1200	36.2137	42.3691
8.2800	36.7250	44.5721
8.4400	39.7049	44.1213

STAGE OUTLET TOTAL TEMPERATURES (5 POINTS)

RADIUS	TEMPERATURE
7.8000	753.615
7.9500	761.358
8.1200	763.595
8.2800	775.233
8.4400	774.937

STAGE OUTLET FLOW ANGLES (1 POINTS)

RADIUS	ANGLE
0.0000	0.000

CASING STATIC PRESSURES (14 POINTS)

X-COORD	PRESSURE
-2.0000	13.4804
-.2500	13.4540
0.0000	13.7632
.2500	14.4436
.5000	15.7940
.7500	16.0131
1.0000	20.3644
1.2500	23.8027
1.5000	24.5302
1.7500	25.2124
2.0000	26.3941
2.2500	26.7530
4.7253	27.8493
6.1913	27.3993

HUB STATIC PRESSURES (5 POINTS)

X-COORD	PRESSURE
-2.0000	13.6635
-.2500	13.0121
2.2500	24.2955
4.7250	27.4607
6.1310	27.4607

DISTRIBUTED BLOCKAGE SPECIFICATION

(3)

STATION	BLOCKAGE	DISTRIBUTION FACTOR	MID AEC.CHORD	DISTRIBUTION FACTOR	FRACTION TE BLOCKAGE
1	0.00000	1.0000	-0.000	-0.0000	-0.0000
2	0.00000	1.0000	-0.000	-0.0000	-0.0000
3	0.00000	1.0000	-0.000	-0.0000	-0.0000
4	0.00000	1.0000	-0.000	-0.0000	-0.0000
5	.05000	0.0000	-0.000	-0.0000	-0.0000
6	.05000	0.0000	-0.000	-0.0000	-0.0000
7	.10000	1.0000	-0.000	-0.0000	-0.0000
8	.26000	1.0000	-0.000	-0.0000	-0.0000
9	.05400	1.0000	-0.000	-0.0000	-0.0000
10	.05400	1.0000	-0.000	-0.0000	-0.0000

SOLUTION TYPE INDICATORS

(3)

STATION	1	2	3	4	5	6	7	8	9	10
MACH	0	-0	-0	-0	-0	-0	-0	-0	-0	-0

NJUMP= 0

SECTION 4. COMMON PHASE II FIXED DATA (LOG 1) WITHIN BLADE

FIXED DATA PRINTOUT

OVERALL RUN TITLE

NUMBER OF STATIONS	= 17
NUMBER OF STREAMLINES	= 21
MAXIMUM NUMBER OF ITERATIONS	= 60
MAXIMUM NUMBER OF ARBITRARY ITERATIONS	= 20
TOTAL PRESSURE SOURCE INDICATOR	= 0
TOTAL TEMPERATURE SOURCE INDICATOR	= 0
STATION NUMBER FOR ROTOR EXIT DATA	= 11
STATION NUMBER FOR STAGE EXIT DATA	= 16
NUMBER OF ROTOR BLADES	= 30
NUMBER OF STATOR BLADES	= 49
MAXIMUM NUMBER OF LINES PER PAGE	= 60
NPLOT	= 2

ANNULUS SPECIFICATION

STATION 1 SPECIFIED BY 2 POINTS

RSTN	XSTN
6.0086	-1.3000
9.3900	-1.3000

STATION 2 SPECIFIED BY 2 POINTS

RSTN	XSTN
6.3746	-1.0000
9.0900	-1.0000

STATION 3 SPECIFIED BY 2 POINTS

RSTN	XSTN
6.3016	-.4000
9.0500	-.4000

STATION 4 SPECIFIED BY 2 POINTS

RSTN	XSTN
6.7300	0.0000
9.0000	0.0000

STATION 5 SPECIFIED BY 2 POINTS

RSTN	XSTN
6.3379	.4000
8.9340	.4000

STATION 6 SPECIFIED BY 2 POINTS

RSTN	XSTN
7.0784	.8000
8.4579	.8000

STATION 7 SPECIFIED BY 2 POINTS

RSTN	XSTN
7.2620	1.2000
8.4019	1.2000

STATION 8 SPECIFIED BY 2 POINTS

RSTN	XSTN
7.4497	1.6000
8.7359	1.6000

STATION 9 SPECIFIED BY 2 POINTS

RSTN	XSTN
7.5439	2.0000
8.6699	2.0000

STATION 10 SPECIFIED BY 6 POINTS

RSTN	XSTN
7.5749	2.2000
7.8000	2.3350
8.0000	2.3950
8.2000	2.4080
8.4000	2.3500
8.6339	2.2000

STATION 11 SPECIFIED BY 8 POINTS

RSTN	XSTN
7.5139	2.5000
7.7472	2.6938
7.8730	2.8402
8.0049	2.9262
8.1427	2.9491
8.2873	2.8996
8.4401	2.7656
8.6199	2.5000

STATION 12 SPECIFIED BY 8 POINTS

RSTN	XSTN
7.7150	3.0659
7.8336	3.2061
7.9410	3.3114
8.0550	3.3759
8.1746	3.3931
8.2934	3.3560
8.4297	3.2554
8.5730	3.0678

STATION 13 SPECIFIED BY 8 POINTS

RSTN	XSTN
7.7230	3.6189
7.8456	3.7124
7.9538	3.7826
8.0656	3.8256
8.1885	3.8370
8.3126	3.8123
8.4337	3.7433
8.5735	3.6202

STATION 14 SPECIFIED BY 3 POINTS

RSTN	XSTN
7.6720	4.1720
8.1900	4.2810
8.5900	4.1726

STATION 15 SPECIFIED BY 2 POINTS

RSTN	XSTN
7.6400	4.7250
8.6000	4.7250

STATION 16 SPECIFIED BY 2 POINTS

RSTN	XSTN
7.6400	5.4000
8.6300	5.4000

STATION 17 SPECIFIED BY 2 POINTS

RSTN	XSTN
7.6400	7.0000
8.6000	7.0000

STATION CALCULATION SPECIFICATION AND BLADING DATA

STATION 2 NCALC = 0 NDATA = -0 NBL =-0

STATION 3 NCALC = 0 NDATA = -0 NBL =-0

STATION 4 NCALC = 1 NDATA = 15 NBL = 0

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
6.7586	-62.0811	6.0825	.01450	.2192
6.9086	-62.2938	6.2938	.01420	.2168
7.0604	-62.5601	6.4195	.01410	.2144
7.2131	-62.8379	6.2846	.01390	.2129
7.3668	-63.0939	5.7818	.01370	.2097
7.5216	-63.3790	4.8992	.01350	.2078
7.6776	-63.7062	3.6317	.01330	.2062
7.8345	-64.0816	2.0493	.01320	.2052
7.9927	-64.5112	.2588	.01320	.2048
8.1529	-65.0037	-1.7858	.01330	.2051
8.3148	-65.5623	-4.0672	.01340	.2061
8.4791	-66.1881	-6.0474	.01360	.2078
8.6462	-66.8700	-7.1213	.01380	.2101
8.8166	-67.5768	-8.1121	.01420	.2127
8.9300	-68.2867	-9.5200	.01450	.2157

(4) STATION 5 NCALC = 2 NDATA = 15 NBL = 3

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
6.9066	-60.4843	4.2528	.11660	.1095
7.0443	-60.8164	4.1868	.11320	.1081
7.1829	-61.1343	3.7778	.10980	.1067
7.3217	-61.4067	3.1230	.10630	.1056
7.4607	-61.6313	2.6462	.10280	.1046
7.5999	-61.8603	2.2043	.09960	.1038
7.7397	-62.1272	1.6392	.09670	.1032
7.8799	-62.4467	1.0024	.09450	.1028
8.0211	-62.8331	.3683	.09280	.1026
8.1640	-63.3022	-.3192	.09160	.1026
8.3088	-63.8650	-1.0951	.09100	.1028
8.4564	-64.5226	-1.7009	.09140	.1032
8.6074	-65.2580	-1.8276	.09230	.1038
8.7629	-66.0375	-2.1796	.09340	.1044
8.9231	-66.8394	-3.0445	.09450	.1052

(4) STATION 6 NCALC = 2 NDATA = 15 NBL = 3

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
7.0871	-54.7286	2.4431	.15180	.0157
7.2111	-55.0830	2.1140	.14700	.0150
7.3352	-55.4640	1.2241	.14230	.0145
7.4588	-55.8124	.1217	.13780	.0143
7.5820	-56.0634	-.2912	.13350	.0143
7.7051	-56.3007	-.3032	.12940	.0144
7.8282	-56.5794	-.2037	.12580	.0145
7.9512	-56.9187	.0605	.12290	.0145
8.0748	-57.3364	.5445	.12060	.0145
8.1994	-57.8545	1.1927	.11880	.0142
8.3253	-58.4881	1.9451	.11770	.0138
8.4530	-59.2396	2.8362	.11760	.0132
8.5835	-60.[illegible]	3.9074	.11820	.0123
8.7176	-60.9981	4.6308	.11890	.0111
8.8562	-61.9604	4.9033	.11960	.0098

(4) STATION 7 NCALC = 2 NDATA = 15 NBL = 3

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
7.2700	-42.8530	1.4890	.20936	-.0504
7.3759	-43.2304	1.0492	.19685	-.0507
7.4809	-43.8701	.0200	.18715	-.0509
7.5846	-44.4575	-1.1013	.17888	-.0507
7.6889	-44.9081	-1.2450	.17166	-.0504
7.7925	-45.3233	-.7671	.16513	-.0502
7.8972	-45.7857	-.0043	.15950	-.0501
8.0023	-46.3129	1.0785	.15419	-.0502
8.1083	-46.9235	2.3041	.15016	-.0506
8.2157	-47.6575	4.1941	.14656	-.0514
8.3246	-48.4393	6.0132	.14416	-.0526
8.4359	-49.4393	7.7920	.14275	-.0542
8.5492	-50.4285	9.3300	.14233	-.0562
8.6667	-51.3985	10.3001	.14225	-.0586
8.7834	-52.3297	10.8437	.14220	-.0612

(4) STATION 8 NCALC = 2 NDATA = 15 NBL = 3

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
7.4300	-24.9339	2.8700	.16500	-.0886
7.5291	-25.5753	2.8220	.15501	-.0891
7.6033	-26.0033	2.1498	.14656	-.0896
7.6907	-26.6303	1.2496	.13967	-.0899
7.7738	-29.1233	1.1645	.13377	-.0901
7.8587	-30.1294	1.6595	.12853	-.0904
7.9455	-30.8546	2.5578	.12381	-.0907
8.0340	-31.5333	3.3882	.11927	-.0914
8.1243	-32.4730	5.6399	.11547	-.0923
8.2167	-33.3295	7.6642	.11220	-.0935
8.3110	-34.2257	9.7467	.10980	-.0954
8.4079	-35.1018	11.5906	.10801	-.0975
8.5071	-35.9958	12.8628	.10689	-.1001
8.6110	-36.7200	13.3143	.10601	-.1029
8.7225	-37.3409	13.2525	.10507	-.1060

(4) STATION 9 NCALC = 4 NDATA = 15 NBL = 3

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
7.5585	-11.0731	10.9221	.04437	-.1061
7.6147	-12.5921	10.3557	.04309	-.1076
7.6339	-14.1312	9.3775	.04185	-.1091
7.7208	-15.6950	8.1113	.04100	-.1104
7.8206	-17.1350	7.1593	.04024	-.1116
7.8926	-18.3596	6.6712	.03956	-.1127
7.9573	-19.3731	6.3211	.03882	-.1138
8.0442	-20.2556	7.6047	.03800	-.1151
8.1233	-21.0448	8.9547	.03752	-.1165
8.2047	-21.7930	10.6021	.03690	-.1182
8.2882	-22.4822	12.2001	.03636	-.1202
8.3739	-23.1450	13.4357	.03584	-.1226
8.4623	-23.4032	13.9543	.03545	-.1252
8.5544	-23.4330	13.7249	.03496	-.1279
8.6556	-23.4253	13.2395	.03437	-.1307

