

UNCLASSIFIED

AD NUMBER

AD377961

CLASSIFICATION CHANGES

TO: unclassified

FROM: confidential

LIMITATION CHANGES

TO:

Approved for public release, distribution unlimited

FROM:

Distribtuion: Controlled: all requests to Director of Supersonic Transport Development, Federal Aviation Agency, Washington, D. C. 20553.

AUTHORITY

31 Jan 1976, Group-4; FAA, per DTIC Form 55, dtd 20 Dec 2002

THIS PAGE IS UNCLASSIFIED

CONFIDENTIAL

PA

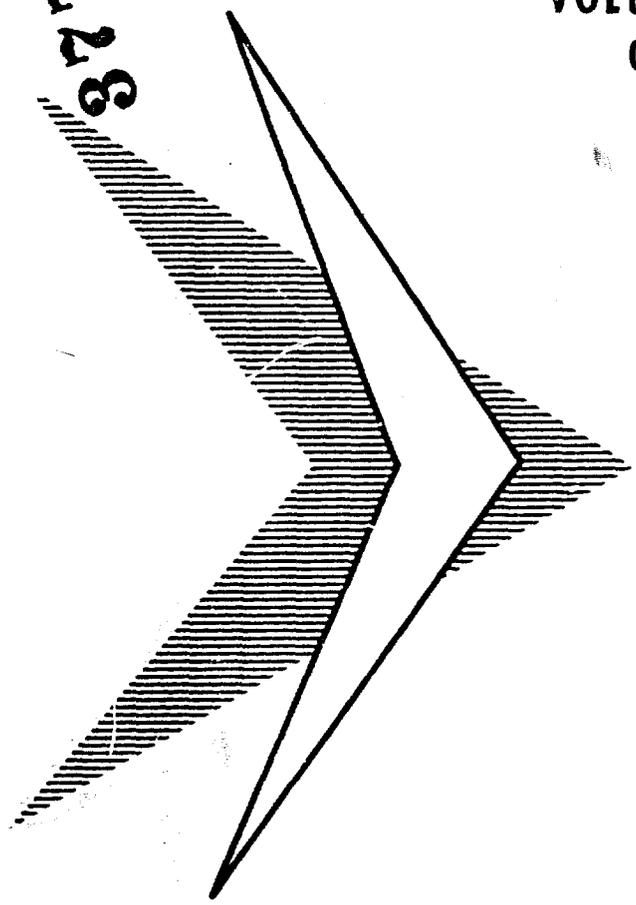
10

~~D~~

196228

# ENGINE PERFORMANCE REPORT

VOLUME E-IV (J)  
GE4/J4C



## Commercial Supersonic Transport Engine Proposal

DDC  
RECEIVED  
JAN 4 1967  
C

P64-1  
JANUARY 15, 1964

FLIGHT PROPULSION DIVISION  
GENERAL ELECTRIC  
CINCINNATI 15, OHIO

FAA SECURITY CONTROL  
NO. 675

FAA SECURITY CONTROL  
NO. 4464-5

CONFIDENTIAL

64AP 2276

NOTICES

When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government thereby incurs no responsibility nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data, is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

All distribution of this document is controlled. In addition to security requirements which apply to this document and must be met, it may be further distributed by the holder only with specific prior approval of:

Director of Supersonic Transport Development  
Federal Aviation Agency  
Washington, D. C. 20553

The distribution of this report is limited because it contains technology identifiable with items excluded from export by the Department of State (U. S. Export Control Act of 1949, as amended).

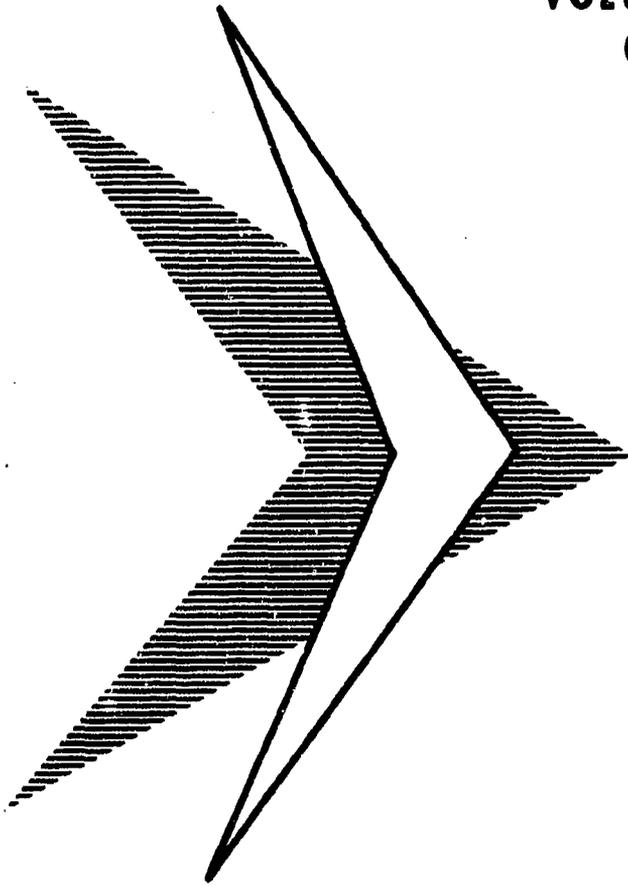
**DOWNGRADED AT 3 YEAR INTERVALS  
DECLASSIFIED AFTER 12 YEARS  
DOD DIR 5200.10**

**"THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE  
NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING  
OF THE ESPIONAGE LAWS, TITLE 18, U.S.C., SECTIONS 793 AND 794,  
THE TRANSMISSION OR REVELATION OF WHICH IN ANY MANNER TO  
AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW."**

**CONFIDENTIAL**

# **ENGINE PERFORMANCE REPORT**

**VOLUME E-IV (J)  
GE4/J4C**



**Commercial  
Supersonic Transport  
Engine Proposal**

**P64-1  
JANUARY 15, 1964**

**FLIGHT PROPULSION DIVISION  
GENERAL ELECTRIC  
CINCINNATI 15, OHIO**

**CONFIDENTIAL**

## FOREWORD

The Flight Propulsion Division of the General Electric Company is submitting proposals on two (2) engines in response to the Federal Aviation Agency Request for Proposal for a Supersonic Transport Engine. These two engines are identified as GE4/J4C - Turbojet and GE4/F6A - Turbofan. Volume numbers contain the Suffix (J) for the Turbojet and (F) for the Turbofan when appropriate.

The volume numbers and titles are listed below for this proposal:

Volume I	J & F	SUMMARY
E-I	J & F	ENGINE WORK STATEMENT
E-II	J & F	COMMERCIAL ENGINE MODEL SPECIFICATION
E-III	J & F	PRELIMINARY INSTALLATION AND OPERATING MANUAL
E-IV	J & F	ENGINE PERFORMANCE REPORT
E-V	J & F	ENGINE DESIGN REPORT
E-VI	J & F	COMPONENT DESCRIPTIONS AND PERFORMANCE - PARTS I & II
E-VII	J & F	ENGINE INSTALLATION
E-VIII		MANUFACTURING TECHNIQUES AND MATERIALS
E-IX	J & F	ENGINE TEST PROGRAM PLAN
E-X		ENGINE SYSTEM MOCKUP PLAN
M-I		MANAGEMENT
M-II		MANAGEMENT CONTROLS
M-III		PRODUCT SUPPORT PLAN
M-IV	J & F	PRELIMINARY PRODUCTION PLAN
M-V	J & F	DEVELOPMENT AND PRODUCTION COSTS

**PRELIMINARY PERFORMANCE REPORT (J)**

**TABLE OF CONTENTS**

	<u>Page</u>
SUMMARY	iii
1 DESCRIPTION	
1.1 Engine Description	1-1
1.2 Data Description	1-1
2 PERFORMANCE CURVES	
2.1 Flight Performance (G and A) Curves	2-1
2.2 $F_n$ versus SFC Curves	2-9
2.3 Flight Windmilling Operation	2-12
3 NOMENCLATURE	
3.1 Definition of Terms	3-1
3.2 Performance Ratings	3-3
3.3 Power Setting versus Rotor Speed	3-4
3.4 1962 Standard Atmosphere Tables	3-5
4 CALCULATION PROCEDURES	
4.1 Sample Calculations	4-1
4.2 Calculation Aids and Engine Limits	4-9

January 15, 1964

**CONFIDENTIAL**

GEI 67870

**TABLE OF CONTENTS (Cont.)**

	<u>Page</u>
5 <b>ENGINE LIMITS</b>	5-1
<u>Performance Tabulations</u>	
6 <b>SEA LEVEL, STANDARD AND HOT DAYS</b>	6-1
7 <b>5000 FEET, STANDARD AND HOT DAYS</b>	7-1
8 <b>15,000 FEET, STANDARD AND HOT DAYS</b>	8-1
9 <b>25,000 FEET, STANDARD AND HOT DAYS</b>	9-1
10 <b>36,089 FEET, STANDARD AND HOT DAYS</b>	10-1
11 <b>45,000 FEET, STANDARD AND HOT DAYS</b>	11-1
12 <b>55,000 FEET, STANDARD AND HOT DAYS</b>	12-1
13 <b>65,000 FEET, STANDARD AND HOT DAYS</b>	13-1
14 <b>75,000 FEET, STANDARD DAY</b>	14-1

**CONFIDENTIAL**

GEI 67870

GE4/J4C

**SUMMARY**

This report (Volume E-IV) presents performance of the General Electric GE4/J4C Turbojet Engine using Fuel conforming to G. E. Commercial Jet Fuel Specification A50T27A date November 11, 1963. The performance is identical to that given by the Estimated Performance Card Deck, R63FPD377, November, 1963.

Performance is presented in tabulated form over most of the engine operating range. Accurate performance can be obtained directly for many flight conditions, and simple interpolation will yield engine performance for most flight conditions within the flight envelope. Installation effects can be accounted for by applying the given correction factors.

Flight performance (G and A) curves are also included to give a compact graphical presentation of engine performance.

January 15, 1964

iii

**CONFIDENTIAL**

**CONFIDENTIAL**

GEI 67870

**GE4/J4C**

**1.1 ENGINE DESCRIPTION**

The GE4/J4C turbojet is a lightweight, high performance augmented engine which has been optimized for the supersonic transport mission. High cycle efficiency in the flight regime of Mach 2.5 to 3.0 has been emphasized in the design. Maximum flight speed capability is Mach 3.0 with a maximum altitude capability of 80,000 feet.

The engine performance presented herein is based on an airflow size of 475 lbs/sec at sea level static, standard conditions. This size gives a maximum take-off thrust of 51,800 lbs. Compressor pressure ratio at take-off is approximately 9.5:1.

The major components of the GE4/J4C turbojet include a variable stator compressor, an annular main combustor, an air cooled turbine, a modulated augmentor, and a convergent-divergent exhaust nozzle which incorporates a thrust reverser.

**1.2 DATA DESCRIPTION**

**1.2.1 Performance Curves**

Flight performance (G&A) curves are presented on pages 2-1 through 2-8 showing engine net thrust, specific fuel consumption, and airflow as functions of engine power setting and flight Mach number for the following altitudes:

Sea Level	45,000 ft
15,000 ft	55,000 ft
25,000 ft	65,000 ft
36,089 ft	75,000 ft

The performance shown in these curves are based on U.S. Standard Atmosphere - 1962, MIL-E-5008B ram recovery, no bleed or power extraction and the proposed exhaust nozzle.

Additional flight performance curves at several important flight conditions are presented. These curves consist of net thrust vs. specific fuel consumption at altitudes of 15,000, 36,089 and 65,000 feet and are presented for a nozzle gross thrust coefficient of 0.985.

January 15, 1964

1-1

**CONFIDENTIAL**

# CONFIDENTIAL

GEI 67870

GE4/J4C

The purpose of these curves is to provide a quick indication of a reference performance level of the engine at important flight conditions. More detailed and complete performance is available in the tabulations.

## 1. 2. 2 Tabulated Performance Data

The engine performance data presented in the tabulations are based on U.S. Standard Atmosphere - 1962, MIL-E-5008B ram recovery, zero bleed, zero power extraction, and fuel conforming to G.E. Specification A50T27A. The tabulated data include all exhaust nozzle performance effects with the exception of afterbody drag which can be determined from the data provided on boattail geometry. The data presented is based on a schedule of exhaust nozzle area and boattail angle which yields maximum uninstalled thrust and is consistent with the data obtainable from the Estimated Performance Data Deck R63FPD377, November, 1963, with the boattail fork (BTFFORK) set equal to zero, and with the rotor speed locked up at and above Mach 1.5 (MONLU = 1.5). The Data Deck also incorporates provisions for operation of the engine in the rotor unlocked mode and at different boattail angles.

## 1. 2. 3 Power Setting Definitions

Performance data are presented for eleven power settings defined as:

P. S. = 1	Maximum thrust, augmented
P. S. = 2	Partial augmentation
P. S. = 3	Partial augmentation
P. S. = 4	Minimum thrust, augmented
P. S. = 5	Maximum thrust, non augmented
P. S. = 7	95% engine RPM*
P. S. = 8	90% engine RPM*
P. S. = 9	85% engine RPM*
P. S. = 10	80% engine RPM*
P. S. = 11	75% engine RPM*
P. S. = 12.4	68% engine RPM (Flight idle)*

\*The defined speed schedule for power settings 5 through 12.4 is adhered to up to the flight Mach number where lockup occurs ( $M_o = 1.5$ ). At or above the lockup Mach number, engine RPM remains constant at 100%.

**CONFIDENTIAL**

GEI 67870

GE4/J4C

**1.2.4 Performance Tabulations**

Performance tabulations are presented for nine altitudes and two ambient temperatures.

U.S. Standard, 1962	U.S. Standard, 1962, plus 40°F
Altitude: Sea Level	Sea Level
5,000 ft	5,000 ft
15,000 ft	15,000 ft
25,000 ft	25,000 ft
36,089 ft	36,089 ft
45,000 ft	45,000 ft
55,000 ft	55,000 ft
65,000 ft	65,000 ft
75,000 ft	

The tabulated engine data at each altitude are presented for both ambient temperatures as a function of:

Power Setting (PS)  
Flight Mach Number (Mo)

and include correction factors for determining performance at other conditions of ram recovery, bleed extraction and power extraction.

January 15, 1964

1-3

**CONFIDENTIAL**

2. PERFORMANCE  
CURVES



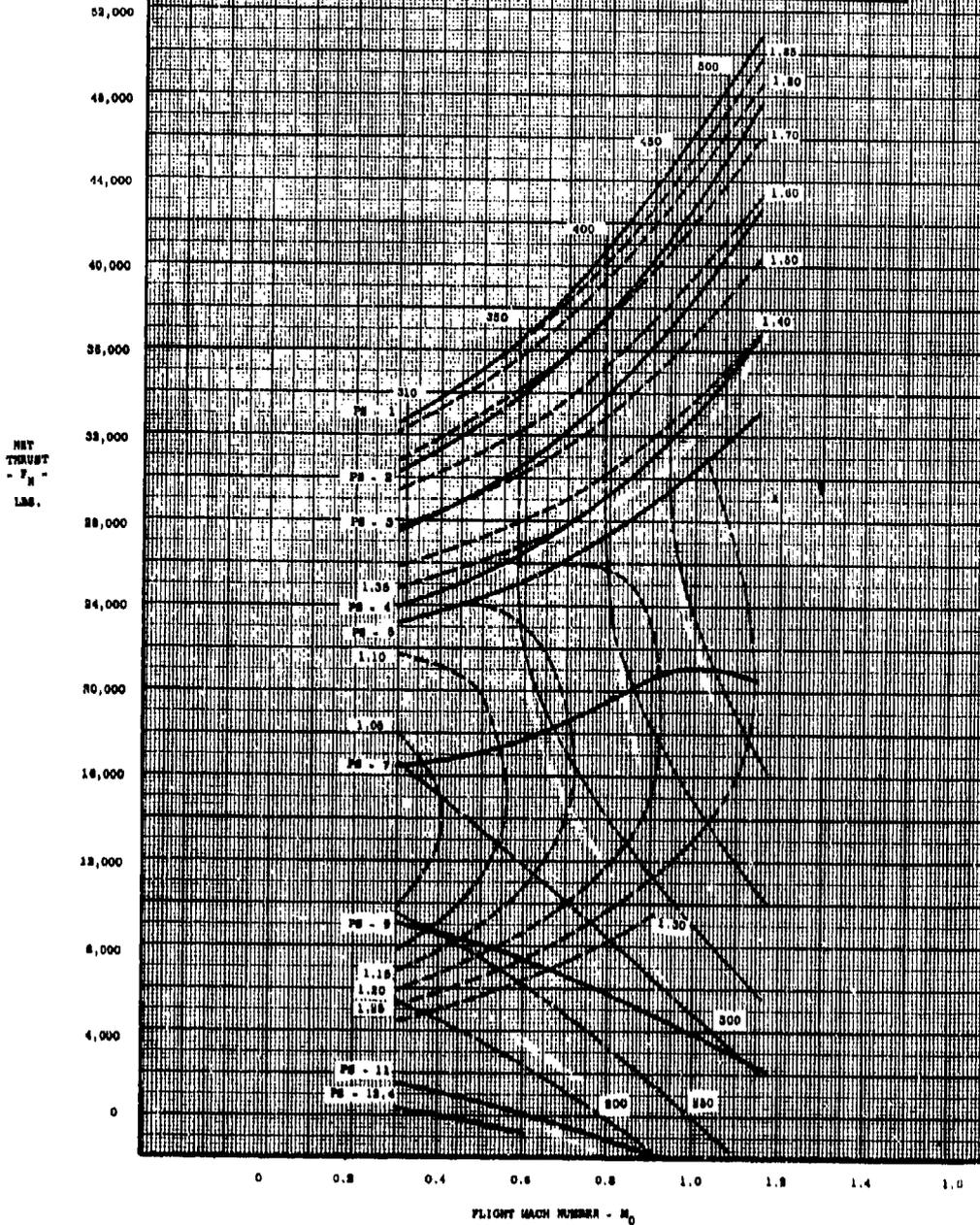
CONFIDENTIAL

15000  
FEET

ESTIMATED PERFORMANCE  
GENERAL ELECTRIC OR4/J4C TURBOJET ENGINE  
U.S. STD. 1962 ATMOSPHERE  
MIL-E-500RB RAM RECOVERY

GENERAL ELECTRIC

----- SFC  
----- TOTAL AIRFLOW



CONFIDENTIAL

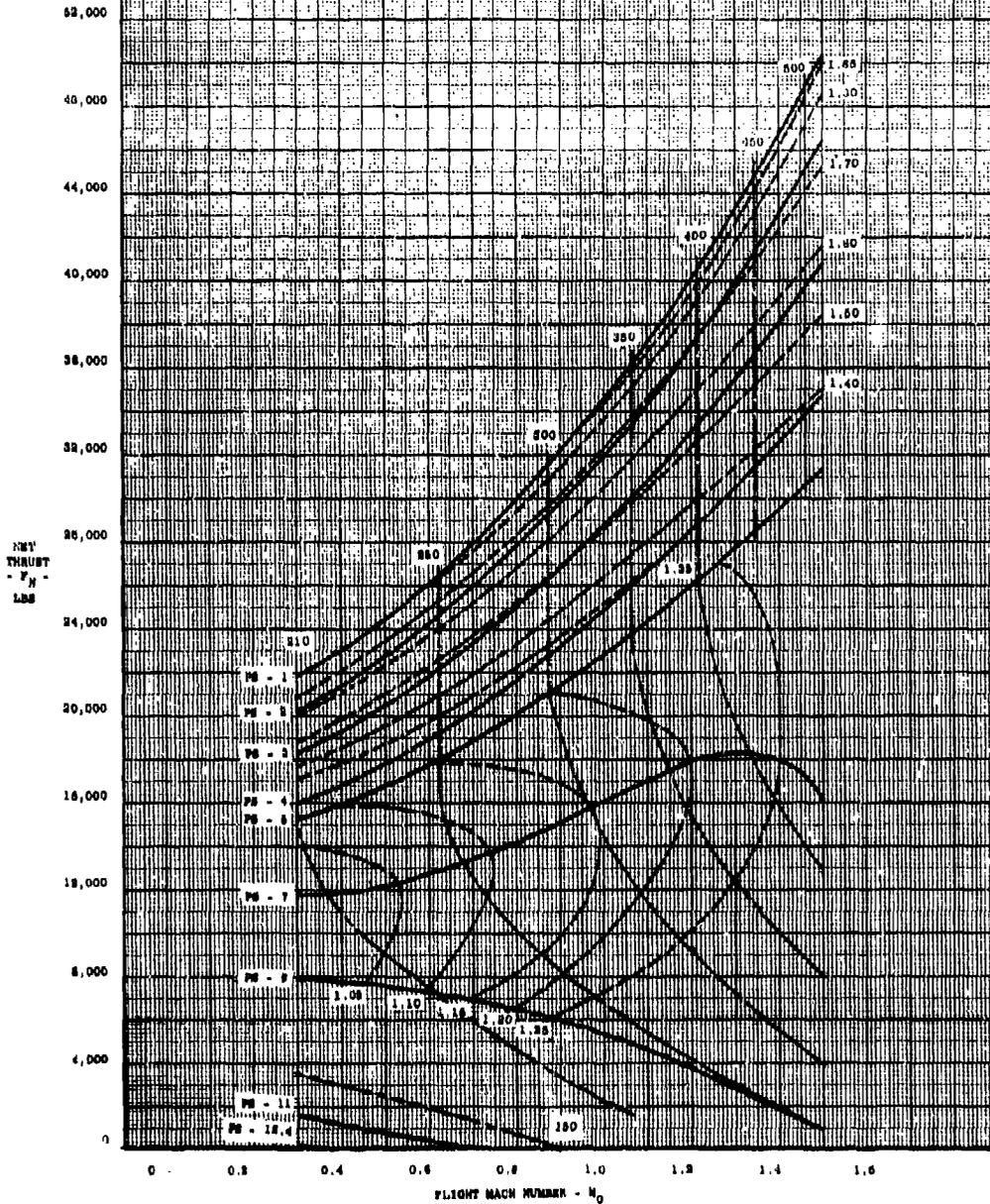
CONFIDENTIAL

25000  
FEET

ESTIMATED PERFORMANCE  
GENERAL ELECTRIC GE4/14C TURBOJET ENGINE  
U.S. STD. 1962 ATMOSPHERE  
MIL-R-5005B RAM RECOVERY

GENERAL ELECTRIC

----- SFC  
----- TOTAL AIRFLOW



CONFIDENTIAL

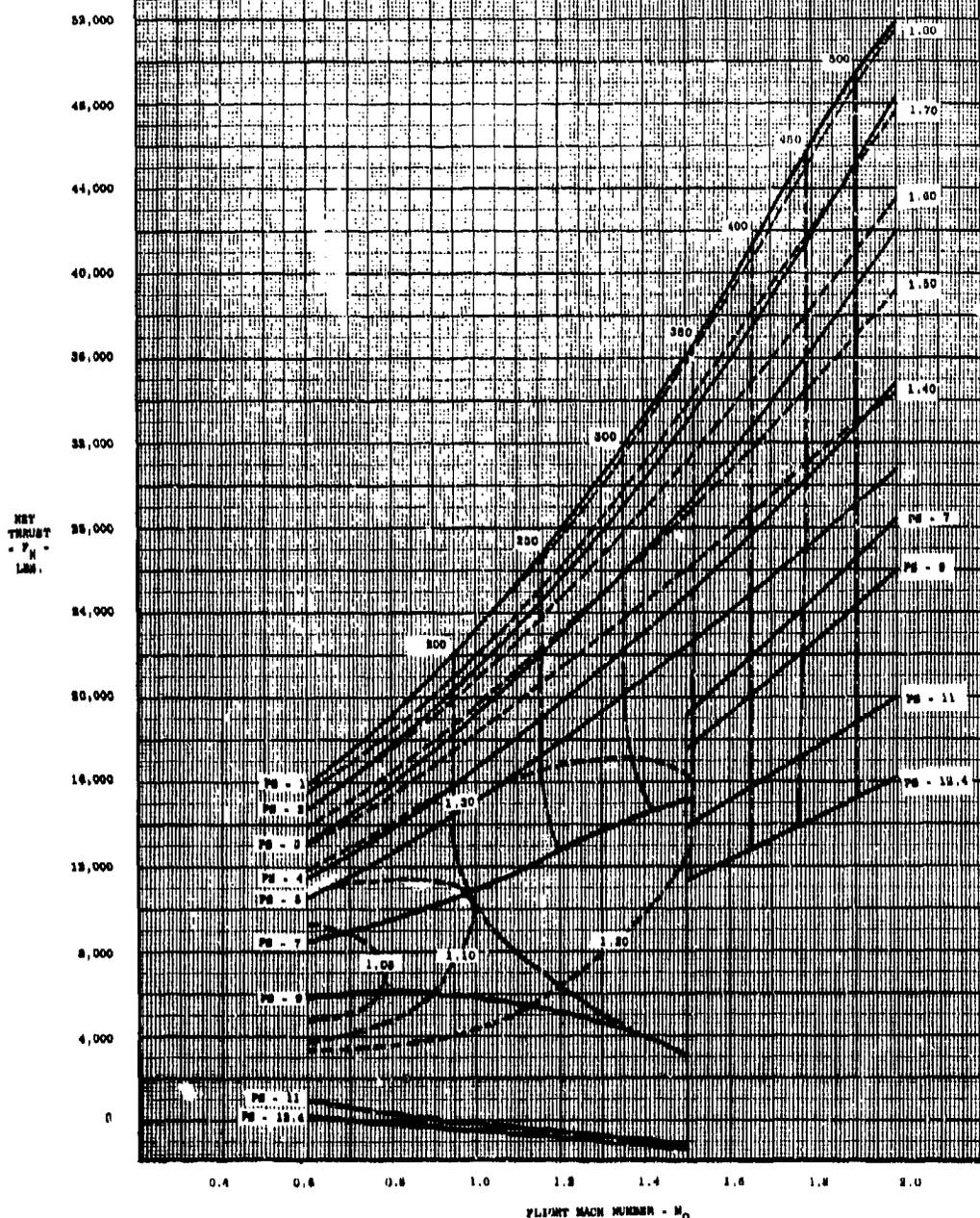
CONFIDENTIAL

36089  
FEET

ESTIMATED PERFORMANCE  
GENERAL ELECTRIC GE4/J4C TURBOJET ENGINE  
U.S. STD. 1902 ATMOSPHERE  
MIL-E-2008B RAM RECOVERY

GENERAL ELECTRIC

----- BFC  
----- TOTAL AIRFLOW



KEY  
THRUST  
=  $F_{th}$   
= LBS.

FLIGHT MACH NUMBER - M<sub>0</sub>  
CONFIDENTIAL



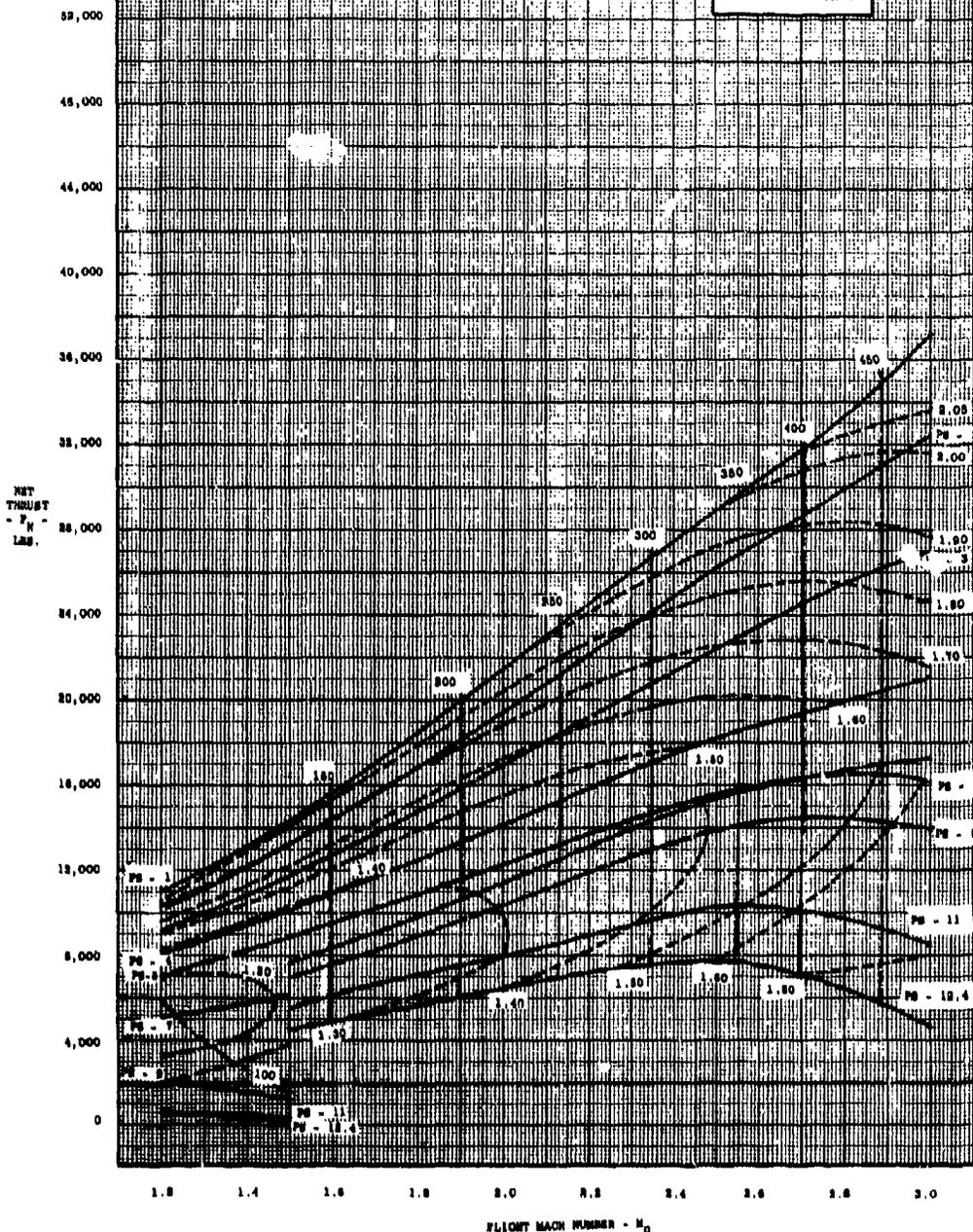
CONFIDENTIAL

55000  
FEET

ESTIMATED PERFORMANCE  
GENERAL ELECTRIC GR4/J4C TURBOJET ENGINE  
U.S. STD. 1982 ATMOSPHERE  
MIL-E-5008B RAM RECOVERY

GENERAL ELECTRIC

--- SFC  
--- TOTAL AIRFLOW



CONFIDENTIAL

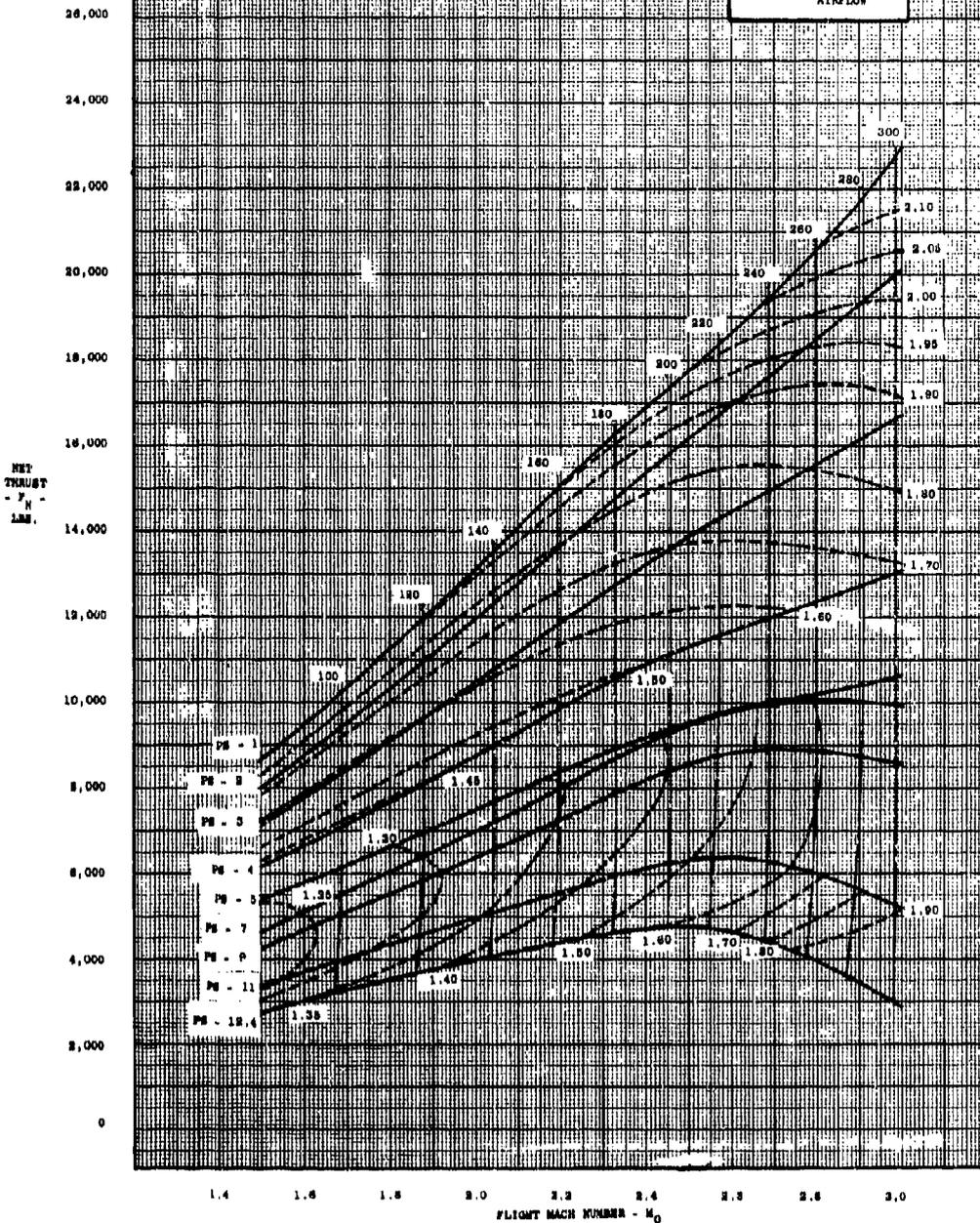
CONFIDENTIAL

65000  
FEET

ESTIMATED PERFORMANCE  
GENERAL ELECTRIC GE4/JAC TURBOJET ENGINE  
11 2 2713 10423 ATMOSPHERE  
MIL-E-5008B RAM RECOVERY

GENERAL ELECTRIC

----- SFC  
----- TOTAL  
AIRFLOW



CONFIDENTIAL

CONFIDENTIAL

75000  
FEET

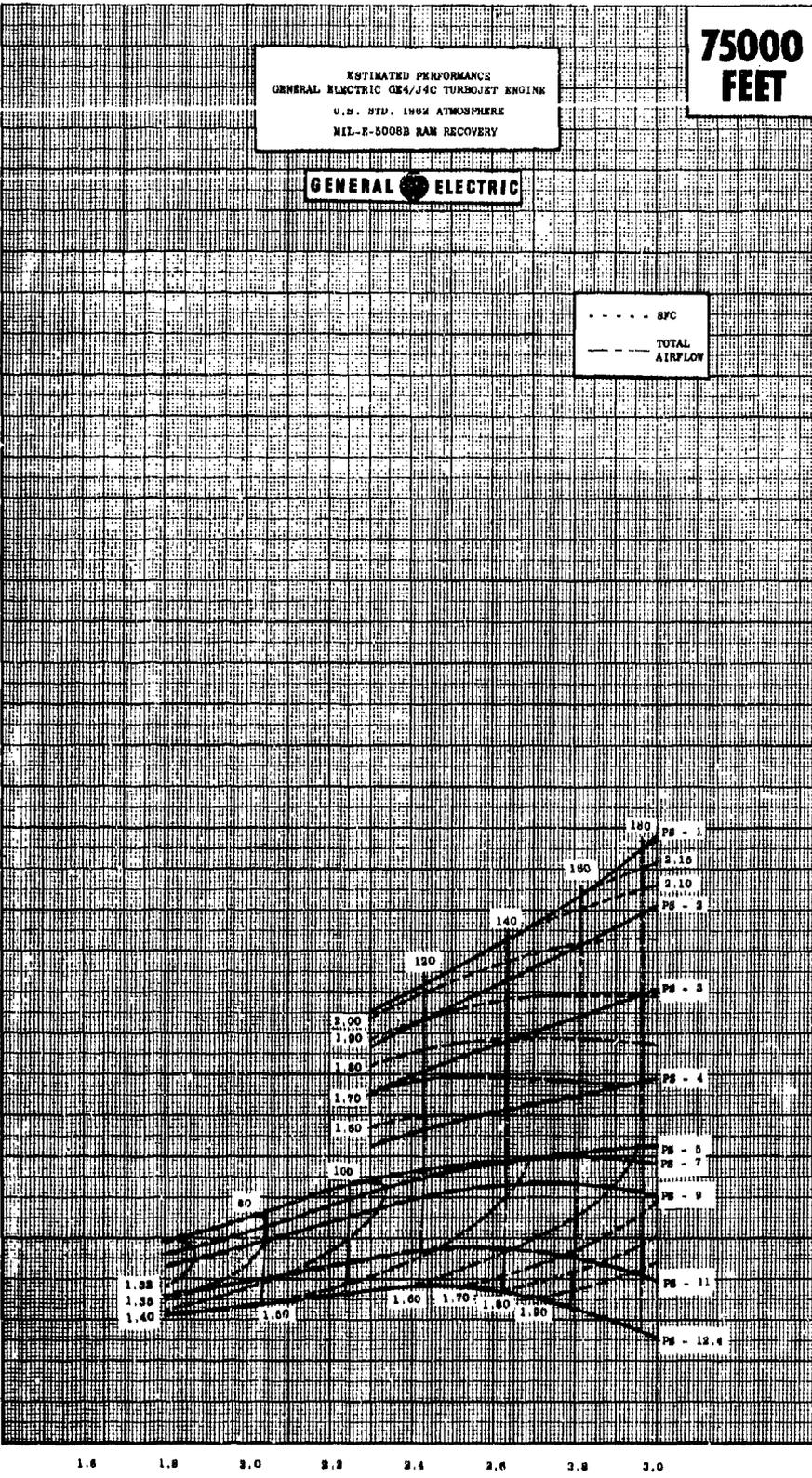
ESTIMATED PERFORMANCE  
GENERAL ELECTRIC GE4/J4C TURBOJET ENGINE  
U.S. STD. 1928 ATMOSPHERE  
MIL-E-5008B RAM RECOVERY

GENERAL ELECTRIC

NET  
THRUST  
-  $F_N$  -  
LBS.

28,000  
24,000  
22,000  
20,000  
18,000  
16,000  
15,000  
14,000  
12,000  
10,000  
8,000  
6,000  
4,000  
2,000  
0

----- SFC  
----- TOTAL AIRFLOW

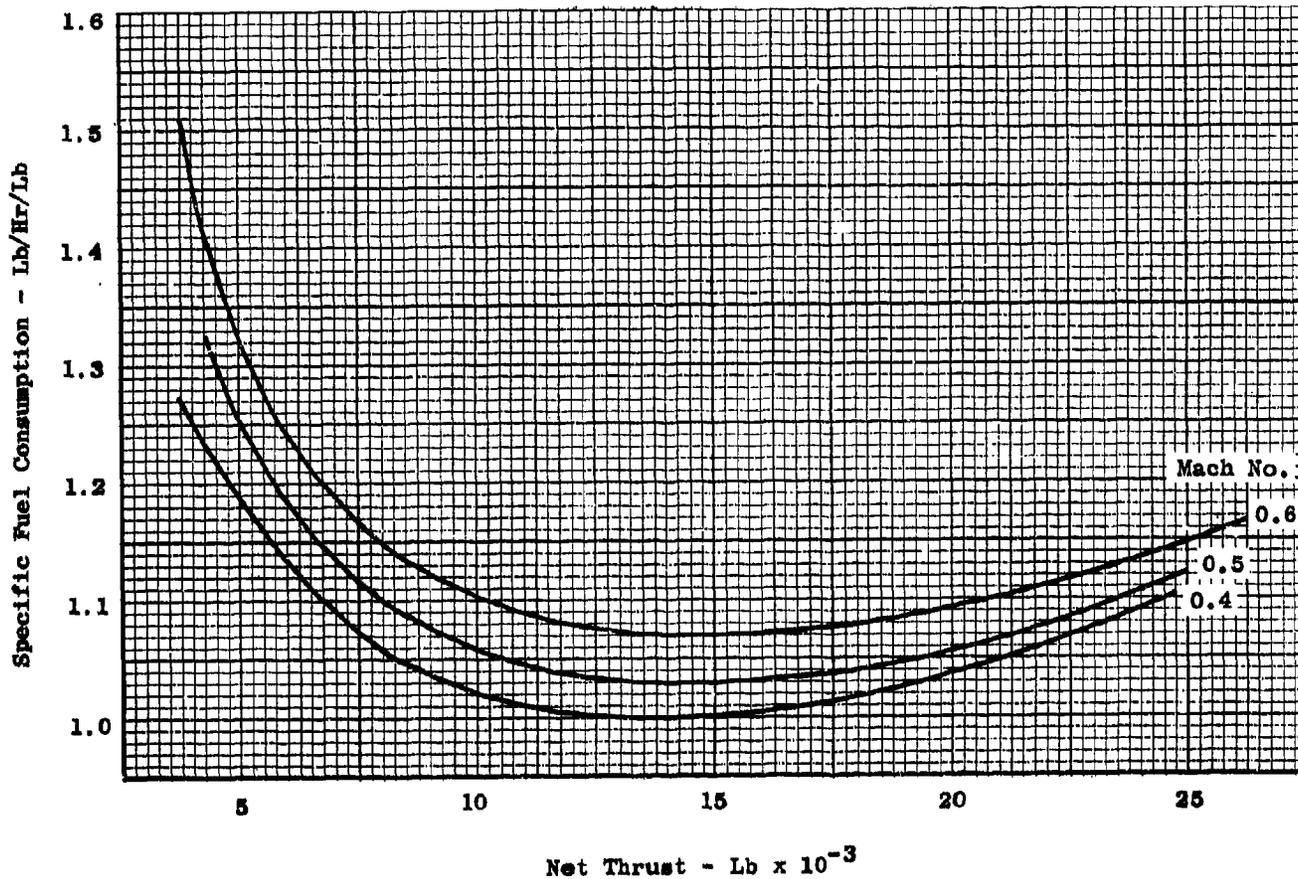


1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0

FLIGHT MACH NUMBER - M<sub>0</sub>  
CONFIDENTIAL

2.2 PERFORMANCE CURVES

ESTIMATED PERFORMANCE  
U. S. STD. ATMOSPHERE  
MIL-E-5008B RAM RECOVERY NON-AUGMENTED  
C/D NOZZLE WITH IDEAL SECONDARY  
ALTITUDE 15000 FEET

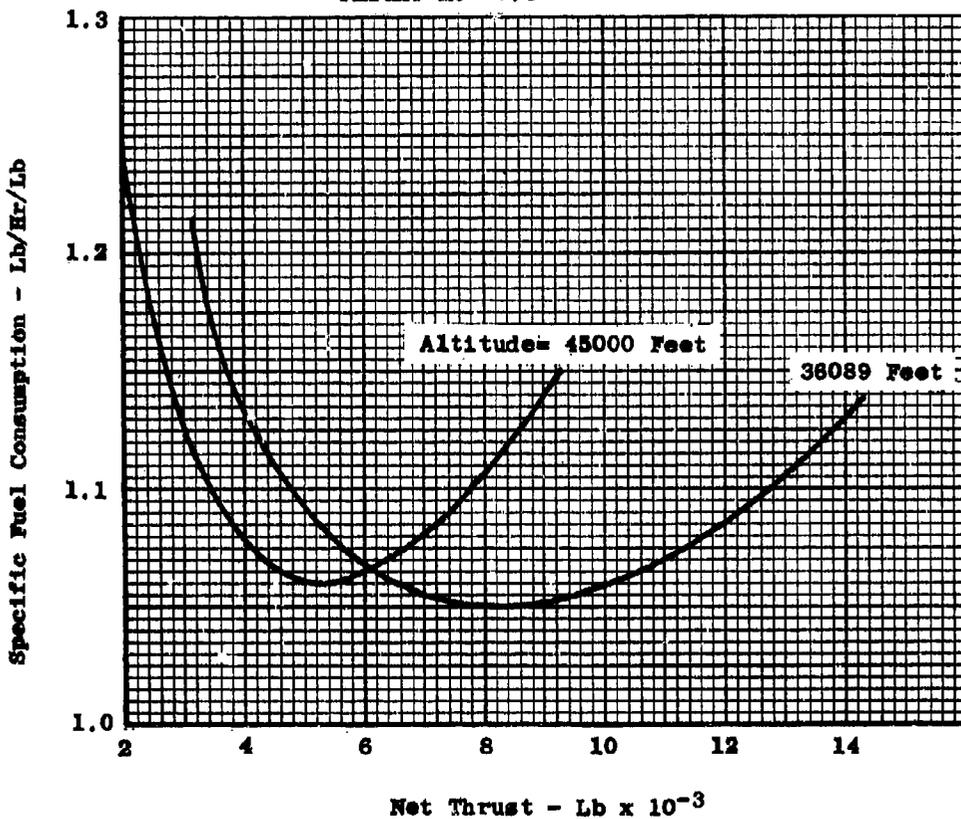


GEI 67870

**CONFIDENTIAL**

GE4/J4C

ESTIMATED PERFORMANCE  
U.S. STD. ATMOSPHERE  
MIL-E-5008B RAM RECOVERY NON-AUGMENTED  
C/D NOZZLE WITH IDEAL SECONDARY  
FLIGHT Mo 0.9

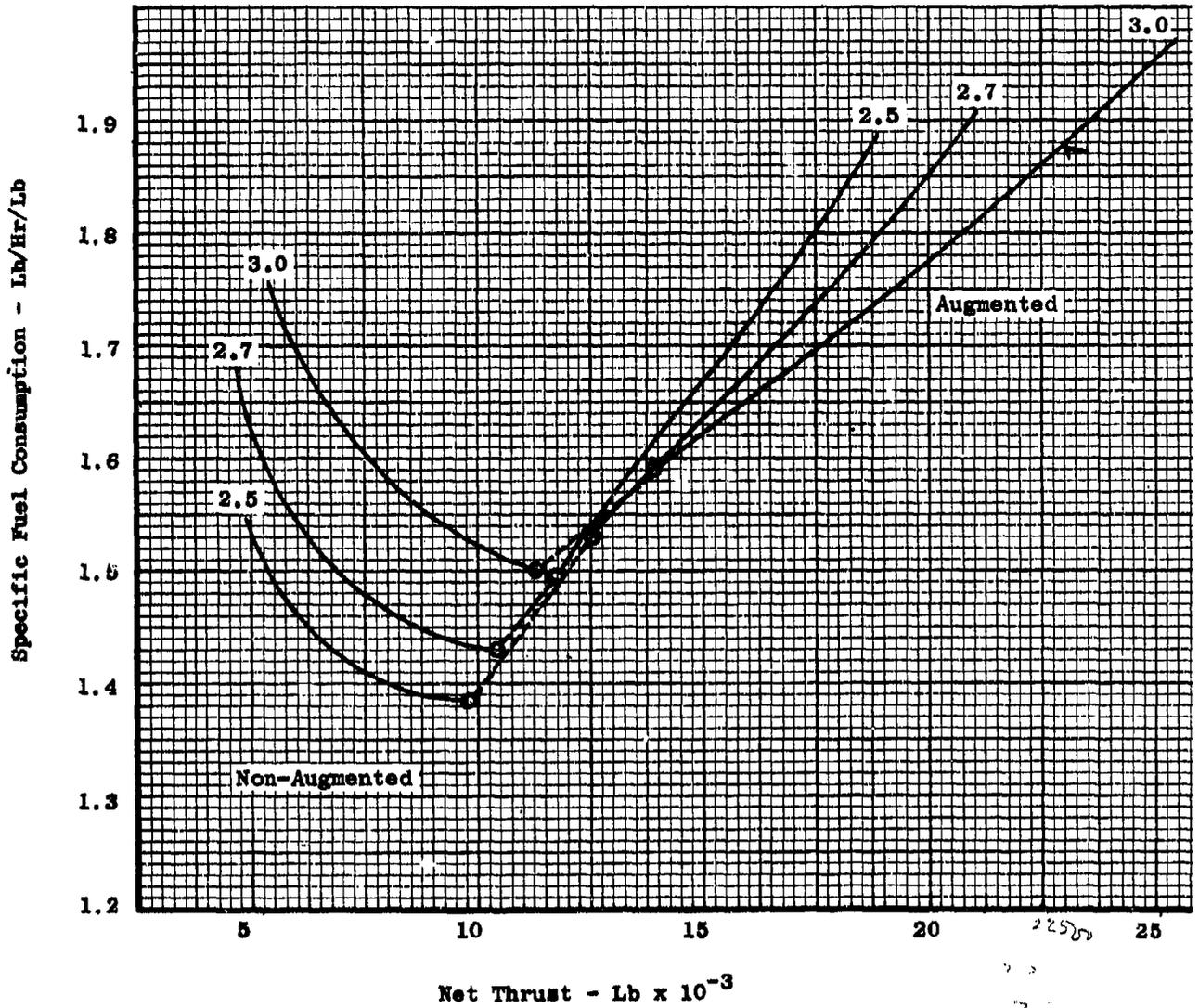


**CONFIDENTIAL**

GE4/J4C

GEI 67870

ESTIMATED PERFORMANCE  
U.S. STD. ATMOSPHERE  
MIL-E-5008B RAM RECOVERY  
C/D NOZZLE WITH IDEAL SECONDARY  
ALTITUDE 65000 FEET



January 15, 1964

**CONFIDENTIAL**

2-11

**CONFIDENTIAL**

GEI 67870

GE4/J4C

**2.3 FLIGHT WINDMILLING OPERATION**

**2.3.1 Performance**

Flight windmilling performance data are presented on Pages 2-13 through 2-15. This data is for zero bleed and power extraction.

Windmilling performance characteristics of the engine can be varied within limits by modulation of the jet nozzle area. The jet nozzle can be positioned by the throttle.

Windmilling during supersonic flight is restricted to five minutes after the fuel supply has been shut off.

Maximum available power extraction during windmilling at subsonic flight speeds:

$P_2/P_0$	$H_p/\delta_2$	$\%N/\sqrt{\theta_2}$
1.20	50	10 to 15
1.30	150	10 to 15
1.45	300	10 to 15

**2.3.2 Stator Closure Mechanism**

The engine can be provided with means for retarding windmilling RPM (windmill brake) sufficiently to allow extended windmilling operation of the engine.

With the windmill brake actuated, maximum corrected airflow will be less than five percent of the sea level static design corrected airflow (475 lb/sec). Engine net drag with the windmill brake actuated is presented on page 2-16.

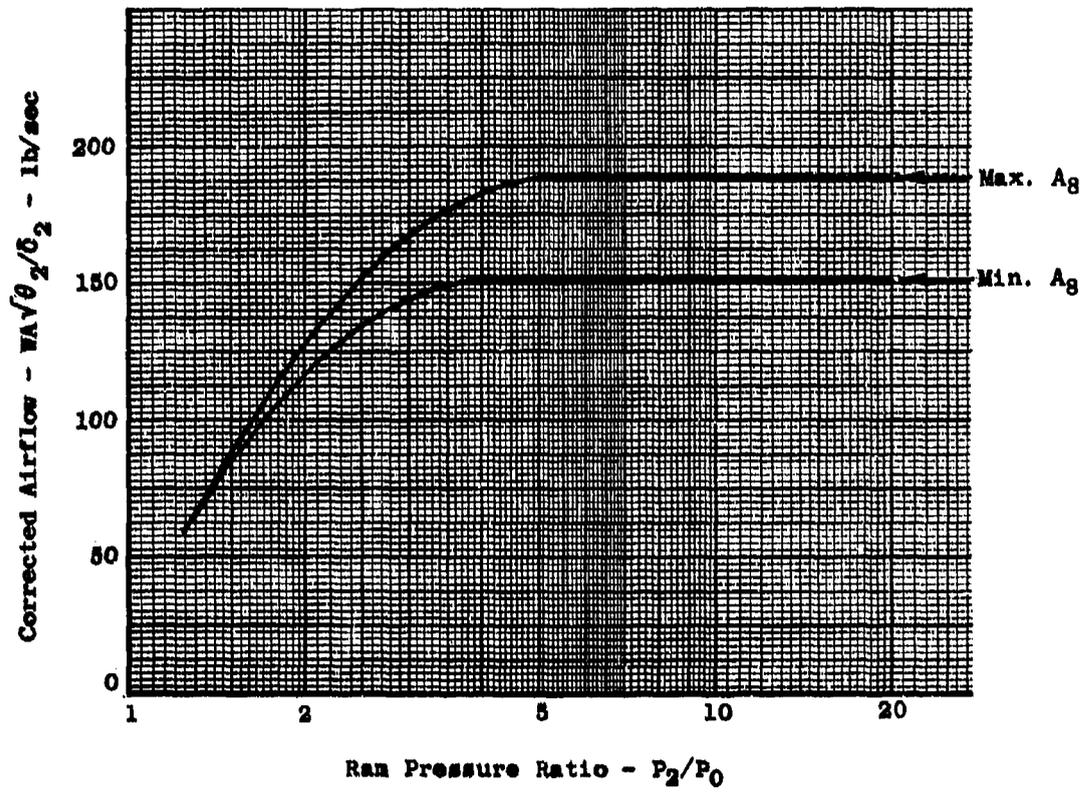
CONFIDENTIAL

GE4/J4C

GEI 67870

PRELIMINARY  
WINDMILLING  
PERFORMANCE

AIRFLOW



January 15, 1964

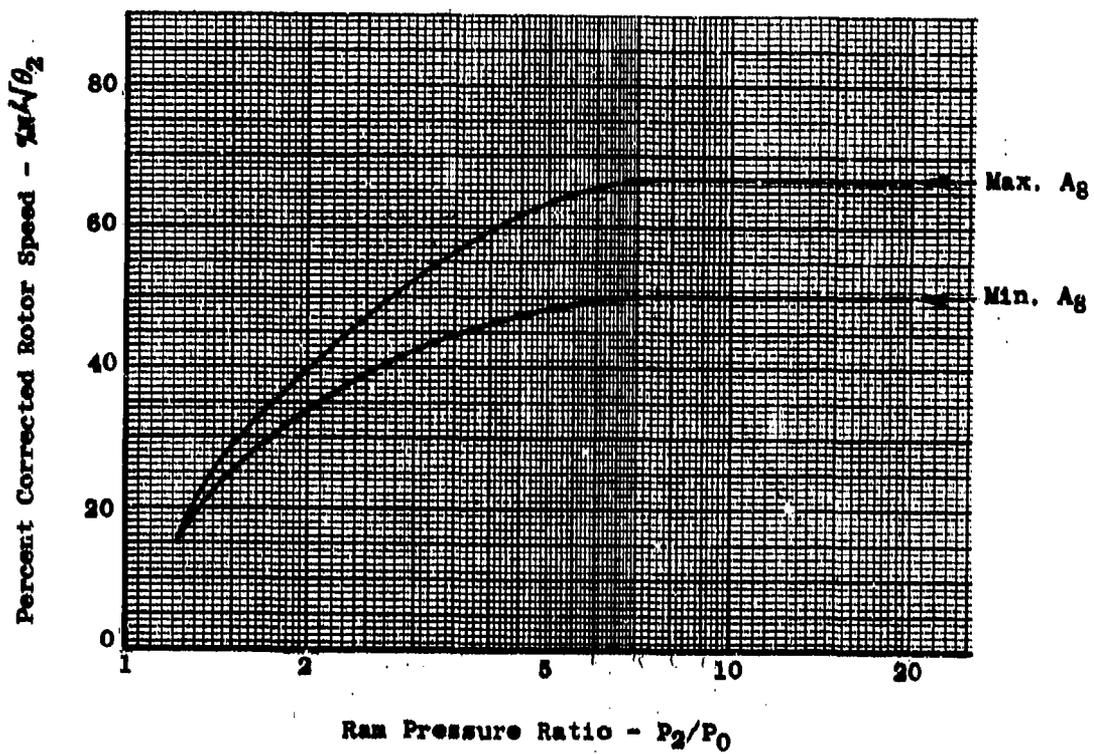
CONFIDENTIAL

2-13

**CONFIDENTIAL**  
GE4/J4C

**PRELIMINARY  
WINDMILLING  
PERFORMANCE**

**ROTOR SPEED**

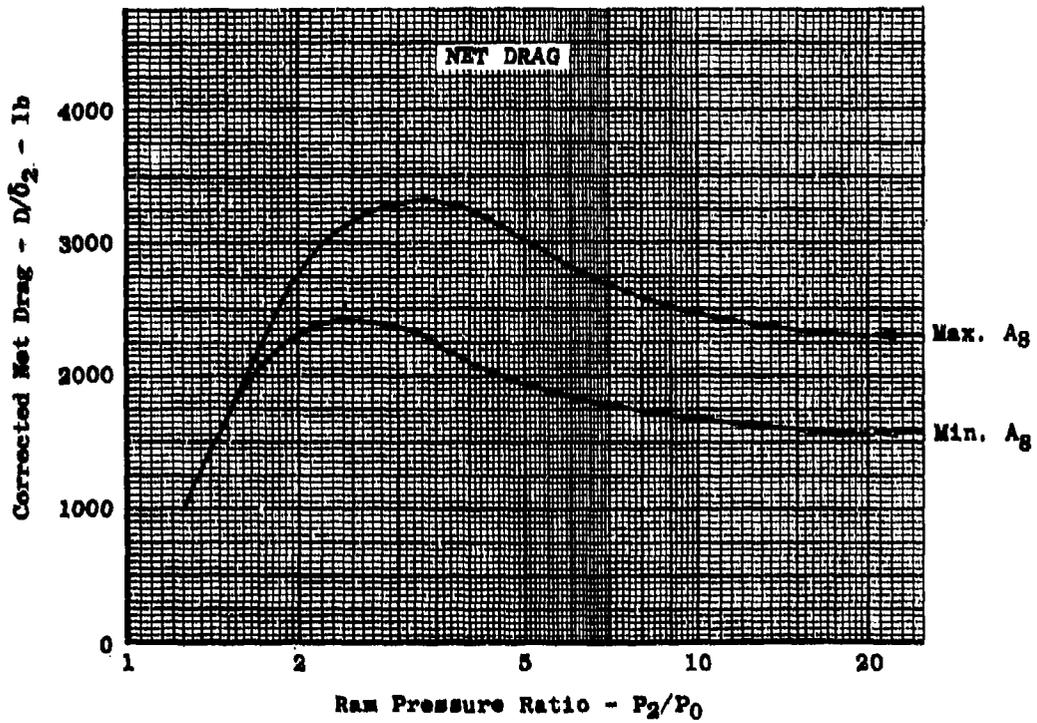


CONFIDENTIAL

GE4/J4C

GEI 67870

PRELIMINARY WINDMILLING PERFORMANCE



January 15, 1964

CONFIDENTIAL

2-15

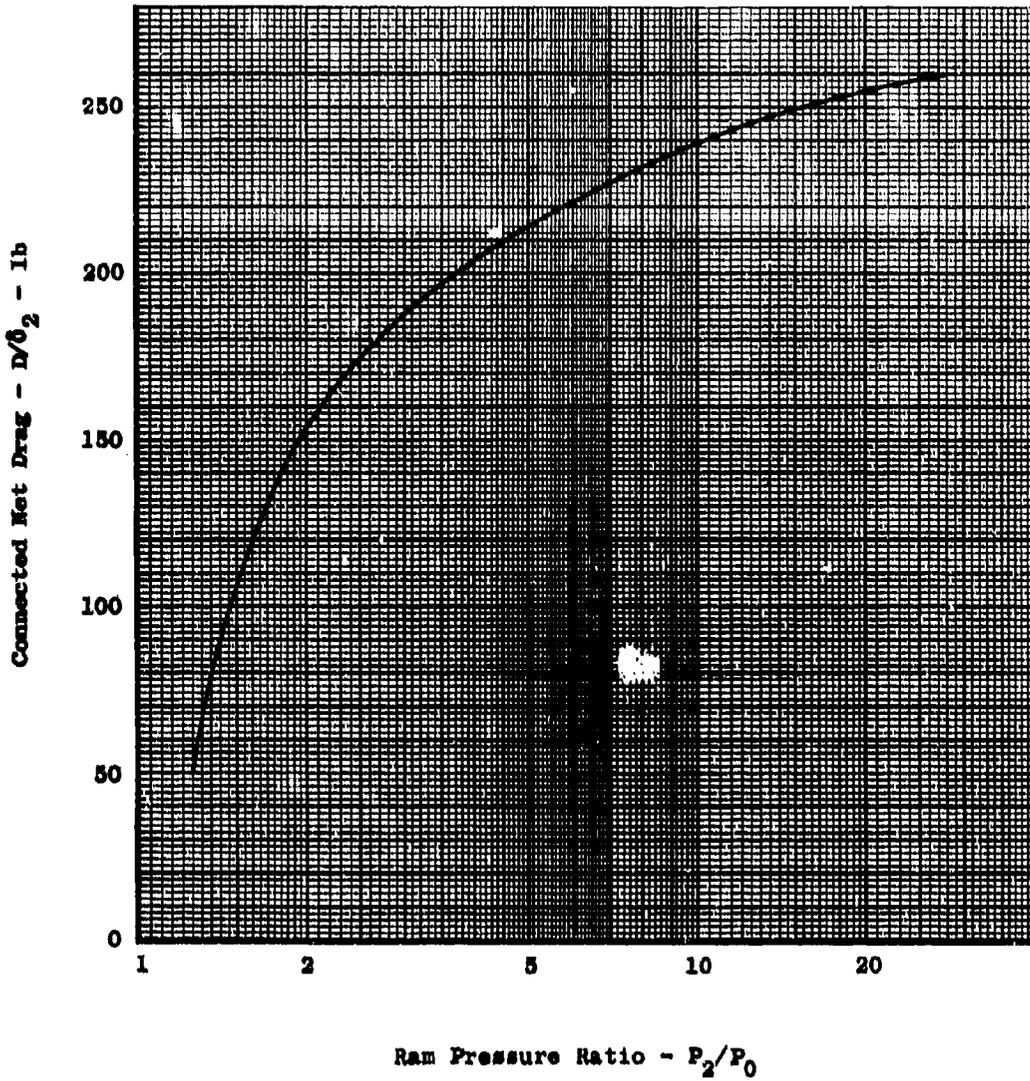
**CONFIDENTIAL**

GEI 67870

GE4/J4C

**PRELIMINARY WINDMILL BRAKE PERFORMANCE**

Net Drag



**CONFIDENTIAL**

January 15, 1964

**CONFIDENTIAL**

GE1 67870

GE4/J4C

**3. NOMENCLATURE**

**3.1 DEFINITION OF TERMS**

**Engine Station Locations**

0	Free stream or ambient
2	Compressor inlet
8	Primary exhaust nozzle throat
9	Exhaust nozzle exit

**Cycle Parameters**

**Units**

$A_8$	Primary exhaust nozzle throat area	Sq. In.
$A_9$	Secondary exhaust nozzle exit area	Sq. In.
BTANG	Secondary exhaust nozzle boattail angle	Degrees
CFG	Exhaust nozzle thrust coefficient	
ERI	Error return indicator	
FG	Gross thrust (with exhaust nozzle)	Lbs.
FGB	Base gross thrust (CFG = .985)	
FD	Ram drag of compressor inlet airflow ( $W_2$ )	Lbs.
$F_N$	Net thrust (with exhaust nozzle)	Lbs.
FNB	Base net thrust (CFB = .985)	Lbs.
$M_0$	Flight Mach number	
NR	Ram recovery	
$P_0$	Ambient pressure	Psia
$P_2$	Compressor inlet total pressure	Psia
$P_E$	Bleed port static pressure	Psia
PTB	Customer bleed port pressure	Psia
$P_2/P_0$	Ram total pressure ratio	
$P_8/P_0$	Primary exhaust nozzle pressure ratio	
P.S.	Power setting	
SFC	Specific fuel consumption (with exhaust nozzle)	Lbs/Hr/Lb.
SFCB	Base specific fuel consumption (CFG = .985)	Lbs/Hr/Lb.
$T_0$	Ambient temperature	$^{\circ}$ R
$T_2$	Compressor inlet total temperature	$^{\circ}$ R
$T_8$	Exhaust nozzle total temperature	$^{\circ}$ R
TC	Control temperature	$^{\circ}$ R
$T_E$	Bleed air total temperature	$^{\circ}$ R
$T_S$	Secondary nozzle total temperature	$^{\circ}$ R

January 15, 1964

**CONFIDENTIAL**

3-1

**CONFIDENTIAL**

GEI 67870

GE4/J4C

**Cycle Parameters**

**Units**

$W_2$	Compressor inlet airflow	Lbs/Sec.
$W_{2K}$	Corrected compressor inlet airflow	Lbs/Sec.
$W_8$	Exhaust nozzle gas flow	Lbs/Sec.
WFT	Total engine fuel flow	Lbs/Hr.
$W_8$	Secondary nozzle airflow	Lbs/Sec.
$W_8/W_2(\sqrt{T_8/T_2})$	Corrected secondary nozzle airflow	Lbs/Sec.

**CONFIDENTIAL**

GEI 67870

GE4/J4C

**3.2 PERFORMANCE RATINGS**

The performance ratings shall be as specified below:

Power Setting Number	Rating
1	Take Off and Maximum Climb
2.5 (To be defined)	Maximum Continuous

Power setting definitions are given on page 1-2.

January 15, 1964

3-3

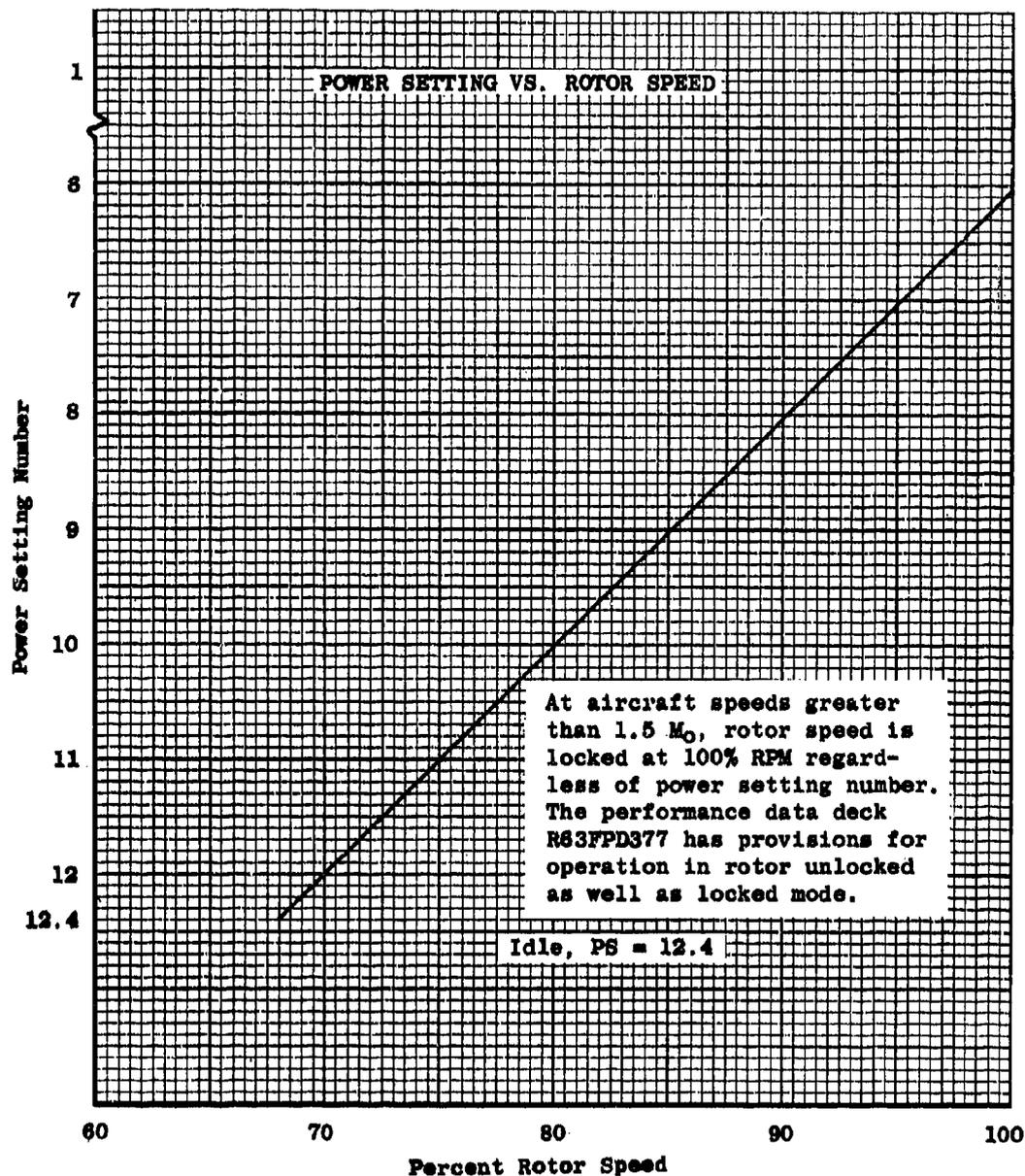
**CONFIDENTIAL**

**CONFIDENTIAL**

GE4/J4C

GEI 67870

**3.3 POWER SETTING**



**CONFIDENTIAL**

3.4 1962 ATMOSPHERE TABLES.