STATION 10 NCALC = 0 NDATA = -0 NBL = 1

STATION 11 NCALC = 1 NDATA = 10 NBL = -0

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
7.5400	22.1091	-43.7548	.01914	-.1083
7.6299	33.5860	-37.7735	.01723	-.0952
7.7776	39.3380	-30.1445	.01536	-.0847
7.8985	47.1407	-21.2081	.01445	-.0773
8.0211	45.3735	-11.8297	.01392	-.0727
8.1454	44.4992	-.3199	.01358	-.0710
8.2714	44.5432	9.6089	.01338	-.0722
8.3997	45.3113	26.7782	.01333	-.0770
8.5330	49.5925	41.5535	.01370	-.0852
8.6721	54.4329	48.7540	.01130	-.1047

STATION 12 NCALC = 2 NDATA = 10 NBL = 0

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
7.5113	34.7293	-25.7556	.11858	-.0549
7.6334	33.9362	-26.3943	.10511	-.0470
7.7560	32.8982	-23.2637	.09202	-.0394
7.8795	31.3971	-16.2152	.08062	-.0337
8.0036	30.4237	-9.4934	.07350	-.0301
8.1283	29.8951	-2.9737	.06992	-.0284
8.2534	29.8235	3.3793	.06961	-.0285
8.3789	30.3733	12.2206	.07270	-.0305
8.5053	32.4775	23.1254	.08078	-.0353
8.6330	35.6328	32.3432	.09245	-.0432

STATION 13 NCALC = 2 NDATA = 10 NBL = 0

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
7.5009	16.6561	-9.9376	.12611	-.0156
7.6256	16.3979	-10.2994	.11167	-.0127
7.7504	16.0640	-9.0207	.09770	-.0098
7.8752	15.9238	-6.7565	.08599	-.0076
8.0001	15.7335	-3.7730	.07831	-.0061
8.1251	15.8033	-1.1768	.07436	-.0055
8.2501	15.9516	.5493	.07368	-.0054
8.3751	16.0597	2.9555	.07641	-.0059
8.5002	16.7361	6.0849	.08323	-.0070
8.6254	17.8003	10.0593	.09466	-.0091

STATION 14 NCALC = 2 NDATA = 10 NBL = 0

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
7.5000	4.4731	-1.0973	.08357	.0024
7.6250	4.1107	-1.1011	.07496	.0027
7.7500	3.8830	-.9168	.06672	.0030
7.8750	3.3057	-.6527	.06023	.0032
8.0000	2.9953	-.4567	.05577	.0034
8.1250	2.8012	-.3036	.05325	.0035
8.2501	2.7537	-.1369	.05270	.0035
8.3751	2.8770	-.3981	.05419	.0036
8.5001	3.1370	-.8345	.05797	.0037
8.6251	3.6112	-1.0923	.06461	.0040

STATION 15 NCALC = 3 NDATA = 10 NBL = 1

RADIUS	BETA	EPSILON	BLOCKAGE	THETA
7.5000	-6.7608	.0181	.00994	.0001
7.6250	-7.1856	.0202	.00979	.0001
7.7500	-7.6868	.0180	.00964	.0001
7.8750	-8.1752	.0121	.00950	.0001
8.0000	-8.6005	.0076	.00936	0.0000
8.1250	-8.9062	.0030	.00923	0.0000
8.2500	-9.0553	-.0026	.00910	0.0000
8.3750	-9.0583	-.0113	.00896	0.0000
8.5000	-9.1338	-.0255	.00884	.0001
8.6250	-9.2331	-.0418	.00873	.0001

STATION 16 NCALC =-0 NDATA = -0 NBL = 1

STATION 17 NCALC =-0 NDATA = -0 NBL = 1

ROTOR GENERALISED PERFORMANCE LOSS 2 POINTS DEVIATION 3 POINTS

1-COORD	LOSS COEFF/TOTAL LOSS COEFF
0.0000	0.0000
1.0000	1.0010

(4) OUTLET RADIUS = 7.5499

1-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.1750
.4000	-5.4200
.8000	-4.7700

(4) OUTLET RADIUS = 7.7343

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.0750
.4000	-4.5420
.8000	-4.7060

(4) OUTLET RADIUS = 7.9385

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.1000
.4000	-4.2030
.8000	-4.6500

(4) OUTLET RADIUS = 8.1919

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.3750
.4000	-5.7420
.8000	-6.5890

(4) OUTLET RADIUS = 8.6599

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.3250
.4000	-12.3300
.8000	-25.0850

STATOR GENERALISED PERFORMANCE LOSS 2 POINTS DEVIATION 6 POINTS

M-COORD	LOSS COEFF/TOTAL LOSS COEFF
0.0000	0.0000
1.0000	1.0000

OUTLET RADIUS = 0.0000

M-COORD	DEVIATION ANGLE (DEGREES)
0.0000	.1000
.2000	.1100
.4000	.1500
.6000	.2200
.8000	.3800
1.0000	1.0000

NUMBER OF TEST POINTS TO BE ANALYSED = 1

(5) PSCALE= 1.00 PLOWER= 14.00 DAMPF= 5.000 NSAVE= 1 NNMAX= -0 MFORCE= -0 NEX= 2

SECTION 5. COMMON PHASE II INPUT AND TEST POINT DATA (LOG 3, LOG 4) WITHIN BLADE

TEST_DATA_PRINTOUT_FOR_POINT_NO.__1

TEST POINT TITLE

GAS CONSTANT	= 53.5218
AIR MASS FRACTION	= .99446
FLOWRATE	= 13.0351
ROTOR SPEED	= 10195.8
INLET TOTAL PRESSURE	= 14.6960
INLET TOTAL TEMPERATURE	= 518.669
P IN/P IN(STD)	= .96970
P IN/P IN(STD)	= .98610

ROTOR OUTLET TOTAL PRESSURE (5 POINTS)

RADIUS	PRESSURE
7.8710	20.6335
8.0010	20.9238
8.1210	21.7564
8.2510	21.7576
8.3710	20.7773

ROTOR OUTLET TOTAL TEMPERATURE (5 POINTS)

RADIUS	TEMPERATURE
7.8710	572.227
8.0010	572.272
8.1210	573.975
8.2510	574.431
8.3710	574.050

STAGE OUTLET TOTAL PRESSURES (5 POINTS)

RADIUS	MEAN PRES	PEAK PRES
7.8000	20.1302	20.6143
7.9500	20.3619	20.9809
8.1200	20.1487	20.7571
8.2800	20.2026	20.6904
8.4400	20.1297	20.4592

STAGE OUTLET TOTAL TEMPERATURES (5 POINTS)

RADIUS	TEMPERATURE
7.8000	573.697
7.9500	574.153
8.1200	575.339
8.2800	577.637
8.4400	573.322

STAGE OUTLET FLOW ANGLES (1 POINTS)

RADIUS	ANGLE
0.0000	0.000

CASING STATIC PRESSURES (14 POINTS)

X-COORD	PRESSURE
-2.0000	14.4017
-.2500	14.3657
0.0000	14.4173
.2510	14.7776
.5008	15.1334
.7500	15.6129
1.0010	15.8057
1.2510	15.9153
1.5008	16.5372
1.7500	16.8434
2.0000	16.3653
2.2510	15.5537
4.7250	17.7205
5.1510	17.7205

HUB STATIC PRESSURES (5 POINTS)

X-COORD	PRESSURE
-2.0000	14.4513
-.2500	14.3257
2.2500	16.3502
4.7250	17.6348
6.1810	17.6348

(5) DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR	MID ADD.DEVN.	DISTRIBUTION FACTOR	FRACTION TE BLOCKAGE
1	0.00000	1.0000	-0.000	-0.0000	-0.0000
2	0.00000	1.0000	-0.000	-0.0000	-0.0000
3	0.00000	1.0000	-0.000	-0.0000	-0.0000
4	0.00000	1.0000	-0.000	-0.0000	-0.0000
5	0.00000	.8000	.010	1.0000	.2000
6	.04100	.6000	.010	1.0000	.4000
7	.07300	.4000	.010	1.0000	.6000
8	.01000	.2000	.010	1.0000	.8000
9	.03600	0.0000	.010	1.0000	1.0000
10	.02000	0.0000	-0.000	-0.0000	-0.0000
11	.03000	1.0000	-0.000	-0.0000	-0.0000
12	.11000	1.0000	-0.000	-0.0000	-0.0000
13	.13000	1.0000	-0.000	-0.0000	-0.0000
14	.14000	1.0000	-0.000	-0.0000	-0.0000
15	.10000	1.0000	-0.000	-0.0000	-0.0000
16	.10000	1.0000	-0.000	-0.0000	-0.0000
17	.10000	1.0000	-0.000	-0.0000	-0.0000

(5) SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NMACH	0	0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0

NJUMP= 0

SECTION 6. INDIVIDUAL TEST INPUT DATA

a. EXCEPTIONS TO SECTION 1 DATA
(Indicated by (1))

Test Point Number	Exception (1)
212050109840	14.1590
212050213440	"
212050315040	"
212050415940	"
212050516240	"
212050616440	"
212050615050	14.1590
212050815750	"
212050916250	"
212051015050	"
212051114250	"
212051212250	"
212051415060	"
212051514360	"
212051612960	"
212051715560	"
212051815960	"
212051916360	"
212070215070	14.5035
212070314770	"
212070615070	"
212070715670	"
212070815970	"
212070916170	"
212071015080	14.5035
212071315080	"
212071415580	"
212071515980	"
301180915685	14.2208
301181015885	"
301180615085	"
301180815385	"
301181515590	14.2208
301181615790	"
301181715890	"
301181415290	"

301230615095	5.0097	15.0097	15.00	30.00
301230415395	"	"	"	"
301230515695	"	"	"	"
301231515600	5.0097	15.0097	15.00	30.00
301231615700	"	"	"	"
301231315200	"	"	"	"
301231415400	"	"	"	"
301240815302	"	"	"	"
301240915602	"	"	"	"

b. EXCEPTIONS TO SECTION 2 DATA
(Indicated by (2))

Test Point 212050109840

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212050213440

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212050315040

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212050415940

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 21205016240

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212050616440

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212050615050

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212050815750

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212050916250

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212051015050

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212051114250

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212051212250

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212051415060

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212051514360

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212051612960

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212051715560

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212051815960

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212051916360

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212070215070

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212070314770

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212070615070

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212070715670

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212070815970

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212070916170

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212071015080

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212071315080

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212071415580

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 212071515980

Station	NCALC	NDATA	NBL
4	1	15	1
5	4	15	1
6	0	0	1
7	1	10	1
8	3	10	1

Test Point 301180915685

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	1
6	0	0	1
7	1	10	2
8	3	10	1

Test Point 301181015885

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	1
6	0	0	1
7	1	10	2
8	3	10	1

Test Point 301180615085

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	1
6	0	0	1
7	1	10	2
8	3	10	1

Test Point 301180815385

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	1
6	0	0	1
7	1	10	2
8	3	10	1

Test Point 301181515590

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

Test Point 301181615790

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

Test Point 301181715890

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

Test Point 301181415290

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

Test Point 301230615095

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

Test Point 301230415395

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

Test Point 301230515695

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

Test Point 301231515600

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

Test Point 301231615700

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

Test Point 301231315200

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

Test Point 301231415400

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

Test Point 301240815?02

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

Test Point 301240915602

Station	NCALC	NDATA	NBL
4	1	15	0
5	4	15	0
6	0	0	0
7	1	10	0
8	3	10	0

c. EXCEPTIONS TO SECTION 3 DATA
(indicated by (3))

Test Point 212050109840

PSCALE = .50 PLOWER = 14.0 DAMP F = 6.00

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.08000	1.0000
6	.08000	1.0000
7	.08000	1.0000
8	.08000	1.0000
9	.08000	1.0000
10	.08000	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
MACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212050213440