GEI 67870

1962 ATMOSPHERE  
MIL STD 210A COLD DAY

ALT	PO	TO	PO/PSLS
0.	1.4696000+01	3.9969999+02	1.0000000+00
1.0000000+03	1.4172636+01	4.1329105+02	9.6438729-01
2.0000000+03	1.3664467+01	4.2688211+02	9.2980857-01
3.0000000+03	1.3171155+01	4.4047318+02	8.9624078-01
3.3110000+03	1.3020709+01	4.4470000+02	8.8600363-01
4.0000000+03	1.2692363+01	4.4470000+02	8.6366103-01
5.0000000+03	1.2227763+01	4.4470000+02	8.3204700-01
6.0000000+03	1.1777031+01	4.4470000+02	8.0137663-01
7.0000000+03	1.1339848+01	4.4470000+02	7.7162818-01
8.0000000+03	1.0915900+01	4.4470000+02	7.4278033-01
9.0000000+03	1.0504878+01	4.4470000+02	7.1481203-01
1.0000000+04	1.0106478+01	4.4470000+02	6.8770264-01
1.0744000+04	9.8180809+00	4.4470000+02	6.6807844-01
1.1000000+04	9.7204031+00	4.4385187+02	6.6143188-01
1.2000000+04	9.3463578+00	4.4053890+02	6.3597970-01
1.3000000+04	8.9840533+00	4.3722593+02	6.1132643-01
1.4000000+04	8.6332065+00	4.3391296+02	5.8745281-01
1.5000000+04	8.2935373+00	4.3059999+02	5.6433976-01
1.6000000+04	7.9647716+00	4.2720000+02	5.4196866-01
1.7000000+04	7.6466390+00	4.2379999+02	5.2032111-01
1.8000000+04	7.3388751+00	4.2039999+02	4.9937908-01
1.9000000+04	7.0412194+00	4.1700000+02	4.7912488-01
2.0000000+04	6.7534152+00	4.1360000+02	4.5954104-01
2.1000000+04	6.4752120+00	4.1004000+02	4.4061050-01
2.2000000+04	6.2063618+00	4.0647999+02	4.2231640-01
2.3000000+04	5.9466227+00	4.0292000+02	4.0464226-01
2.4000000+04	5.6957570+00	3.9936000+02	3.8757192-01
2.5000000+04	5.4535303+00	3.9580000+02	3.7108943-01
2.6000000+04	5.2197132+00	3.9210796+02	3.5517918-01
2.7000000+04	4.9940807+00	3.8841592+02	3.3982585-01
2.8000000+04	4.7764114+00	3.8472388+02	3.2501438-01
2.9000000+04	4.5664889+00	3.8103184+02	3.1073005-01
3.0000000+04	4.3641005+00	3.7733980+02	2.9695839-01
3.0715000+04	4.2238959+00	3.7469999+02	2.8741806-01
3.1000000+04	4.1690372+00	3.7469999+02	2.8368517-01
3.2000000+04	3.9810949+00	3.7469999+02	2.7089649-01
3.3000000+04	3.8000726+00	3.7469999+02	2.5857870-01
3.4000000+04	3.6257737+00	3.7469999+02	2.4671840-01
3.5000000+04	3.4580058+00	3.7469999+02	2.3530251-01
3.6000000+04	3.2965796+00	3.7469999+02	2.2431815-01
3.6089000+04	3.2825137+00	3.7469999+02	2.2336103-01
3.7000000+04	3.1419396+00	3.7469999+02	2.1379556-01
3.8000000+04	2.9944979+00	3.7469999+02	2.0376278-01
3.9000000+04	2.8539751+00	3.7469999+02	1.9420081-01
3.9400000+04	2.7996301+00	3.7469999+02	1.9050287-01

January 15, 1964

3-5

**CONFIDENTIAL**

**CONFIDENTIAL**1962 ATMOSPHERE  
MIL STD 210A COLD DAY

ALT	PO	TO	PO/PSLS
4.000000+04	2.7200467+00	3.7469999+02	1.8508756-01
4.100000+04	2.5924031+00	3.7469999+02	1.7640195-01
4.200000+04	2.4707495+00	3.7469999+02	1.6812394-01
4.2377000+04	2.4263826+00	3.7469999+02	1.6510497-01
4.300000+04	2.3548047+00	3.7146980+02	1.6023439-01
4.400000+04	2.2443008+00	3.6628490+02	1.5271508-01
4.500000+04	2.1389826+00	3.6110000+02	1.4554862-01
4.600000+04	2.0386066+00	3.5574000+02	1.3871846-01
4.700000+04	1.9429410+00	3.5037999+02	1.3220883-01
4.750000+04	1.8968050+00	3.4770000+02	1.2906947-01
4.800000+04	1.8517646+00	3.4552000+02	1.2600467-01
4.900000+04	1.7648669+00	3.4115999+02	1.2009165-01
5.000000+04	1.6820470+00	3.3680000+02	1.1445611-01
5.0583000+04	1.6355683+00	3.3469999+02	1.1129344-01
5.100000+04	1.6031136+00	3.3469999+02	1.0908503-01
5.200000+04	1.5278843+00	3.3469999+02	1.0396600-01
5.250000+04	1.4916041+00	3.3469999+02	1.0149728-01
5.300000+04	1.4561854+00	3.3469999+02	9.9087191-02
5.400000+04	1.3878510+00	3.3469999+02	9.4437326-02
5.500000+04	1.3227233+00	3.3469999+02	9.0005668-02
5.600000+04	1.2606519+00	3.3469999+02	8.5781974-02
5.700000+04	1.2014933+00	3.3469999+02	8.1756485-02
5.750000+04	1.1729634+00	3.3469999+02	7.9815145-02
5.800000+04	1.1451109+00	3.3469999+02	7.7919901-02
5.900000+04	1.0913743+00	3.3469999+02	7.4263355-02
6.000000+04	1.0401594+00	3.3469999+02	7.0778400-02
6.100000+04	9.9134785-01	3.3469999+02	6.7456985-02
6.1087000+04	9.8721113-01	3.3469999+02	6.7175499-02
6.200000+04	9.4482689-01	3.3760764+02	6.4291432-02
6.250000+04	9.2239158-01	3.3920000+02	6.2764806-02
6.300000+04	9.0048901-01	3.4065999+02	6.1274429-02
6.400000+04	8.5823178-01	3.4358000+02	5.8399006-02
6.500000+04	8.1795756-01	3.4650000+02	5.5658517-02
6.5617000+04	7.9405690-01	3.4815356+02	5.4032179-02
6.600000+04	7.7957606-01	3.4918000+02	5.3046820-02
6.700000+04	7.4303722-01	3.5186000+02	5.0560508-02
6.750000+04	7.2543359-01	3.5319999+02	4.9362655-02
6.800000+04	7.0825865-01	3.5439999+02	4.8193974-02
6.900000+04	6.7515336-01	3.5679999+02	4.5941300-02

**CONFIDENTIAL**

CONFIDENTIAL

GEI 67870

1962 ATMOSPHERE  
MIL STD 210A COLD DAY

ALT	PO	TO	PO/PSE
7.000000+04	6.4363841-01	3.5919999+02	4.3796843-02
7.100000+04	6.1363567-01	3.6132765+02	4.1755284-02
7.200000+04	5.8507041-01	3.6345531+02	3.9811541-02
7.300000+04	5.5787197-01	3.6558297+02	3.7960803-02
7.305500+04	5.5641426-01	3.6569999+02	3.7861613-02
7.400000+04	5.3197325-01	3.6545706+02	3.6198506-02
7.500000+04	5.0731010-01	3.6520000+02	3.4520285-02
7.600000+04	4.8382241-01	3.6491999+02	3.2922047-02
7.700000+04	4.6145244-01	3.6463999+02	3.1399867-02
7.800000+04	4.4014553-01	3.6436000+02	2.9950022-02
7.900000+04	4.1984994-01	3.6408000+02	2.8568994-02
8.000000+04	4.0051624-01	3.6380000+02	2.7253419-02
8.099999+04	3.8209770-01	3.6345363+02	2.6000115-02
8.199999+04	3.6454978-01	3.6310727+02	2.4806055-02
8.202099+04	3.6419016-01	3.6310000+02	2.4781584+02
8.300000+04	3.4783024-01	3.6270563+02	2.3668361-02
8.400000+04	3.3189881-01	3.6230281+02	2.2584296-02
8.500000+04	3.1671759-01	3.6190000+02	2.1551279-02
8.599999+04	3.0225000-01	3.6152000+02	2.0566821-02
8.699999+04	2.8846175-01	3.6113999+02	1.9628589-02
8.800000+04	2.7532003-01	3.6076000+02	1.8734352-02
8.900000+04	2.6279373-01	3.6038000+02	1.7881990-02
9.000000+04	2.5085328-01	3.6000000+02	1.7069494-02
9.099999+04	2.3947048-01	3.5960000+02	1.6294943-02
9.199999+04	2.2861862-01	3.5919999+02	1.5556520-02
9.300000+04	2.1827221-01	3.5880000+02	1.4852491-02
9.400000+04	2.0840712-01	3.5840000+02	1.4181214-02
9.500000+04	1.9900034-01	3.5800000+02	1.3541123-02
9.599999+04	1.9002996-01	3.5756000+02	1.2930727-02
9.699999+04	1.8147529-01	3.5712000+02	1.2348618-02
9.800000+04	1.7331642-01	3.5667999+02	1.1793442-02
9.900000+04	1.6553463-01	3.5624000+02	1.1263924-02
1.000000+05	1.5811203-01	3.5580000+02	1.0758848-02
1.010000+05	1.5103148-01	3.5634864+02	1.0277047-02
1.020000+05	1.4427687-01	3.5689728+02	9.8174247-03
1.030000+05	1.3783281-01	3.5744593+02	9.3789333-03
1.040000+05	1.3168462-01	3.5799457+02	8.9605753-03
1.049870+05	1.2589286-01	3.5853608+02	8.5664712-03
1.050000+05	1.2581975-01	3.5855605+02	8.5614960-03
1.060000+05	1.2022873-01	3.6009226+02	8.1810514-03
1.070000+05	1.1490555-01	3.6162847+02	7.8188316-03
1.080000+05	1.0983644-01	3.6316468+02	7.4739005-03
1.090000+05	1.0500842-01	3.6470089+02	7.1453742-03

January 15, 1964

3-7

CONFIDENTIAL

**CONFIDENTIAL**

GEI 67870

1962 ATMOSPHERE  
MIL STD 210A COLD DAY

ALT	PO	TO	PO/PSLS
1.100000+05	1.0040917-01	3.6623710+02	6.8324150-03
1.110000+05	9.6027111-02	3.6777331+02	6.5342345-03
1.120000+05	9.1251213-02	3.6930952+02	6.2500826-03
1.130000+05	8.7871100-02	3.7084573+02	5.9792528-03
1.140000+05	8.4076928-02	3.7238194+02	5.7210757-03
1.150000+05	8.0459377-02	3.7391815+02	5.4749168-03
1.160000+05	7.7009649-02	3.7545436+02	5.2401775-03
1.170000+05	7.3719388-02	3.7699058+02	5.0162893-03
1.180000+05	7.0580693-02	3.7852679+02	4.8027145-03
1.190000+05	6.7586077-02	3.8006299+02	4.5989437-03
1.200000+05	6.4728458-02	3.8159921+02	4.4044949-03
1.210000+05	6.2001111-02	3.8313542+02	4.2189106-03
1.220000+05	5.9397665-02	3.8467163+02	4.0417572-03
1.230000+05	5.6912097-02	3.8620784+02	3.8726250-03
1.240000+05	5.4538674-02	3.8774405+02	3.7111237-03
1.250000+05	5.2271988-02	3.8928026+02	3.5568854-03
1.260000+05	5.0106875-02	3.9081647+02	3.4095587-03
1.270000+05	4.8038463-02	3.9235268+02	3.2688121-03
1.280000+05	4.6062120-02	3.9388889+02	3.1343304-03
1.290000+05	4.4173450-02	3.9542510+02	3.0058145-03
1.300000+05	4.2368290-02	3.9696131+02	2.8829811-03
1.310000+05	4.0642673-02	3.9849752+02	2.7655602-03
1.320000+05	3.8992853-02	4.0003374+02	2.6532970-03
1.330000+05	3.7415250-02	4.0156994+02	2.5459478-03
1.340000+05	3.5906472-02	4.0310615+02	2.4432819-03
1.350000+05	3.4463311-02	4.0464237+02	2.3450810-03
1.360000+05	3.3082696-02	4.0617858+02	2.2511361-03
1.370000+05	3.1761728-02	4.0771479+02	2.1612498-03
1.380000+05	3.0497642-02	4.0925100+02	2.0752342-03
1.390000+05	2.9287812-02	4.1078721+02	1.9929104-03
1.400000+05	2.8129739-02	4.1232342+02	1.9141085-03
1.410000+05	2.7021047-02	4.1385963+02	1.8386668-03
1.420000+05	2.5959488-02	4.1539584+02	1.7664322-03
1.430000+05	2.4942899-02	4.1693205+02	1.6972577-03
1.440000+05	2.3969250-02	4.1846826+02	1.6310050-03
1.450000+05	2.3036591-02	4.2000447+02	1.5675416-03
1.460000+05	2.2143068-02	4.2154068+02	1.5067411-03
1.470000+05	2.1286928-02	4.2307689+02	1.4484845-03
1.480000+05	2.0466485-02	4.2461310+02	1.3926569-03
1.490000+05	1.9680150-02	4.2614931+02	1.3391501-03
1.500000+05	1.8926401-02	4.2768552+02	1.2878607-03
1.510000+05	1.8203786-02	4.2922173+02	1.2386899-03
1.520000+05	1.7510930-02	4.3075795+02	1.1915439-03
1.530000+05	1.6846515-02	4.3229415+02	1.1463333-03
1.540000+05	1.6209294-02	4.3383036+02	1.1029732-03
1.541990+05	1.6085624-02	4.3413607+02	1.0945580-03

CONFIDENTIAL

GEI 67870

1962 ATMOSPHERE  
INTERMEDIATE COLD DAY

ALT	PO	TO	PO/PSLS
0.	1.4696000+01	4.5919399+02	1.0000000+00
1.0000000+03	1.4172636+01	4.6420371+02	9.6438729-01
2.0000000+03	1.3664467+01	4.6921343+02	9.2980857-01
3.0000000+03	1.3171155+01	4.7422315+02	8.9624078-01
3.3110000+03	1.3020709+01	4.7578117+02	8.8600363-01
4.0000000+03	1.2692363+01	4.7455262+02	8.6366103-01
5.0000000+03	1.2227763+01	4.7276953+02	8.3204700-01
6.0000000+03	1.1777031+01	4.7098644+02	8.0137663-01
7.0000000+03	1.1339848+01	4.6920335+02	7.7162818-01
8.0000000+03	1.0915900+01	4.6742026+02	7.4278033-01
9.0000000+03	1.0504878+01	4.6563717+02	7.1481203-01
1.0000000+04	1.0106478+01	4.6385407+02	6.8770264-01
1.0744000+04	9.8180809+00	4.6252745+02	6.6807844-01
1.1000000+04	9.7204031+00	4.6164692+02	6.6143188-01
1.2000000+04	9.3463578+00	4.5820735+02	6.3597970-01
1.3000000+04	8.9840533+00	4.5476776+02	6.1132643-01
1.4000000+04	8.6332065+00	4.5132819+02	5.8745281-01
1.5000000+04	8.2935373+00	4.4788861+02	5.6433976-01
1.6000000+04	7.9647716+00	4.4440552+02	5.4196866-01
1.7000000+04	7.6466390+00	4.4092243+02	5.2032111-01
1.8000000+04	7.3388751+00	4.3743934+02	4.9937908-01
1.9000000+04	7.0412194+00	4.3395625+02	4.7912488-01
2.0000000+04	6.7534152+00	4.3047315+02	4.5954104-01
2.1000000+04	6.4752120+00	4.2691007+02	4.4061050-01
2.2000000+04	6.2063618+00	4.2334697+02	4.2231640-01
2.3000000+04	5.9466227+00	4.1978388+02	4.0464226-01
2.4000000+04	5.6957570+00	4.1622079+02	3.8757192-01
2.5000000+04	5.4535303+00	4.1265770+02	3.7108943-01
2.6000000+04	5.2197132+00	4.0902859+02	3.5517918-01
2.7000000+04	4.9940807+00	4.0539948+02	3.3982585-01
2.8000000+04	4.7764114+00	4.0177037+02	3.2501438-01
2.9000000+04	4.5664889+00	3.9814125+02	3.1079005-01
3.0000000+04	4.3641005+00	3.9451214+02	2.9695839-01
3.0715000+04	4.2238959+00	3.9191733+02	2.8741806-01
3.1000000+04	4.1690372+00	3.9140915+02	2.8368517-01
3.2000000+04	3.9810949+00	3.8962606+02	2.7089649-01
3.3000000+04	3.8000726+00	3.8784297+02	2.5857870-01
3.4000000+04	3.6257737+00	3.8605987+02	2.4671840-01
3.5000000+04	3.4580058+00	3.8427678+02	2.3530251-01
3.6000000+04	3.2965796+00	3.8249369+02	2.2431815-01
3.6089000+04	3.2825137+00	3.8233500+02	2.2336103-01
3.7000000+04	3.1419396+00	3.8233500+02	2.1379556-01
3.8000000+04	2.9944979+00	3.8233500+02	2.0376278-01
3.9000000+04	2.8539751+00	3.8233500+02	1.9420081-01
3.9400000+04	2.7996301+00	3.8233500+02	1.9050287-01

January 15, 1964

**CONFIDENTIAL**

1962 ATMOSPHERE  
INTERMEDIATE COLD DAY

ALT	PO	TO	PO/PSLS
4.000000+04	2.7200467+00	3.8233500+02	1.8508756-01
4.100000+04	2.5924031+00	3.8233500+02	1.7640195-01
4.200000+04	2.4707495+00	3.8233500+02	1.6812394-01
4.237700+04	2.4263826+00	3.8233500+02	1.6510497-01
4.300000+04	2.3548047+00	3.8071990+02	1.6023439-01
4.400000+04	2.2443008+00	3.7812745+02	1.5271508-01
4.500000+04	2.1389826+00	3.7553499+02	1.4554862-01
4.600000+04	2.0386066+00	3.7285500+02	1.3871846-01
4.700000+04	1.9429410+00	3.7017500+02	1.3220883-01
4.750000+04	1.8968050+00	3.6883499+02	1.2906947-01
4.800000+04	1.8517646+00	3.6774499+02	1.2600467-01
4.900000+04	1.7648669+00	3.6556499+02	1.2009165-01
5.000000+04	1.6820470+00	3.6338500+02	1.1445611-01
5.058300+04	1.6355683+00	3.6233499+02	1.1129344-01
5.100000+04	1.6031136+00	3.6233499+02	1.0908503-01
5.200000+04	1.5278843+00	3.6233499+02	1.0396600-01
5.250000+04	1.4916041+00	3.6233499+02	1.0149728-01
5.300000+04	1.4561854+00	3.6233499+02	9.9087191-02
5.400000+04	1.3878510+00	3.6233499+02	9.4437326-02
5.500000+04	1.3227233+00	3.6233499+02	9.0005668-02
5.600000+04	1.2606519+00	3.6233499+02	8.5781974-02
5.700000+04	1.2014933+00	3.6233499+02	8.1756485-02
5.750000+04	1.1729634+00	3.6233499+02	7.9815145-02
5.800000+04	1.1451109+00	3.6233499+02	7.7919901-02
5.900000+04	1.0913743+00	3.6233499+02	7.4263355-02
6.000000+04	1.0401594+00	3.6233499+02	7.0778400-02
6.100000+04	9.9134785-01	3.6233499+02	6.7456985-02
6.108700+04	9.8721113-01	3.6233499+02	6.7175499-02
6.200000+04	9.4482689-01	3.6378882+02	6.4291432-02
6.250000+04	9.2239158-01	3.6458499+02	6.2764806-02
6.300000+04	9.0048901-01	3.6531499+02	6.1274429-02
6.400000+04	8.5823178-01	3.6677500+02	5.8399006-02
6.500000+04	8.1795756-01	3.6823500+02	5.5658517-02
6.561700+04	7.9405690-01	3.6906177+02	5.4032179-02
6.600000+04	7.7957606-01	3.6968006+02	5.3046820-02
6.700000+04	7.4303722-01	3.7129438+02	5.0560508-02
6.750000+04	7.2543359-01	3.7210154+02	4.9362655-02
6.800000+04	7.0825865-01	3.7283870+02	4.8193974-02
6.900000+04	6.7515336-01	3.7431302+02	4.5941300-02

CONFIDENTIAL

GEI 67870

1962 ATMOSPHERE  
INTERMEDIATE COLD DAY

ALT	PO	TO	PG/PSELS
7.000000+04	6.4363841-01	3.7578734+02	4.3796843-02
7.100000+04	6.1363567-01	3.7712549+02	4.1755284-02
7.200000+04	5.8507041-01	3.7846364+02	3.9811541-02
7.300000+04	5.5787197-01	3.7980179+02	3.7960803-02
7.3055000+04	5.5641426-01	3.7987539+02	3.7861613-02
7.400000+04	5.3197325-01	3.8001316+02	3.6198506-02
7.500000+04	5.0731010-01	3.8015895+02	3.4520285-02
7.600000+04	4.8382241-01	3.8029326+02	3.2922047-02
7.700000+04	4.6145244-01	3.8042758+02	3.1399867-02
7.800000+04	4.4014553-01	3.8056191+02	2.9950022-02
7.900000+04	4.1984994-01	3.8069623+02	2.8568994-02
8.000000+04	4.0051624-01	3.8083055+02	2.7253419-02
8.0999999+04	3.8209770-01	3.8093168+02	2.6000115-02
8.1999999+04	3.6454978-01	3.8103282+02	2.4806055-02
8.2020999+04	3.6419016-01	3.8103495+02	2.4781584-02
8.3000000+04	3.4783024-01	3.8110633+02	2.3668361-02
8.4000000+04	3.3189881-01	3.8117924+02	2.2584296-02
8.5000000+04	3.1671759-01	3.8125215+02	2.1551279-02
8.5999999+04	3.0225000-01	3.8133647+02	2.0566821-02
8.6999999+04	2.8846175-01	3.8142079+02	1.9628589-02
8.8000000+04	2.7532003-01	3.8150511+02	1.8734352-02
8.9000000+04	2.6279373-01	3.8158943+02	1.7881990-02
9.0000000+04	2.5085328-01	3.8167375+02	1.7069494-02
9.0999999+04	2.3947048-01	3.8174807+02	1.6294943-02
9.1999999+04	2.2861862-01	3.8182240+02	1.5556520-02
9.3000000+04	2.1827221-01	3.8189672+02	1.4852491-02
9.4000000+04	2.0840712-01	3.8197103+02	1.4181214-02
9.5000000+04	1.9900034-01	3.8204536+02	1.3541123-02
9.5999999+04	1.9002996-01	3.8209968+02	1.2930727-02
9.6999999+04	1.8147529-01	3.8215400+02	1.2348618-02
9.8000000+04	1.7331642-01	3.8220831+02	1.1793442-02
9.9000000+04	1.6553463-01	3.8226264+02	1.1263924-02
1.0000000+05	1.5811203-01	3.8231696+02	1.0758848-02
1.0100000+05	1.5103148-01	3.8286560+02	1.0277047-02
1.0200000+05	1.4427687-01	3.8341424+02	9.8174247-03
1.0300000+05	1.3783281-01	3.8396288+02	9.3789333-03
1.0400000+05	1.3168462-01	3.8451153+02	8.9605753-03
1.0498700+05	1.2589286-01	3.8505304+02	8.5664712-03
1.0500000+05	1.2581975-01	3.8507301+02	8.5614960-03
1.0600000+05	1.2022873-01	3.8660922+02	8.1810514-03
1.0700000+05	1.1490555-01	3.8814543+02	7.8188316-03
1.0800000+05	1.0983644-01	3.8968164+02	7.4739005-03
1.0900000+05	1.0500842-01	3.9121785+02	7.1453742-03

January 15, 1964

3-11

CONFIDENTIAL

**CONFIDENTIAL**

1962 ATMOSPHERE  
INTERMEDIATE COLD DAY

ALT	PO	TO	PO/PSLS
1.100000+05	1.0040917-01	3.9275406+02	6.8324150-03
1.110000+05	9.6027111-02	3.9429027+02	6.5342345-03
1.120000+05	9.1851213-02	3.9582648+02	6.2500826-03
1.130000+05	8.7871100-02	3.9736269+02	5.9792528-03
1.140000+05	8.4076928-02	3.9889890+02	5.7210757-03
1.150000+05	8.0459377-02	4.0043511+02	5.4749168-03
1.160000+05	7.7009649-02	4.0197132+02	5.2401775-03
1.170000+05	7.3719388-02	4.0350754+02	5.0162893-03
1.180000+05	7.0580693-02	4.0504375+02	4.8027145-03
1.190000+05	6.7586077-02	4.0657995+02	4.5989437-03
1.200000+05	6.4728458-02	4.0811617+02	4.4044949-03
1.210000+05	6.2001111-02	4.0965238+02	4.2189106-03
1.220000+05	5.9397665-02	4.1118859+02	4.0417572-03
1.230000+05	5.6912097-02	4.1272480+02	3.8726250-03
1.240000+05	5.4538674-02	4.1426101+02	3.7111237-03
1.250000+05	5.2271988-02	4.1579722+02	3.5568854-03
1.260000+05	5.0106875-02	4.1733343+02	3.4095587-03
1.270000+05	4.8038463-02	4.1886964+02	3.2688121-03
1.280000+05	4.6062120-02	4.2040585+02	3.1343304-03
1.290000+05	4.4173450-02	4.2194206+02	3.0058145-03
1.300000+05	4.2368290-02	4.2347827+02	2.8829811-03
1.310000+05	4.0642673-02	4.2501448+02	2.7655602-03
1.320000+05	3.8992853-02	4.2655069+02	2.6532970-03
1.330000+05	3.7415250-02	4.2808690+02	2.5459478-03
1.340000+05	3.5906472-02	4.2962312+02	2.4432819-03
1.350000+05	3.4463311-02	4.3115932+02	2.3450810-03
1.360000+05	3.3082696-02	4.3269553+02	2.2511361-03
1.370000+05	3.1761728-02	4.3423175+02	2.1612498-03
1.380000+05	3.0497642-02	4.3576795+02	2.0752342-03
1.390000+05	2.9287812-02	4.3730416+02	1.9929104-03
1.400000+05	2.8129739-02	4.3884038+02	1.9141085-03
1.410000+05	2.7021047-02	4.4037659+02	1.8386658-03
1.420000+05	2.5959488-02	4.4191280+02	1.7664322-03
1.430000+05	2.4942899-02	4.4344901+02	1.6972577-03
1.440000+05	2.3969250-02	4.4498522+02	1.6310050-03
1.450000+05	2.3036591-02	4.4652143+02	1.5675416-03
1.460000+05	2.2143068-02	4.4805764+02	1.5067411-03
1.470000+05	2.1286928-02	4.4959385+02	1.4484845-03
1.480000+05	2.0466485-02	4.5113006+02	1.3926569-03
1.490000+05	1.9680150-02	4.5266627+02	1.3391501-03
1.500000+05	1.8926401-02	4.5420249+02	1.2878607-03
1.510000+05	1.8203786-02	4.5573869+02	1.2386899-03
1.520000+05	1.7510930-02	4.5727491+02	1.1915439-03
1.530000+05	1.6846515-02	4.5881112+02	1.1463333-03
1.540000+05	1.6209294-02	4.6034732+02	1.1029732-03
1.541990+05	1.6085624-02	4.6065303+02	1.0945580-03

CONFIDENTIAL

GEI 67870

1962 ATMOSPHERE  
STANDARD DAY

ALT	PO	TO	PO/PSLS
0.	1.4696000+01	5.1868799+02	1.0000000+00
1.0000000+03	1.4172636+01	5.1511637+02	9.6438729-01
2.0000000+03	1.3664467+01	5.1154475+02	9.2980857-01
3.0000000+03	1.3171155+01	5.0797313+02	8.9624078-01
3.3110000+03	1.3020709+01	5.0686235+02	8.8600363-01
4.0000000+03	1.2692363+01	5.0440525+02	8.6366103-01
5.0000000+03	1.2227763+01	5.0083907+02	8.3204700-01
6.0000000+03	1.1777031+01	4.9727288+02	8.0137663-01
7.0000000+03	1.1339848+01	4.9370670+02	7.7162818-01
8.0000000+03	1.0915900+01	4.9014052+02	7.4278033-01
9.0000000+03	1.0504878+01	4.8657434+02	7.1481203-01
1.0000000+04	1.0106478+01	4.8300815+02	6.8770264-01
1.0744000+04	9.8180809+00	4.8035491+02	6.5807844-01
1.1000000+04	9.7204031+00	4.7944197+02	6.6143188+01
1.2000000+04	9.3463578+00	4.7587579+02	6.3597970-01
1.3000000+04	8.9840533+00	4.7230960+02	6.1132643-01
1.4000000+04	8.6332065+00	4.6874342+02	5.8745281-01
1.5000000+04	8.2935373+00	4.6517724+02	5.6433974-01
1.6000000+04	7.9647716+00	4.6161105+02	5.4196866-01
1.7000000+04	7.6466390+00	4.5804487+02	5.2032111-01
1.8000000+04	7.3388751+00	4.5447869+02	4.9937908-01
1.9000000+04	7.0412194+00	4.5091251+02	4.7912488-01
2.0000000+04	6.7534152+00	4.4734632+02	4.5954104-01
2.1000000+04	6.4752120+00	4.4378014+02	4.4061050-01
2.2000000+04	6.2063618+00	4.4021395+02	4.2231640-01
2.3000000+04	5.9466227+00	4.3664777+02	4.0464226-01
2.4000000+04	5.6957570+00	4.3308159+02	3.8757192-01
2.5000000+04	5.4535303+00	4.2951540+02	3.7108943-01
2.6000000+04	5.2197132+00	4.2594922+02	3.5517918-01
2.7000000+04	4.9940807+00	4.2238303+02	3.3982585-01
2.8000000+04	4.7764114+00	4.1881685+02	3.2501438-01
2.9000000+04	4.5664889+00	4.1525067+02	3.1073005-01
3.0000000+04	4.3641005+00	4.1168448+02	2.9695839-01
3.0715000+04	4.2238959+00	4.0913466+02	2.8741806-01
3.1000000+04	4.1690372+00	4.0811830+02	2.8368517-01
3.2000000+04	3.9810949+00	4.0455212+02	2.7089649-01
3.3000000+04	3.8000726+00	4.0098594+02	2.5857870-01
3.4000000+04	3.6257737+00	3.9741975+02	2.4671840-01
3.5000000+04	3.4580058+00	3.9385357+02	2.3530251-01
3.6000000+04	3.2965796+00	3.9028739+02	2.2431815-01
3.6089000+04	3.2825137+00	3.8997000+02	2.2336103-01
3.7000000+04	3.1419396+00	3.8997000+02	2.1379556-01
3.8000000+04	2.9944979+00	3.8997000+02	2.0376278-01
3.9000000+04	2.8539751+00	3.8997000+02	1.9420081-01
3.9400000+04	2.7996301+00	3.8997000+02	1.9050287-01

January 15, 1964

3-13

CONFIDENTIAL

CONFIDENTIAL

GEI 67870

1962 ATMOSPHERE  
STANDARD DAY

ALT	PO	TO	PO/PSLS
4.000000+04	2.7200467+00	3.8997000+02	1.8508756-01
4.100000+04	2.5924031+00	3.8997000+02	1.7640195-01
4.200000+04	2.4707495+00	3.8997000+02	1.6812394-01
4.2377000+04	2.4263826+00	3.8997000+02	1.6510497-01
4.300000+04	2.3548047+00	3.8997000+02	1.6023439-01
4.400000+04	2.2443008+00	3.8997000+02	1.5271508-01
4.500000+04	2.1389826+00	3.8997000+02	1.4554862-01
4.600000+04	2.0386066+00	3.8997000+02	1.3871846-01
4.700000+04	1.9429410+00	3.8997000+02	1.3220883-01
4.750000+04	1.8968050+00	3.8997000+02	1.2906947-01
4.800000+04	1.8517646+00	3.8997000+02	1.2600467-01
4.900000+04	1.7648669+00	3.8997000+02	1.2009165-01
5.000000+04	1.6820470+00	3.8997000+02	1.1445611-01
5.0583000+04	1.6355683+00	3.8997000+02	1.1129344-01
5.100000+04	1.6031136+00	3.8997000+02	1.0908503-01
5.200000+04	1.5278843+00	3.8997000+02	1.0396600-01
5.250000+04	1.4916041+00	3.8997000+02	1.0149728-01
5.300000+04	1.4561854+00	3.8997000+02	9.9087191-02
5.400000+04	1.3878510+00	3.8997000+02	9.4437326-02
5.500000+04	1.3227233+00	3.8997000+02	9.0005668-02
5.600000+04	1.2606519+00	3.8997000+02	8.5781974-02
5.700000+04	1.2014933+00	3.8997000+02	8.1756485-02
5.750000+04	1.1729634+00	3.8997000+02	7.9815145-02
5.800000+04	1.1451109+00	3.8997000+02	7.7919901-02
5.900000+04	1.0913743+00	3.8997000+02	7.4263355-02
6.000000+04	1.0401594+00	3.8997000+02	7.0778400-02
6.100000+04	9.9134785-01	3.8997000+02	6.7456985-02
6.1087000+04	9.8721113-01	3.8997000+02	6.7175499-02
6.200000+04	9.4482689-01	3.8997000+02	6.4291432-02
6.250000+04	9.2239158-01	3.8997000+02	6.2764806-02
6.300000+04	9.0048901-01	3.8997000+02	6.1274429-02
6.400000+04	8.5823178-01	3.8997000+02	5.8399006-02
6.500000+04	8.1795756-01	3.8997000+02	5.5658517-02
6.5617000+04	7.9405690-01	3.8997000+02	5.4032179-02
6.600000+04	7.7957606-01	3.9018013+02	5.3046820-02
6.700000+04	7.4303722-01	3.9072877+02	5.0560508-02
6.750000+04	7.2543359-01	3.9100308+02	4.9362655-02
6.800000+04	7.0825865-01	3.9127741+02	4.8193974-02
6.900000+04	6.7515336-01	3.9182605+02	4.5941300-02