PSCALE = .50 PLOWER = 14.0 DAMP F = 6.00

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.08000	1.0000
6	.09000	1.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	3	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212050315040

PSCALE = .50 PLOWER = 14.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.08000	1.0000
6	.09000	1.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	3	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212050415940

PSCALE = .50 PLOWER = 14.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.08000	1.0000
6	.09000	1.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212050516240

PSCALE = .50 PLOWER = 14.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.08000	1.0000
6	.09000	1.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212050616440

PSCALE = .50 PLOWER = 14.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.08000	1.0000
6	.05000	1.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
MACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212050615050

PSCALE = 1.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.08000	.5000
6	.08000	0.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
MACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212050815750

PSCALE = 1.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.08000	.5000
6	.08000	0.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
MACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212050916250

PSCALE = 1.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.08000	.5000
6	.08000	0.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
MACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212051015050

PSCALE = 1.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00001	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.08000	.5000
6	.08000	0.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
MACH	3	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212051114250

PSCALE = 1.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.08000	0.0000
6	.08000	0.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
MACH	3	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212051212250

PSCALE = 1.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	[illegible]	1.0000
2	[illegible]	1.0000
3	[illegible]	1.0000
4	[illegible]	1.0000
5	[illegible]	0.0000
6	[illegible]	0.0000
7	[illegible]	1.0000
8	[illegible]	1.0000
9	[illegible]	1.0000
10	[illegible]	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
AMACH	1	0	-0	-1	-0	-0	-1	-0	-0	-1

Test Point 212051415060

PSCALE = 1.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	[illegible]	1.0000
2	[illegible]	1.0000
3	[illegible]	1.0000
4	[illegible]	1.0000
5	[illegible]	0.0000
6	[illegible]	0.0000
7	[illegible]	1.0000
8	[illegible]	1.0000
9	[illegible]	1.0000
10	[illegible]	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
AMACH	1	0	-0	-1	-0	-1	-0	-0	-0	-1

Test Point 212051514360

PSCALE = 1.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.00000	0.0000
6	.08000	0.0000
7	.00000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	0	0	0	0	0	0	0	0

Test Point 212051612960

PSCALE = 1.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.00000	0.0000
6	.08000	0.0000
7	.00000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	0	0	0	0	0	0	0	0

Test Point 212051715560

PSCALE = 1.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.00000	0.0000
6	.08000	0.0000
7	.00000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
MACH	0	0	0	0	0	0	0	0	0	0

Test Point 212051815960

PSCALE = 1.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.00000	0.0000
6	.08000	0.0000
7	.00000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
MACH	0	0	0	0	0	0	0	0	0	0

Test Point 212051916360

PSCALE = 1.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.08000	0.0000
6	.08000	0.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212070215070

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.08000	0.0000
6	.08000	0.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212070314770

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.08000	0.0000
6	.00000	0.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
MACH	2	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212070615070

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.08000	0.0000
6	.08000	0.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
MACH	2	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212070715670

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.08000	1.0000
6	.08000	1.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212070815970

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.08000	1.0000
6	.08000	1.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212070916170

PSCALE = 2.0 PLOWE. · 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.0.000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00005	1.0000
5	.08000	0.0000
6	.00000	0.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	3	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212071015080

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.0.000	1.0000
2	0.00000	1.0000
3	0.0.000	1.0.00
4	0.00000	1.0000
5	.0000	0.0000
6	.08000	0.0000
7	.08000	1.0000
8	.05400	1.0000
9	.0540.	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	3	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212071315080

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.08000	0.0000
6	.08000	0.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	1	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212071415580

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.08000	0.0000
6	.08000	0.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	1	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 212071515980

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 6.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	[illegible]	1.0000
2	[illegible]	1.0000
3	[illegible]	1.0000
4	[illegible]	1.0000
5	.08000	0.0000
6	.08000	0.0000
7	.08000	1.0000
8	.05400	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 30180615085

PSCALE = 4.0 PLOWER = 12.0 DAMP F = 4.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.05000	0.0000
6	.05000	0.0000
7	.05000	1.0000
8	.07000	1.0000
9	.07000	1.0000
10	.07600	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	-0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 30180815385

PSCALE = 4.0 PLOWER = 12.0 DAMP F = 4.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.05000	0.0000
6	.05000	0.0000
7	.05000	1.0000
8	.07000	1.0000
9	.07000	1.0000
10	.07000	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
MACH	0	-0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301180915685

PSCALE = 4.0 PLOWER = 12.0 DAMP F = 4.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.05000	0.0000
6	.05000	0.0000
7	.05000	1.0000
8	.07000	1.0000
9	.07000	1.0000
10	.07000	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
MACH	0	-0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 30118105885

PSCALE = 4.0 PLOWER = 12.0 DAMP F = 4.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.03000	0.0000
6	.03000	0.0000
7	.05400	1.0000
8	.07000	1.0000
9	.07000	1.0000
10	.07000	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
MMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301181415290

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.03750	0.0000
6	.03750	0.0000
7	.07500	1.0000
8	.27000	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
MMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301181515590

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 5.0

CISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.03750	0.0000
6	.03750	0.0000
7	.07500	1.0000
8	.26000	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
MACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301181615790

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.03750	0.0000
6	.03750	0.0000
7	.07500	1.0000
8	.25000	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
MACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301181715890

PSCALE = 2.0 PLOWER = 13.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.03750	0.0000
6	.03750	0.0000
7	.07500	1.0000
8	.24000	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
MACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301230415395

PSCALE = 2.5 PLOWER = 13.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.03750	0.0000
6	.03750	0.0000
7	.07500	1.0000
8	.24000	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
MACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301230515695

PSCALE = 2.5 PLOWER = 13.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.05000	0.0000
6	.05000	0.0000
7	.10000	1.0000
8	.25000	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301230615095

PSCALE = 2.5 PLOWER = 13.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.03750	0.0000
6	.03750	0.0000
7	.07500	1.0000
8	.26500	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301231315200

PSCALE = 4.0 PLOWER = 12.0 DAMP F = 4.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.010000	1.0000
2	0.000000	1.0000
3	0.000000	1.0000
4	0.000000	1.0000
5	.011750	0.0000
6	.063750	0.0000
7	.077500	1.0000
8	.200000	1.0000
9	.050000	1.0000
10	.000000	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	-0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301231415400

PSCALE = 4.0 PLOWER = 12.0 DAMP F = 4.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.000000	1.0000
2	0.000000	1.0000
3	0.000000	1.0000
4	0.000000	1.0000
5	.011750	0.0000
6	.063750	0.0000
7	.100000	1.0000
8	.200000	1.0000
9	.050000	1.0000
10	.000000	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
NMACH	0	-0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301231515600

PSCALE = 4.0 PLOWER = 12.0 DAMP F = 4.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.05000	0.0000
6	.05000	0.0000
7	.10000	1.0000
8	.26000	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
MACH	0	-0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301231615700

PSCALE = 4.0 PLOWER = 12.0 DAMP F = 4.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.05000	0.0000
6	.05000	0.0000
7	.10000	1.0000
8	.26000	1.0000
9	.05400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
MACH	0	-0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301240815302

PSCALE = 4.0 PLOWER = 12.0 DAMP F = 4.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.05000	0.0000
6	.05000	0.0000
7	.07500	1.0000
8	.26000	1.0000
9	.03400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
MACH	0	-0	-0	-0	-0	-0	-0	-0	-0	-0

Test Point 301240915602

PSCALE = 4.0 PLOWER =12.0 DAMP F = 4.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR
1	0.00000	1.0000
2	0.00000	1.0000
3	0.00000	1.0000
4	0.00000	1.0000
5	.03750	0.0000
6	.03750	0.0000
7	.07500	1.0000
8	.26000	1.0000
9	.03400	1.0000
10	.05400	1.0000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10
MACH	0	-0	-0	-0	-0	-0	-0	-0	-0	-0

d. EXCEPTIONS TO SECTION 4 DATA
(Indicated by (4))

Test Point 212050315040

Station	NCALC	NDATA	NBL
5	2	15	3
6	2	151	3
7	2	15	3
8	2	15	3
9	2	15	3

OUTLET RADIUS = 7.9433

T-COORD	DEVIATION ANGLE (DEGREES)
.2000	-3.0000
.4000	-8.7200
.6000	-9.3000
.8000	-8.0000

OUTLET RADIUS = 8.0331

T-COORD	DEVIATION ANGLE (DEGREES)
.2000	-7.3000
.4000	-7.2000
.6000	-7.1000
.8000	-7.3000

OUTLET RADIUS = 8.0233

T-COORD	DEVIATION ANGLE (DEGREES)
.2000	-8.0000
.4000	-9.0000
.6000	-10.2000
.8000	-11.2000

Test Point 212050615050

Station	NCALC	NDATA	NBL
5	2	15	3
6	2	15	3
7	2	15	3
8	2	15	3
9	2	15	3

OUTLET RADIUS = 7.5499

1-COORD	DEVIATION ANGLE (DEGREES)
.2000	-9.0000
.4000	-8.7000
.6000	-8.3000
.8000	-8.0000

OUTLET RADIUS = 8.0331

1-COORD	DEVIATION ANGLE (DEGREES)
.2000	-7.3000
.4000	-7.2000
.6000	-7.1000
.8000	-7.0000

OUTLET RADIUS = 8.0999

1-COORD	DEVIATION ANGLE (DEGREES)
.2000	-8.0000
.4000	-9.1000
.6000	-10.2000
.8000	-11.2000

Test Point 212051715560

Station	NCALC	NDATA	NBL
5	2	15	3
6	2	15	3
7	2	15	3
8	2	15	3
9	2	15	3

OUTLET RADIUS = 7.5499

1-COORD	DEVIATION ANGLE (DEGREES)
.2000	-8.8000
.4000	-7.9200
.6000	-7.1000
.8000	-6.2000

OUTLET RADIUS = 8.0235

1-COORD	DEVIATION ANGLE (DEGREES)
.2000	-7.4000
.4000	-7.1000
.6000	-6.8000
.8000	-5.4600

OUTLET RADIUS = 8.6599

1-COORD	DEVIATION ANGLE (DEGREES)
.2000	-7.7500
.4000	-9.0500
.6000	-10.3500
.8000	-11.6500

Test Point 212070815970

Station	NCALC	NDATA	NBL
5	2	15	3
6	2	15	3
7	2	15	3
8	2	15	3
9	4	15	3

OUTLET RADIUS = 7.5499

1-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.1750
.4000	-5.4200
.8000	-4.7700

OUTLET RADIUS = 7.7343

1-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.0750
.4000	-4.5420
.8000	-4.7060

OUTLET RADIUS = 7.9385

1-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.1000
.4000	-4.2030
.8000	-4.6500

OUTLET RADIUS = 8.1319

1-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.3750
.4000	-5.7420
.8000	-6.5890

OUTLET RADIUS = 8.6599

1-COORD	DEVIATION ANGLE (DEGREES)
.2000	-7.3250
.4000	-12.3300
.8000	-25.0850

Test Point 212071515980

Station	NCALC	NDATA	NBL
5	2	15	3
6	2	15	3
7	2	15	3
8	2	15	3
9	4	15	3

OUTLET RADIUS = 7.5499

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.1750
.4000	-5.4200
.8000	-4.7700

OUTLET RADIUS = 7.7343

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.0750
.4000	-4.5420
.8000	-4.7060

OUTLET RADIUS = 7.9385

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.1000
.4000	-4.2030
.8000	-4.6500

OUTLET RADIUS = 8.1919

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.3750
.4000	-5.7420
.8000	-6.5890

OUTLET RADIUS = 8.6399

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.3250
.4000	-12.3300
.8000	-25.0850

Test Point 301181015885

Station	NCALC	NDATA	NBL
5	2	15	3
6	2	15	3
7	2	15	3
8	2	15	3
9	4	15	0

OUTLET RADIUS = 7.5499

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-6.1750
.4000	-5.4200
.8000	-4.7700

OUTLET RADIUS = 7.7343

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.4750
.4000	-4.5420
.8000	-4.7060

OUTLET RADIUS = 7.9385

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.1000
.4000	-4.2030
.8000	-4.6500

OUTLET RADIUS = 8.1919

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.3750
.4000	-5.7420
.8000	-6.5890

OUTLET RADIUS = 8.6699

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-7.3250
.4000	-12.3300
.8000	-25.0850

Test Point 301181715890

Station	NCALC	NDATA	NBL
5	2	15	0
6	2	15	3
7	2	15	3
8	2	15	3
9	4	15	0

OUTLET RADIUS = 7.5439

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-6.1750
.4000	-5.4200
.8000	-4.7700

OUTLET RADIUS = 7.7343

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.4750
.4000	-4.5420
.8000	-4.7060

OUTLET RADIUS = 7.9385

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.1000
.4000	-4.2030
.8000	-4.6500

OUTLET RADIUS = 8.1319

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.3750
.4000	-5.7420
.8000	-6.5890

OUTLET RADIUS = 8.6699

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-7.3250
.4000	-12.3300
.8000	-25.0850

Test Point 301230515695

Station	NCALC	NDATA	NBL
5	2	15	0
6	2	15	0
7	2	15	3
8	2	15	3
9	4	15	0

OUTLET RADIUS = 7.5499

1-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.3750
.4000	-5.4200
.8000	-4.7700

OUTLET RADIUS = 7.7343

1-COORD	DEVIATION ANGLE (DEGREES)
.2000	-4.6750
.4000	-4.5420
.8000	-4.7060

OUTLET RADIUS = 7.9385

1-COORD	DEVIATION ANGLE (DEGREES)
.2000	-4.5000
.4000	-4.2030
.8000	-4.6500

OUTLET RADIUS = 8.1319

1-COORD	DEVIATION ANGLE (DEGREES)
.2000	-4.5750
.4000	-5.7420
.8000	-6.5890

OUTLET RADIUS = 8.6599

1-COORD	DEVIATION ANGLE (DEGREES)
.2000	-6.5250
.4000	-12.3300
.8000	-25.0850

Test Point 301231615700

Station	NCALC	NDATA	NBL
5	2	15	0
6	2	15	0
7	2	15	3
8	2	15	3
9	4	15	0

OUTLET RADIUS = 7.5499

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-4.7640
.4000	-5.2750
.8000	-4.7700

OUTLET RADIUS = 7.7343

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-4.0730
.4000	-4.3750
.8000	-4.7060

OUTLET RADIUS = 7.9385

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-3.9700
.4000	-4.1500
.8000	-4.6500

OUTLET RADIUS = 8.1919

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-3.9600
.4000	-5.3750
.8000	-6.5690

OUTLET RADIUS = 8.6699

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.7160
.4000	-11.7500
.8000	-24.0850

Test Point 301240915602

Station	NCALC	NDATA	NBL
5	2	15	3
6	2	15	3
7	2	15	3
8	2	15	3
9	4	15	0

OUTLET RADIUS = 7.5499

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.1750
.4000	-5.4200
.8000	-4.7700

OUTLET RADIUS = 7.7343

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.0750
.4000	-4.5420
.8000	-4.7060

OUTLET RADIUS = 7.9335

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.1000
.4000	-4.2030
.8000	-4.6500

OUTLET RADIUS = 8.1919

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.3750
.4000	-5.7420
.8000	-6.5890

OUTLET RADIUS = 8.6599

M-COORD	DEVIATION ANGLE (DEGREES)
.2000	-5.3250
.4000	-12.3300
.8000	-25.0850

e. EXCEPTIONS TO SECTION 5 DATA
(indicated by (5))

Test Point 212050315040

PSCALE = 1.0 PLOWER = 14.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR	MID ADD.DEVN.
1	0.00000	1.0000	-0.000
2	0.00000	1.0000	-0.000
3	0.00000	1.0000	-0.000
4	0.00000	1.0000	-0.000
5	.00380	.8000	.010
6	.00700	.6000	.010
7	.01000	.4000	.010
8	.01400	.2000	.010
9	.01800	0.0000	.010
10	.03500	0.0000	-0.000
11	.03000	1.0000	-0.000
12	.05000	1.0000	-0.000
13	.07000	1.0000	-0.000
14	.05000	1.0000	-0.000
15	.10000	1.0000	-0.000
16	.10000	1.0000	-0.000
17	.10000	1.0000	-0.000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MACH	0	0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0

Test Point 212050615050

PSCALE = 1.0 PLOWER = 14.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR	MID ADD.DEVN.
1	0.00000	1.0000	-0.000
2	0.00000	1.0000	-0.000
3	0.00000	1.0000	-0.000
4	0.00000	1.0000	-0.000
5	.00400	.8000	.010
6	.00800	.6000	.010
7	.01200	.4000	.010
8	.01600	.2000	.010
9	.02100	0.0000	.010
10	.03000	0.0000	-0.000
11	.03000	1.0000	-0.000
12	.05000	1.0000	-0.000
13	.07000	1.0000	-0.000
14	.08000	1.0000	-0.000
15	.10000	1.0000	-0.000
16	.10000	1.0000	-0.000
17	.10000	1.0000	-0.000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NMACH	0	0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0

Test Point 212051715560

PSCALE = 1.0 PLOWER = 14.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR	MID ADD.DEVN.
1	0.00000	1.0000	-0.000
2	0.00000	1.0000	-0.000
3	0.00000	1.0000	-0.000
4	0.00000	1.0000	-0.000
5	.01000	.8000	.010
6	.02000	.6000	.010
7	.03100	.4000	.010
8	.04100	.2000	.010
9	.05100	0.0000	.010
10	.03000	0.0000	-0.000
11	.03000	1.0000	-0.000
12	.05000	1.0000	-0.000
13	.07000	1.0000	-0.000
14	.08000	1.0000	-0.000
15	.10000	1.0000	-0.000
16	.10000	1.0000	-0.000
17	.10000	1.0000	-0.000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NMACH	0	0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0

Test Point 2120/0810 67

PSCALE = 2.5 PLOWER = 12.5 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR	MID ADD.DEVN.
1	0.10000	1.0000	-0.000
2	0.10000	1.0000	-0.000
3	0.10000	1.0000	-0.000
4	0.10000	1.0000	-0.000
5	0.10000	.8000	.010
6	.08000	.6000	.010
7	.06000	.4000	.010
8	.04000	.2000	.010
9	.02000	0.0000	.010
10	.00000	0.0000	-0.000
11	.00000	1.0000	-0.000
12	.10000	1.0000	-0.000
13	.10000	1.0000	-0.000
14	.10000	1.0000	-0.000
15	.10000	1.0000	-0.000
16	.10000	1.0000	-0.000
17	.10000	1.0000	-0.000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MACH	0	0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0

Test Point 2120/0810 68

PSCALE = 2.5 PLOWER = 12.5 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR	MID ADD.DEVN.
1	0.10000	1.0000	-0.000
2	0.10000	1.0000	-0.000
3	0.10000	1.0000	-0.000
4	0.10000	1.0000	-0.000
5	0.10000	.8000	.010
6	.08000	.6000	.010
7	.06000	.4000	.010
8	.04000	.2000	.010
9	.02000	0.0000	.010
10	.00000	0.0000	-0.000
11	.00000	1.0000	-0.000
12	.10000	1.0000	-0.000
13	.10000	1.0000	-0.000
14	.10000	1.0000	-0.000
15	.10000	1.0000	-0.000
16	.10000	1.0000	-0.000
17	.10000	1.0000	-0.000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MACH	0	0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0

Test Point 301181015885

PSCALE = 3.0 PLOWER = 12.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR	MID ADD.DEVN.
1	0.00000	1.0000	-0.000
2	0.00000	1.0000	-0.000
3	0.00000	1.0000	-0.000
4	0.00000	1.0000	-0.000
5	0.00000	.8000	.010
6	.00100	.6000	.010
7	.00300	.4000	.010
8	.01000	.2000	.010
9	.05500	0.0000	.010
10	.02000	0.0000	-0.000
11	.03000	1.0000	-0.000
12	.11000	1.0000	-0.000
13	.13000	1.0000	-0.000
14	.14000	1.0000	-0.000
15	.10000	1.0000	-0.000
16	.10000	1.0000	-0.000
17	.10000	1.0000	-0.000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MACH	0	0	-0	-0	1	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0

Test Point 301181715890

PSCALE = 3.0 PLOWER = 12.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR	MID ADD.DEVN.
1	0.00000	1.0000	-0.000
2	0.00000	1.0000	-0.000
3	0.00000	1.0000	-0.000
4	0.00000	1.0000	-0.000
5	0.00000	.8000	.010
6	.00100	.6000	.010
7	.00300	.4000	.010
8	.01000	.2000	.010
9	.05500	0.0000	.010
10	.02000	0.0000	-0.000
11	.03000	1.0000	-0.000
12	.11000	1.0000	-0.000
13	.13000	1.0000	-0.000
14	.14000	1.0000	-0.000
15	.10000	1.0000	-0.000
16	.10000	1.0000	-0.000
17	.10000	1.0000	-0.000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MACH	0	0	-0	-0	1	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0

Test Point 301?30515695

PSCALE = 4.0 PLOWER = 12.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR	MID ADD.DEVN.
1	0.00000	1.0000	-0.000
2	0.00000	1.0000	-0.000
3	0.00000	1.0000	-0.000
4	0.00000	1.0000	-0.000
5	0.00000	.5000	.010
6	.00110	.5000	.010
7	.00300	.4000	.010
8	.01000	.2000	.010
9	.05500	0.0000	.010
10	.02000	0.0000	-0.000
11	.03000	1.0000	-0.000
12	.11000	1.0000	-0.000
13	.15000	1.0000	-0.000
14	.14000	1.0000	-0.000
15	.10000	1.0000	-0.000
16	.10000	1.0000	-0.000
17	.10000	1.0000	-0.000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MACH	0	0	-0	-0	1	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0

Test Point 301?31615700

PSCALE = 4.0 PLOWER = 12.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR	MID ADD.DEVN.
1	0.00000	1.0000	-0.000
2	0.00000	1.0000	-0.000
3	0.00000	1.0000	-0.000
4	0.00000	1.0000	-0.000
5	0.00000	.5000	.010
6	.00100	.5000	.010
7	.00300	.4000	.010
8	.01000	.2000	.010
9	.05500	0.0000	.010
10	.02000	0.0000	-0.000
11	.03000	1.0000	-0.000
12	.13000	1.0000	-0.000
13	.15000	1.0000	-0.000
14	.17000	1.0000	-0.000
15	.10000	1.0000	-0.000
16	.10000	1.0000	-0.000
17	.10000	1.0000	-0.000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MACH	0	0	-0	-0	1	1	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0

Test Point 301240915602

PSCALE = 4.0 PLOWER = 12.0 DAMP F = 5.0

DISTRIBUTED BLOCKAGE SPECIFICATION

STATION	BLOCKAGE	DISTRIBUTION FACTOR	MID ADD.DEVN.
1	0.00000	1.0000	-0.000
2	0.00000	1.0000	-0.000
3	0.00000	1.0000	-0.000
4	0.00000	1.0000	-0.000
5	0.00000	.8000	.010
6	.00100	.6000	.010
7	.00300	.4000	.010
8	.01000	.2000	.010
9	.03600	0.0000	.010
10	.02000	0.0000	-0.000
11	.03000	1.0000	-0.000
12	.11000	1.0000	-0.000
13	.13000	1.0000	-0.000
14	.14000	1.0000	-0.000
15	.10000	1.0000	-0.000
16	.10000	1.0000	-0.000
17	.10000	1.0000	-0.000

SOLUTION TYPE INDICATORS

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NMACH	0	0	-0	-0	1	1	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0

APPENDIX C

ADDITIONAL CALCOMP PLOTTING ROUTINE LISTINGS

This appendix contains the program listing for the DEVIL'T and STAPLOT plotting routines. Section 1 contains the input format and program listing for DEVILOT. Section 2 contains the input format and program listing for STAPLOT.