**CONFIDENTIAL**

GEI 67870

1962 ATMOSPHERE  
STANDARD DAY

ALT	PO	TO	PO/PST S
7.000000+04	6.4363841-01	3.9237469+02	4.3796843-02
7.100000+04	6.1363567-01	3.9292333+02	4.1755284-02
7.200000+04	5.8507041-01	3.9347197+02	3.9811541-02
7.300000+04	5.5787197-01	3.9402061+02	3.7960803-02
7.305500+04	5.5641426-01	3.9405079+02	3.7861613-02
7.400000+04	5.3197325-01	3.9456925+02	3.6198506-02
7.500000+04	5.0731010-01	3.9511790+02	3.4520285-02
7.600000+04	4.8382241-01	3.9566654+02	3.2922047-02
7.700000+04	4.6145244-01	3.9621518+02	3.1399867-02
7.800000+04	4.4014553-01	3.9676382+02	2.9950022-02
7.900000+04	4.1984994-01	3.9731246+02	2.8568994-02
8.000000+04	4.0051624-01	3.9786110+02	2.7253419-02
8.099999+04	3.8209770-01	3.9840974+02	2.6000115-02
8.199999+04	3.6454978-01	3.9895838+02	2.4806055-02
8.202099+04	3.6419016-01	3.9896990+02	2.4781584-02
8.300000+04	3.4783024-01	3.9950702+02	2.3668361-02
8.400000+04	3.3189881-01	4.0005566+02	2.2584296-02
8.500000+04	3.1671759-01	4.0060430+02	2.1551279-02
8.599999+04	3.0225000-01	4.0115294+02	2.0566821-02
8.699999+04	2.8846175-01	4.0170159+02	1.9626589-02
8.800000+04	2.7532003-01	4.0225022+02	1.8734352-02
8.900000+04	2.6279373-01	4.0279887+02	1.7881990-02
9.000000+04	2.5085328-01	4.0334751+02	1.7069494-02
9.099999+04	2.3947048-01	4.0389615+02	1.6294943-02
9.199999+04	2.2861862-01	4.0444479+02	1.5556520-02
9.300000+04	2.1827221-01	4.0499343+02	1.4852491-02
9.400000+04	2.0840712-01	4.0554208+02	1.4181214-02
9.500000+04	1.9900034-01	4.0609071+02	1.3541123-02
9.599999+04	1.9002996-01	4.0663936+02	1.2930727+02
9.699999+04	1.8147529-01	4.0718800+02	1.2348618-02
9.800000+04	1.7331642-01	4.0773664+02	1.1793442-02
9.900000+04	1.6553463-01	4.0828528+02	1.1263924-02
1.000000+05	1.5811203-01	4.0883392+02	1.0758848-02
1.010000+05	1.5103148-01	4.0938256+02	1.0277047-02
1.020000+05	1.4427687-01	4.0993120+02	9.8174247-03
1.030000+05	1.3783281-01	4.1047984+02	9.3789333-03
1.040000+05	1.3168462-01	4.1102849+02	8.9605753-03
1.049870+05	1.2589286-01	4.1156999+02	8.5664712-03
1.050000+05	1.2581975-01	4.1158997+02	8.5614960-03
1.060000+05	1.2022873-01	4.1312618+02	8.1810514-03
1.070000+05	1.1490555-01	4.1466239+02	7.8188316-03
1.080000+05	1.0983644-01	4.1619860+02	7.4739005-03
1.090000+05	1.0500842-01	4.1773481+02	7.1453742-03

January 15, 1964

3-15

**CONFIDENTIAL**

## CONFIDENTIAL

1962 ATMOSPHERE  
STANDARD DAY

ALT	PO	TO	PO/PSLS
1.100000+05	1.0040917-01	4.1927102+02	6.8324150-03
1.110000+05	9.6027111-02	4.2080723+02	6.5342345-03
1.120000+05	9.1851213-02	4.2234344+02	6.2500826-03
1.130000+05	8.7871100-02	4.2387965+02	5.9792528-03
1.140000+05	8.4076928-02	4.2541586+02	5.7210757-03
1.150000+05	8.0459377-02	4.2695208+02	5.4749168-03
1.160000+05	7.7009649-02	4.2848828+02	5.2401775-03
1.170000+05	7.3719388-02	4.3002449+02	5.0162893-03
1.180000+05	7.0580693-02	4.3156071+02	4.8027145-03
1.190000+05	6.7586077-02	4.3309692+02	4.5989437-03
1.200000+05	6.4728458-02	4.3463312+02	4.4044949-03
1.210000+05	6.2001111-02	4.3616934+02	4.2189106-03
1.220000+05	5.9397665-02	4.3770555+02	4.0417572-03
1.230000+05	5.6912097-02	4.3924176+02	3.8726250-03
1.240000+05	5.4538674-02	4.4077797+02	3.7111237-03
1.250000+05	5.2271988-02	4.4231418+02	3.5568854-03
1.260000+05	5.0106875-02	4.4385039+02	3.4095587-03
1.270000+05	4.8038463-02	4.4538660+02	3.2688121-03
1.280000+05	4.6062120-02	4.4692281+02	3.1343304-03
1.290000+05	4.4173450-02	4.4845902+02	3.0058145-03
1.300000+05	4.2368290-02	4.4999523+02	2.8829811-03
1.310000+05	4.0642673-02	4.5153144+02	2.7655602-03
1.320000+05	3.8992853-02	4.5306765+02	2.6532970-03
1.330000+05	3.7415250-02	4.5460386+02	2.5459478-03
1.340000+05	3.5906472-02	4.5614007+02	2.4432819-03
1.350000+05	3.4463311-02	4.5767629+02	2.3450810-03
1.360000+05	3.3082696-02	4.5921249+02	2.2511361-03
1.370000+05	3.1761728-02	4.6074871+02	2.1612498-03
1.380000+05	3.0497642-02	4.6228492+02	2.0752342-03
1.390000+05	2.9287812-02	4.6382113+02	1.9929104-03
1.400000+05	2.8129739-02	4.6535734+02	1.9141085-03
1.410000+05	2.7021047-02	4.6689355+02	1.8386668-03
1.420000+05	2.5959488-02	4.6842976+02	1.7664322-03
1.430000+05	2.4942899-02	4.6996597+02	1.6972577-03
1.440000+05	2.3969250-02	4.7150218+02	1.6310050-03
1.450000+05	2.3036591-02	4.7303839+02	1.5675416-03
1.460000+05	2.2143068-02	4.7457460+02	1.5067411-03
1.470000+05	2.1286928-02	4.7611082+02	1.4484845-03
1.480000+05	2.0466485-02	4.7764702+02	1.3926569-03
1.490000+05	1.9680150-02	4.7918323+02	1.3391501-03
1.500000+05	1.8926401-02	4.8071945+02	1.2878607-03
1.510000+05	1.8203786-02	4.8225566+02	1.2386899-03
1.520000+05	1.7510930-02	4.8379187+02	1.1915439-03
1.530000+05	1.6846515-02	4.8532808+02	1.1463333-03
1.540000+05	1.6209294-02	4.8686429+02	1.1029732-03
1.541990+05	1.6085624-02	4.8718999+02	1.0945580-03

**CONFIDENTIAL**

GEI 67870

1962 ATMOSPHERE  
INTERMEDIATE HOT DAY

ALT	PO	TO	PO/PSLS
0.	1.4696000+01	5.4069399+02	1.0000000+00
1.0000000+03	1.4172636+01	5.3697522+02	9.6438729-01
2.0000000+03	1.3664467+01	5.3325646+02	9.2980857-01
3.0000000+03	1.3171155+01	5.2953770+02	8.9624078-01
3.3110000+03	1.3020709+01	5.2838117+02	8.8600363-01
4.0000000+03	1.2692363+01	5.2582684+02	8.6366103-01
5.0000000+03	1.2227763+01	5.2211953+02	8.3204700-01
6.0000000+03	1.1777031+01	5.1837091+02	8.0137663-01
7.0000000+03	1.1339848+01	5.1462228+02	7.7162818-01
8.0000000+03	1.0915900+01	5.1087366+02	7.4278033-01
9.0000000+03	1.0504878+01	5.0712504+02	7.1481203-01
1.0000000+04	1.0106478+01	5.0337643+02	6.8770264-01
1.0744000+04	9.8180809+00	5.0058745+02	6.6807844-01
1.1000000+04	9.7204031+00	4.9964316+02	6.6143188-01
1.2000000+04	9.3463578+00	4.9595452+02	6.3597970-01
1.3000000+04	8.9840533+00	4.9226589+02	6.1132643-01
1.4000000+04	8.6332065+00	4.8857725+02	5.8745281-01
1.5000000+04	8.2935973+00	4.8488861+02	5.6433976-01
1.6000000+04	7.9647716+00	4.8116552+02	5.4196866-01
1.7000000+04	7.6466390+00	4.7744243+02	5.2032111-01
1.8000000+04	7.3388751+00	4.7371934+02	4.9937908-01
1.9000000+04	7.0412194+00	4.6999625+02	4.7912488-01
2.0000000+04	6.7534152+00	4.6627316+02	4.5954104-01
2.1000000+04	6.4752120+00	4.6261006+02	4.4061050-01
2.2000000+04	6.2063618+00	4.5894697+02	4.2231640-01
2.3000000+04	5.9466227+00	4.5528388+02	4.0464226-01
2.4000000+04	5.6957570+00	4.5162079+02	3.8757192-01
2.5000000+04	5.4535303+00	4.4795769+02	3.7108943-01
2.6000000+04	5.2197132+00	4.4428747+02	3.5517918-01
2.7000000+04	4.9940807+00	4.4061723+02	3.3982585-01
2.8000000+04	4.7764114+00	4.3694701+02	3.2501438-01
2.9000000+04	4.5664889+00	4.3327677+02	3.1073005-01
3.0000000+04	4.3641005+00	4.2960554+02	2.9695839-01
3.0715000+04	4.2238959+00	4.2698233+02	2.8741806-01
3.1000000+04	4.1690372+00	4.2597537+02	2.8368517-01
3.2000000+04	3.9810949+00	4.2244219+02	2.7089649-01
3.3000000+04	3.8000726+00	4.1890900+02	2.5857870-01
3.4000000+04	3.6257737+00	4.1537581+02	2.4671840-01
3.5000000+04	3.4580058+00	4.1184263+02	2.3530251-01
3.6000000+04	3.2965796+00	4.0830945+02	2.2431815-01
3.6089000+04	3.2825137+00	4.0799499+02	2.2336103-01
3.7000000+04	3.1419396+00	4.0643768+02	2.1379556-01
3.8000000+04	2.9944979+00	4.0472823+02	2.0376278-01
3.9000000+04	2.8539751+00	4.0301877+02	1.9420081-01
3.9400000+04	2.7996301+00	4.0233499+02	1.9050287-01

January 15, 1964

3-17

**CONFIDENTIAL**

**CONFIDENTIAL**

GEI 67870

1962 ATMOSPHERE  
INTERMEDIATE HOT DAY

ALT	PO	TO	PO/PSLS
4.000000+04	2.7200467+00	4.0246096+02	1.8508756-01
4.100000+04	2.5924031+00	4.0267090+02	1.7640195-01
4.200000+04	2.4707495+00	4.0288085+02	1.6812394-01
4.2377000+04	2.4263826+00	4.0295999+02	1.6510497-01
4.300000+04	2.3548047+00	4.0309656+02	1.6023439-01
4.400000+04	2.2443008+00	4.0331578+02	1.5271508-01
4.500000+04	2.1389826+00	4.0353499+02	1.4554862-01
4.600000+04	2.0386066+00	4.0377499+02	1.3871846-01
4.700000+04	1.9429410+00	4.0401499+02	1.3220883-01
4.750000+04	1.8968050+00	4.0413499+02	1.2906947-01
4.800000+04	1.8517646+00	4.0425500+02	1.2600467-01
4.900000+04	1.7648669+00	4.0449499+02	1.2009165-01
5.000000+04	1.6820470+00	4.0473499+02	1.1445611-01
5.0583000+04	1.6355683+00	4.0484499+02	1.1129344-01
5.100000+04	1.6031136+00	4.0488632+02	1.0908503-01
5.200000+04	1.5278843+00	4.0498543+02	1.0396600-01
5.250000+04	1.4916041+00	4.0503500+02	1.0149728-01
5.300000+04	1.4561854+00	4.0508499+02	9.9087191-02
5.400000+04	1.3878510+00	4.0518500+02	9.4437326-02
5.500000+04	1.3227233+00	4.0528499+02	9.0005668-02
5.600000+04	1.2606519+00	4.0536500+02	8.5781974-02
5.700000+04	1.2014933+00	4.0544499+02	8.1756485-02
5.750000+04	1.1729634+00	4.0548499+02	7.9815143-02
5.800000+04	1.1451109+00	4.0553499+02	7.7919901-02
5.900000+04	1.0913743+00	4.0563499+02	7.4263355-02
6.000000+04	1.0401594+00	4.0573499+02	7.0778400-02
6.100000+04	9.9134785-01	4.0585919+02	6.7456985-02
6.1087000+04	9.8721113-01	4.0586999+02	6.7175499-02
6.200000+04	9.4482689-01	4.0594430+02	6.4291432-02
6.230000+04	9.2239158-01	4.0598499+02	6.2764806-02
6.300000+04	9.0048901-01	4.0603499+02	6.1274429-02
6.400000+04	8.5823178-01	4.0613499+02	5.8399006-02
6.500000+04	8.1795756-01	4.0623499+02	5.5658517-02
6.5617000+04	7.9405690-01	4.0633371+02	5.4032179-02
6.600000+04	7.7957606-01	4.0650006+02	5.3046820-02
6.700000+04	7.4303722-01	4.0693437+02	5.0560508-02
6.750000+04	7.2543359-01	4.0715154+02	4.9362655-02
6.800000+04	7.0825865-01	4.0745870+02	4.8193974-02
6.900000+04	6.7515336-01	4.0807302+02	4.5941300-02

**CONFIDENTIAL**

GEI 67870

**1962 ATMOSPHERE  
INTERMEDIATE HOT DAY**

ALT	PO	TC	PO/PSIC
7.000000+04	6.4363841-01	4.0868734+02	4.3796843-02
7.100000+04	6.1363567-01	4.0931027+02	4.1755284+02
7.200000+04	5.8507041-01	4.0993320+02	3.9811541-02
7.300000+04	5.5787197-01	4.1055613+02	3.7960803-02
7.305500+04	5.5641426-01	4.1059039+02	3.7861613-02
7.400000+04	5.3197325-01	4.1118244+02	3.6198506-02
7.500000+04	5.0731010-01	4.1180894+02	3.4520285+02
7.600000+04	4.8382241-01	4.1243326+02	3.2922047-02
7.700000+04	4.6145244-01	4.1305758+02	3.1399867-02
7.800000+04	4.4014553-01	4.1368191+02	2.9950022-02
7.900000+04	4.1984994-01	4.1430622+02	2.8568994-02
8.000000+04	4.0051624-01	4.1493055+02	2.7253419-02
8.099999+04	3.8209770-01	4.1560071+02	2.6000115-02
8.199999+04	3.6454978-01	4.1627087+02	2.4806055-02
8.202099+04	3.6419016-01	4.1628495+02	2.4781584-02
8.300000+04	3.4783024-01	4.1693144+02	2.3668961-02
8.400000+04	3.3189881-01	4.1759179+02	2.2584296-02
8.500000+04	3.1671759-01	4.1825215+02	2.1551279-02
8.599999+04	3.0225000-01	4.1892647+02	2.0566821-02
8.699999+04	2.8846175-01	4.1960079+02	1.9628589-02
8.800000+04	2.7532003-01	4.2027511+02	1.8734352-02
8.900000+04	2.6279373-01	4.2094943+02	1.7881990-02
9.000000+04	2.5085328-01	4.2162375+02	1.7069494-02
9.099999+04	2.3947048-01	4.2228807+02	1.6294943-02
9.199999+04	2.2861862-01	4.2295239+02	1.5556520-02
9.300000+04	2.1827221-01	4.2361671+02	1.4852491-02
9.400000+04	2.0840712-01	4.2428103+02	1.4181214-02
9.500000+04	1.9900034-01	4.2494535+02	1.3541123-02
9.599999+04	1.9002996-01	4.2564967+02	1.2930727-02
9.699999+04	1.8147529-01	4.2635399+02	1.2348618-02
9.800000+04	1.7331642-01	4.2705832+02	1.1793442-02
9.900000+04	1.6553463-01	4.2776263+02	1.1263924-02
1.000000+05	1.5811203-01	4.2846696+02	1.0758848-02
1.010000+05	1.5103148-01	4.2901560+02	1.0277047-02
1.020000+05	1.4427687-01	4.2956424+02	9.8174247-03
1.030000+05	1.3783281-01	4.3011288+02	9.3789333-03
1.040000+05	1.3168462-01	4.3066152+02	8.9605753-03
1.049870+05	1.2589286-01	4.3120303+02	8.5664712-03
1.050000+05	1.2581975-01	4.3122301+02	8.5614960-03
1.060000+05	1.2022873-01	4.3275921+02	8.1810514-03
1.070000+05	1.1490555-01	4.3429543+02	7.8188316-03
1.080000+05	1.0983644-01	4.3583164+02	7.4739005-03
1.090000+05	1.0500842-01	4.3736784+02	7.1453742-03

January 15, 1964

3-19

**CONFIDENTIAL**

**CONFIDENTIAL**

GEI 67870

1962 ATMOSPHERE  
INTERMEDIATE HOT DAY

AIT	PO	TO	PO/PSLS
1.100000+05	1.0040917-01	4.3890406+02	6.8324150-03
1.110000+05	9.6027111-02	4.4044027+02	6.5342345-03
1.120000+05	9.1851213-02	4.4197648+02	6.2500826-03
1.130000+05	8.7871100-02	4.4351269+02	5.9792528-03
1.140000+05	8.4076928-02	4.4504890+02	5.7210757-03
1.150000+05	8.0459377-02	4.4658511+02	5.4749168-03
1.160000+05	7.7009649-02	4.4812132+02	5.2401775-03
1.170000+05	7.3719388-02	4.4965754+02	5.0162893-03
1.180000+05	7.0580693-02	4.5119374+02	4.8027145-03
1.190000+05	6.7586077-02	4.5272995+02	4.5989437-03
1.200000+05	6.4728458-02	4.5426617+02	4.4044949-03
1.210000+05	6.2001111-02	4.5580238+02	4.2189106-03
1.220000+05	5.9397665-02	4.5733858+02	4.0417572-03
1.230000+05	5.6912097-02	4.5887480+02	3.8726250-03
1.240000+05	5.4538674-02	4.6041101+02	3.7111237-03
1.250000+05	5.2271988-02	4.6194721+02	3.5568854+03
1.260000+05	5.0106875-02	4.6348343+02	3.4095587+03
1.270000+05	4.8038463-02	4.6501964+02	3.2688121-03
1.280000+05	4.6062120-02	4.6655585+02	3.1343304-03
1.290000+05	4.4173450-02	4.6809206+02	3.0058145-03
1.300000+05	4.2368290-02	4.6962827+02	2.8829811-03
1.310000+05	4.0642673-02	4.7116448+02	2.7655602-03
1.320000+05	3.8992853-02	4.7270069+02	2.6532970-03
1.330000+05	3.7415250-02	4.7423690+02	2.5459478-03
1.340000+05	3.5906472-02	4.7577311+02	2.4432819-03
1.350000+05	3.4463311-02	4.7730932+02	2.3450810+03
1.360000+05	3.3082696-02	4.7884553+02	2.2511361-03
1.370000+05	3.1761728-02	4.8038175+02	2.1612498-03
1.380000+05	3.0497642-02	4.8191795+02	2.0752342-03
1.390000+05	2.9287812-02	4.8345416+02	1.9929104-03
1.400000+05	2.8129739-02	4.8499038+02	1.9141085+03
1.410000+05	2.7021047-02	4.8652658+02	1.8386668-03
1.420000+05	2.5959488-02	4.8806280+02	1.7664322-03
1.430000+05	2.4942899-02	4.8959901+02	1.6972577-03
1.440000+05	2.3969250-02	4.9113522+02	1.6310050-03
1.450000+05	2.3036591-02	4.9267142+02	1.5675416-03
1.460000+05	2.2143068-02	4.9420763+02	1.5067411-03
1.470000+05	2.1286928-02	4.9574385+02	1.4484845-03
1.480000+05	2.0466485-02	4.9728006+02	1.3926569-03
1.490000+05	1.9680150-02	4.9881627+02	1.3391501-03
1.500000+05	1.8926401-02	5.0035248+02	1.2878607-03
1.510000+05	1.8203786-02	5.0188869+02	1.2386899-03
1.520000+05	1.7510930-02	5.0342491+02	1.1915439-03
1.530000+05	1.6846515-02	5.0496112+02	1.1463333-03
1.540000+05	1.6209294-02	5.0649732+02	1.1029732-03
1.541990+05	1.6085624-02	5.0680302+02	1.0945580-03

CONFIDENTIAL

GEI 87870

1962 ATMOSPHERE  
MIL STD 210A HOT DAY

ALT	PO	TO	PO/RSL
0.	1.4696000+01	5.6268999+02	1.0000000+00
1.0000000+03	1.4172636+01	5.5883409+02	9.6438729-01
2.0000000+03	1.3664467+01	5.5496818+02	9.3980857-01
3.0000000+03	1.3171155+01	5.5110229+02	8.9624078-01
3.3110000+03	1.3020709+01	5.4989999+02	8.8600363-01
4.0000000+03	1.2692363+01	5.4724842+02	8.6366103-01
5.0000000+03	1.2227763+01	5.4339999+02	8.3204700-01
6.0000000+03	1.1777031+01	5.3946893+02	8.0137663-01
7.0000000+03	1.1339848+01	5.3553787+02	7.7162818-01
8.0000000+03	1.0915900+01	5.3160682+02	7.4278033-01
9.0000000+03	1.0504878+01	5.2767575+02	7.1481209-01
1.0000000+04	1.0106478+01	5.2374470+02	6.8770264-01
1.0744000+04	9.8180809+00	5.2082000+02	6.6807844-01
1.1000000+04	9.7204031+00	5.1984436+02	6.6143188-01
1.2000000+04	9.3463578+00	5.1603326+02	6.3597970-01
1.3000000+04	8.9840533+00	5.1222217+02	6.1132643-01
1.4000000+04	8.6332065+00	5.0841109+02	5.8745281-01
1.5000000+04	8.2935373+00	5.0459999+02	5.6433976-01
1.6000000+04	7.9647716+00	5.0071999+02	5.4196866-01
1.7000000+04	7.6466390+00	4.9683999+02	5.2032111-01
1.8000000+04	7.3388751+00	4.9295999+02	4.9937908-01
1.9000000+04	7.0412194+00	4.8907999+02	4.7912488-01
2.0000000+04	6.7534152+00	4.8519999+02	4.5954104-01
2.1000000+04	6.4752120+00	4.8143999+02	4.4061050-01
2.2000000+04	6.2063618+00	4.7767999+02	4.2231640-01
2.3000000+04	5.9466227+00	4.7391999+02	4.0464226-01
2.4000000+04	5.6957570+00	4.7016000+02	3.8757192-01
2.5000000+04	5.4535303+00	4.6640000+02	3.7108943-01
2.6000000+04	5.2197132+00	4.6262571+02	3.5517918-01
2.7000000+04	4.9940807+00	4.5885144+02	3.3982589-01
2.8000000+04	4.7764114+00	4.5507716+02	3.2501438-01
2.9000000+04	4.5664889+00	4.5130288+02	3.1073005-01
3.0000000+04	4.3641005+00	4.4752860+02	2.9695839-01
3.0715000+04	4.2238959+00	4.4482999+02	2.8741806-01
3.1000000+04	4.1690372+00	4.4383244+02	2.8368517-01
3.2000000+04	3.9810949+00	4.4033225+02	2.7089649-01
3.3000000+04	3.8000726+00	4.3683206+02	2.5857870-01
3.4000000+04	3.6257737+00	4.3333188+02	2.4671840-01
3.5000000+04	3.4580058+00	4.2983170+02	2.3530251-01
3.6000000+04	3.2965796+00	4.2633151+02	2.2431815-01
3.6089000+04	3.2825137+00	4.2602000+02	2.2336103-01
3.7000000+04	3.1419396+00	4.2290537+02	2.1379556-01
3.8000000+04	2.9944979+00	4.1948646+02	2.0376278-01
3.9000000+04	2.8539751+00	4.1606755+02	1.9420081-01
3.9400000+04	2.7996301+00	4.1470000+02	1.9050287-01

January 15, 1964

3-21

CONFIDENTIAL

**CONFIDENTIAL**

GEI 67870

1962 ATMOSPHERE  
MIL STD 210A HOT DAY

ALT	PO	TO	PO/PSLS
4.000000+04	2.7200467+00	4.1495193+02	1.8508756-01
4.100000+04	2.5924031+00	4.1537181+02	1.7640195-01
4.200000+04	2.4707495+00	4.1579170+02	1.6812394-01
4.2377000+04	2.4263826+00	4.1594999+02	1.6510497-01
4.300000+04	2.3548047+00	4.1622313+02	1.6023439-01
4.400000+04	2.2443008+00	4.1666157+02	1.5271508-01
4.500000+04	2.1389826+00	4.1709999+02	1.4554862-01
4.600000+04	2.0386066+00	4.1758000+02	1.3871846-01
4.700000+04	1.9429410+00	4.1805999+02	1.3220883-01
4.750000+04	1.8968050+00	4.1829999+02	1.2906947-01
4.800000+04	1.8517646+00	4.1853999+02	1.2600467-01
4.900000+04	1.7648669+00	4.1901999+02	1.2009165-01
5.000000+04	1.6820470+00	4.1950000+02	1.1445611-01
5.0583000+04	1.6355683+00	4.1971999+02	1.1129344-01
5.100000+04	1.6031136+00	4.1980265+02	1.0908503-01
5.200000+04	1.5278843+00	4.2000088+02	1.0396600-01
5.250000+04	1.4916041+00	4.2010000+02	1.0149728-01
5.300000+04	1.4561854+00	4.2020000+02	9.9087191-02
5.400000+04	1.3878510+00	4.2039999+02	9.4437326-02
5.500000+04	1.3227233+00	4.2060000+02	9.0005668-02
5.600000+04	1.2606519+00	4.2075999+02	8.5781974-02
5.700000+04	1.2014933+00	4.2092000+02	8.1756485-02
5.750000+04	1.1729634+00	4.2100000+02	7.9815145-02
5.800000+04	1.1451109+00	4.2110000+02	7.7919901-02
5.900000+04	1.0913743+00	4.2129999+02	7.4263355-02
6.000000+04	1.0401594+00	4.2150000+02	7.0778400-02
6.100000+04	9.9134785-01	4.2174838+02	6.7456985-02
6.1087000+04	9.8721113-01	4.2176999+02	6.7175499-02
6.200000+04	9.4482689-01	4.2191861+02	6.4291432-02
6.250000+04	9.2239158-01	4.2200000+02	6.2764806-02
6.300000+04	9.0048901-01	4.2210000+02	6.1274429-02
6.400000+04	8.5823178-01	4.2230000+02	5.8399006-02
6.500000+04	8.1795756-01	4.2250000+02	5.5658517-02
6.5617000+04	7.9405690-01	4.2269744+02	5.4032179-02
6.600000+04	7.7957606-01	4.2282000+02	5.3046820-02
6.700000+04	7.4303722-01	4.2314000+02	5.0560508-02
6.750000+04	7.2543359-01	4.2330000+02	4.9362655-02
6.800000+04	7.0825865-01	4.2363999+02	4.8193974-02
6.900000+04	6.7515336-01	4.2431999+02	4.5941300-02

**CONFIDENTIAL**

GEI 67870

1962 ATMOSPHERE  
MIL STD 210A HOT DAY

ALT	PO	TO	PO/PSLS
7.000000+04	6.4363841-01	4.250000+02	4.3796843-02
7.1000000+04	6.1363567-01	4.2569721+02	4.1755284-02
7.2000000+04	5.8507041-01	4.2639443+02	3.9811541-02
7.3000000+04	5.5787197-01	4.2709165+02	3.7960803-02
7.3055000+04	5.5641426-01	4.2713000+02	3.7861613-02
7.4000000+04	5.3197325-01	4.2779562+02	3.6198506-02
7.5000000+04	5.0731010-01	4.2850000+02	3.4520285-02
7.6000000+04	4.8382241-01	4.2919999+02	3.2922047-02
7.7000000+04	4.6145244-01	4.2990000+02	3.1399867-02
7.8000000+04	4.4014553-01	4.3059999+02	2.9950022-02
7.9000000+04	4.1984994-01	4.3130000+02	2.8568994-02
8.0000000+04	4.0051624-01	4.3200000+02	2.7253419-02
8.0999999+04	3.8209770-01	4.3279168+02	2.6000115-02
8.1999999+04	3.6454978-01	4.3358337+02	2.4806055-02
8.2020999+04	3.6419016-01	4.3360000+02	2.4781584-02
8.3000000+04	3.4783024-01	4.3435585+02	2.3668361-02
8.4000000+04	3.3189881-01	4.3512793+02	2.2584296-02
8.5000000+04	3.1671759-01	4.3590000+02	2.1551279-02
8.5999999+04	3.0225000-01	4.3669999+02	2.0566821-02
8.6999999+04	2.8846175-01	4.3749999+02	1.9628589-02
8.8000000+04	2.7532003-01	4.3829999+02	1.8734352-02
8.9000000+04	2.6279373-01	4.3909999+02	1.7881990-02
9.0000000+04	2.5085328-01	4.3989999+02	1.7069494-02
9.0999999+04	2.3947048-01	4.4067999+02	1.6294943-02
9.1999999+04	2.2861862-01	4.4145999+02	1.5556520-02
9.3000000+04	2.1827221-01	4.4223999+02	1.4852491-02
9.4000000+04	2.0840712-01	4.4301999+02	1.4181214-02
9.5000000+04	1.9900034-01	4.4380000+02	1.3541123-02
9.5999999+04	1.9002996-01	4.4466000+02	1.2930727-02
9.6999999+04	1.8147529-01	4.4552000+02	1.2348618-02
9.8000000+04	1.7331642-01	4.4638000+02	1.1793442-02
9.9000000+04	1.6553463-01	4.4723999+02	1.1263924-02
1.0000000+05	1.5811203-01	4.4809999+02	1.0758848-02
1.0100000+05	1.5103148-01	4.4864864+02	1.0277047-02
1.0200000+05	1.4427687-01	4.4919728+02	9.8174247-03
1.0300000+05	1.3783281-01	4.4974592+02	9.3789333-03
1.0400000+05	1.3168462-01	4.5029457+02	8.9605753-03
1.0498700+05	1.2589286-01	4.5083607+02	8.5664712-03
1.0500000+05	1.2581975-01	4.5085605+02	8.5614960-03
1.0600000+05	1.2022873-01	4.5239226+02	8.1810514-03
1.0700000+05	1.1490555-01	4.5392846+02	7.8188316-03
1.0800000+05	1.0983644-01	4.5546468+02	7.4739005-03
1.0900000+05	1.0500842-01	4.5700089+02	7.1453742-03

January 15, 1984

3-23

**CONFIDENTIAL**

**CONFIDENTIAL**

GEI 67870

1962 ATMOSPHERE  
MIL STD 210A HOT DAY

ALT	PO	TO	PO/PSLS
1.100000+05	1.0040917-01	4.5853710+02	6.8324150-03
1.110000+05	9.6027111-02	4.6007331+02	6.5342345-03
1.120000+05	9.1851213-02	4.6160952+02	6.2500826-03
1.130000+05	8.7871100-02	4.6314573+02	5.9792528-03
1.140000+05	8.4076928-02	4.6468194+02	5.7210757-03
1.150000+05	8.0459377-02	4.6621815+02	5.4749168-03
1.160000+05	7.7009649-02	4.6775436+02	5.2401775-03
1.170000+05	7.3719388-02	4.6929057+02	5.0162893-03
1.180000+05	7.0580693-02	4.7082678+02	4.8027145-03
1.190000+05	6.7586077-02	4.7236300+02	4.5989437-03
1.200000+05	6.4728458-02	4.7389920+02	4.4044949-03
1.210000+05	6.2001111-02	4.7543541+02	4.2189106-03
1.220000+05	5.9397665-02	4.7697163+02	4.0417572-03
1.230000+05	5.6912097-02	4.7850783+02	3.8726250-03
1.240000+05	5.4538674-02	4.8004404+02	3.7111237-03
1.250000+05	5.2271988-02	4.8158026+02	3.5568854-03
1.260000+05	5.0106875-02	4.8311647+02	3.4095587-03
1.270000+05	4.8038463-02	4.8465267+02	3.2688121-03
1.280000+05	4.6062120-02	4.8618889+02	3.1343304-03
1.290000+05	4.4173450-02	4.8772510+02	3.0058145-03
1.300000+05	4.2368290-02	4.8926131+02	2.8829811-03
1.310000+05	4.0642673-02	4.9079752+02	2.7655602-03
1.320000+05	3.8992853-02	4.9233373+02	2.6532970-03
1.330000+05	3.7415250-02	4.9386994+02	2.5459478-03
1.340000+05	3.5906472-02	4.9540615+02	2.4432819-03
1.350000+05	3.4463311-02	4.9694236+02	2.3450810-03
1.360000+05	3.3082696-02	4.9847857+02	2.2511361-03
1.370000+05	3.1761728-02	5.0001478+02	2.1612498-03
1.380000+05	3.0497642-02	5.0155099+02	2.0752342-03
1.390000+05	2.9287812-02	5.0308720+02	1.9929104-03
1.400000+05	2.8129739-02	5.0462341+02	1.9141085-03
1.410000+05	2.7021047-02	5.0615962+02	1.8386668-03
1.420000+05	2.5959488-02	5.0769584+02	1.7664322-03
1.430000+05	2.4942899-02	5.0923204+02	1.6972577-03
1.440000+05	2.3969250-02	5.1076826+02	1.6310050-03
1.450000+05	2.3036591-02	5.1230446+02	1.5675416-03
1.460000+05	2.2143068-02	5.1384068+02	1.5067411-03
1.470000+05	2.1286928-02	5.1537689+02	1.4484845-03
1.480000+05	2.0466485-02	5.1691310+02	1.3926569-03
1.490000+05	1.9680150-02	5.1844931+02	1.3391501-03
1.500000+05	1.8926401-02	5.1998551+02	1.2878607-03
1.510000+05	1.8203786-02	5.2152172+02	1.2386899-03
1.520000+05	1.7510930-02	5.2305794+02	1.1915439-03
1.530000+05	1.6846515-02	5.2459415+02	1.1463333-03
1.540000+05	1.6209294-02	5.2613036+02	1.1029732-03
1.541990+05	1.6085624-02	5.2643606+02	1.0945580-03

GE4/J4C

4. **CALCULATION PROCEDURE**

Calculation instructions are presented in a series of sample calculations which have been prepared to demonstrate the suggested methods for determining engine flight performance between the tabulated flight conditions and for conditions of ram recovery, bleed-air and power extraction other than that contained in the tabulation.

4.1 **SAMPLE CALCULATIONS**

The sample calculations are divided into two parts, which represent different situations:

- I. **Desired: Engine Performance**  
**Known: Engine Power Setting and Airplane Operating Condition**

- A. **General**
- B. **Interpolating Mach Number**
- C. **Interpolating Altitude**
- D. **Interpolating Ambient Temperature**
- E. **Interpolating Engine Power Setting**
- F. **Interpolating for Combinations of Mach Number, Altitude and Power Setting**
- G. **Correction for Ram Recovery**
- H. **Correction for Bleed-air**
- I. **Correction for Power Extraction**
- J. **Correction for Combination of Ram Recovery, Bleed-air and Power Extraction**

- II. **Desired: Engine Power Setting**  
**Known: Thrust Required and Engine Operating Condition**

- A. **General**  
Engine performance may be read directly for many tabulated flight conditions. Linear interpolation may be used to obtain engine performance between tabulated flight conditions. However crossplotting will yield a more precise interpolation.

**CONFIDENTIAL**

GEI 67870

GE4/J4C

**B. Interpolating Mach Number**

If an intermediate Mach number is desired, use linear interpolation.

Example:

Given: Power Setting (P.S. = 5.0)  
Altitude 25,000 feet  
Type of Day Standard  
Mach Number 1.4  
Ram Recovery MIL-E-5008B (.978)

From the tabulated performance:

Mo	FN	SFC	TE	PE	W2
1.2	25900	1.24	1101	112.2	397
1.5	31400	1.28	1186	147.3	520

Using linear interpolation, the performance is:

Mo	FN	SFC	TE	PE	W2
1.4	29600	1.27	1158	135.6	479

Note: Linear interpolation for performance of power settings 7.0 through 12.4 below Mach number equal to 1.5. At this flight speed and above, the engine speed is constant therefore introducing a discontinuity in performance across that Mach number.

**C. Interpolating Altitude**

If an intermediate altitude is desired, use linear interpolation as a function of ambient pressure, P0.

Example:

Given: Power Setting (P.S. = 5.0)  
Altitude 30,000  
Type of Day Standard  
Mach Number 1.2  
Ram Recovery MIL-E-5008B (.991)

From the tabulated performance:

Alt	FN	SFC	TE	PE	W2
25000	25900	1.24	1101	112.2	397
36089	17800	1.23	1040	73.8	261

**CONFIDENTIAL**

GEI 67870

**GE4/J4C**

From the table of atmospheric conditions for the altitudes involved:

Altitude	P0
25000	5.45
30000	4.37
36089	3.28

Interpolating linearly as a function of P0, the performance is:

Alt	FN	SFC	TE	PE	W2
30000	21900	1.23	1071	93.0	329

**D. Interpolating Ambient Temperature**

If an intermediate ambient temperature is desired, use linear interpolation.

Example:

Given:	Power Setting	(P. S. = 5.0)
	Altitude	15,000 feet
	To	475°R
	Mach Number	0.9
	Ram Recovery	MIL-E-5008B (1.00)

From the tabulated performance:

To	FN	SFC	TE	PE	W2
505	24900	1.28	1142	113.0	400
465	28900	1.23	1085	122.9	435

Using linear interpolation, the performance is:

To	FN	SFC	TE	PE	W2
475	27700	1.24	1099	120.4	426

Note: Linear interpolation can only be utilized providing that neither of the tabulated points is at the compressor corrected speed limit  $(\%RPM \times \sqrt{\frac{519}{T_2}} \geq 105.)$

**CONFIDENTIAL**

GEI 67870

GE4/J4C

**E. Interpolating Engine Power Setting**

If an intermediate engine power setting is desired, cross-plot to determine the required performance.

Example:

Given:	Power Setting	90% RPM (P. S. = 8.0)
	Altitude	25,000 feet
	Type of Day	Standard
	Mach Number	0.9
	Ram Recovery	MIL-E-5008B (1.00)

From the tabulated performance:

P. S.	%RPM	FN	SFC	TE	PE	W2
7.0	95	15100	1.14	985	74.9	295
9.0	85	6120	1.26	871	49.4	226
11.0	75	-810	-2.14	723	23.7	136

Plotting all parameters versus % RPM, the performance is:

P. S.	%RPM	FN	SFC	TE	PE	W2
8.0	90	10200	1.14	916	62.2	265

Performance may be obtained by linear interpolation versus % RPM if less accurate data are adequate.

**F. Interpolating for Combination of Mach Number, Altitude, Engine Power Setting and Ambient Temperature**

If the desired engine operating conditions are such that all of the above interpolations are required, it is possible to accomplish these interpolations in any order. This procedure is easiest and quickest if the large number of the required interpolations be done linearly. Therefore, it is recommended that the interpolations be accomplished in the following order:

- 1) Intermediate Mach Number - Linear
- 2) Intermediate Altitude - Linear Function of P0
- 3) Intermediate Ambient Temperature - Linear Function of T0
- 4) Intermediate Power Setting - Crossplot

**CONFIDENTIAL**

GEI 67870

GE4/J4C

**G. Correction for Ram Recovery**

If ram recovery is other than MIL-E-5008B, read P2 and T2 for the tabulated condition:

$$P2 = (\text{Tabulated } P2) \times \frac{\text{Ram Recovery}}{\text{Ram Recovery MIL-E-5008B}}$$

Verify that this point falls within the engine operating limits as described by the P2-T2 envelope. To determine the percentage change in each parameter, multiply its correction factor (line "RAM" of the tabulation) by the difference in ram recovery (desired ram recovery minus MIL-E-5008B ram recovery).

Example:

Given:	Power Setting	(P. S. = 5.0)
	Altitude	25000 feet
	Type of Day	Standard
	Mach Number	1.5
	Ram Recovery	0.951

From the tabulated performance:

NR	P2	T2	FN	SFC	TE	PE	W2
.971	19.44	623	31400	1.28	1185	147.3	520
		RAM	1.32	-.30	.00	1.03	1.03

$P2 = (19.44) (.951/.971) = 19.05 \text{ psia}$

The point falls within the P2-T2 engine operating limit envelope.

The difference in ram recovery is:

$$\Delta NR = NR - NR_{\text{MIL-E-5008B}} = 0.951 - 0.971 = -.02$$

The percentage change in net thrust is:

$$(1.32) (-0.02) = -0.0264 \text{ or } -2.64\%$$

The percentage change in each parameter is:

	FN	SFC	TE	PE	W2
% Change	-2.64	0.60	0	-2.06	-2.06

January 15, 1964

4-5

**CONFIDENTIAL**

**CONFIDENTIAL**

GE4/J4C

Net thrust corrected for ram recovery is:

$$FN = 31400 (0.9736) = 30600 \text{ lbs.}$$

All parameters corrected for ram recovery:

FN	SFC	TE	PE	W2
30600	1.29	1186	144.3	509

If a number of interpolations are to be made to obtain engine performance and ram recovery is to be different than MIL5008B, the ram recovery correction should be applied before interpolating. If this is not done, the ram recovery correction factors for the required flight conditions will also have to be determined by interpolation.

**H. Correction for Bleed**

The maximum bleed rate of 5% engine airflow must not be exceeded.

To determine the percentage change in each parameter, multiply its correction factor (line "BLEED" of the tabulation) by WB/W2.

Example:

Given: Power Setting	(P. S. = 5.0)
Altitude	25,000 feet
Type of Day	Standard
Mach Number	1.2
Ram Recovery	MIL-E-5008B (.991)
WB/W2	0.02

From the tabulated performance:

NR	P2	T2	FN	SFC	TE	PE	W2
.991	13.12	554	25900	1.24	1101	112.2	397
		BLEED	-2.05	1.56	-0.26	-0.87	0.09

The percentage change in net thrust is:

$$(-2.05) (0.02) = -0.041 \text{ or } -4.1\%$$

The percentage change in each parameter is:

% Change	FN	SFC	TE	PE	W2
	-4.1	3.12	-0.52	-1.74	0.18

**CONFIDENTIAL**

GEI 67870

GE4/J4C

Net thrust corrected for bleed is:

$$FN = 25900 (.959) = 24800 \text{ lbs.}$$

All parameters corrected for bleed:

FN	SFC	TE	PE	W2
24800	1.28	1096	110.4	398

Calculate  $WB = (WB/W2) (W2) = (0.02) (398) = 7.96 \text{ lbs/sec}$

Calculate  $WB\sqrt{TE/PE}$  using parameters corrected for bleed:

$$WB\sqrt{TE/PE} = 7.96\sqrt{1096/110.4} = 2.39$$

From the bleed port pressure ratio curve, read  $PTB/PE = 0.94$  for 4 bleed ports or  $0.752$  for 2 bleed ports.

$$PTB_{2 \text{ ports}} = (PTB/PE) (PE) = (0.752) (110.4) = 83 \text{ lbs/sq. in.}$$

$$PTB_{4 \text{ ports}} = (PTB/PE) (PE) = (0.94) (110.4) = 103.7 \text{ lbs/sq. in.}$$

If a number of interpolations are to be made to obtain engine performance and ram recovery is to be different than MIL-E-5008B, the ram recovery should be applied before interpolating. If this is not done, the ram recovery correction factors for the required flight conditions will also have to be determined by interpolation.

I. Correction for Power Extraction

The maximum horsepower extraction available is defined as  $6.50 \times \% \text{ engine speed}$ .

To determine the percentage change in each parameter, multiply its correction (line "POWER" of the tabulation) by  $HP \times 10^{-5}$ .

January 15, 1964

4-7

**CONFIDENTIAL**

**CONFIDENTIAL**

GE4/J4C

Example:

Given: Power Setting (P. S. = 5.0)  
 Altitude 25,000 feet  
 Type of Day Standard  
 Mach Number 1.2  
 Ram Recovery MIL-E-5008B (.991)  
 HP 400  
 WB/W2 0

From the tabulated performance:

NR	P2	T2	FN	SFC	TE	PE	W2
.991	13.12	554	25900	1.24	1101	112.2	397
	POWER	-0.37	0.83	0.02	0.06	-0.01	

The percentage change in net thrust is:

$$(-0.37) (400 \times 10^{-5}) = -.00148 \text{ or } -0.148\%$$

The percentage change in each parameter is:

	FN	SFC	TE	PE	W2
% Change	-0.148	0.332	0.008	0.024	-0.004

Net thrust corrected for power extraction is:

$$FN = 25900 (.99852) = 25900 \text{ lbs.}$$

All parameters corrected for power extraction:

FN	SFC	TE	PE	W2
25900	1.24	1101	112.2	397

If a number of interpolations are to be made to obtain engine performance, and ram recovery is to be different than MIL-E-5008B, the ram recovery correction should be applied before interpolating. If this is not done, the ram recovery correction factors for the required flight conditions will also have to be determined by interpolation.

GE4/J4C

J. Correction for Combination of Ram Recovery, Bleed and Power Extraction

If all the possible corrections are to be made to engine performance determined from the tabulation, the calculation may be simplified by:

1. Calculate  $\Delta\eta\gamma$ .
2. Verify that the specified bleed and/or power extraction does not exceed the limits of:  
 Maximum bleed: 5% of engine airflow, W2.  
 Maximum power extraction: 6.50 x % engine speed.
3. Read correction factors for all parameters.

	FN	SFC	TE	PE	W2
RAM					
BLEED					
POWER					

4. Multiply RAM correction factors by  $\Delta\eta\gamma$ .
5. Multiply BLEED correction factors by WB/W2.
6. Multiply POWER correction factors by HP x 10<sup>-5</sup>.
7. For each parameter, algebraically add the correction factors together to determine the total percentage change due to ram recovery, bleed and power extraction.
8. Correct each parameter:

$$FN(\text{corrected}) = FN (1 + \text{total } \% \text{ change}), \text{ etc.}$$

4.2 Calculation Aids and Engine Limits

In addition to the performance presentation of the GE4/J4C turbojet engine, certain calculation aids and engine limits are included to assist in the estimation of performance at flight conditions not tabulated.

**CONFIDENTIAL**

GEI 67870

GE4/J4C

**4.2.1 Ram Recovery**

The flight performance curves and tabulations in this report are represented for MIL-E-5008B ram recovery,  $NR = 1.00 - .075 (Mo-1)^{1.35}$ .

**4.2.2 Engine Operating Envelope**

The envelope of engine operating capability is represented in both standard day altitude - Mach number form and P2-T2 form including augmentor operating limits. For design limits, refer to the P2-T2 envelope. Data are contained on pages 5-1 and 5-2.

**4.2.3 Rotor Speed Schedule**

Scheduled maximum percent rotor speed versus compressor inlet total temperature is included in Section 5.

**4.2.4 Power Setting - Speed Schedule**

A curve of percent rotor speed versus engine power setting is included in Section 3 for operation below the lockup Mach number ( $Mo = 1.5$ ). Above the lockup Mach number, rotor speed is held constant at 100% for all power settings.

The Mach number at which rotor lockup occurs is a variable that can be changed at the customers option. The capability of generating performance at various lockup Mach numbers (MONLU) is supplied in the estimated performance data deck with complete details of operation in the data deck instructions. The bulletin performance is produced with a lockup Mach number of 1.5.

During all operation, the self-cooling capability of the engine must be observed.

**4.2.5 Bleed Port Pressure**

Pressure ratio (PTB/PE) across the air bleed port versus corrected bleed flow is defined on page 4-13 for either 2 port or 4 port operation. Airframe service bleed air is restricted to 5% of the engine airflow.

**4.2.6 Primary Exhaust Nozzle Area Schedule**

The primary exhaust nozzle throat area schedule versus engine power setting is provided for operation at power settings greater than 5. in Section 5.

GE4/J4C

4.2.7 Exhaust Nozzle Secondary Flow

Corrected secondary nozzle airflow ( $W_s/W_2\sqrt{T_s/T_8}$ ) versus nozzle pressure ratio ( $P_8/P_0$ ) is defined on page 4-14 for both augmented and non-augmented operation. The ram drag of this secondary flow is included in the nozzle performance.

4.2.8 Exhaust Nozzle

Bulletin performance is calculated utilizing a specific nozzle switch-over schedule and is denoted by BTANG being printed for each point.

To allow for variations in the calculation of boattail drag, the customer may optimize the nozzle switchover for a particular airframe and flight placard by utilization of a special feature built into the estimated performance data deck. Complete instructions for the generation of performance at desired boattail angles is included in the instructions on the estimated performance data deck operation. Exhaust areas ( $A_9$ ) and boattail angles (BTANG) are as follows:

Exhaust Nozzle Area vs Boattail Angle

<u>Boattail Angle</u>	<u><math>A_9</math> Area-in.<sup>2</sup></u>
15.2°	1320
10.2°	1800
2.9°	2640
0°	3020

4.2.9 Exhaust Nozzle Data for Noise Calculations

To more accurately predict the perceived noise level of the engine, exhaust nozzle thermodynamics conditions are provided for the normal operating mode of the engine. Tabulated exhaust nozzle data at several flight conditions are contained on pages 4-15 and 4-16. Secondary airflow pumping characteristics of the exhaust nozzle at low altitudes and flight speed are contained on page 4-17.

4.2.10 Performance Scaling

Engine performance parameters (thrusts, flows and areas) can be directly scaled as a function of airflow within the range of 300 to 600 lbs/sec.

**CONFIDENTIAL**

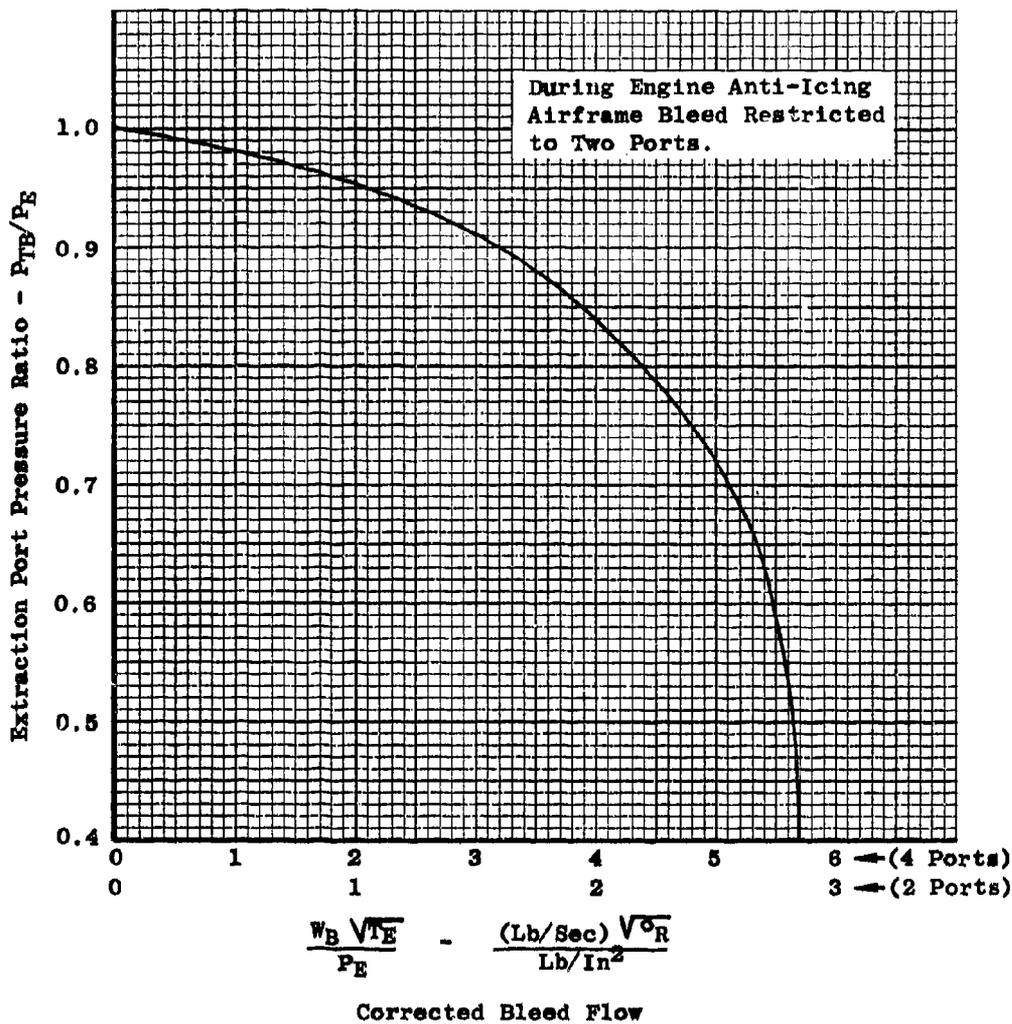
GEI 67870

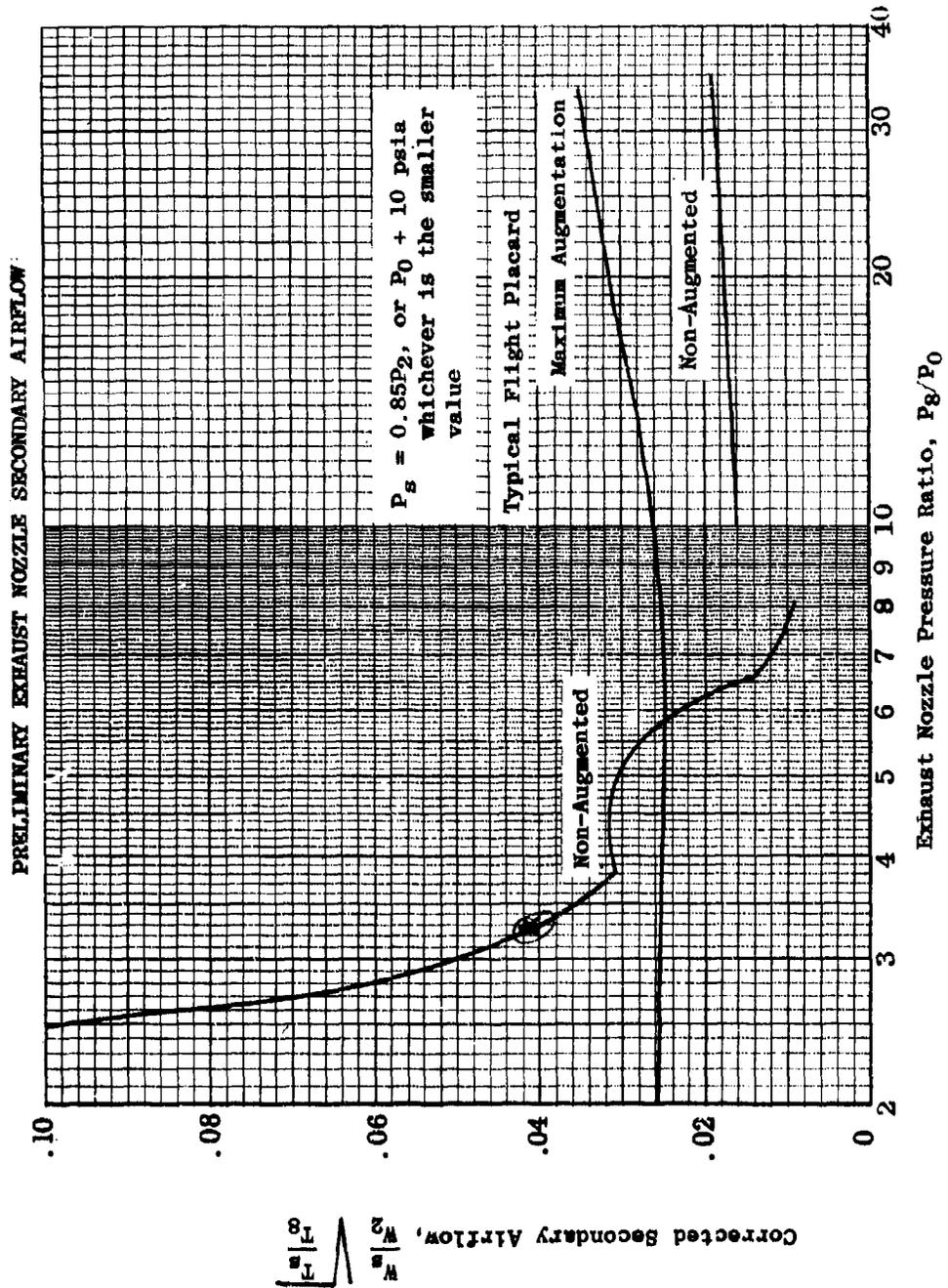
GE4/J4C

4. 2. 11 Error Return Indicator (ERI) Definition

<u>ERI No.</u>	<u>Definition of Limits for Tabulated Data</u>
0	No limit exceeded.
101	Rotor speed reduced to observe corrected speed limit, no limit exceeded.
7	Fuel flow reduced to observe nozzle area limit, no limit exceeded.
19	Augmentor pressure less than design operation limit. (Para. 4. 2. 2)

BLEED PORT PRESSURE CORRECTION





**CONFIDENTIAL**

GEI 67870

GE4/J4C

Jet Exhaust Conditions for Noise Calculations  
 Normal Operation  
 U. S. Standard Atmosphere 1962

Alt.ft.	M <sub>0</sub>	P. S.	$\eta_R$	FN lbs	FG lbs	W <sub>g</sub> lbs/sec	A <sub>g</sub>	P <sub>g</sub> /P <sub>0</sub>	T <sub>g</sub> °R
0	0	1	.92	46000	46000	460	1299	2.88	3494
0	0	2.5	.92	41600	41600	454	1154	2.92	2918
0	0	4	.92	35700	35700	448	972	2.96	2200
0	0	5	.92	34600	34600	446	933	2.99	2067
0	0	7.5	.92	22600	22600	408	1057	2.14	1608
0	0	9	.92	11000	11000	305	1095	1.51	1297
0	.2	1	.95	46000	49200	484	1299	3.03	3493
0	.2	2.5	.95	40600	43800	478	1155	3.07	2917
0	.2	4	.95	33100	36300	472	974	3.12	2199
0	.2	5	.95	33300	36500	471	934	3.14	2067
0	.2	7.5	.95	21300	24300	428	1057	2.23	1600
0	.2	9	.95	9360	11500	317	1096	1.53	1289
1500	.2	1	.95	44200	47300	463	1296	3.07	3494
1500	.2	2.5	.95	39100	42100	457	1152	3.11	2918
1500	.2	4	.95	31800	34900	451	971	3.16	2199
1500	.2	5	.95	32000	35100	450	932	3.18	2067
1500	.2	7.5	.95	20800	23600	412	1057	2.27	1602
1500	.2	9	.95	9340	11400	317	1096	1.56	1287

January 15, 1964

**CONFIDENTIAL**

4-15

**CONFIDENTIAL**

GEI 67870

GE4/J4C

Jet Exhaust Conditions for Noise Calculations  
Normal Operation  
U. S. Standard Atmosphere 1962 plus 44° F

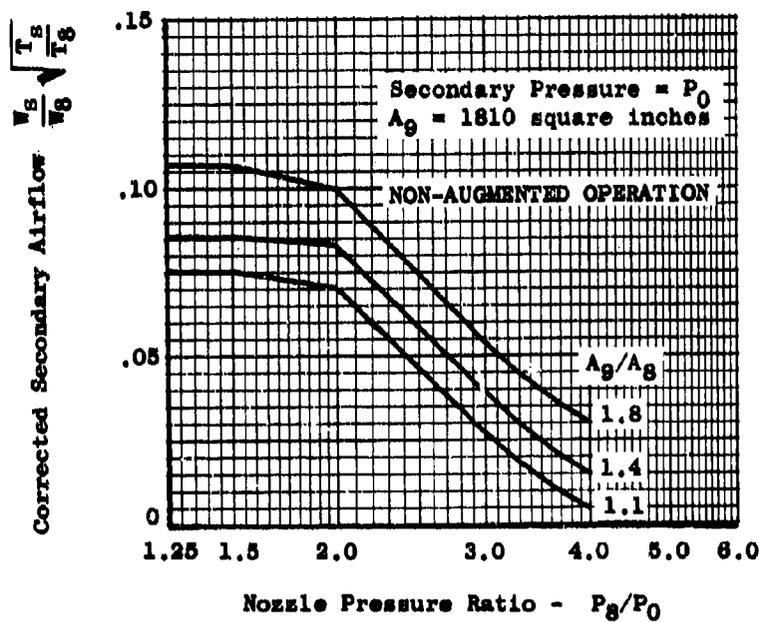
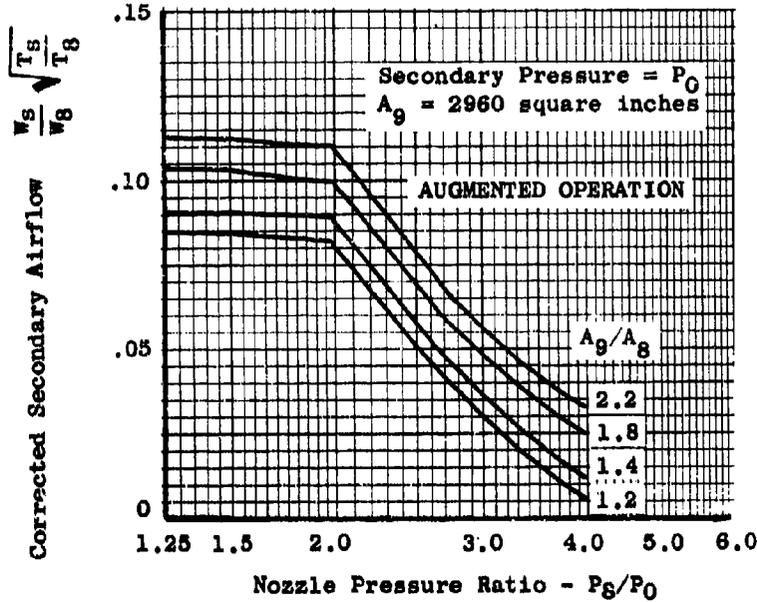
Alt. ft.	M <sub>0</sub>	P.S.	η <sub>R</sub>	F <sub>N</sub> lbs	F <sub>G</sub> lbs	W <sub>8</sub> lbs/sec	A <sub>8</sub>	P <sub>8</sub> /P <sub>0</sub>	T <sub>8</sub> R
0	0	1	.92	40400	40400	424	1336	2.59	3491
0	0	2.5	.92	36600	36600	418	1188	2.62	2915
0	0	4	.92	31400	31400	413	1002	2.67	2199
0	0	5	.92	30500	30500	411	961	2.69	2067
0	0	7.5	.92	17300	17300	349	1057	1.85	1591
0	0	9	.92	7540	7540	247	1095	1.34	1343
0	.2	1	.95	40000	43100	446	1336	2.72	3490
0	.2	2.5	.95	35200	43000	440	1187	2.76	2914
0	.2	4	.95	28600	31700	434	1000	2.80	2198
0	.2	5	.95	29000	32030	433	959	2.82	2067
0	.2	7.5	.95	15800	18400	364	1058	1.91	1572
0	.2	9	.95	6100	7930	257	1096	1.36	1308
1500	.2	1	.95	38600	41500	427	1333	2.76	3491
1500	.2	2.5	.95	34000	36900	421	1184	2.79	2916
1500	.2	4	.95	27600	30500	416	998	2.84	2199
1500	.2	5	.95	27900	30800	414	956	2.86	2067
1500	.2	7.5	.95	15600	18100	352	1057	1.94	1575
1500	.2	9	.95	6050	7830	249	1096	1.37	1301