SECTION C1. DEVPLOT PROGRAM

a. DEVPLT INPUT DATA FORMAT

In the following chart, one line corresponds to one card except where noted. Values in parentheses indicate the input format for the corresponding variable.

NCASE	(I)	NPLOT	(I6)	
NPTS	(I)	NPTNUM	(I6)	
XX...XX	(F1.*)	XX (F1.8) R (F11.8	Repeat NPTS Times	Repeat NCase Times
* .. (I6)		..I (I6)		

b. DEFINITION OF INPUT DATA ITEMS

NCASE	Number of Cases (Speed Points) to be Plotted
NPLOT	Plotting Option. NPLOT = 1, Plots will be made. NPLOT = 0, No plots will be made.
NPTNUM	Test Point Identification (Percent Design Speed)
NPTS	Number of Input Deviation Angles to be Plotted for each NPTNUM. (Including Streamline, Computing Station and Corresponding Deviation Angle)
DEVANG	Deviation angle
XX	Normalized Axial Distance
R	Radial Distance
II	Computing Station Number Corresponding to Phase II Calculations
SS	Streamline Number Corresponding to Phase II Calculations

* Continuation of previous line.

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c. PROGRAM LISTING

```
      PROGRAM DEVPLOT(INPUT,OUTPUT,PLOT)
      DIMENSION DEVSGN(10,3),XX2(10,3),R(10,3),II(10,3),JJ(10,3)
      READ 10,NCASE,NPLOT
   10 FORMAT (2I6)
      PRINT 20,NCASE,NPLOT
   20 FORMAT (1H1,10X,26HROTOR THRU-BLADE DEVIATION,//,10X,17HNUMBER OF
     1CASES =,I3,//,10X,7HNPLOT =,I2)
      M=1
   30 READ 40,NSPEED,NPOINTS
   40 FORMAT (2I6)
      PRINT 50,NSPEED,NPOINTS
   50 FORMAT (1H1,10X,12HTEST SPEED =,I4,1H%,//,10X,23HNUMBER OF DATA PO
     1INTS =,I3,/,2X)
      READ 60,((DEVSGN(I,J),XX2(I,J),R(I,J),II(I,J),JJ(I,J),J=1,3),I=1,6
     1)
   60 FORMAT (3F12.8,2I6)
      PRINT 70
   70 FORMAT(//,22X,10HNORMALIZED,/,11X,7HSTATION,2X,14HAXIAL DISTANCE,1
     1X,9HDEVIATION,2X,10HSTREAMLINE,3X,6HRADIUS,/,2X)
      DO 80 J=1,3
      DO 80 I=1,5
   80 XX2(I,J)=XX2(I,J)/2.0
      DO 100 J=1,3
      DO 100 I=1,5
      PRINT 90, II(I,J),XX2(I,J),DEVSGN(I,J),JJ(I,J),R(I,J)
   90 FORMAT (10X,I6,3X,F10.2,4X,F10.4,3X,I6,3X,F10.4)
  100 CONTINUE
      IF(NPLOT.EQ.0)GO TO 150
      CALL PLOT(0.0,-12.0,-3)
      CALL PLOT(3.0,2.0,-3)
      CALL AXIS(0.,0.,25HNORMALIZED AXIAL DISTANCE,-25,5.,0.,0.,.2)
      CALL AXIS(0.,0.,25HROTOR INCIDENCE/DEVIATION,25,7.,90.,0.,5.)
      FPN=NSPEED
      CALL NUMBER(3.0,6.25,.25,FPN,0.,-1)
      CALL SYMBOL(1.0,6.2,.105,0,0.,-1)
      CALL SYMBOL(1.30,6.25,.125,3HHUB,0.,3)
      CALL SYMBOL(1.0,6.1,.105,1,0.,-1)
      CALL SYMBOL(1.30,6.05,.125,3HMID,0.,3)
      CALL SYMBOL(1.0,5.7,.105,2,0.,-1)
      CALL SYMBOL(1.30,5.65,.125,3HTIP,0.,3)
      DO 110 J=1,3
      XX2(7,J)=0.0
      XX2(8,J)=0.2
      DEVSGN(7,J)=0.0
      DEVSGN(8,J)=5.0
      L=J-1
  110 CALL LINE(XX2(1,J),DEVSGN(1,J),6,1,1,L)
      CALL PLOT(8.,0.,-3)
```

```
150 CONTINUE
    IF(M.EQ.NCASE)GO TO 170
    M=M+1
    GO TO 30
170 CONTINUE
    CALL PLOTE
    END
```

SECTION C2. STAPLOT PROGRAM

a. STAPLOT INPUT DATA FORMAT

In the following chart, one line corresponds to one card. Values in parentheses indicate the input format for the corresponding variable.

NCASE (I6) NPLOT (I6)

NTITLE (11?)

NPSPTS (I6)

PDIST (F10.0) PSP (F10.0) } Occurs NPSPTS Times

PDIST (NPPT) (F10.0) PSP (NPPT) (F10.0)

PDIST (NPPTS) (F10.0) PSP (NPPTS) (F10.0)

} Occurs NCASE Times

NSSPTS (I6)

SDIST (F10.0) SSP (F10.0) } Occurs NSSPTS Times

SDIST (NPPT) (F10.0) SSP (NPPT) (F10.0)

SDIST (NPPTS) (F10.0) SSP (NPPTS) (F10.0)

I. DEFINITION OF INPUT DATA ITEMS

NCASE	Number of Test Point Cases to be run (Each requires a separate input data set).
NPLOT	Plotting Option. NPLOT = 1, Plots will be made. NPLOT = 0, No plots will be made.
NAFILE	12 Digit Test Point Identification Number for each NCASE.
NPSPTS	Number of Pressure Surface Static Pressure Readings to be Input for each NCASE.
PDIST	Chord Distance from Leading Edge (On chosen radius) of each Pressure Tap on Pressure Surface.
PSP	Pressure Surface Static Pressure at each PDIST.
SDIST	Same as PDIST, except for Suction Surface Pressure Taps.
SSP	Suction Surface Static Pressure at each SDIST.
NSSPTS	Same as NPSPTS except for Suction Surface.
NPPT	(NPSPTS + 1) Array Location for Starting Value of Static Pressure Axis (YAXIS).
NPPTS	(NPSPTS + 2) Array Location Pressure/in value for Pressure Axis (YAXIS).
NSPT	(NSSPTS + 1) Same as NPPT.
NSPTS	(NSSPTS + 2) Same as NPPTS.
PLOT(NPPT)	Starting Value of Percent Chord Axis (X AXIS).
PLOT(NPPTS)	Percent Chord/in value for X Axis.
PLOT(NSPT)	Same as PDIST(NPPT).
PLOT(NSPTS)	Same as PDIST(NPPTS).
PLOT(NPPT)	Starting Value of Static Pressure Axis.

PSP(NPPTS)	Pressure/in Value for Static Pressure Axis.
SSP(NPPT)	Same as PSP (NPPT)
SSP(NPPTS)	Same as PSP(NPPTS)

c. PROGRAM LISTING

```
      PROGRAM STAPLOT(INPUT,OUTPUT,PLOT)
      DIMENSION PDIST(400),PSP(400),SSP(400),SDIST(400)
      READ 10,NCASE,NPLOT
   10 FORMAT(2I12)
      PRINT 20,NCASE,NPLOT
   20 FORMAT (1H1,10X,31HSTATOR SURFACE STATIC PRESSURES,//, 9X,17HNUMBE
     1R OF CASES =,I3,//,9X, 7HNPLOT =,I3)
      I=1
   30 READ 40,NTITLE
   40 FORMAT (I12)
      PRINT 50,NTITLE
   50 FORMAT (1H1,//,20X,18HTEST POINT NUMBER ,I12)
      READ 60,NPSPTS
   60 FORMAT (I12)
      J=NPSPTS+2
      READ 70,(PDIST(K),PSP(K),K=1,J)
   70 FORMAT (F10.2,F10.3)
      DO 80 L=1,NPSPTS
   80 PDIST(L)=(((PDIST(L)-2.93)/1.795)*100.0)
      PRINT 90,(PDIST(K),PSP(K),K=1,NPSPTS)
   90 FORMAT (///,24X,22HSTATIC PRESSURE (PSIA),//,27X,16HPRESSURE SURFA
     1CE,//,18X,13HPERCENT CHORD,10X,8HPRESSURE,//,(17X,F10.2,11X,F10.3)
     2)
      READ 100,NSSPTS
  100 FORMAT (I12)
      J=NSSPTS+2
      READ 110,(SDIST(K),SSP(K),K=1,J)
  110 FORMAT (2F10.3)
      DO 120 L=1,NSSPTS
  120 SDIST(L)=(((SDIST(L)-2.93)/1.795)*100.0)
      PRINT 130,(SDIST(K),SSP(K),K=1,NSSPTS)
  130 FORMAT(///,28X,15HSUCTION SURFACE,//,18X,13HPERCENT CHORD,10X,8HPR
     1ESSURE,//,(17X,F10.2,11X,F10.3))
      IF(1-NPLOT)150,140,150
  140 CONTINUE
      NPPT=NPSPTS+1
      NPPTS=NPSPTS+2
      NSPT=NSSPTS+1
      NSPTS=NSSPTS+2
      CALL PLOT(0.0,-12.0,-3)
      CALL PLOT(3.0,2.0,-3)
      CALL AXIS(0.,0.,13HPERCENT CHORD,-13,5.,0.,PDIST(NPPT),PDIST(NPPTS
     1))
      CALL AXIS(0.,0.,15HPRESSURE (PSIA),15,5.,90.,PSP(NPPT),PSP(NPPTS))
      CALL LINE(PDIST,PSP,NPSPTS,1,1,0)
      CALL LINE(SDIST,SSP,NSSPTS,1,1,4)
      FPN=NTITLE
      CALL NUMBER(1.8,6.25,.2,FPN,0.,-1)
```

```
      CALL SYMBOL(1.5,5.8,.105,0,0.,-1)
      CALL SYMBOL(1.8,5.74,.125,16HPRESSURE SURFACE,0.,16)
      CALL SYMBOL(1.5,5.48,.105,4,0.,-1)
      CALL SYMBOL(1.8,5.42,.125,15HSUCTION SURFACE,0.,15)
      CALL SYMBOL(1.5,5.16,.105,0,0.,-1)
      CALL SYMBOL(1.5,5.16,.105,4,0.,-1)
      CALL SYMBOL(1.8,5.10,.125,17HCALCULATED VALUES,0.,17)
      CALL SYMBOL(1.8,4.90,.125,24HLEADING & TRAILING EDGES,0.,24)
      CALL PLOT(6.,0.,-3)
  150 CONTINUE
      IF (I-NCASE)160,170,170
  160 I=I+1
      GO TO 30
  170 CONTINUE
      CALL PLOTE
      END
```

APPENDIX D

RAW EXPERIMENTAL DATA

This appendix presents a listing of the experimental data after being dumped from magnetic tape onto computer cards. The first two ten-character "words" of each test contain the test identification number.