# CONFIDENTIAL

GE4/J4C

GEI 67870

## EXHAUST NOZZLE PRELIMINARY AIR HANDLING DATA LOW ALTITUDE AND MACH NUMBER CONDITIONS



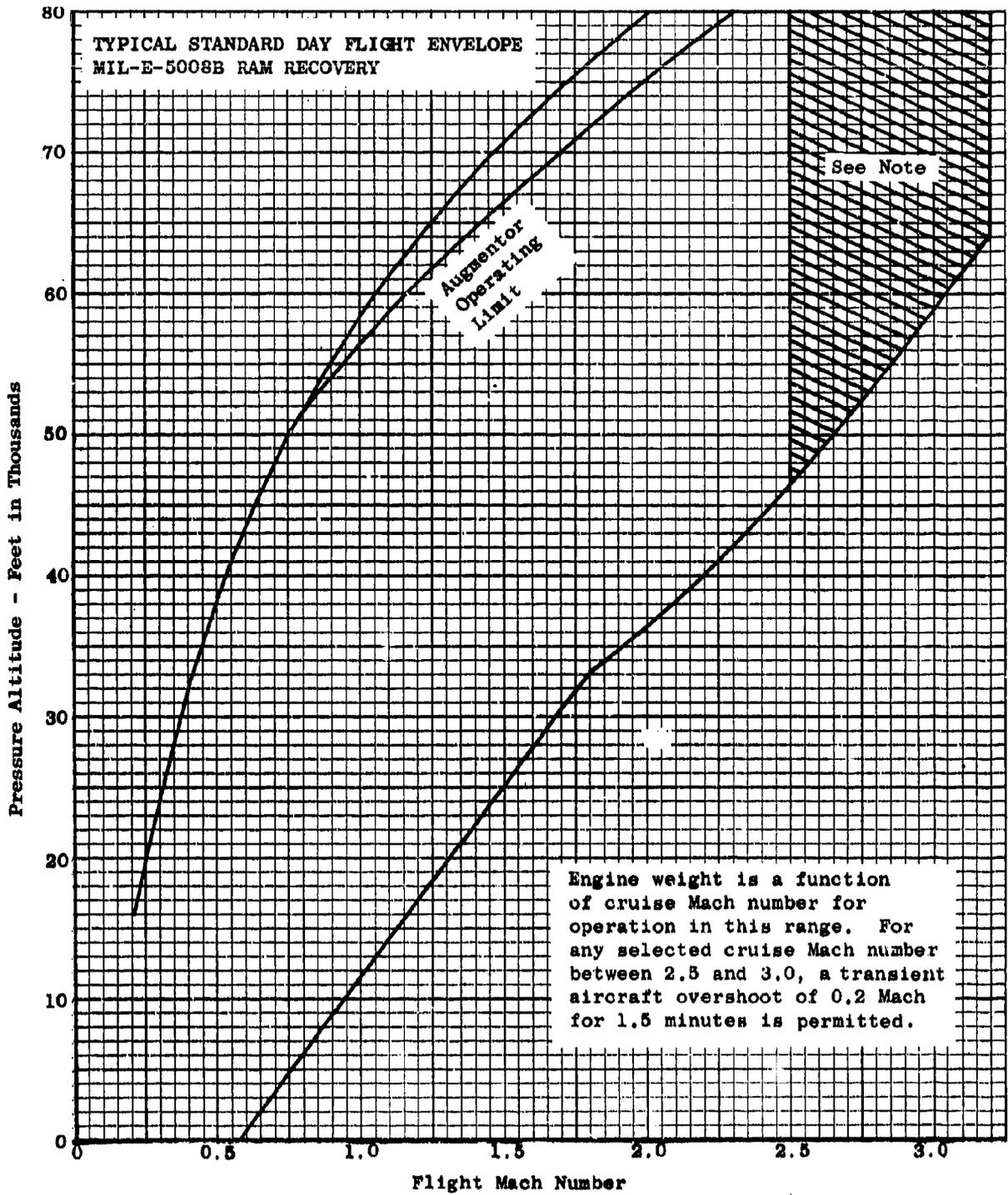
January 15, 1964

CONFIDENTIAL

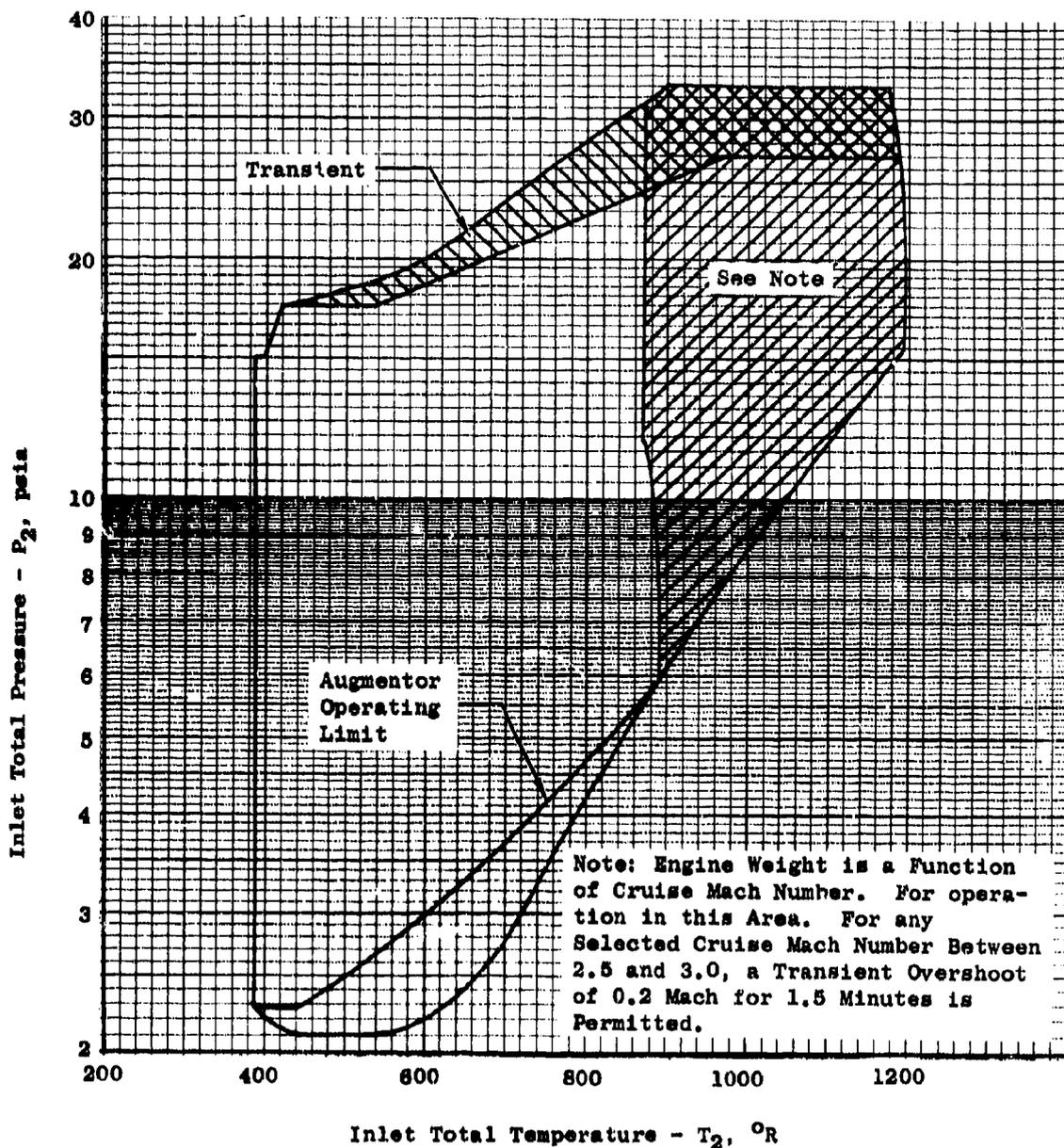
4-17



5.1 ENGINE FLIGHT LIMITS



5.1 ENGINE OPERATING LIMITS



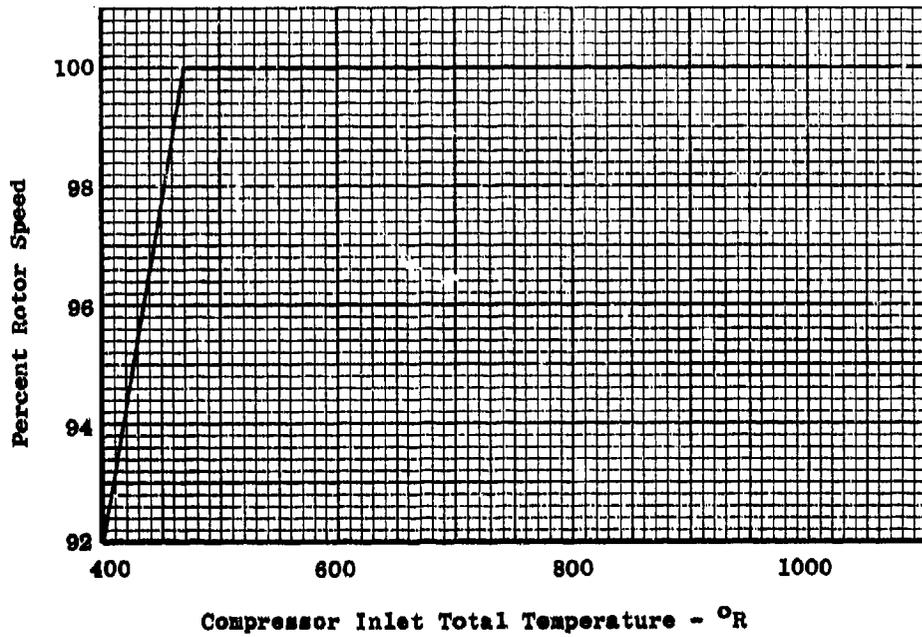
**CONFIDENTIAL**

**GE4/J4C**

**GEI 67870**

**5. MAXIMUM ROTOR SPEED**

**MAXIMUM ROTOR SPEED**



January 15, 1964

**CONFIDENTIAL**

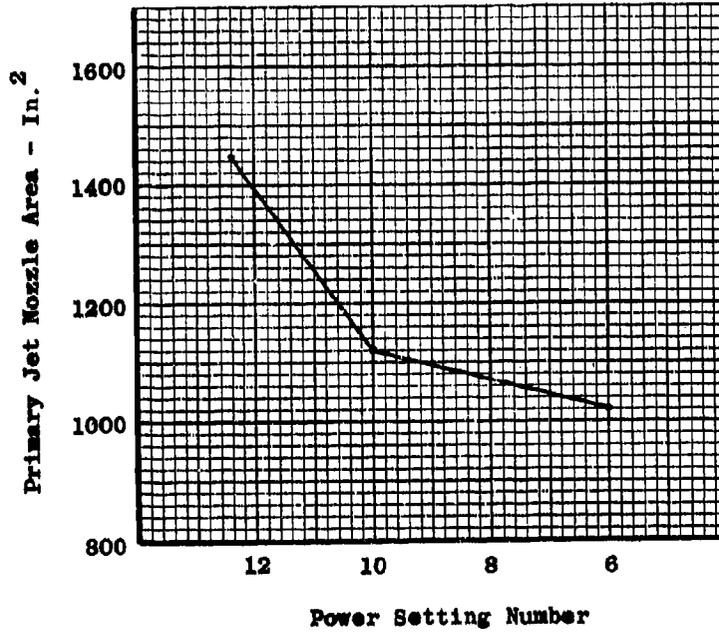
5-3

**CONFIDENTIAL**

GE4/J4C

GEI 67870

**5.3 PRIMARY JET NOZZLE AREA SCHEDULE  
NON-AUGMENTED OPERATION**



**CONFIDENTIAL**

January 15, 1964



PREVIOUS PAGE WAS WANK, THEREFORE WAS NOT FILMED

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE

0 FEET

MO		P2/P0	FD <sup>100%</sup>	(FN)	(SFC)	TE	PE	W2	TC
.00	NR = 1.00	1.00	0	51800	1.75	1055	133.2	475	2067
	P2 = 14.70	RAM	.00	1.39	-.42	.00	1.01	1.01	-.00
	T2 = 519	BLEED	.00	-1.52	.71	-.31	-.96	.03	-.01
	ERI = 0	POWER	.00	-.51	.72	.02	.06	-.00	.00
.30	NR = 1.00	1.06	5180	49500	1.91	1066	139.3	497	2067
	P2 = 15.64	RAM	1.00	1.47	-.52	.00	1.00	1.00	-.00
	T2 = 528	BLEED	.05	-1.70	.92	-.28	-.95	.05	-.01
	ERI = 0	POWER	-.00	-.46	.65	.02	.05	-.00	.00
.60	NR = 1.00	1.28	11800	53200	1.87	1102	159.0	566	2067
	P2 = 18.75	RAM	1.00	1.23	-.82	.00	1.00	1.00	.00
	T2 = 556	BLEED	.09	-1.55	1.32	-.26	-.89	.09	.01
	ERI = 0	POWER	-.00	-.42	.58	.01	.05	-.00	.01

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE

0 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	(FGB)	(ENB)	SFCB	W2K	BTANG
.00	1.00	3.14	90597	3493	1296	52500	52500	1.73	475	10.2
	RAM	1.01	1.00	-.00	-.01	1.39	1.39	-.42	.01	.00
	BLEED	-1.36	-.82	-.06	.36	-1.52	-1.52	.71	.03	.00
	POWER	-1.16	.20	-.13	1.08	-.51	-.51	.72	-.00	.00
.30	1.06	3.27	94517	3492	1302	55700	50600	1.87	471	10.2
	RAM	1.00	.99	-.00	-.00	1.37	1.41	-.44	.00	.00
	BLEED	-1.40	-.81	-.07	.42	-1.50	-1.66	.87	.05	.00
	POWER	-1.11	.19	-.13	1.03	-.47	-.52	.72	-.00	.00
.60	1.28	3.67	99670	3356	1290	65900	54100	1.84	460	10.2
	RAM	1.02	.46	-.32	-.22	1.16	1.19	-.78	.00	.00
	BLEED	-1.40	-.26	.23	.64	-1.23	-1.52	1.29	.09	.00
	POWER	-.94	.15	-.12	.87	-.37	-.45	.61	-.00	.00

# CONFIDENTIAL

GEI 67870

**CONFIDENTIAL**

GENERAL ELECTRIC GE4/J40 ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY                      PRESSURE ALTITUDE                      0 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.00	NR = 1.00	1.00	0	48900	1.56	1055	133.3	475	2067
	P2 = 14.70	RAM	.00	1.39	-.42	.00	1.01	1.01	.00
	T2 = 519	BLEED	.00	-1.50	.72	-.32	-.96	.03	-.01
	ERI = 0	POWER	.00	-.49	.72	.02	.06	-.00	.00
.30	NR = 1.00	1.06	5180	45900	1.73	1067	139.5	497	2067
	P2 = 15.64	RAM	1.00	1.50	-.55	.00	1.00	1.00	.00
	T2 = 528	BLEED	.04	-1.71	.95	-.29	-.95	.04	-.01
	ERI = 0	POWER	-.00	-.40	.61	.01	.05	-.00	-.01
.60	NR = 1.00	1.28	11800	50600	1.77	1102	159.1	566	2067
	P2 = 18.75	RAM	1.00	1.48	-.53	.00	1.00	1.00	-.00
	T2 = 556	BLEED	.09	-1.78	1.08	-.26	-.90	.09	-.00
	ERI = 0	POWER	-.00	-.40	.60	.01	.05	-.00	.00

# CONFIDENTIAL

CEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

	STANDARD DAY			PRESSURE ALTITUDE				0 FEET		
MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FN8	SFCB	W2K	BTANG
.00	1.00	3.16	76084	3153	1210	49500	49500	1.54	475	10.2
	RAM	1.01	1.00	-.01	-.00	1.39	1.39	-.42	.01	.00
	BLEED	-1.34	-.80	-.04	.35	-1.50	-1.50	.72	.03	.00
	POWER	-1.15	.22	-.10	1.07	-.49	-.49	.72	-.00	.00
.30	1.06	3.29	79330	3152	1215	52500	47400	1.67	471	10.2
	RAM	1.00	.99	-.01	-.00	1.36	1.40	-.44	.00	.00
	BLEED	-1.39	-.78	-.05	.41	-1.48	-1.65	.89	.04	.00
	POWER	-1.11	.20	-.10	1.03	-.46	-.51	.72	-.00	.00
.60	1.28	3.69	89591	3147	1234	63500	51700	1.73	460	10.2
	RAM	1.00	.99	-.00	-.00	1.33	1.40	-.44	.00	.00
	BLEED	-1.39	-.73	-.05	.45	-1.39	-1.73	1.03	.09	.00
	POWER	-.94	.19	-.09	.88	-.36	-.44	.63	-.00	.00

# CONFIDENTIAL

GE1 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE

0 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.00	NR = 1.00	1.00	0	45300	1.36	1056	133.4	475	2067
	P2 = 14.70	RAM	.00	1.38	-.41	.00	1.01	1.01	.00
	T2 = 519	BLEED	.00	-1.48	.74	-.32	-.96	.03	-.01
	ERI = 0	POWER	.00	-.47	.73	.02	.05	-.00	-.01
.30	NR = 1.00	1.06	5170	41400	1.55	1067	139.6	497	2067
	P2 = 15.64	RAM	1.00	1.53	-.59	.00	1.00	1.00	.00
	T2 = 528	BLEED	.04	-1.72	1.01	-.29	-.94	.04	-.00
	ERI = 0	POWER	-.00	-.35	.60	.02	.05	-.00	.00
.60	NR = 1.00	1.28	11800	45400	1.59	1103	159.3	566	2067
	P2 = 18.75	RAM	1.00	1.53	-.58	.00	1.00	1.00	-.00
	T2 = 556	BLEED	.09	-1.84	1.19	-.26	-.90	.09	-.00
	ERI = 0	POWER	-.00	-.37	.60	.01	.05	-.00	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE

0 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.00	1.00	3.19	61543	2751	1111	45900	45900	1.34	475	10.2
	RAM	1.01	1.00	-.01	-.00	1.38	1.38	-.41	.01	.00
	BLEED	-1.33	-.76	-.03	.34	-1.48	-1.48	.74	.03	.00
	POWER	-1.14	.25	-.08	1.08	-.47	-.47	.73	-.00	.00
.30	1.06	3.32	64104	2749	1116	48700	43500	1.47	471	10.2
	RAM	1.00	.99	-.01	-.00	1.36	1.40	-.44	.00	.00
	BLEED	-1.36	-.73	-.03	.39	-1.46	-1.64	.92	.04	.00
	POWER	-1.08	.25	-.07	1.03	-.43	-.48	.73	-.00	.00
.60	1.28	3.72	72213	2745	1133	58800	47000	1.53	460	10.2
	RAM	1.00	.99	-.01	-.00	1.32	1.40	-.44	.00	.00
	BLEED	-1.38	-.69	-.03	.45	-1.37	-1.74	1.08	.09	.00
	POWER	-.93	.22	-.06	.87	-.33	-.42	.64	-.00	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

		STANDARD DAY		PRESSURE ALTITUDE		0 FEET			
MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC
.00	NR =	1.00	0	41200	1.14	1056	133.6	475	2067
	P2 =	14.70	RAM .00	1.37	-.41	.00	1.01	1.01	-.00
	T2 =	519	BLEED .00	-1.45	.79	-.32	-.96	.03	-.00
	ERI =	0	POWER .00	-.43	.76	.02	.05	-.00	.00
.30	NR =	1.00	5170	35900	1.36	1067	139.7	497	2067
	P2 =	15.64	RAM 1.00	1.59	-.65	.00	1.00	1.00	.00
	T2 =	528	BLEED .04	-1.76	1.13	-.30	-.94	.04	-.00
	ERI =	0	POWER -.00	-.27	.58	.02	.05	-.00	.00
.60	NR =	1.00	11800	38900	1.41	1103	159.4	566	2067
	P2 =	18.75	RAM 1.00	1.59	-.65	.00	1.00	1.00	-.00
	T2 =	556	BLEED .09	-1.88	1.30	-.26	-.90	.09	-.00
	ERI =	0	POWER -.00	-.25	.53	.01	.05	-.00	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/14C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE

0 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.00	1.00	3.22	46964	2309	999	41700	41700	1.13	475	10.2
	RAM	1.01	.99	-.01	-.00	1.37	1.37	-.41	.01	.00
	BLEED	-1.31	-.68	-.00	.33	-1.45	-1.45	.79	.03	.00
	POWER	-1.12	.32	-.03	1.08	-.43	-.43	.76	-.00	.00
.30	1.06	3.35	48859	2308	1004	44300	39100	1.25	471	10.2
	RAM	1.00	.99	-.01	-.01	1.35	1.40	-.44	.00	.00
	BLEED	-1.35	-.67	-.01	.39	-1.43	-1.63	.99	.04	.00
	POWER	-1.07	.31	-.03	1.03	-.39	-.45	.76	-.00	.00
.60	1.28	3.76	54803	2305	1019	53400	41600	1.32	460	10.2
	RAM	1.00	.99	-.01	-.01	1.31	1.40	-.45	.00	.00
	BLEED	-1.38	-.62	-.01	.46	-1.35	-1.76	1.18	.09	.00
	POWER	-.91	.28	-.03	.88	-.31	-.39	.68	-.00	.00

6-9

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY          PRESSURE ALTITUDE          0 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.00	NR =	1.00	0	38900	1.01	1057	134.1	475	2067
	P2 =	14.70	RAM .00	1.38	-.39	.00	1.01	1.01	.00
	T2 =	519	BLEED .00	-1.43	.81	-.33	-.96	.03	.00
	ERI =	0	POWER .00	-.40	.78	.02	.05	-.00	.00
.30	NR =	1.00	5170	35200	1.16	1069	140.3	497	2067
	P2 =	15.64	RAM 1.00	1.50	-.54	.00	1.00	1.00	.00
	T2 =	528	BLEED .04	-1.72	1.13	-.31	-.94	.04	.00
	ERI =	0	POWER -.00	-.42	.79	.02	.05	-.00	.00
.60	NR =	1.00	11800	37400	1.23	1104	160.0	566	2067
	P2 =	18.75	RAM 1.00	1.48	-.52	.00	1.00	1.00	-.00
	T2 =	556	BLEED .09	-1.85	1.32	-.25	-.89	.09	-.00
	ERI =	0	POWER -.00	-.36	.69	.01	.05	-.00	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE

0 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.00	1.00	3.25	39363	2067	933	39400	39400	1.00	475	15.2
	RAM	1.01	1.01	.00	.00	1.38	1.38	-.39	.01	.00
	BLEED	-1.28	-.64	.00	.30	-1.43	-1.43	.81	.03	.00
	POWER	-1.10	.38	.00	1.08	-.40	-.40	.78	-.00	.00
.30	1.06	3.38	40938	2067	937	41800	36600	1.12	471	15.2
	RAM	1.00	1.00	.00	.00	1.35	1.40	-.43	.00	.00
	BLEED	-1.30	-.62	.00	.34	-1.41	-1.61	1.02	.04	.00
	POWER	-1.05	.36	.00	1.03	-.37	-.42	.79	-.00	.00
.60	1.28	3.79	45857	2067	951	50400	38600	1.19	460	15.2
	RAM	1.00	1.00	-.00	-.00	1.31	1.41	-.44	.00	.00
	BLEED	-1.36	-.57	-.00	.45	-1.34	-1.77	1.24	.09	.00
	POWER	-.91	.32	.00	.89	-.29	-.38	.70	-.00	.00

6-11

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 7.0

JANUARY 1964

		STANDARD DAY		PRESSURE ALTITUDE		0 FEET				
MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.00	NR =	1.00	1.00	0	28500	.95	1011	116.4	452	1681
	P2 =	14.70	RAM	.00	1.51	-.66	-.01	.99	1.01	-.07
	T2 =	519	BLEED	.00	-.91	1.44	-.20	-.64	.06	.66
	ERI =	0	POWER	.00	1.46	1.92	.20	.78	-.06	1.82
.30	NR =	1.00	1.06	4930	25800	1.10	1023	122.2	473	1690
	P2 =	15.64	RAM	1.00	1.57	-.73	-.01	.98	1.00	-.07
	T2 =	528	BLEED	.06	-1.00	1.64	-.19	-.62	.06	.72
	ERI =	0	POWER	-.06	1.64	1.59	.19	.74	-.06	1.73
.60	NR =	1.00	1.28	11000	25700	1.19	1051	136.1	528	1683
	P2 =	18.75	RAM	1.00	1.55	-.73	-.01	.97	1.00	-.08
	T2 =	556	BLEED	.05	-1.21	1.82	-.19	-.64	.05	.68
	ERI =	0	POWER	-.05	1.70	1.29	.17	.67	-.05	1.57

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 7.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE

0 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.00	1.00	2.48	27061	1681	1045	29900	29900	.91	452	15.2
	RAM	.93	.91	-.07	-.00	1.43	1.43	-.56	.01	.00
	BLEED	-.56	.51	.66	.01	-.86	-.86	1.39	.06	.00
	POWER	.90	3.42	1.82	.00	1.37	1.37	2.01	-.06	.00
.30	1.06	2.59	28352	1690	1045	32000	27100	1.05	449	15.2
	RAM	.92	.89	-.07	-.00	1.39	1.46	-.61	.00	.00
	BLEED	-.48	.61	.72	-.03	-.78	-.93	1.56	.06	.00
	POWER	.85	3.27	1.73	-.00	1.28	1.52	1.71	-.06	.00
.60	1.28	2.87	30722	1683	1045	38000	27000	1.14	429	15.2
	RAM	.91	.88	-.08	-.00	1.33	1.47	-.63	.00	.00
	BLEED	-.53	.57	.68	-.00	-.80	-1.15	1.75	.05	.00
	POWER	.77	3.03	1.57	-.00	1.12	1.60	1.39	-.05	.00

6-13

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

		STANDARD DAY		PRESSURE ALTITUDE		0 FEET			
MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.00	NR = 1.00	1.00	0	12400	.97	884	73.3	329	1257
	P2 = 14.70	RAM	.00	1.46	-1.20	-.04	.87	1.01	-.38
	T2 = 519	BLEED	.00	-1.09	1.88	-.20	-.67	.01	.71
	ERI = 0	POWER	.00	2.63	3.35	.31	1.32	-.02	2.76
.30	NR = 1.00	1.06	3480	9030	1.29	887	73.7	334	1232
	P2 = 15.64	RAM	1.00	1.61	-1.40	-.03	.86	1.00	-.38
	T2 = 528	BLEED	.01	-1.42	2.46	-.14	-.62	.01	.82
	ERI = 0	POWER	-.02	3.65	2.50	.31	1.33	-.02	2.77
.60	NR = 1.00	1.28	7290	5920	1.79	897	75.3	350	1167
	P2 = 18.75	RAM	1.00	2.04	-1.91	-.03	.87	1.00	-.35
	T2 = 556	BLEED	.01	-2.42	3.56	-.17	-.65	.01	.74
	ERI = 0	POWER	-.02	5.58	.95	.25	1.29	-.02	2.66

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE

0 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.00	1.00	1.57	12104	1257	1095	13500	13500	.89	329	15.2
	RAM	.55	.35	-.38	.00	1.39	1.39	-1.12	.01	.00
	BLEED	-.41	.76	.71	-.00	-1.04	-1.04	1.82	.01	.00
	POWER	1.02	6.05	2.76	-.02	2.49	2.49	3.48	-.02	.00
.30	1.06	1.58	11692	1232	1095	13600	10200	1.15	316	15.2
	RAM	.55	.33	-.38	.01	1.37	1.50	-1.27	.00	.00
	BLEED	-.40	.98	.82	.02	-.97	-1.31	2.34	.01	.00
	POWER	1.03	6.23	2.77	-.02	2.50	3.36	2.80	-.02	.00
.60	1.28	1.60	10618	1167	1095	14400	7080	1.50	284	15.2
	RAM	.57	.32	-.35	-.00	1.40	1.80	-1.63	.00	.00
	BLEED	-.42	1.01	.74	.01	-1.02	-2.09	3.20	.01	.00
	POWER	.98	6.57	2.66	.01	2.35	4.80	1.70	-.02	.00

6-15

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY                  PRESSURE ALTITUDE                  0 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.00	NR =	1.00	0	3520	1.64	759	40.4	196	1108	
	P2 =	14.70	RAM	1.12	-1.89	-.08	.63	1.02	-.90	
	T2 =	519	BLEED	-.95	2.27	-.16	-.54	.01	.99	
	ERI =	0	POWER	.00	4.57	6.47	.47	2.19	-.04	4.55
.30	NR =	1.00	1.06	2090	1480	3.71	762	40.7	201	1075
	P2 =	15.64	RAM	1.01	1.27	-2.11	-.09	.63	1.01	-.89
	T2 =	528	BLEED	.01	-2.46	3.86	-.17	-.56	.01	.92
	ERI =	0	POWER	-.03	10.78	.46	.48	2.18	-.03	4.37
.60	NR =	1.00	1.28	4510	-660	-6.870	770	41.9	217	976
	P2 =	18.75	RAM	1.01	.42	-1.49	-.11	.61	1.01	-.91
	T2 =	556	BLEED	.02	8.24	-6.33	-.23	-.66	.02	.69
	ERI =	0	POWER	-.04	-20.26	35.66	.55	2.16	-.04	4.27

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE

0 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.00	1.00	1.13	5797	1108	1257	3990	3990	1.45	196	10.2
	RAM	.13	-.66	-.90	-.01	1.11	1.11	-1.87	.02	.00
	BLEED	-.11	1.29	.99	.00	-.93	-.93	2.26	.01	.00
	POWER	.53	11.13	4.55	.04	4.49	4.49	6.54	-.04	.00
.30	1.06	1.13	5506	1075	1257	4050	1960	2.81	190	10.2
	RAM	.13	-.71	-.89	.00	1.10	1.20	-2.03	.01	.00
	BLEED	-.12	1.25	.92	.00	-1.00	-2.08	3.44	.01	.00
	POWER	.54	11.26	4.37	-.05	4.41	9.16	2.04	-.03	.00
.60	1.28	1.14	4554	976	1253	4360	-150	-29.990	176	10.2
	RAM	.14	-1.05	-.91	-.01	1.10	-1.60	.52	.01	.00
	BLEED	-.22	1.13	.69	.24	-1.45	42.28	-25.18	.02	.00
	POWER	.22	13.11	4.27	1.14	3.01	-87.67	139.48	-.04	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.12.4

JANUARY 1964

		STANDARD DAY		PRESSURE ALTITUDE		0 FEET				
MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.00	NR =	1.00	1.00	0	1800	2.52	697	30.3	146	1135
	P2 =	14.70	RAM	.00	.88	-2.08	-.16	.47	1.02	-1.18
	T2 =	519	BLEED	.00	-1.54	2.36	-.21	-.59	.01	.79
	ERI =	0	POWER	.00	6.27	9.23	.80	2.77	-.05	6.69
.30	NR =	1.00	1.06	1570	250	16.65	697	30.6	151	1078
	P2 =	15.64	RAM	1.01	-1.16	-.11	-.17	.44	1.01	-1.20
	T2 =	528	BLEED	.01	-3.99	5.53	-.19	-.49	.01	.96
	ERI =	0	POWER	-.07	68.96	-44.86	.98	3.44	-.07	7.77
.60	NR =	1.00	1.28	3460	-1520	-2.060	702	31.3	166	931
	P2 =	18.75	RAM	1.01	1.21	-3.15	-.14	.45	1.01	-1.15
	T2 =	556	BLEED	.01	1.41	.07	-.18	-.54	.01	.84
	ERI =	0	POWER	-.07	-13.27	37.47	.84	3.56	-.07	7.58

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.12.4

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE

0 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.00	1.00	1.05	4544	1135	1443	1970	1970	2.30	146	10.2
	RAM	.05	-1.11	-1.18	-.01	.88	.88	-2.08	.02	.00
	BLEED	-.11	.77	.79	.46	-1.64	-1.64	2.46	.01	.00
	POWER	.28	15.60	6.69	.64	6.09	6.09	9.41	-.05	.00
.30	1.06	1.05	4189	1078	1450	1990	420	9.99	143	10.2
	RAM	.02	-1.27	-1.20	.17	.67	-.62	-.64	.01	.00
	BLEED	.01	1.21	.96	-.52	-.41	-1.99	3.30	.01	.00
	POWER	.62	18.73	7.77	-1.83	9.87	47.08	-26.20	-.07	.00
.60	1.28	1.06	3138	931	1450	2110	-1340	-2.335	135	10.2
	RAM	.04	-1.75	-1.15	.04	.85	1.27	-3.23	.01	.00
	BLEED	-.06	1.48	.84	-.03	-1.07	1.72	-.23	.01	.00
	POWER	.78	23.38	7.58	-3.07	11.00	-17.48	42.07	-.07	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 0 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.00	NR =	1.00	1.00	0	46200	1.80	1105	123.9	441	2067
	P2 =	14.70	RAM	.00	1.44	-.47	-.00	1.01	1.01	.00
	T2 =	559	BLEED	.00	-1.53	.80	-.26	-.89	.09	.00
	ERI =	0	POWER	.00	-.59	.82	.02	.07	-.01	.01
.30	NR =	1.00	1.06	4980	43600	1.99	1117	129.4	461	2067
	P2 =	15.64	RAM	1.01	1.55	-.59	-.00	1.01	1.01	.00
	T2 =	569	BLEED	.10	-1.72	1.01	-.26	-.89	.10	.00
	ERI =	0	POWER	-.01	-.52	.73	.02	.07	-.01	-.01
.60	NR =	1.00	1.28	11400	47500	2.01	1155	147.7	526	2067
	P2 =	18.75	RAM	1.00	1.27	-.89	.00	1.00	1.00	.00
	T2 =	599	BLEED	.10	-1.59	1.39	-.25	-.87	.10	-.00
	ERI =	0	POWER	-.01	-.47	.63	.02	.07	-.01	-.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY + 40 F

PRESSURE ALTITUDE

0 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FN8	SFC8	W2K	BTANG
.00	1.00	2.85	83411	3490	1329	46800	46800	1.78	458	10.2
	RAM	1.01	1.00	-.00	-.04	1.44	1.44	-.47	.01	.00
	BLEED	-1.39	-.74	-.07	.49	-1.53	-1.53	.80	.09	.00
	POWER	-1.20	.22	-.14	1.15	-.59	-.59	.82	-.01	.00
.30	1.06	2.96	86874	3489	1332	49700	44700	1.94	454	10.2
	RAM	1.01	1.00	-.00	-.04	1.42	1.46	-.50	.01	.00
	BLEED	-1.38	-.74	-.07	.49	-1.50	-1.68	.96	.10	.00
	POWER	-1.16	.20	-.14	1.11	-.55	-.61	.82	-.01	.00
.60	1.28	3.32	95255	3428	1339	59800	48400	1.97	443	10.2
	RAM	1.02	.43	-.31	-.22	1.19	1.24	-.85	.00	.00
	BLEED	-1.37	-.24	.20	.60	-1.27	-1.59	1.38	.10	.00
	POWER	-.99	.15	-.14	.90	-.44	-.54	.70	-.01	.00

# CONFIDENTIAL

GEI 67670

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 0 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.00	NR =	1.00	1.00	0	43600	1.60	1105	124.0	441	2067
	P2 =	14.70	RAM	.00	1.43	-.46	.00	1.01	1.01	.00
	T2 =	559	BLEED	.00	-1.52	.81	-.26	-.89	.09	-.00
	ERI =	0	POWER	.00	-.57	.82	.02	.06	-.01	-.00
.30	NR =	1.00	1.06	4980	40400	1.80	1117	129.6	461	2067
	P2 =	15.64	RAM	1.01	1.59	-.64	-.00	1.01	1.01	-.00
	T2 =	569	BLEED	.10	-1.76	1.08	-.25	-.88	.10	.00
	ERI =	0	POWER	-.01	-.53	.77	.02	.07	-.01	-.01
.60	NR =	1.00	1.28	11400	44300	1.85	1155	147.8	526	2067
	P2 =	18.75	RAM	1.00	1.54	-.59	.00	1.00	1.00	-.00
	T2 =	599	BLEED	.10	-1.85	1.18	-.25	-.87	.10	.00
	ERI =	0	POWER	-.01	-.46	.67	.02	.07	-.01	-.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY + 40 F

PRESSURE ALTITUDE

0 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFC8	W2K	BTANG
.00	1.00	2.87	69911	3151	1239	44200	44200	1.58	458	10.2
	RAM	1.01	1.00	-.01	-.05	1.43	1.43	-.46	.01	.00
	BLEED	-1.39	-.72	-.05	.52	-1.52	-1.52	.81	.09	.00
	POWER	-1.21	.24	-.12	1.18	-.57	-.57	.82	-.01	.00
.30	1.06	2.98	72759	3149	1242	46900	41900	1.74	454	10.2
	RAM	1.01	1.00	-.01	-.05	1.41	1.46	-.50	.01	.00
	BLEED	-1.38	-.71	-.05	.52	-1.48	-1.66	.98	.10	.00
	POWER	-1.14	.23	-.11	1.13	-.52	-.59	.82	-.01	.00
.60	1.28	3.34	82085	3143	1262	56900	45500	1.80	443	10.2
	RAM	1.00	.99	-.00	-.00	1.36	1.45	-.49	.00	.00
	BLEED	-1.34	-.70	-.05	.42	-1.40	-1.78	1.11	.10	.00
	POWER	-.98	.21	-.09	.92	-.41	-.50	.72	-.01	.00

GEI 67870

# CONFIDENTIAL

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 0 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.00	NR =	1.00	0	40500	1.39	1106	124.1	441	2067
	P2 =	14.70	RAM .00	1.42	-.46	-.00	1.01	1.01	.00
	T2 =	559	BLEED .00	-1.49	.84	-.26	-.89	.09	-.00
	ERI =	0	POWER .00	-.54	.83	.02	.06	-.01	.00
.30	NR =	1.00	4980	36400	1.61	1117	129.7	461	2067
	P2 =	15.64	RAM 1.01	1.63	-.69	-.00	1.01	1.01	-.00
	T2 =	569	BLEED .10	-1.78	1.16	-.25	-.88	.10	.01
	ERI =	0	POWER -.01	-.47	.75	.02	.07	-.01	.00
.60	NR =	1.00	11400	39600	1.67	1155	148.0	526	2067
	P2 =	18.75	RAM 1.00	1.58	-.65	.00	1.00	1.00	.00
	T2 =	599	BLEED .10	-1.90	1.28	-.25	-.87	.10	-.00
	ERI =	0	POWER -.01	-.41	.66	.02	.07	-.01	-.00

6-24

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.L. 3.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 0 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.00	1.00	2.89	56373	2750	1138	41000	41000	1.37	458	10.2
	RAM	1.01	1.00	-.01	-.06	1.42	1.42	-.46	.01	.00
	BLEED	-1.38	-.68	-.03	.52	-1.49	-1.49	.84	.09	.00
	POWER	-1.19	.28	-.08	1.18	-.54	-.54	.83	-.01	.00
.30	1.06	3.01	58612	2748	1140	43500	38500	1.52	454	10.2
	RAM	1.01	.99	-.01	-.06	1.40	1.45	-.50	.01	.00
	BLEED	-1.36	-.66	-.02	.50	-1.45	-1.65	1.02	.10	.00
	POWER	-1.12	.28	-.08	1.11	-.49	-.55	.83	-.01	.00
.60	1.28	3.37	65944	2743	1158	52700	41400	1.59	443	10.2
	RAM	1.00	.99	-.01	-.00	1.35	1.45	-.49	.00	.00
	BLEED	-1.34	-.65	-.03	.42	-1.38	-1.79	1.17	.10	.00
	POWER	-.97	.24	-.06	.91	-.38	-.48	.74	-.01	.00