TEST I.D. NUMBER 212050213440

```
0000000212 050213440000CC0005E 0+0003626E0000060057 0+0005E86ECC00000058 0+0016756E
0000000059 0+0000106E000CC00060 0+0002026E00000061 0+0002496ECC0000062 0+0002516E
0000000063 0+0002526E000CC0006A 0+001029EE0000000065 0+001027ECC0000066 0+0009576E
0000000067 0+0009026E000CC0006E 0+000959E00000000069 0+0009556ECC0000070 0+0009346E
0000000071 0+0009056E000CC00072 0+000946E00000000073 0+0009436ECC0000074 0+0010266E
0000000075 0+0010396E000CC00076 0+0009776ECC0000077 0+0016216E000000007B 0+0010B26E
0000000079 0+0010756E000000000080 0+000334EE0000000081 0+0010446ECC0000082 0+0009956E
0000000083 0+001016EE000CC0006A 0+0003326E0000000085 0+0009786ECC0000086 0+0009766E
0000000087 0+0009886E000CC00088 0+0009B86E0000000089 0+0009296ECC0000090 0+0014356E
0000000091 0+0009906E000CC00092 0+0009416E0000000093 0+0009E76ECC0000094 0+0009416E
0000000095 0+0418376E000CC00096 0+0010046E0000000097 0+0009716ECC0C00009B 0+0009916E
0000000099 0F0005033000CC0001C1 0+0170366E000000C201 0+0179E96ECCCC000301 0-0073036E
0000000401 0+0014526E000C0001C3 0+016B426E0000000203 0+0173996ECCCC000303 0-0073036E
0000000403 0+0013896E000CC001C5 0+0170336E0000000205 0+0178916ECCCC000305 0-0074E16E
0000000405 0+0011916E000CC001C7 0+0162936E000000C207 0+0171C16ECCCC000307 0-0071E36E
0000000407 0+0015056E000CC001C9 0+0153796E0000000209 0+0172256ECCCC000309 0-0078436E
0000000409 0+0012836E000CC00111 0+0159346E0000000211 0+0175566E0000000311 0-0060906E
0000000411 0+0014386E000CC00113 0+0153996E0000000213 0+01EEE86ECCCC000313 0-0060806E
0000000413 0+0013706E000CC00115 0+01E0776E0000000215 0+01E0946ECCCC000315 0-0060B56E
0000000419 0+0011646E000000C117 0+01C3346E0000000217 0+01E0356E0000000317 0-0060936E
0000000417 0+0014926E000CC00119 0+01E963EE0000000219 0+01E037ECCCC000319 0-0060966E
0000000419 0+0012596E000CC00121 0+01E3516E0000000221 0+0181296ECCCC000321 0-0061036E
0000000421 0+0015226E000CC00123 0+01E679EE0000000223 0+0179E96ECCCC000323 0-0061296E
0000000423 0+0014806E000CC00125 0+0171C56E0000000225 0+0185936ECCCC000325 0-0061226E
0000000425 0+0012146E000CC00127 0+017430EE0000000227 0+0185E6ECCCC000327 0-0061186E
0000000427 0+0015706E000CC00129 0+0175326E0000000229 0+0186796ECCCC000329 0-0061386E
0000000429 0+0013946E000CC00131 0+0135216E0000000231 0+0184E6ECCCC000331 0-0061746E
0000000431 0+0015356E000CC00133 0+C1293E6E0000000233 0+0183576ECCCC000333 0-0061846E
0000000433 0+0015056E000CC00135 0+0135936E0000000235 0+0184796ECCCC000335 0-0064076E
0000000433 0+0012156E000CC00137 0+0143846E0000000237 0+0186326ECCCC000337 0-0061386E
0000000437 0+0012246E000CC00139 0+0157576E0000000239 0+0185E76ECCCC000339 0-0064436E
0000000439 0+0013516E000CC001A1 0+0170716E0000000241 0+0175106ECCCC000341 0-0073826E
0000000441 0+0003446E000CC00143 0+0170726E0000000243 0+0175096ECCCC000343 0-0073826E
0000000443 0+0003936E000CC00145 0+0356796E0000000245 0+03E635ECCCC000345 0-0083E36E
0000000445 0+0073956E000CC00147 0+0535626E0000000247 0+0551666ECCCC000347 0+0062946E
0000000447 0+0141196E
```

TEST I.C. NUMBER 212050315040

```
0000000212 0+0031b0+000C0C00056 C+0010020C0000000057 0+00C387EC00000058 0+00168+6
0000000053 0+0000039c0300C00063 C+0002b5bc0000000061 0+0002916C00000062 0+00025ZE
0000000063 0+0002+16900000C0064 C+001100b000000C0065 0+001C23EC00000066 0+0010C3E
0000000067 0+0013346000000C0068 0+00101+E000000C0069 0+001CC5EC00000070 0+0009806
0000000071 0+0004L3E0000C000072 C+0011+5E000000C0073 0+0009734C00000074 0+00109+E
0000000075 0+0011136000C0C00076 C+000993E000000C0077 0+0C1C616C00000078 0+001133E
0000000079 0+0011?5E000000C0080 C+0010836000000C0081 0+0011C5EC00000082 0+0010276
0000000083 0+0019386000000C0084 0+0009b+6000000C0085 0+0C1C42EC00000086 0+0010c+E
0000000087 0+0010+36000000C0088 C+0013E5E000000C0089 0+0009876C00000090 0-0029226
0000000091 0+0010-3E000C0C0092 C+C0099bE000000C0093 0+001C16EC00000094 0+0010026
0000000095 0+0050+2600000C00096 C+0010191000000C0097 0+001CC5EC00000098 0+00190+E
0000000099 0F0008033J000C0001C1 C+0170c9e000000C0201 0+0179136C00000301 0-0073056
0000000+01 0+0013+33500000C00103 C+01+6b1E000000C0203 0+0174866C00000303 0-0073C56
0000000403 0+0017116000000C00105 C+0170386000000C0205 0+0179586C00000305 0-00b970E
0000000+07 0+0C1+196000000C00107 0+0163916000000C0207 0+0172166C00000307 0-0067816
0000000+07 0+0017196000000C00109 C+0181356000000C0209 0+0183916C00000309 0-0067026
0000000+0B 0+0015720000000C00111 C+0161946000000C0211 0+0186316C00000311 0-0059756
0000000+11 0+0014+02+00000C00113 C+0161956000000C0213 0+0170416C00000313 0-0059F06
0000000+13 0+0017?6E000000C00115 C+0164306000000C0215 0+0177386C00000315 0-0059c9E
0000000413 0+0013c+0000000C00117 C+01e713F000000C0217 0+0165956C00000317 0-0059716
0000000+17 0+0017+++000000C00119 C+0170c+E000000C0219 0+0177016C00000319 0-00b9cbE
0000000+19 0+0013?3E000000C00121 C+0170736000000C0221 0+0185336C00000321 0-0059726
0000000+21 0+0015?3E000000C00123 C+0172316000000C0223 0+0183716C00000323 0-006C15E
0000000+23 0+0015?6E000000C00125 C+017c2+F000000C0225 0+0194576C00000325 0-00c9bcE
0000000+25 0+0014-3E000000C00127 C+0179716000000C0227 0+0194116C00000327 0-0060U1E
0000000+27 0+0017?6E000000C00129 C+0179166000000C0229 0+0195226C00000329 0-0060136
0000000+29 0+0015+3E000000C00131 C+0147b6E000000C0231 0+0193F6EC00000331 0-00E102E
0000000+31 0+0015E3E000000C00133 0+01+77e6000000C0233 0+0192526C00000333 0-0060126
0000000435 0+0016+3E000000C00135 C+0154986000000C0235 0+0193436C00000335 0-0061ECE
0000000+35 0+0014544000000C00137 C+01c9726000000C0237 0+0194916C00000337 0-0060056
0000000+37 0+0015+7E000000C00139 0+0171b6E000000C0239 0+0194256C00000339 0-0062+4E
0000000+39 0+0015?5E000000C00141 C+0170746000000C0241 0+0179146C00000341 0-0073636
0000000+41 0+0003?06000000C00143 C+0170746000000C0243 0+0179146C00000343 0-0073036
0000000+43 0+0033?1c000000C00145 0+0356946000000C0245 0+0369426C00000345 0-0003C3E
0000000+45 0+0073?+C000000C00147 C+0535c86000000C0247 0+0551756C00000347 0+00c295E
0000000+47 0+0141206
```

TEST I.C. NUMBER 212050415940

```
0000000212 0+041594000000C00056 C+0010576E0000000057 0+001035EC00000056 0+0016776E
0C00000053 0+C000096000000000E0 C+0002576E0000000061 0+0002476ECC0C000062 C+00024C3E
0000000063 0+0002436E00000C0006 0+0C11336E0000000065 0+0011356E0000000056 0+0010736E
0000000067 0+0010356E00000C0006 C+0010536E0000000069 0+001C56ECCC0000070 0+0010146E
0C00000071 0+0010106000000C00072 C+00273o6E0000000073 0+0010C46ECC0000074 0+0011366E
0000000075 0+0011526000C0C00076 C+001023cE0000000077 0+0011276ECC0000078 0+0011646E
0000000079 0+0011506E00000000080 C+C01115EE0000000081 0+0011556E0000030082 0+0010776E
0C00000083 0+0011426E00000C0006 C+0010506E0000000085 0+0C1C96CECCCC000086 C+0011C86E
0000000087 0+0011096E00000C0008 C+C011166E0000000089 0+00102EECCC0000090 0-0006426E
0000000091 0+C010316C0000000092 C+C01004cE0000000093 0+00107EECCC0000094 0+0010266E
0000000095 0+0513156000000C0096 C+001043E0000000097 0+001C38ECCC0000098 C+0010446E
0000000099 0F000804300000C00101 C+0170656E0000000201 0+0179116C000000301 0-0073056
0000000+01 0+0015-16000000C00103 C+C1o7136E0000000203 0+0179476CCC0C000303 0-0073046E
0000J00403 0+001810E0000000010E 0+C170566E0000000205 0+0178986E0000000305 0-0066966E
0C00000407 0+0015396E000CCC00107 C+C1o516E000000C0207 0+0173476ECCCC000307 0-0065536
0000J00407 0+0017536E0000000103 C+C1o2916E0000000209 0+0190C6ECCCC000309 0-0065006
0000000409 0+001b376E0000C00111 C+0163456E0000000211 0+0191076E0000000311 0-0058046E
0000000411 0+001o236E0000C00113 C+0163756E0000000213 0+C171936CC0C000313 0-0058786E
0C00000413 0+001829E0000C00115 C+016o156E0000000215 0+0171B6ECCC000315 0-0058796E
0000000415 0+0015466E0000C00117 C+0171726E0000000217 0+0171E16E0000000317 0-0058506E
0000000417 0+0017246E0000000119 C+0171246E0000000219 0+C171E5ECCC0000319 C-0058576E
0000000419 0+001712E000CCC00121 0+0175206E0000000221 0+0186E2ECCCC000321 0-0058536E
0000000421 0+0015-76000CCJ00123 C+0177176E0000000223 0+01EE96CC000000323 0-0059136E
0000000+23 0+0018396E000CC00125 C+0180076E0000000225 0+0200396ECC0000325 0-0058776
0C00000425 0+0015866E000C000127 C+0181896E0000000227 0+0199E5EC0000000327 0-0059066E
0C00000427 0+0017+96E000CC00129 C+0182176E0000000229 0+020Ec2ECCC0000329 0-0059086E
0000000+29 0+001o+0E000CCC00131 0+0156096E0000000231 0+0199376ECCCC000331 0-0068196E
0000000431 0+0016396E0CCCC00133 C+01o3296E000000C0233 0+0195E2ECJ0000333 0-0059166E
0000000433 0+0018146E000C00135 C+0165936E0000000235 0+C199106CCCC000335 0-0060756E
0000000435 0+001o196E0000000137 C+017233cE0000000237 0+0200266CCC0000337 0-0059376E
0000000437 0+0017856E000CC00139 C+0180416E0000000239 0+0199536E0000000339 0-0061336E
0000000439 0+0017066E000CC00141 C+0170726E0000000241 0+0179126ECC0C000341 0-0073036E
0000J00441 0+000396600000000143 C+0170726E0000000243 0+0179126E0000000343 0-0073036E
0000000443 0+0003966000CC000145 C+0356816E0000000245 0+036536E0CCC000345 0-0063646E
0000000445 0+0073976000CC000147 C+0535636E0000000247 0+0551716ECC0000347 0+0062946E
0000000447 0+0141226
```

TEST I.D. NUMBER 2120001=240

```
0000000212 0+0010516E+0000000056 0+0010538E0000000057 0+0010641E0000000058 0+0010C38E
0000000059 0+0010918E0000000060 0+0010E16E0000000061 0+0011249E0000000062 0+0011249E
0000000063 0+0011165E0000000065 0+0011174E0000000066 0+0011112E
0000000067 0+0011178E0000000068 0+0011073E0000000069 0+0011079E0000000070 0+0011023E
0000000071 0+0011023E0000000072 0+0011595E0000000073 0+0011819E0000000074 0+0011181E
0000000075 0+0011926E0000000076 0+0011337E0000000077 0+0011125E0000000078 0+0011695E
0000000079 0+0011976E0000000080 0+0011096E0000000081 0+0011946E0000000082 0+0011C38E
0000000083 0+0011495E0000000084 0+0011103E0000000085 0+0011846E0000000086 0+0011446E
0000000087 0+0011346E0000000088 0+0011326E0000000089 0+0011056E0000000090 0+0011493E
0000000091 0+0011236E0000000092 0+0011003E0000000093 0+0011112E0000000094 0+0011032E
0000000095 0+0479 7E0000000096 0+0010356E0000000097 0+0011034E0000000098 0+0011078E
0000000099 0F+0059230000000101 0+0170546E0000000201 0+0179106E0000000301 0-0073C5E
0000000-01 0+0011936E0000000103 0+01+7516E0000000203 0+0179796E0000000303 0-0073C4E
0000000-03 0+0018236E0000000105 0+0170573E0000000205 0+0176E96E0000000305 0-0065E2E
0000000-05 0+0015246E0000000107 0+0165916E0000000207 0+0174196E0000000307 0-0064716E
0000000-07 0+0017926E0000000109 0+01E396E0000000209 0+0192146E0000000309 0-00644E
0000000-09 0+0017176E0000000111 0+01E4-36E0000000211 0+0192376E0000000311 0-0058706E
0000000-11 0+0015126E0000000113 0+01E439E0000000213 0+0172E36E0000000313 0-0059726E
0000000-13 0+0018236E0000000115 0+01E796E0000000215 0+0172826E0000000315 0-0058536E
0000000-15 0+0015-26E0000000117 0+0173876E0000000217 0+0172976E0000000317 0-0058396E
0000000-17 0+0017246E0000000119 0+01-136E0000000219 0+0172E56E0000000319 0-0058316E
0000000-19 0+0017036E0000000121 0+0177216E0000000221 0+0195006E0000000321 0-005926E
0000000-21 0+0015216E0000000123 0+0173146E0000000223 0+0192006E0000000323 0-0058006E
0000000-23 0+0015+36E0000000125 0+0131506E0000000225 0+0202C46E0000000325 0-0058496E
0000000-25 0+0015-66E0000000127 0+0182976E0000000227 0+0-01486E0000000327 0-0058726E
0000000-27 0+0017-76E0000000129 0+0183346E0000000229 0+0202346E0000000329 0-0058846E
0000000-29 0+0017256E0000000131 0+0160936E0000000231 0+0201186E0000000331 0-005E036E
0000000-31 0+0016056E0000000133 0+01E433E0000000233 0+0200286E0000000333 0-0058E86E
0000000-33 0+0018-36E0000000135 0+0173186E0000000235 0+0201C06E0000000335 0-00E146E
0000000-35 0+0016206E0000000137 0+0179256E0000000237 0+0201976E0000000337 0-0059176E
0000000437 0+0017-96E0000000139 0+0183036E0000000239 0+0201716E0000000339 0-005E056E
0000000439 0+0017496E0000000141 0+0170706E0000000241 0+0179116E0000000341 0-0078046E
0000000441 0+0003E6E0000000143 0+0170706E0000000243 0+0179106E0000000343 0-0073036E
0000000443 0+0093E6E0000000145 0+03E079E0000000245 0+0396376E0000000345 0-0003E46E
0000000445 0+0073986E0000000147 0+0535636E0000000247 0+0551656E0000000347 0+0062946E
0000000447 0+0141246
```