6-25

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 0 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC	
.00	NR =	1.00	1.00	0	36800	1.16	1106	124.2	441	2067
	P2 =	14.70	RAM	.00	1.42	-.45	.00	1.01	1.01	.00
	T2 =	559	BLEED	.00	-1.47	.88	-.26	-.89	.09	-.00
	ERI =	0	POWER	.00	-.50	.86	.02	.06	-.01	.00
.30	NR =	1.00	1.06	4980	31400	1.41	1118	129.8	461	2067
	P2 =	15.64	RAM	1.01	1.68	-.75	-.00	1.01	1.01	.00
	T2 =	569	BLEED	.10	-1.76	1.20	-.25	-.88	.10	.01
	ERI =	0	POWER	-.01	-.30	.65	.02	.07	-.01	.00
.60	NR =	1.00	1.28	11400	33800	1.47	1156	148.1	525	2067
	P2 =	18.75	RAM	1.00	1.66	-.73	.00	1.00	1.00	.00
	T2 =	599	BLEED	.10	-1.97	1.43	-.25	-.87	.10	-.00
	ERI =	0	POWER	-.01	-.34	.65	.02	.07	-.01	-.00

6-26

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 0 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.00	1.00	2.92	42817	2310	1023	37300	37300	1.15	458	10.2
	RAM	1.01	.99	-.01	-.07	1.42	1.42	-.45	.01	.00
	BLEED	-1.37	-.61	-.01	.54	-1.47	-1.47	.88	.09	.00
	POWER	-1.17	.35	-.03	1.19	-.50	-.50	.86	-.01	.00
.30	1.06	3.04	44450	2309	1025	39600	34600	1.29	453	10.2
	RAM	1.01	.99	-.01	-.06	1.40	1.45	-.50	.01	.00
	BLEED	-1.35	-.59	-.00	.48	-1.43	-1.65	1.09	.10	.00
	POWER	-1.10	.34	-.03	1.08	-.45	-.52	.87	-.01	.00
.60	1.28	3.40	49775	2305	1041	47900	36600	1.36	443	10.2
	RAM	1.00	.98	-.01	-.01	1.34	1.45	-.50	.00	.00
	BLEED	-1.33	-.58	-.01	.42	-1.36	-1.81	1.27	.10	.00
	POWER	-.95	.30	-.03	.91	-.35	-.46	.77	-.01	.00

6-27

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 0 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.00	NR =	1.00	0	34800	1.03	1107	124.7	441	2067
	P2 =	14.70	RAM .00	1.41	-.43	-.00	1.01	1.01	.00
	T2 =	559	BLEED .00	-1.46	.91	-.25	-.89	.09	-.01
	ERI =	0	POWER .00	-.47	.89	.02	.06	-.01	.00
.30	NR =	1.00	4980	30900	1.20	1119	130.2	461	2067
	P2 =	15.64	RAM 1.01	1.56	-.60	-.00	1.01	1.01	.00
	T2 =	569	BLEED .10	-1.72	1.20	-.25	-.88	.10	-.00
	ERI =	0	POWER -.01	-.45	.85	.02	.06	-.01	-.00
.60	NR =	1.00	11400	32600	1.27	1157	148.6	525	2067
	P2 =	18.75	RAM 1.00	1.57	-.62	.00	1.00	1.00	-.00
	T2 =	599	BLEED .11	-1.94	1.45	-.25	-.85	.11	-.00
	ERI =	0	POWER -.01	-.44	.80	.02	.07	-.01	-.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 0 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.00	1.00	2.95	35683	2067	953	35200	35200	1.01	458	15.2
	RAM	1.01	1.01	.00	-.07	1.41	1.41	-.43	.01	.00
	BLEED	-1.37	-.58	-.01	.55	-1.46	-1.46	.91	.09	.00
	POWER	-1.16	.41	.00	1.22	-.47	-.47	.89	-.01	.00
.30	1.06	3.07	37032	2067	956	37400	32400	1.14	453	15.2
	RAM	1.01	1.01	.00	-.04	1.40	1.46	-.48	.01	.00
	BLEED	-1.35	-.55	-.00	.45	-1.42	-1.65	1.13	.10	.00
	POWER	-1.10	.39	-.00	1.07	-.43	-.49	.90	-.01	.00
.60	1.28	3.44	41405	2067	972	45300	33900	1.22	442	15.2
	RAM	1.00	1.00	-.00	-.00	1.34	1.46	-.49	.00	.00
	BLEED	-1.31	-.53	-.00	.42	-1.34	-1.82	1.33	.11	.00
	POWER	-.94	.35	-.00	.91	-.33	-.44	.79	-.01	.00

6-29

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 7.0

JANUARY 1964

STANDARD DAY + 40 F      PRESSURE ALTITUDE      0 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.00	NR = 1.00	1.00	0	24800	.99	1055	106.4	410	1711
	P2 = 14.70	RAM	.00	1.57	-.72	-.01	.99	1.01	-.07
	T2 = 559	BLEED	.00	-.95	1.48	-.21	-.65	.06	.63
	ERI = 0	POWER	.00	1.68	2.15	.22	.87	-.07	2.02
.30	NR = 1.00	1.06	4580	21400	1.16	1062	109.6	424	1699
	P2 = 15.64	RAM	1.01	1.67	-.83	-.01	.99	1.01	-.07
	T2 = 569	BLEED	.06	-1.17	1.69	-.21	-.66	.06	.62
	ERI = 0	POWER	-.06	1.99	1.79	.22	.85	-.06	1.98
.60	NR = 1.00	1.28	9850	19000	1.30	1078	116.1	456	1647
	P2 = 18.75	RAM	1.00	1.76	-.95	-.01	.98	1.00	-.07
	T2 = 599	BLEED	.04	-1.53	2.06	-.19	-.68	.04	.60
	ERI = 0	POWER	-.03	2.24	1.33	.19	.81	-.03	1.78

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 7.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 0 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.00	1.00	2.28	24473	1711	1045	26200	26200	.93	426	15.2
	RAM	.93	.91	-.07	-.00	1.48	1.48	-.62	.01	.00
	BLEED	-.55	.50	.63	-.00	-.90	-.90	1.42	.06	.00
	POWER	1.01	3.87	2.02	-.00	1.57	1.57	2.25	-.07	.00
.30	1.06	2.34	24783	1699	1045	27300	22800	1.09	417	15.2
	RAM	.93	.91	-.07	-.00	1.46	1.55	-.70	.01	.00
	BLEED	-.56	.49	.62	-.01	-.90	-1.09	1.61	.06	.00
	POWER	.99	3.84	1.98	-.00	1.53	1.85	1.93	-.06	.00
.60	1.28	2.47	24610	1647	1045	30300	20400	1.21	384	15.2
	RAM	.92	.89	-.07	-.00	1.42	1.62	-.79	.00	.00
	BLEED	-.59	.49	.60	-.00	-.93	-1.40	1.93	.04	.00
	POWER	.91	3.62	1.78	-.01	1.37	2.05	1.52	-.03	.00

CEI 67970

**CONFIDENTIAL**

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 0 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC
.00	NR =	1.00	0	8790	1.12	905	60.6	271	1283
	P2 =	14.70	.00	1.46	-1.44	-.04	.81	1.01	-.49
	T2 =	559	.00	-1.03	2.09	-.15	-.60	.01	.84
	ERI =	0	.00	3.05	3.83	.30	1.46	-.03	3.02
.30	NR =	1.00	2980	5930	1.61	909	61.0	275	1258
	P2 =	15.64	1.01	1.69	-1.73	-.04	.81	1.01	-.49
	T2 =	569	.01	-1.64	2.71	-.16	-.62	.01	.80
	ERI =	0	-.03	4.56	2.54	.30	1.46	-.03	3.02
.60	NR =	1.00	6300	3190	2.66	920	62.6	291	1180
	P2 =	18.75	1.00	2.23	-2.54	-.05	.79	1.00	-.50
	T2 =	599	.01	-3.52	4.79	-.20	-.67	.01	.70
	ERI =	0	-.02	9.83	-1.35	.35	1.57	-.02	3.22

**CONFIDENTIAL**

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 0 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.00	1.00	1.40	9865	1283	1095	9750	9750	1.01	281	15.2
	RAM	.44	.13	-.49	-.00	1.40	1.40	-1.37	.01	.00
	BLEED	-.31	1.02	.84	-.02	-.99	-.99	2.04	.01	.00
	POWER	.94	6.96	3.02	-.00	2.91	2.91	3.98	-.03	.00
.30	1.06	1.40	9533	1258	1095	9880	6900	1.38	271	15.2
	RAM	.45	.11	-.49	-.00	1.40	1.57	-1.59	.02	.00
	BLEED	-.33	1.00	.80	-.00	-1.04	-1.49	2.55	.01	.00
	POWER	.94	7.17	3.02	.02	2.88	4.14	2.96	-.03	.00
.60	1.28	1.42	8480	1180	1095	10500	4190	2.02	245	15.2
	RAM	.44	-.03	-.50	.01	1.35	1.87	-2.10	.00	.00
	BLEED	-.36	1.02	.70	-.02	-1.12	-2.81	4.00	.01	.00
	POWER	1.07	8.40	3.22	-.03	3.13	7.85	.53	-.02	.00

GEI 67870

# CONFIDENTIAL

CENTRAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 0 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC	
.00	NR =	1.00	1.00	0	2850	1.97	792	36.1	168	1219
	P2 =	14.70	RAM	.00	.93	-1.89	-.13	.55	1.02	-1.04
	T2 =	559	BLEED	.00	-.96	2.15	-.17	-.53	.01	.96
	ERI =	0	POWER	.00	5.39	7.08	.59	2.43	-.05	5.34
.30	NR =	1.00	1.06	1870	1040	5.10	794	36.4	173	1175
	P2 =	15.64	RAM	1.02	1.07	-2.07	-.12	.57	1.02	-1.00
	T2 =	569	BLEED	.02	-2.89	4.23	-.18	-.55	.02	.90
	ERI =	0	POWER	-.05	15.19	-1.90	.61	2.43	-.05	5.34
.60	NR =	1.00	1.28	4050	-960	-4.385	800	37.3	187	1044
	P2 =	18.75	RAM	1.01	.95	-2.33	-.12	.55	1.01	-1.00
	T2 =	599	BLEED	.02	4.29	-2.91	-.21	-.62	.02	.74
	ERI =	0	POWER	-.06	-17.59	35.18	.64	2.50	-.06	5.33

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 0 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFC8	W2K	BTANG
.00	1.00	1.10	5620	1219	1258	3240	3240	1.73	174	10.2
	RAM	.08	-.88	-1.04	.10	.88	.88	-1.85	.02	.00
	BLEED	-.09	1.16	.96	-.01	-.94	-.94	2.13	.01	.00
	POWER	.51	12.58	5.34	.05	5.32	5.32	7.16	-.05	.00
.30	1.06	1.11	5298	1175	1257	3300	1430	3.70	170	10.2
	RAM	.10	-.89	-1.00	.00	1.03	1.04	-2.03	.02	.00
	BLEED	-.10	1.15	.90	.00	-1.01	-2.35	3.63	.02	.00
	POWER	.53	13.22	5.34	.01	5.34	12.36	.84	-.05	.00
.60	1.28	1.11	4208	1044	1254	3510	-540	-7.785	158	10.2
	RAM	.11	-1.27	-1.00	-.01	1.02	.96	-2.34	.01	.00
	BLEED	-.16	1.20	.74	.17	-1.35	8.91	-6.81	.02	.00
	POWER	.56	16.00	5.33	-.04	5.34	-35.08	56.14	-.06	.00

GEI 67870

**CONFIDENTIAL**

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.12.4

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 0 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.00	NR = 1.00	1.00	0	1530	2.91	729	28.1	129	1235
	P2 = 14.70	RAM	.00	.78	-2.20	-.18	.40	1.03	-1.32
	T2 = 559	BLEED	.00	-.35	1.58	-.16	-.42	.02	1.07
	ERI = 0	POWER	.00	12.70	7.20	1.02	3.63	-.10	9.09
.30	NR = 1.00	1.06	1440	100	40.01	729	28.3	133	1167
	P2 = 15.64	RAM	1.03	-4.43	2.39	-.18	.39	1.03	-1.33
	T2 = 569	BLEED	.02	-15.08	20.88	-.18	-.49	.02	.91
	ERI = 0	POWER	-.10	126.45	-90.04	.92	3.24	-.10	8.30
.60	NR = 1.00	1.28	3170	-1530	-1.955	735	28.9	147	1000
	P2 = 18.75	RAM	1.02	1.04	-3.04	-.14	.43	1.02	-1.19
	T2 = 599	BLEED	.02	1.44	-.04	-.17	-.52	.02	.82
	ERI = 0	POWER	-.09	-2.93	26.79	.73	3.11	-.09	7.60

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.12.4

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 0 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.00	1.00	1.04	4436	1235	1448	1670	1670	2.66	133	10.2
	RAM	.04	-1.33	-1.32	-.03	.79	.79	-2.20	.03	.00
	BLEED	.02	1.22	1.07	-.62	-.19	-.19	1.42	.02	.00
	POWER	.79	20.03	9.09	-3.97	13.65	13.65	6.25	-.10	.00
.30	1.06	1.04	4053	1167	1450	1680	240	16.62	131	10.2
	RAM	.02	-1.51	-1.33	.10	.64	-1.62	.10	.03	.00
	BLEED	-.04	1.08	.91	-.05	-.96	-6.74	8.70	.02	.00
	POWER	.35	19.87	8.30	.18	8.16	56.84	-34.16	-.10	.00
.60	1.28	1.05	2995	1000	1438	1800	-1380	-2.175	124	10.2
	RAM	.05	-1.84	-1.19	-.15	1.03	1.00	-3.00	.02	.00
	BLEED	-.07	1.40	.82	.24	-1.35	1.83	-.42	.02	.00
	POWER	-.26	23.76	7.60	5.95	1.07	-1.62	25.43	-.09	.00

6-37

# CONFIDENTIAL

7,500 FEET

PREVIOUS PAGE WAS BLANK, THEREFORE WAS NOT FILMED

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY          PRESSURE ALTITUDE      5000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.00	NR = 1.00	1.00	0	45200	1.73	1036	114.5	408	2067
	P2 = 12.23	RAM	.00	1.38	-.41	.00	1.01	1.01	.00
	T2 = 501	BLEED	.00	-1.49	.68	-.33	-.97	.02	-.01
	ERI = 0	POWER	.00	-.58	.81	.02	.06	-.00	.00
.30	NR = 1.00	1.06	4370	43500	1.88	1045	119.8	427	2067
	P2 = 13.02	RAM	1.01	1.47	-.51	.00	1.01	1.01	.00
	T2 = 510	BLEED	.03	-1.67	.87	-.34	-.97	.03	-.01
	ERI = 0	POWER	-.00	-.53	.75	.02	.06	-.00	.00
.60	NR = 1.00	1.28	9980	48400	1.91	1078	136.7	487	2067
	P2 = 15.60	RAM	1.01	1.44	-.48	-.00	1.01	1.01	.00
	T2 = 537	BLEED	.06	-1.77	1.01	-.26	-.93	.06	-.01
	ERI = 0	POWER	-.00	-.49	.69	.01	.05	-.00	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE

5000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.00	1.00	3.26	78341	3495	1292	45800	45800	1.71	482	10.2
	RAM	1.01	1.00	-.00	-.00	1.38	1.38	-.41	.01	.00
	BLEED	-1.33	-.83	-.05	.33	-1.49	-1.49	.68	.02	.00
	POWER	-1.35	.23	-.15	1.26	-.58	-.58	.81	-.00	.00
.30	1.06	3.40	81760	3494	1294	48700	44300	1.85	478	10.2
	RAM	1.01	1.00	-.00	-.00	1.37	1.40	-.43	.01	.00
	BLEED	-1.32	-.83	-.05	.32	-1.47	-1.61	.81	.03	.00
	POWER	-1.29	.22	-.14	1.20	-.53	-.58	.81	-.00	.00
.60	1.28	3.83	92539	3491	1309	59000	49000	1.89	467	10.2
	RAM	1.01	1.00	-.00	-.00	1.33	1.39	-.42	.01	.00
	BLEED	-1.42	-.79	-.07	.45	-1.42	-1.73	.97	.06	.00
	POWER	-1.12	.19	-.13	1.04	-.43	-.51	.71	-.00	.00

7-3

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE      5000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.00	NR = 1.00	1.00	0	42600	1.54	1036	114.6	408	2067
	P2 = 12.23	RAM	.00	1.38	-.40	.00	1.01	1.01	.00
	T2 = 501	BLEED	.00	-1.48	.69	-.33	-.97	.02	-.01
	ERI = 0	POWER	.00	-.55	.81	.02	.06	-.00	.00
.30	NR = 1.00	1.06	4370	40300	1.70	1046	119.9	427	2067
	P2 = 13.02	RAM	1.01	1.50	-.54	.00	1.01	1.01	.00
	T2 = 510	BLEED	.03	-1.69	.91	-.33	-.97	.03	-.01
	ERI = 0	POWER	-.00	-.46	.71	.02	.06	-.00	.00
.60	NR = 1.00	1.28	9980	44700	1.74	1078	136.9	487	2067
	P2 = 15.60	RAM	1.01	1.48	-.52	.00	1.01	1.01	.00
	T2 = 537	BLEED	.06	-1.81	1.07	-.26	-.93	.06	-.02
	ERI = 0	POWER	-.00	-.45	.66	.01	.05	-.00	-.01

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE

5000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FN8	SFCB	W2K	BTANG
.00	1.00	3.28	65869	3156	1206	43200	43200	1.53	482	10.2
	RAM	1.01	1.00	-.01	-.00	1.38	1.38	-.40	.01	.00
	BLEED	-1.32	-.80	-.04	.33	-1.48	-1.48	.69	.02	.00
	POWER	-1.33	.26	-.12	1.24	-.55	-.55	.81	-.00	.00
.30	1.06	3.43	68707	3155	1208	45900	41500	1.65	478	10.2
	RAM	1.01	1.00	-.01	-.00	1.36	1.40	-.43	.01	.00
	BLEED	-1.32	-.80	-.04	.32	-1.45	-1.61	.83	.03	.00
	POWER	-1.27	.25	-.11	1.19	-.50	-.56	.81	-.00	.00
.60	1.28	3.86	77635	3151	1221	55500	45600	1.70	467	10.2
	RAM	1.01	1.00	-.01	-.00	1.32	1.39	-.42	.01	.00
	BLEED	-1.43	-.77	-.05	.46	-1.41	-1.74	1.00	.06	.00
	POWER	-1.13	.21	-.11	1.05	-.41	-.50	.71	-.00	.00

7-5

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE      5000 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC
.00	NR = 1.00	1.00	0	39500	1.35	1036	114.7	408	2067
	P2 = 12.23	RAM	.00	1.37	-.40	.00	1.01	1.01	.00
	T2 = 501	BLEED	.00	-1.46	.71	-.33	-.97	.02	-.01
	ERI = 0	POWER	.00	-.52	.83	.02	.06	-.00	.00
.30	NR = 1.00	1.06	4370	36400	1.53	1046	120.0	427	2067
	P2 = 13.02	RAM	1.01	1.54	-.58	.00	1.01	1.01	.00
	T2 = 510	BLEED	.03	-1.72	.98	-.33	-.97	.03	-.01
	ERI = 0	POWER	-.00	-.40	.70	.02	.06	-.00	.00
.60	NR = 1.00	1.28	9980	40200	1.56	1078	137.0	487	2067
	P2 = 15.60	RAM	1.01	1.52	-.57	.00	1.01	1.01	-.00
	T2 = 537	BLEED	.06	-1.84	1.15	-.27	-.93	.06	-.01
	ERI = 0	POWER	-.00	-.41	.67	.02	.05	-.00	-.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE

5000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.00	1.00	3.31	53373	2755	1108	40000	40000	1.33	482	10.2
	RAM	1.01	1.00	-.01	-.01	1.37	1.37	-.40	.01	.00
	BLEED	-1.32	-.76	-.02	.33	-1.46	-1.46	.71	.02	.00
	POWER	-1.32	.30	-.08	1.25	-.52	-.52	.83	-.00	.00
.30	1.06	3.46	55627	2753	1110	42500	38200	1.46	478	10.2
	RAM	1.01	1.00	-.01	-.00	1.35	1.39	-.43	.01	.00
	BLEED	-1.31	-.76	-.02	.32	-1.44	-1.60	.87	.03	.00
	POWER	-1.26	.29	-.08	1.19	-.48	-.53	.83	-.00	.00
.60	1.28	3.89	62692	2749	1121	51500	41500	1.51	467	10.2
	RAM	1.00	.99	-.01	-.00	1.31	1.39	-.42	.01	.00
	BLEED	-1.40	-.72	-.03	.44	-1.39	-1.74	1.05	.06	.00
	POWER	-1.10	.25	-.07	1.04	-.38	-.47	.73	-.00	.00

7-7

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE      5000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.00	NR = 1.00	1.00	0	35900	1.14	1037	114.8	408	2067
	P2 = 12.23	RAM	.00	1.36	-.40	.00	1.01	1.01	.00
	T2 = 501	BLEED	.00	-1.44	.76	-.33	-.97	.02	-.01
	ERI = 0	POWER	.00	-.48	.86	.02	.06	-.00	.00
.30	NR = 1.00	1.06	4370	31700	1.34	1047	120.1	427	2067
	P2 = 13.02	RAM	1.01	1.59	-.65	.00	1.01	1.01	.00
	T2 = 510	BLEED	.03	-1.77	1.10	-.33	-.97	.03	-.01
	ERI = 0	POWER	-.00	-.32	.68	.02	.06	-.00	.00
.60	NR = 1.00	1.28	9980	34600	1.38	1079	137.1	487	2067
	P2 = 15.60	RAM	1.01	1.59	-.65	.00	1.01	1.01	.00
	T2 = 537	BLEED	.06	-1.90	1.28	-.27	-.93	.06	-.01
	ERI = 0	POWER	-.00	-.31	.63	.02	.05	-.00	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE

5000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.00	1.00	3.34	40852	2314	996	36400	36400	1.12	482	10.2
	RAM	1.01	.99	-.01	-.01	1.36	1.36	-.40	.01	.00
	BLEED	-1.31	-.70	-.01	.33	-1.44	-1.44	.76	.02	.00
	POWER	-1.30	.37	-.04	1.25	-.48	-.48	.86	-.00	.00
.30	1.06	3.49	42522	2312	998	38600	34300	1.24	478	10.2
	RAM	1.01	.99	-.01	-.01	1.35	1.39	-.43	.01	.00
	BLEED	-1.30	-.69	-.01	.33	-1.42	-1.60	.93	.03	.00
	POWER	-1.24	.36	-.03	1.20	-.44	-.50	.86	-.00	.00
.60	1.28	3.93	47731	2308	1008	46700	36700	1.30	467	10.2
	RAM	1.01	.99	-.01	-.01	1.31	1.39	-.43	.01	.00
	BLEED	-1.38	-.65	-.01	.43	-1.36	-1.75	1.13	.06	.00
	POWER	-1.09	.32	-.03	1.05	-.35	-.45	.77	-.00	.00

7-9

# CONFIDENTIAL

GEI 67870

**CONFIDENTIAL**

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE      5000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.00	NR = 1.00	1.00	0	33900	1.01	1038	115.2	408	2067
	P2 = 12.23	RAM	.00	1.36	-.38	.00	1.01	1.01	.00
	T2 = 501	BLEED	.00	-1.43	.79	-.33	-.96	.02	-.01
	ERI = 0	POWER	.00	-.46	.89	.02	.06	-.00	-.01
.30	NR = 1.00	1.06	4370	30900	1.15	1048	120.6	427	2067
	P2 = 13.02	RAM	1.01	1.50	-.53	.00	1.01	1.01	.00
	T2 = 510	BLEED	.03	-1.70	1.08	-.33	-.96	.03	.00
	ERI = 0	POWER	-.00	-.48	.90	.02	.06	-.00	.00
.60	NR = 1.00	1.28	9980	33100	1.21	1080	137.6	487	2067
	P2 = 15.60	RAM	1.01	1.48	-.51	.00	1.01	1.01	.00
	T2 = 537	BLEED	.06	-1.84	1.26	-.28	-.92	.06	-.00
	ERI = 0	POWER	-.00	-.42	.79	.02	.05	-.00	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE

5000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.00	1.00	3.37	34212	2067	929	34300	34300	1.00	482	15.2
	RAM	1.01	1.01	.00	.00	1.36	1.36	-.38	.01	.00
	BLEED	-1.30	-.66	-.01	.32	-1.43	-1.43	.79	.02	.00
	POWER	-1.29	.42	-.01	1.26	-.46	-.46	.89	-.00	.00
.30	1.06	3.52	35601	2067	931	36400	32100	1.11	478	15.2
	RAM	1.01	1.01	.00	.00	1.35	1.40	-.41	.01	.00
	BLEED	-1.28	-.64	.00	.31	-1.40	-1.60	.98	.03	.00
	POWER	-1.23	.42	.00	1.20	-.41	-.47	.89	-.00	.00
.60	1.28	3.97	39941	2067	941	44000	34100	1.17	467	15.2
	RAM	1.01	1.01	.00	.00	1.31	1.40	-.42	.01	.00
	BLEED	-1.34	-.61	-.00	.39	-1.34	-1.75	1.18	.06	.00
	POWER	-1.07	.37	.00	1.05	-.33	-.42	.80	-.00	.00

7-11

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 5000 FEET

MO		P2/P0	FD	FM	SFC	TE	PE	W2	TC
.00	NR =	1.00	0	40400	1.78	1082	106.2	379	2067
	P2 =	12.23	RAM	1.42	-.45	-.00	1.01	1.01	.00
	T2 =	541	BLEED	-1.54	.78	-.26	-.92	.07	-.00
	ERI =	0	POWER	-.68	.93	.02	.07	-.00	.00
.30	NR =	1.00	4220	38400	1.96	1095	111.2	396	2067
	P2 =	13.02	RAM	1.52	-.56	-.00	1.01	1.01	.00
	T2 =	551	BLEED	-1.68	.95	-.26	-.90	.08	.00
	ERI =	0	POWER	-.57	.81	.02	.07	-.01	.00
.60	NR =	1.00	9590	42300	2.00	1130	126.3	451	2067
	P2 =	15.60	RAM	1.50	-.54	-.00	1.01	1.01	-.00
	T2 =	580	BLEED	-1.79	1.08	-.25	-.88	.10	-.00
	ERI =	0	POWER	-.53	.76	.02	.08	-.01	-.00

7-12

# CONFIDENTIAL

# CONFIDENTIAL

GEI 87870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY + 40 F

PRESSURE ALTITUDE

5000 FFFT

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFC8	W2K	BTANG
.00	1.00	2.97	71970	3494	1313	40900	40100	1.76	465	10.2
	RAM	1.01	1.00	-.00	-.05	1.42	1.42	-.45	.01	.00
	BLEED	-1.41	-.77	-.06	.50	-1.54	-1.54	.78	.07	.00
	POWER	-1.45	.24	-.17	1.40	-.68	-.68	.93	-.00	.00
.30	1.06	3.09	75129	3492	1321	43500	39500	1.91	461	10.2
	RAM	1.01	1.00	-.00	-.02	1.40	1.44	-.48	.01	.00
	BLEED	-1.40	-.76	-.06	.45	-1.49	-1.60	.93	.08	.00
	POWER	-1.37	.24	-.16	1.27	-.62	-.69	.93	-.01	.00
.60	1.28	3.45	84690	3488	1339	52600	43000	1.97	449	10.2
	RAM	1.01	1.00	-.00	-.00	1.36	1.44	-.47	.01	.00
	BLEED	-1.36	-.73	-.07	.43	-1.41	-1.74	1.04	.10	.00
	POWER	-1.16	.22	-.14	1.07	-.48	-.59	.81	-.01	.00

7-13

# CONFIDENTIAL

GEI 67870

# CONFIDENTIAL

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 5000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.00	NR = 1.00	1.00	0	38100	1.58	1083	106.3	379	2067
	P2 = 12.23	RAM	.00	1.41	-.44	-.00	1.01	1.01	.00
	T2 = 541	BLEED	.00	-1.52	.79	-.26	-.92	.07	-.00
	ERI = 0	POWER	.00	-.64	.93	.02	.07	-.00	.00
.30	NR = 1.00	1.06	4220	35600	1.77	1095	111.3	396	2067
	P2 = 13.02	RAM	1.01	1.54	-.59	.00	1.01	1.01	.00
	T2 = 551	BLEED	.08	-1.68	.98	-.26	-.90	.08	-.00
	ERI = 0	POWER	-.01	-.53	.80	.02	.07	-.01	.00
.60	NR = 1.00	1.28	9590	39000	1.82	1131	126.7	451	2067
	P2 = 15.60	RAM	1.01	1.54	-.58	-.00	1.01	1.01	-.00
	T2 = 580	BLEED	.10	-1.84	1.17	-.25	-.88	.10	-.00
	ERI = 0	POWER	-.01	-.54	.79	.02	.08	-.01	-.00

7-14

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 5000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.00	1.00	2.99	60393	3156	1225	38600	38600	1.56	465	10.2
	RAM	1.01	1.00	-.01	-.06	1.41	1.41	-.44	.01	.00
	BLEED	-1.41	-.75	-.04	.51	-1.52	-1.52	.79	.07	.00
	POWER	-1.43	.28	-.13	1.40	-.64	-.64	.93	-.00	.00
.30	1.06	3.11	63006	3154	1232	41000	36800	1.71	461	10.2
	RAM	1.01	1.00	-.01	-.02	1.40	1.44	-.48	.01	.00
	BLEED	-1.40	-.73	-.04	.45	-1.48	-1.66	.95	.08	.00
	POWER	-1.36	.27	-.13	1.27	-.59	-.66	.93	-.01	.00
.60	1.28	3.48	70890	3148	1248	49600	40000	1.77	449	10.2
	RAM	1.01	1.00	-.01	-.00	1.35	1.44	-.47	.01	.00
	BLEED	-1.36	-.70	-.05	.44	-1.39	-1.75	1.07	.10	.00
	POWER	-1.15	.24	-.11	1.08	-.46	-.56	.81	-.01	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 5000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.00	NR = 1.00	1.00	0	35400	1.38	1083	106.4	379	2067
	P2 = 12.23	RAM	.00	1.40	-.44	-.00	1.01	1.01	.00
	T2 = 541	BLEED	.00	-1.50	.81	-.26	-.92	.07	-.00
	ERI = 0	POWER	.00	-.61	.94	.02	.07	-.00	.00
.30	NR = 1.00	1.06	4210	32100	1.59	1096	111.4	396	2067
	P2 = 13.02	RAM	1.01	1.57	-.62	-.00	1.01	1.01	.00
	T2 = 551	BLEED	.08	-1.71	1.05	-.26	-.90	.08	-.00
	ERI = 0	POWER	-.01	-.48	.79	.02	.07	-.01	.00
.60	NR = 1.00	1.28	9580	34900	1.63	1131	126.8	451	2067
	P2 = 15.60	RAM	1.01	1.58	-.64	-.00	1.01	1.01	-.00
	T2 = 580	BLEED	.10	-1.87	1.25	-.25	-.87	.10	-.00
	ERI = 0	POWER	-.01	-.47	.76	.02	.08	-.01	-.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 5000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.00	1.00	3.02	48795	2755	1125	35800	35800	1.36	465	10.2
	RAM	1.01	.99	-.01	-.06	1.40	1.40	-.44	.01	.00
	BLEED	-1.40	-.71	-.03	.51	-1.50	-1.50	.81	.07	.00
	POWER	-1.41	.33	-.09	1.39	-.61	-.61	.94	-.00	.00
.30	1.06	3.14	50859	2753	1132	38100	33900	1.50	461	10.2
	RAM	1.01	.99	-.01	-.01	1.39	1.44	-.47	.01	.00
	BLEED	-1.39	-.69	-.03	.45	-1.46	-1.65	.99	.08	.00
	POWER	-1.34	.31	-.09	1.26	-.56	-.63	.95	-.01	.00
.60	1.28	3.52	57067	2748	1147	46000	36400	1.57	449	10.2
	RAM	1.01	1.00	-.01	-.01	1.35	1.44	-.48	.01	.00
	BLEED	-1.35	-.66	-.03	.43	-1.37	-1.76	1.13	.10	.00
	POWER	-1.13	.28	-.08	1.06	-.43	-.54	.83	-.01	.00

7-17

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 5000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.00	NR = 1.00	1.00	0	32200	1.16	1083	106.5	379	2067
	P2 = 12.23	RAM	.00	1.40	-.44	-.00	1.01	1.01	.00
	T2 = 541	BLEED	.00	-1.48	.86	-.26	-.92	.07	-.01
	ERI = 0	POWER	.00	-.57	.98	.02	.07	-.00	.00
.30	NR = 1.00	1.06	4210	27800	1.39	1096	111.5	396	2067
	P2 = 13.02	RAM	1.01	1.61	-.67	-.00	1.01	1.01	.00
	T2 = 551	BLEED	.08	-1.74	1.14	-.26	-.90	.08	-.00
	ERI = 0	POWER	-.01	-.33	.72	.02	.06	-.01	.00
.60	NR = 1.00	1.28	9580	29900	1.45	1131	126.9	451	2067
	P2 = 15.60	RAM	1.01	1.65	-.72	-.00	1.01	1.01	-.00
	T2 = 580	BLEED	.10	-1.90	1.35	-.25	-.87	.10	-.00
	ERI = 0	POWER	-.01	-.33	.68	.02	.07	-.01	-.00

7-18

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 5000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.00	1.00	3.05	37175	2315	1012	32600	32600	1.14	465	10.2
	RAM	1.01	.99	-.01	-.06	1.40	1.40	-.44	.01	.00
	BLEED	-1.40	-.64	-.01	.48	-1.48	-1.48	.86	.07	.00
	POWER	-1.39	.41	-.04	1.36	-.57	-.57	.98	-.00	.00
.30	1.06	3.17	38689	2314	1017	34600	30400	1.27	461	10.2
	RAM	1.01	.99	-.01	-.01	1.38	1.43	-.48	.01	.00
	BLEED	-1.38	-.62	-.01	.46	-1.44	-1.65	1.05	.08	.00
	POWER	-1.32	.39	-.04	1.27	-.52	-.59	.99	-.01	.00
.60	1.28	3.55	43219	2309	1031	41800	32200	1.34	449	10.2
	RAM	1.01	.99	-.01	-.01	1.34	1.44	-.48	.01	.00
	BLEED	-1.34	-.59	-.01	.44	-1.35	-1.78	1.23	.10	.00
	POWER	-1.12	.35	-.03	1.07	-.40	-.51	.87	-.01	.00