TEST I.D. NUMBER 2120509164440

```
0000000212 05061644000000000056 0+0010436000000C0057 0+0010546C000000058 0+0016856
0C00000053 0+0000106000000C0060 0+0002E36000000C0061 0+0002526C0C0C000062 0+0002526
0000000053 0+0002546C000000C064 0+0011276000000000065 0+0011566C000000066 0+0011266
0C00000067 0+0011436000000C006A 0+0010850C000000069 0+0010E56C000000070 0+0010256
0C00000071 0+0010306000000C0072 0+0011596000000000C73 0+0010276C0C0C00074 0+0011626
0C00000075 0+0011636000000C0076 0+0010456C000C000077 0+0011256C000000078 0+0011546
0000000079 0+0012136000000C007C0 0+0011186000000000081 0+0011596C0C0C000082 0+0010656
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Reproduced from best available copy.

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TEST I.D. NUMBER 212050615750

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TEST I.C. NUMBER 212050916250

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TEST I.D. NUMBER 212051015050

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TEST I.D. NUMBER 2120511142S0

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TEST I.C. NUMBER 212051212230

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0000000099 0F0610053000CCC001C1 C+C170=36000000000201 0+017914ECC000000301 0-007310E
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0000000+45 0+007+13E000CCC00147 C+0535=4E00E000C247 0+0551986C00C0003+7 0+0062976
0000000+47 0+01+1+4E
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TEST I... NUMBER 2120E1+19060

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0C00700075 3+0022>0E000000C>7> C+0019>0E000000C077 0+0022134E000000078 C+0022216
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0C00300401 0+0026>516000000C0>03 C+01>170>000000C0203 0+0156>>>E000000303 J-0073106
0C00J00403 0+0036+>76000000C0>1> C+0172>>>000000C020. 0+0176>3E000000305 C-0067166
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0C00J00+0> 0+00>3>0>J7000000C3 C+01.0>>>000000C0209 0+01>075>000000309 0-00>0776
0C00000+03 0+0025066000000111 C+0161>+>E000000C0211 0+015>C3E000000311 C-0040076
0CC0J0>+11 0+0023136000000113 C+1>2>76000000C0213 0+01>C>5E000000313 C-0039756
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0C00>07+15 0+0025>>E000000C0117 C+0150>22>000000C0217 0+01>CC7E000000317 0-0039776
0C00J00+17 0+0023.>E000000C0119 C+1702>+>000000C0219 0+01>>>6E000000319 C-0039366
0C00000+1> 0+002>>>+>000000C01>1 C+0170+70>000000C0221 0+0197>6E000000321 C-0039716
3000000+21 0+002+17E000000C01>3 C+0173>>>000000C0223 0+0194716000000323 J-0040+46
0000C0J+23 0+J0771>E000000C0125 C+>1>>70F000000C0225 0+0212>>E000000325 0-0040016
J000300+2. 0+002>>>E000000C0127 C+>1>317E000000C0227 0+0210>6E000000327 C-0040316
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TEST I.D. NUMBER 212051514360

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0000000071 0+0020006000000C00072 C+0020196000000073 0+0020156000000074 0+0021136
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TEST I.C. NUMBER 2120516129+0

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0C00000063 0+0F02F160000C000C64 C+0022186E0000000065 0+0021906E000C000066 0+0020706E
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TEST I.C. NUMBER 2120F1715E0

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0000000447 0+0141506
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 LIST LOG NUMBER 2120:191:020

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0000000004 0+0000:12:0000C00000 C+0000:3:E0000000001 0+0000279E0000000062 0+0002396E
0000000003 0+0012:3E0000000000 C+0023778E0000000000 0+0023451C0000000056 0+0022416E
0000000007 0+0012233E0000000003 C+0021:1C0000000003 C+0021130C0000000070 C+0021106E
0000000071 0+0024:3:E0000000072 C+0020:0C0000000071 0+0022C:1E0000000074 C+0023466E
0000000073 0+0023239E0000000074 C+0021:5E0000000077 0+0022338C0000000078 0+0023546E
0000000076 0+0023:0E0000000080 C+0023236C0000000081 0+0023730C0000000082 0+0021E16E
0000000083 0+0023:0E0000000084 C+0021700C0000000085 0+0021956C0000000086 0+0022896E
0000000087 0+0022E:0E0000000088 C+0022:6C0000000089 0+0020796C0000000090 C+0007526E
0000000091 0+0022:2E0000000092 C+0020:9C0000000093 0+0021946C0000000094 0+0020726E
0000000095 0+0023:7E0000000096 C+0021:3C0000000097 C+0021C9C0000000098 C+0021D6CE
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0000000101 0+0024:2E0000000102 C+01:2:6C0000000203 0+0179516C0000000303 C-0073126E
0000000103 0+0023726E0000000105 C+0170226E0000000205 0+0178706C0000000305 C-0058:6E
0000000106 0+0035:6E0000000107 C+0179:6C0000000207 0+01:6146C0000000307 C-0059C3E
0000000107 0+0033:7E0000000109 C+01:2:6C0000000209 0+0203236C0000000309 C-0053936E
0000000110 0+0033:6E0000000111 C+01'37+E0000000211 0+0209976C0000000311 C-0038636E
0000000112 0+0026:3E0000000113 C+01:+386C0000000213 0+01:2E96C0000000313 C-0039366E
0000000118 0+0035726E0000000119 C+01:1956E0000000219 0+0192E6C0000000319 C-0033726E
0000000120 0+0023:6E0000000121 C+0173126E0000000221' 0+01:1916C0000000317 C-0037216E
0000000117 0+0037:7E0000000119 C+0171706E0000000219 0+0131916C0000000319 C-0037306E
0000000119 0+0026:1E0000000121 C+01 17:E0000000221 0+0202896C0000000321 C-0038016E
0000000121 0+0023:6E0000000123 C+0117:6E0000000223 0+0199436C0000000323 C-0033326E
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0000000125 0+0036:3E0000000127 C+01:7 :E0000000227 0+0229246C0000000327 C-0038:36E
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0000000145 0+0020:4E0000000145 C+0306:0E0000000245 0+03C6296C0000000345 C-0003C6E
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0000000149 0+01-1:3:
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TEST I.D. NUMBER 2120519163+0

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00C0300063 0+0003J9E0U00C00C6+ 0+0024436E0000000065 0+002429EEC0C000066 0+00231+6E
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0U00000071 0+00210190C0CC00C72 0+0020336E0000C00073 0+00210760000000074 0+0023e76
0000000075 0+0023+6E0000000076 0+0020376E0000000077 0+002276EC000000078 0+0023876E
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TEST I.D. NUMBER 212070215070

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TEST I.D. NUMBER 21207031+770

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TEST ... NUMBER 212070[illegible]070

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TEST I.D. SIMALF 212070:15970

TEST I.D. NUMBER 212070916170

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TEST I.D. NUMBER 2120713150B0

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TEST I.D. NUMBER 2120715159.0

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0000000-47  0+0146116
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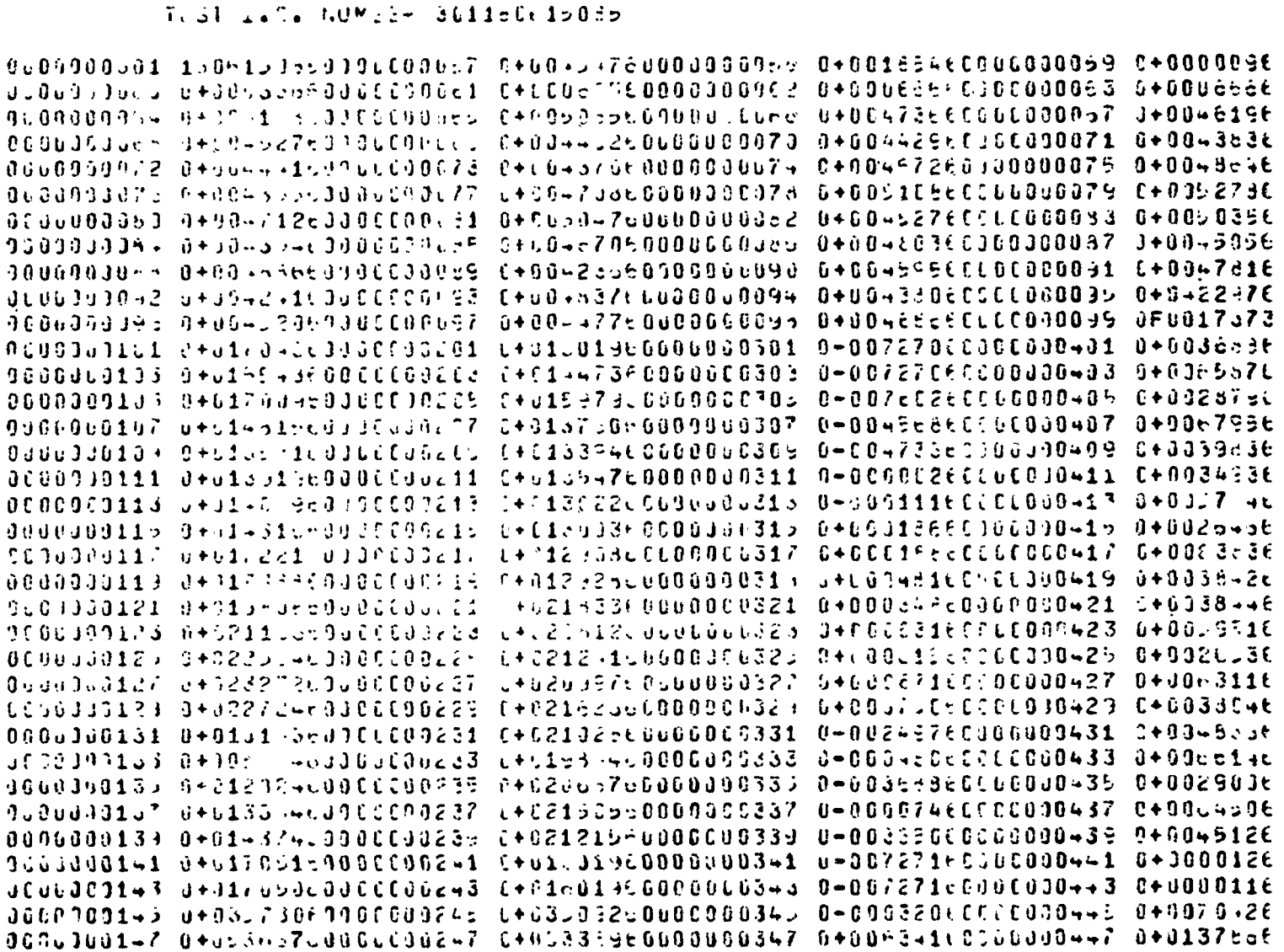

Reproduced from best available copy.

TEST I.D. NUMBER 3011806153B5

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LAST I... NUMBER 3011c0...

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0C0000...  0+...     0+00...      0+L0...       0+004...
0C0000...  0+...     C+00...      0+0C...       0+004...
J0006...   0+...     C+00...      0+00...       0+00...
0C0000...  0+...     C+00...      0+0C...       0+005...
0...       0+...     0+00...      0+00...       0+00...
0000000...3 0+...    C+00...      0+00...       0+00...
0C0000...  0+...     C+00...      0+00...       0+00...
J0006...   0+...     C+00...      0+00...       0+02...
0000000...5 0+...    C+00...      0+00...       0F0017...
0L00000...1 0+...    C+01...      0-00...       0+004...
0000000...3 0+...    C+01...      0-00...       0+00...
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0000000...9 0+...    C+01...      0-00...       0+003...
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TEST I.D. NUMBER 3011910155B5

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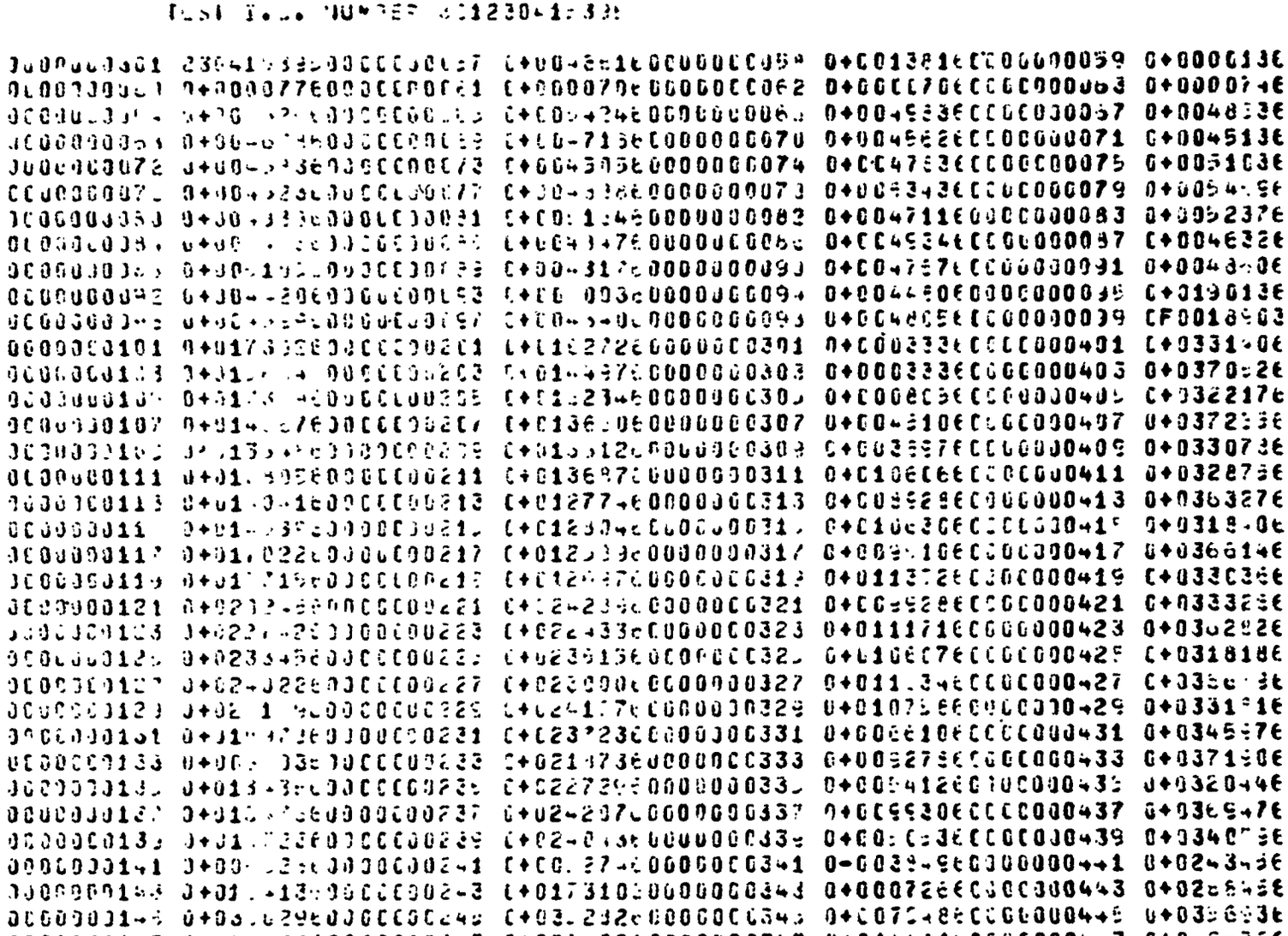

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TEST I.D. NUMBER 001230.1.0C

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TEST I.D. NUMBER 3C1231315200

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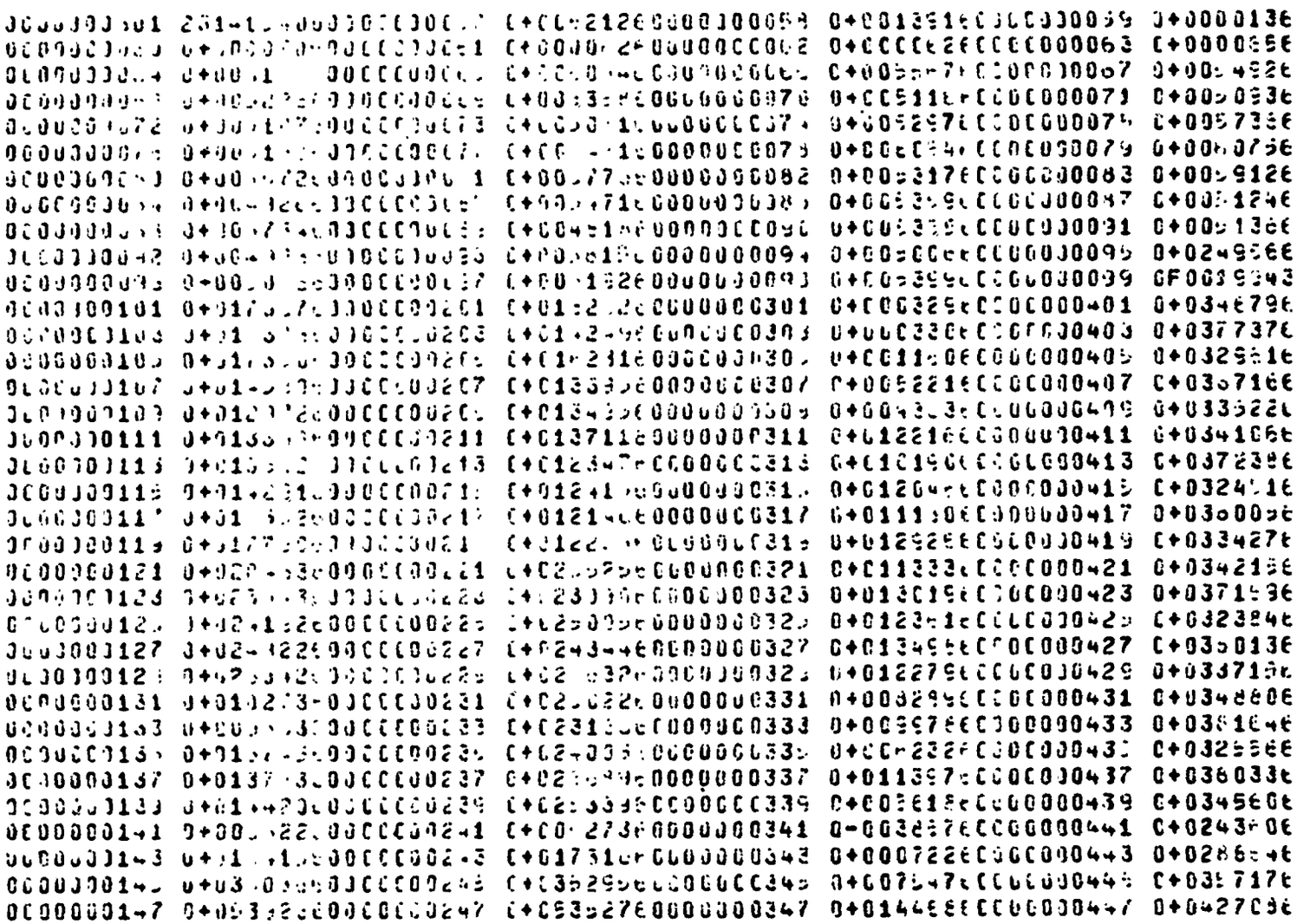

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TEST I.D. NUMBER 301240815302

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TEST TAPE NUMBER 0012+0415E02

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