7-19

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 5000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.00	NR =	1.00	1.00	0	30300	1.02	1084	106.9	378	2067
	P2 =	12.23	RAM	.00	1.40	-.42	.00	1.01	1.01	.00
	T2 =	541	BLEED	.00	-1.46	.88	-.26	-.92	.07	-.01
	ERI =	0	POWER	.00	-.54	1.02	.02	.07	-.00	.00
.30	NR =	1.00	1.06	4210	27200	1.18	1097	111.9	396	2067
	P2 =	13.02	RAM	1.01	1.53	-.57	-.00	1.01	1.01	-.00
	T2 =	551	BLEED	.08	-1.73	1.18	-.26	-.90	.08	-.00
	ERI =	0	POWER	-.00	-.53	.99	.02	.06	-.00	.00
.60	NR =	1.00	1.28	9580	28700	1.25	1132	127.3	450	2067
	P2 =	15.60	RAM	1.01	1.55	-.58	-.00	1.01	1.01	-.00
	T2 =	580	BLEED	.11	-1.86	1.36	-.25	-.87	.11	.00
	ERI =	0	POWER	-.01	-.47	.87	.02	.07	-.01	-.01

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 5000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.00	1.00	3.08	30944	2067	942	30700	30700	1.01	464	15.2
	RAM	1.01	1.01	.00	-.04	1.40	1.40	-.42	.01	.00
	BLEED	-1.38	-.61	-.01	.44	-1.46	-1.46	.88	.07	.00
	POWER	-1.38	.48	.00	1.36	-.54	-.54	1.02	-.00	.00
.30	1.06	3.20	32199	2067	948	32600	28400	1.13	461	15.2
	RAM	1.01	1.01	-.00	.00	1.38	1.43	-.46	.01	.00
	BLEED	-1.37	-.58	-.00	.45	-1.42	-1.64	1.09	.08	.00
	POWER	-1.31	.46	.00	1.28	-.49	-.56	1.02	-.00	.00
.60	1.28	3.59	35939	2067	961	39400	29800	1.21	449	15.2
	RAM	1.01	1.01	-.00	-.00	1.34	1.45	-.47	.01	.00
	BLEED	-1.34	-.54	.00	.44	-1.33	-1.80	1.29	.11	.00
	POWER	-1.12	.39	-.01	1.09	-.38	-.50	.90	-.01	.00

7-21

# CONFIDENTIAL

PREVIOUS PAGE WAS BLANK, THEREFORE WAS NOT FILMED

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE

15000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.30	NR =	1.00	3040	32600	1.83	1004	86.4	308	2067
	P2 =	8.83	RAM 1.01	1.43	-.47	-.00	1.01	1.01	.00
	T2 =	474	BLEED .01	-1.63	.82	-.33	-.98	.01	.00
	ERI =	0	POWER -.00	-.71	1.01	.03	.09	-.00	.00
.40	NR =	1.00	4210	33800	1.83	1011	89.7	320	2067
	P2 =	9.26	RAM 1.01	1.43	-.47	-.00	1.01	1.01	.00
	T2 =	480	BLEED .02	-1.66	.86	-.33	-.97	.02	.00
	ERI =	0	POWER -.00	-.70	1.00	.02	.08	-.00	.00
.50	NR =	1.00	5510	35200	1.84	1021	93.9	335	2067
	P2 =	9.84	RAM 1.01	1.43	-.46	.00	1.01	1.01	.00
	T2 =	489	BLEED .02	-1.71	.90	-.33	-.97	.02	-.01
	ERI =	0	POWER -.00	-.71	1.00	.02	.08	-.00	.00
.60	NR =	1.00	6990	36700	1.86	1033	99.3	354	2067
	P2 =	10.58	RAM 1.01	1.39	-.42	.00	1.01	1.01	.00
	T2 =	499	BLEED .02	-1.67	.87	-.33	-.97	.02	-.01
	ERI =	0	POWER -.00	-.63	.90	.02	.07	-.00	.00
.90	NR =	1.00	12900	43600	1.89	1082	122.1	435	2067
	P2 =	14.03	RAM 1.01	1.33	-.35	-.00	1.01	1.01	.00
	T2 =	541	BLEED .07	-1.73	.98	-.26	-.92	.07	-.00
	ERI =	0	POWER -.00	-.52	.74	.01	.06	-.00	.00
1.15	NR =	.994	20200	50800	1.89	1142	150.2	535	2067
	P2 =	18.76	RAM 1.01	1.04	-.63	.00	1.01	1.01	.00
	T2 =	589	BLEED .10	-1.53	1.32	-.25	-.87	.10	-.00
	ERI =	0	POWER -.01	-.43	.59	.02	.07	-.01	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY                  PRESSURE ALTITUDE    15000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.30	1.06	3.67	59786	3499	1281	36100	33100	1.81	491	10.2
	RAM	1.01	1.00	-.01	-.01	1.34	1.37	-.40	.01	.00
	BLEED	-1.32	-.83	-.05	.31	-1.44	-1.58	.77	.01	.00
	POWER	-1.74	.30	-.19	1.63	-.69	-.75	1.06	-.00	.00
.40	1.12	3.80	61882	3499	1282	38400	34200	1.81	489	10.2
	RAM	1.01	1.00	-.01	-.01	1.33	1.37	-.40	.01	.00
	BLEED	-1.32	-.83	-.05	.32	-1.43	-1.61	.80	.02	.00
	POWER	-1.70	.29	-.19	1.58	-.64	-.72	1.01	-.00	.00
.50	1.19	3.96	64647	3498	1286	41100	35500	1.82	486	10.2
	RAM	1.01	1.00	-.01	-.00	1.32	1.37	-.40	.01	.00
	BLEED	-1.34	-.83	-.05	.34	-1.42	-1.64	.83	.02	.00
	POWER	-1.64	.27	-.18	1.53	-.60	-.69	.98	-.00	.00
.60	1.28	4.17	68093	3497	1292	44000	37000	1.84	482	10.2
	RAM	1.01	1.00	-.01	-.00	1.31	1.36	-.39	.01	.00
	BLEED	-1.33	-.83	-.05	.33	-1.39	-1.66	.85	.02	.00
	POWER	-1.55	.26	-.17	1.45	-.55	-.65	.92	-.00	.00
.90	1.69	5.03	82602	3492	1312	56900	44100	1.87	465	10.2
	RAM	1.01	1.00	-.00	-.00	1.27	1.34	-.36	.01	.00
	BLEED	-1.41	-.78	-.07	.45	-1.33	-1.73	.98	.07	.00
	POWER	-1.26	.21	-.15	1.17	-.40	-.51	.73	-.00	.00
1.15	2.26	6.02	96246	3412	1326	72000	51800	1.86	446	10.2
	RAM	1.03	.44	-.32	-.22	1.05	1.07	-.66	-.00	.00
	BLEED	-1.37	-.24	.20	.61	-1.07	-1.53	1.32	.10	.00
	POWER	-.96	.15	-.13	.88	-.29	-.40	.56	-.01	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE    15000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.30	NR = 1.00	1.06	3040	30300	1.66	1004	86.5	308	2067
	P2 = 8.83	RAM	1.01	1.45	-.50	-.00	1.01	1.01	.00
	T2 = 474	BLEED	.01	-1.64	.86	-.33	-.98	.01	.00
	ERI = 0	POWER	-.00	-.60	.94	.03	.09	-.00	.00
.40	NR = 1.00	1.12	4210	31400	1.66	1012	89.8	320	2067
	P2 = 9.26	RAM	1.01	1.46	-.50	-.00	1.01	1.01	.00
	T2 = 480	BLEED	.02	-1.69	.90	-.33	-.98	.02	-.01
	ERI = 0	POWER	-.00	-.61	.94	.02	.08	-.00	.00
.50	NR = 1.00	1.19	5510	32700	1.67	1021	94.0	335	2067
	P2 = 9.84	RAM	1.01	1.46	-.50	.00	1.01	1.01	.00
	T2 = 489	BLEED	.02	-1.73	.95	-.33	-.97	.02	-.01
	ERI = 0	POWER	-.00	-.62	.94	.02	.08	-.00	.00
.60	NR = 1.00	1.28	6990	34000	1.68	1034	99.4	354	2067
	P2 = 10.58	RAM	1.01	1.40	-.44	.00	1.01	1.01	.00
	T2 = 499	BLEED	.02	-1.68	.91	-.33	-.97	.02	-.01
	ERI = 0	POWER	-.00	-.52	.82	.02	.07	-.00	.00
.90	NR = 1.00	1.69	12900	40300	1.72	1083	122.2	435	2067
	P2 = 14.03	RAM	1.01	1.35	-.37	-.00	1.01	1.01	.00
	T2 = 541	BLEED	.07	-1.73	1.00	-.26	-.92	.07	-.01
	ERI = 0	POWER	-.00	-.45	.69	.01	.06	-.00	.00
1.15	NR = .994	2.26	20200	47700	1.76	1142	150.3	535	2067
	P2 = 18.76	RAM	1.01	1.30	-.32	-.00	1.01	1.01	-.00
	T2 = 589	BLEED	.10	-1.78	1.11	-.25	-.87	.10	-.00
	ERI = 0	POWER	-.01	-.43	.64	.02	.07	-.01	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY PRESSURE ALTITUDE 12000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.30	1.06	3.69	50368	3165	1196	34100	31000	1.62	491	10.2
	RAM	1.01	.99	-.01	-.01	1.34	1.37	-.40	.01	.00
	BLEED	-1.31	-.80	-.03	.31	-1.43	-1.57	.78	.01	.00
	POWER	-1.72	.34	-.15	1.61	-.64	-.70	1.04	-.00	.00
.40	1.12	3.82	52117	3164	1198	36200	32000	1.63	489	10.2
	RAM	1.01	1.00	-.01	-.01	1.33	1.37	-.40	.01	.00
	BLEED	-1.34	-.82	-.04	.33	-1.42	-1.61	.82	.02	.00
	POWER	-1.67	.32	-.14	1.56	.60	.68	1.02	-.00	.00
.50	1.19	3.99	54412	3162	1201	38700	33200	1.64	486	10.2
	RAM	1.01	1.00	-.01	-.01	1.31	1.36	-.40	.01	.00
	BLEED	-1.34	-.81	-.04	.34	-1.40	-1.64	.86	.02	.00
	POWER	-1.62	.31	-.14	1.52	-.57	-.66	.98	-.00	.00
.60	1.28	4.20	57275	3160	1206	41500	34500	1.66	482	10.2
	RAM	1.01	1.00	-.01	-.00	1.30	1.36	-.39	.01	.00
	BLEED	-1.33	-.80	-.04	.33	-1.38	-1.66	.88	.02	.00
	POWER	-1.54	.29	-.13	1.43	-.52	-.62	.93	-.00	.00
.90	1.69	5.07	69296	3153	1224	53600	40700	1.70	465	10.2
	RAM	1.01	1.00	-.01	-.01	1.26	1.34	-.37	.01	.00
	BLEED	-1.41	-.75	-.05	.45	-1.31	-1.75	1.02	.07	.00
	POWER	-1.24	.24	-.11	1.16	-.37	-.49	.74	-.00	.00
1.15	2.26	6.06	83759	3144	1254	68600	48400	1.73	446	10.2
	RAM	1.01	1.00	-.00	-.00	1.23	1.32	-.34	.00	.00
	BLEED	-1.35	-.71	-.05	.43	-1.22	-1.77	1.10	.10	.00
	POWER	-.96	.21	-.09	.90	-.26	-.37	.58	-.01	.00

8-5

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY          PRESSURE ALTITUDE    15000 FEET

M		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
		1.00	1.06	3040	27500	1.49	1005	86.6	308	2067
		8.83	RAM	1.01	1.49	-.54	-.00	1.01	1.01	.00
		474	BLEED	.01	-1.66	.92	-.33	-.98	.01	.00
	ERI =	0	POWER	-.00	-.51	.91	.03	.09	-.00	.00
.40	NR =	1.00	1.12	4210	28400	1.49	1012	89.8	320	2067
	P2 =	9.26	RAM	1.01	1.50	-.54	-.00	1.01	1.01	.00
	T2 =	480	BLEED	.02	-1.72	.98	-.33	-.98	.02	-.01
	ERI =	0	POWER	-.00	-.53	.91	.02	.08	-.00	-.00
.50	NR =	1.00	1.19	5510	29500	1.50	1022	94.1	335	2067
	P2 =	9.84	RAM	1.01	1.49	-.54	.00	1.01	1.01	.00
	T2 =	489	BLEED	.02	-1.74	1.00	-.33	-.97	.02	-.01
	ERI =	0	POWER	-.00	-.50	.87	.02	.08	-.00	.00
.60	NR =	1.00	1.28	6990	30700	1.51	1034	99.5	354	2067
	P2 =	10.58	RAM	1.01	1.43	-.48	.00	1.01	1.01	.00
	T2 =	499	BLEED	.02	-1.72	.98	-.33	-.97	.02	-.01
	ERI =	0	POWER	-.00	-.43	.78	.02	.07	-.00	.00
.90	NR =	1.00	1.69	12900	36200	1.55	1083	122.3	435	2067
	P2 =	14.03	RAM	1.01	1.38	-.41	-.00	1.01	1.01	.00
	T2 =	541	BLEED	.07	-1.75	1.07	-.26	-.92	.07	-.01
	ERI =	0	POWER	-.00	-.39	.68	.01	.06	-.00	.00
1.15	NR =	.994	2.26	20200	42700	1.58	1142	150.5	535	2067
	P2 =	18.76	RAM	1.01	1.33	-.36	.00	1.01	1.01	.00
	T2 =	589	BLEED	.10	-1.81	1.18	-.25	-.87	.10	-.01
	ERI =	0	POWER	-.01	-.35	.60	.02	.07	-.01	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 15000 FEET

M0	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.30	1.06	3.72	40933	2764	1100	31600	28500	1.43	491	10.2
	RAM	1.01	.99	-.01	-.01	1.33	1.36	-.40	.01	.00
	BLEED	-1.31	-.76	-.01	.32	-1.41	-1.56	.82	.01	.00
	POWER	-1.70	.39	-.10	1.61	-.60	-.66	1.07	-.00	.00
.40	1.12	3.86	42325	2762	1101	33600	29400	1.44	488	10.2
	RAM	1.01	.99	-.01	-.01	1.32	1.36	-.40	.01	.00
	BLEED	-1.32	-.77	-.02	.33	-1.41	-1.61	.86	.02	.00
	POWER	-1.65	.38	-.10	1.57	-.57	-.65	1.04	-.00	.00
.50	1.19	4.03	44157	2761	1103	35900	30400	1.45	486	10.2
	RAM	1.01	.99	-.01	-.01	1.31	1.36	-.40	.01	.00
	BLEED	-1.33	-.76	-.02	.34	-1.39	-1.64	.90	.02	.00
	POWER	-1.60	.36	-.10	1.52	-.53	-.63	1.00	-.00	.00
.60	1.28	4.24	46436	2759	1108	38400	31500	1.48	482	10.2
	RAM	1.01	.99	-.01	-.01	1.30	1.36	-.39	.01	.00
	BLEED	-1.32	-.76	-.02	.33	-1.37	-1.67	.94	.02	.00
	POWER	-1.52	.35	-.10	1.44	-.49	-.60	.95	-.00	.00
.90	1.69	5.11	55965	2751	1124	49600	36700	1.52	465	10.2
	RAM	1.01	1.00	-.01	-.01	1.26	1.34	-.37	.01	.00
	BLEED	-1.40	-.71	-.03	.45	-1.30	-1.77	1.09	.07	.00
	POWER	-1.23	.28	-.08	1.16	-.35	-.47	.76	-.00	.00
1.15	2.26	6.12	67346	2744	1151	63400	43200	1.56	446	10.2
	RAM	1.01	1.00	-.00	-.01	1.22	1.33	-.35	-.00	.00
	BLEED	-1.34	-.66	-.03	.43	-1.21	-1.82	1.19	.10	.00
	POWER	-.94	.24	-.06	.89	-.24	-.35	.60	-.01	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY PRESSURE ALTITUDE 15000 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC	
.30	NR =	1.00	1.06	3040	24000	1.31	1005	86.7	308	2067
	P2 =	8.83	RAM	1.01	1.53	-.59	-.00	1.01	1.01	.00
	T2 =	474	BLEED	.01	-1.71	1.02	-.33	-.98	.01	-.01
	ERI =	0	POWER	-.00	-.38	.87	.03	.09	-.00	.00
.40	NR =	1.00	1.12	4210	24700	1.32	1012	89.9	320	2067
	P2 =	9.26	RAM	1.01	1.55	-.60	-.00	1.01	1.01	.00
	T2 =	480	BLEED	.02	-1.77	1.09	-.33	-.98	.02	-.01
	ERI =	0	POWER	-.00	-.40	.88	.02	.08	-.00	.00
.50	NR =	1.00	1.19	5510	25500	1.33	1022	94.2	335	2067
	P2 =	9.84	RAM	1.01	1.53	-.59	.00	1.01	1.01	.00
	T2 =	489	BLEED	.02	-1.75	1.08	-.33	-.97	.02	-.01
	ERI =	0	POWER	-.00	-.33	.78	.02	.08	-.00	.00
.60	NR =	1.00	1.28	6990	26500	1.34	1034	99.6	354	2067
	P2 =	10.58	RAM	1.01	1.49	-.54	.00	1.01	1.01	.00
	T2 =	499	BLEED	.02	-1.78	1.11	-.33	-.97	.02	-.01
	ERI =	0	POWER	-.00	-.32	.75	.02	.07	-.00	.00
.90	NR =	1.00	1.69	12900	31100	1.37	1083	122.4	435	2067
	P2 =	14.03	RAM	1.01	1.44	-.48	-.00	1.01	1.01	.00
	T2 =	541	BLEED	.07	-1.83	1.22	-.26	-.92	.07	-.01
	ERI =	0	POWER	-.00	-.28	.63	.01	.05	-.00	-.01
1.15	NR =	.994	2.26	20200	36600	1.39	1143	150.6	535	2067
	P2 =	18.76	RAM	1.01	1.38	-.41	.00	1.01	1.01	.00
	T2 =	589	BLEED	.11	-1.88	1.32	-.25	-.87	.11	-.01
	ERI =	0	POWER	-.01	-.28	.57	.02	.06	-.01	-.01

8-8

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 15000 FEET

M0	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.30	1.06	3.76	31478	2323	989	28700	25700	1.23	491	10.2
	RAM	1.01	.98	-.02	-.01	1.32	1.36	-.41	.01	.00
	BLEED	-1.31	-.71	-.00	.33	-1.40	-1.57	.88	.01	.00
	POWER	-1.67	.49	-.05	1.61	-.55	-.62	1.11	-.00	.00
.40	1.12	3.89	32517	2322	991	30500	26300	1.24	488	10.2
	RAM	1.01	.99	-.02	-.01	1.31	1.36	-.40	.01	.00
	BLEED	-1.31	-.71	-.00	.33	-1.39	-1.61	.93	.02	.00
	POWER	-1.62	.47	-.05	1.57	-.52	-.61	1.08	-.00	.00
.50	1.19	4.07	33881	2320	993	32600	27100	1.25	486	10.2
	RAM	1.01	.99	-.02	-.01	1.30	1.36	-.40	.01	.00
	BLEED	-1.32	-.70	-.01	.34	-1.38	-1.66	.98	.02	.00
	POWER	-1.57	.45	-.04	1.52	-.50	-.60	1.06	-.00	.00
.60	1.28	4.27	35576	2318	997	34900	27900	1.27	482	10.2
	RAM	1.01	.99	-.02	-.01	1.29	1.36	-.40	.01	.00
	BLEED	-1.31	-.70	-.01	.33	-1.35	-1.69	1.02	.02	.00
	POWER	-1.49	.43	-.04	1.44	-.45	-.56	.99	-.00	.00
.90	1.69	5.16	42610	2311	1011	45000	32100	1.33	465	10.2
	RAM	1.01	.99	-.01	-.01	1.25	1.35	-.38	.01	.00
	BLEED	-1.40	-.64	-.01	.45	-1.28	-1.82	1.21	.07	.00
	POWER	-1.22	.34	-.04	1.17	-.32	-.45	.80	-.00	.00
1.15	2.26	6.18	50905	2305	1035	57500	37300	1.37	446	10.2
	RAM	1.01	.99	-.01	-.01	1.22	1.33	-.37	-.00	.00
	BLEED	-1.34	-.59	-.02	.43	-1.19	-1.89	1.33	.11	.00
	POWER	-.94	.29	-.03	.90	-.22	-.34	.63	-.01	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE    15000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.30	NR =	1.00	1.06	3040	23200	1.13	1006	87.0	308	2067
	P2 =	8.83	RAM	1.01	1.43	-.46	.00	1.01	1.01	.00
	T2 =	474	BLEED	.01	-1.64	.99	-.33	-.97	.01	-.01
	ERI =	0	POWER	-.00	-.56	1.14	.03	.09	-.00	.00
.40	NR =	1.00	1.12	4210	23700	1.14	1014	90.3	320	2067
	P2 =	9.26	RAM	1.01	1.44	-.47	-.00	1.01	1.01	.00
	T2 =	480	BLEED	.02	-1.70	1.05	-.33	-.97	.02	-.01
	ERI =	0	POWER	-.00	-.56	1.11	.02	.08	-.00	.00
.50	NR =	1.00	1.19	5510	24400	1.16	1023	94.6	335	2067
	P2 =	9.84	RAM	1.01	1.44	-.46	.00	1.01	1.01	.00
	T2 =	489	BLEED	.02	-1.72	1.08	-.33	-.97	.02	-.01
	ERI =	0	POWER	-.00	-.51	1.05	.02	.08	-.00	.00
.60	NR =	1.00	1.28	6990	25200	1.18	1036	100.0	354	2067
	P2 =	10.58	RAM	1.01	1.43	-.45	.00	1.01	1.01	.00
	T2 =	499	BLEED	.02	-1.77	1.14	-.33	-.96	.02	-.01
	ERI =	0	POWER	-.00	-.51	1.02	.02	.07	-.00	.00
.90	NR =	1.00	1.69	12900	28900	1.23	1084	122.9	435	2067
	P2 =	14.03	RAM	1.01	1.39	-.41	.00	1.01	1.01	.00
	T2 =	541	BLEED	.07	-1.88	1.31	-.27	-.92	.07	-.01
	ERI =	0	POWER	-.00	-.41	.83	.02	.06	-.00	.00
1.15	NR =	.994	2.26	20200	33100	1.28	1144	151.1	534	2067
	P2 =	18.76	RAM	1.01	1.31	-.33	-.00	1.00	1.01	-.00
	T2 =	589	BLEED	.11	-1.89	1.40	-.25	-.85	.11	-.00
	ERI =	0	POWER	-.01	-.29	.64	.02	.07	-.01	-.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 15000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FGR	FNB	SFCB	W2K	BTANG
.30	1.06	3.80	26275	2067	920	27000	23900	1.10	491	15.2
	RAM	1.01	1.01	.00	.00	1.33	1.37	-.39	.01	.00
	BLEED	-1.30	-.68	-.01	.31	-1.40	-1.57	.92	.01	.00
	POWER	-1.65	.57	.00	1.61	-.52	-.58	1.16	-.00	.00
.40	1.12	3.93	27148	2067	922	28700	24500	1.11	488	15.2
	RAM	1.01	1.01	.00	-.00	1.32	1.37	-.39	.01	.00
	BLEED	-1.30	-.68	-.01	.31	-1.38	-1.62	.97	.02	.00
	POWER	-1.59	.55	.00	1.56	-.48	-.57	1.12	-.00	.00
.50	1.19	4.11	28293	2067	924	30600	25100	1.13	486	15.2
	RAM	1.01	1.01	.00	.00	1.31	1.37	-.39	.01	.00
	BLEED	-1.30	-.67	-.01	.32	-1.36	-1.67	1.02	.02	.00
	POWER	-1.55	.53	.00	1.51	-.45	-.55	1.08	-.00	.00
.60	1.28	4.32	29713	2067	928	32800	25800	1.15	482	15.2
	RAM	1.01	1.01	.00	.00	1.29	1.37	-.39	.01	.00
	BLEED	-1.30	-.66	-.01	.32	-1.34	-1.71	1.08	.02	.00
	POWER	-1.48	.50	.00	1.45	-.41	-.53	1.03	-.00	.00
.90	1.69	5.21	35565	2067	943	42300	29500	1.21	465	15.2
	RAM	1.01	1.01	.00	.00	1.25	1.36	-.38	.01	.00
	BLEED	-1.36	-.60	-.01	.42	-1.26	-1.85	1.28	.07	.00
	POWER	-1.20	.41	.00	1.18	-.29	-.42	.84	-.00	.00
1.15	2.26	6.24	42401	2067	966	54200	34000	1.25	446	15.2
	RAM	1.00	1.00	-.00	.00	1.22	1.34	-.37	.00	.00
	BLEED	-1.32	-.53	-.00	.42	-1.16	-1.92	1.43	.11	.00
	POWER	-.92	.34	-.00	.90	-.20	-.31	.66	-.01	-15.97

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 7.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE

15000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.30	NR =	1.00	1.06	2920	16500	1.04	950	74.6	296	1604
	P2 =	8.83	RAM	1.01	1.50	-.66	-.01	.98	1.01	-.08
	T2 =	474	BLEED	.02	-1.01	1.55	-.19	-.66	.02	.71
	ERI =	0	POWER	-.03	2.49	2.49	.31	1.25	-.03	2.71
.40	NR =	1.00	1.12	4040	16700	1.06	958	77.5	307	1609
	P2 =	9.26	RAM	1.01	1.49	-.65	-.01	.98	1.01	-.08
	T2 =	480	BLEED	.02	-1.03	1.61	-.18	-.64	.02	.73
	ERI =	0	POWER	-.04	2.47	2.31	.29	1.18	-.04	2.59
.50	NR =	1.00	1.19	5280	17100	1.08	970	81.2	321	1617
	P2 =	9.84	RAM	1.01	1.52	-.66	-.01	.99	1.01	-.06
	T2 =	489	BLEED	.03	-1.14	1.67	-.18	-.65	.03	.68
	ERI =	0	POWER	-.05	2.62	2.17	.29	1.17	-.05	2.60
.60	NR =	1.00	1.28	6680	17700	1.11	984	86.1	339	1633
	P2 =	10.58	RAM	1.01	1.58	-.65	-.00	1.01	1.01	-.01
	T2 =	499	BLEED	.04	-1.18	1.71	-.18	-.65	.04	.67
	ERI =	0	POWER	-.06	2.59	2.01	.27	1.10	-.06	2.49
.90	NR =	1.00	1.69	12300	20700	1.18	1039	106.8	414	1687
	P2 =	14.03	RAM	1.01	1.55	-.59	.00	1.01	1.01	.00
	T2 =	541	BLEED	.05	-1.27	1.85	-.19	-.64	.05	.67
	ERI =	0	POWER	-.07	2.30	1.55	.22	.87	-.07	2.06
1.15	NR =	.994	2.26	17900	20500	1.25	1071	120.4	474	1637
	P2 =	18.76	RAM	1.01	1.54	-.61	-.00	1.00	1.01	-.01
	T2 =	589	BLEED	.04	-1.53	2.10	-.19	-.67	.04	.62
	ERI =	0	POWER	-.04	2.39	1.22	.19	.82	-.04	1.82

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 7.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE

15000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.30	1.06	2.78	17099	1604	1045	20100	17200	.99	471	15.2
	RAM	.91	.89	-.08	.00	1.36	1.42	-.57	.01	.00
	BLEED	-.51	.52	.71	-.04	-.82	-.96	1.50	.02	.00
	POWER	1.38	5.05	2.71	-.00	2.02	2.37	2.61	-.03	.00
.40	1.12	2.88	17703	1609	1045	21500	17400	1.01	469	15.2
	RAM	.91	.89	-.08	.00	1.34	1.42	-.57	.01	.00
	BLEED	-.50	.56	.73	-.04	-.79	-.98	1.56	.02	.00
	POWER	1.30	4.84	2.59	.01	1.90	2.34	2.44	-.04	.00
.50	1.19	3.02	18521	1617	1044	23100	17800	1.04	465	15.2
	RAM	.93	.91	-.06	-.01	1.34	1.44	-.57	.01	.00
	BLEED	-.58	.50	.68	-.00	-.83	-1.08	1.61	.03	.00
	POWER	1.40	4.85	2.60	-.02	1.91	2.49	2.30	-.05	.00
.60	1.28	3.20	19674	1633	1045	25000	18400	1.07	461	15.2
	RAM	1.00	.99	-.01	.01	1.37	1.50	-.55	.01	.00
	BLEED	-.58	.50	.67	-.01	-.81	-1.12	1.65	.04	.00
	POWER	1.34	4.65	2.49	-.02	1.78	2.45	2.14	-.06	.00
.90	1.69	3.98	24475	1687	1045	33500	21200	1.15	443	15.2
	RAM	1.01	1.01	.00	-.00	1.31	1.49	-.51	.01	.00
	BLEED	-.57	.54	.67	-.00	-.75	-1.22	1.80	.05	.00
	POWER	1.08	3.90	2.06	-.01	1.38	2.22	1.63	-.07	.00
1.15	2.26	4.47	25556	1637	1046	38900	21000	1.22	395	15.2
	RAM	.99	.98	-.01	.01	1.26	1.49	-.54	.00	.00
	BLEED	-.57	.52	.62	-.04	-.78	-1.48	2.04	.04	.00
	POWER	1.04	3.65	1.82	-.06	1.24	2.34	1.27	-.04	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 8.0

JANUARY 1964

STANDARD DAY                  PRESSURE ALTITUDE    15000 FEET

M0		P2/PO	FD	FN	SFC	TE	PE	W2	TC
.30	NR =	1.00	2770	13700	1.03	919	67.9	281	1466
	P2 =	8.83	1.01	1.61	-.77	-.01	.99	1.01	-.06
	T2 =	474	.04	-1.12	1.68	-.18	-.65	.04	.68
	ERI =	0	-.09	3.03	2.81	.32	1.37	-.09	3.15
.40	NR =	1.00	3830	13900	1.05	928	70.5	291	1473
	P2 =	9.26	1.01	1.63	-.79	-.01	.99	1.01	-.06
	T2 =	480	.04	-1.16	1.75	-.18	-.64	.04	.69
	ERI =	0	-.09	3.08	2.60	.31	1.32	-.09	3.05
.50	NR =	1.00	4980	13900	1.08	937	73.2	303	1473
	P2 =	9.84	1.01	1.65	-.81	-.01	.99	1.01	-.06
	T2 =	489	.04	-1.22	1.83	-.18	-.64	.04	.68
	ERI =	0	-.09	3.15	2.39	.30	1.27	-.09	2.95
.60	NR =	1.00	6200	13700	1.12	944	75.8	314	1463
	P2 =	10.58	1.01	1.65	-.82	-.01	.99	1.01	-.06
	T2 =	499	.04	-1.30	1.89	-.18	-.65	.04	.66
	ERI =	0	-.07	2.97	2.26	.28	1.20	-.07	2.72

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 8.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 15000 FEET

M0	P2/PO	P8/PO	WFT	T8	AB	FGB	FNB	SFCB	W2K	BTANG
.30	1.06	2.47	14109	1466	1070	17200	14500	.98	447	15.2
	RAM	.93	.90	-.06	.00	1.43	1.51	-.66	.01	.00
	BLEED	-.57	.53	.68	.01	-.88	-1.05	1.61	.04	.00
	POWER	1.56	5.92	3.15	-.00	2.36	2.83	3.01	-.09	.00
.40	1.12	2.56	14620	1473	1070	18500	14600	1.00	445	15.2
	RAM	.93	.90	-.06	-.00	1.41	1.52	-.66	.01	.00
	BLEED	-.55	.56	.69	.00	-.85	-1.08	1.67	.04	.00
	POWER	1.50	5.76	3.05	-.00	2.25	2.87	2.82	-.09	.00
.50	1.19	2.65	15058	1473	1070	19600	14600	1.03	439	15.2
	RAM	.93	.90	-.06	-.00	1.39	1.52	-.67	.01	.00
	BLEED	-.55	.57	.68	-.00	-.84	-1.14	1.74	.04	.00
	POWER	1.46	5.61	2.95	-.01	2.15	2.92	2.63	-.09	.00
.60	1.28	2.74	15309	1463	1070	20600	14400	1.06	428	15.2
	RAM	.93	.90	-.06	-.00	1.38	1.53	-.69	.01	.00
	BLEED	-.57	.55	.66	.01	-.85	-1.24	1.82	.04	.00
	POWER	1.26	5.30	2.72	.08	1.93	2.80	2.43	-.07	.00

8-15

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY                  PRESSURE ALTITUDE    15000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.30	NR =	1.00	2420	9060	1.06	862	55.0	246	1255	
	P2 =	8.83	1.01	1.70	-1.08	-.02	.95	1.01	-.17	
	T2 =	474	BLEED	.03	-1.32	1.95	-.20	-.67	.03	.65
	ERI =	0	POWER	-.08	4.35	3.60	.42	1.81	-.08	4.00
.40	NR =	1.00	3290	8600	1.11	865	55.8	250	1242	
	P2 =	9.26	1.01	1.73	-1.11	-.02	.95	1.01	-.17	
	T2 =	480	BLEED	.03	-1.49	2.08	-.20	-.69	.03	.61
	ERI =	0	POWER	-.07	4.61	3.34	.42	1.79	-.07	3.93
.50	NR =	1.00	4200	8010	1.17	868	56.5	255	1225	
	P2 =	9.84	1.01	1.78	-1.16	-.01	.95	1.01	-.16	
	T2 =	489	BLEED	.02	-1.56	2.24	-.20	-.68	.02	.64
	ERI =	0	POWER	-.05	5.29	2.99	.43	1.85	-.05	4.03
.60	NR =	1.00	5150	7290	1.25	872	57.2	261	1201	
	P2 =	10.58	1.01	1.91	-1.26	-.01	.96	1.01	-.13	
	T2 =	499	BLEED	.02	-1.88	2.57	-.18	-.70	.02	.61
	ERI =	0	POWER	-.04	6.33	2.52	.45	1.93	-.04	4.21
.90	NR =	1.00	8300	4780	1.66	885	59.3	280	1110	
	P2 =	14.03	1.01	2.65	-2.04	-.00	.99	1.01	-.05	
	T2 =	541	BLEED	.01	-3.18	4.07	-.17	-.73	.01	.55
	ERI =	0	POWER	-.03	8.72	.44	.32	1.74	-.03	3.71
1.15	NR =	.994	11500	2420	2.72	904	61.9	304	1023	
	P2 =	18.76	1.01	4.24	-4.32	-.00	.98	1.01	-.06	
	T2 =	589	BLEED	.01	-6.68	8.49	-.18	-.74	.01	.51
	ERI =	0	POWER	-.03	17.84	-6.29	.31	1.73	-.03	3.63

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 15000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.30	1.06	1.96	9602	1255	1096	12100	9720	.99	391	15.2
	RAM	.79	.72	-.17	.00	1.46	1.57	-.92	.01	.00
	BLEED	-.54	.59	.65	.01	-.99	-1.24	1.87	.03	.00
	POWER	1.89	8.05	4.00	-.13	3.32	4.16	3.79	-.08	.00
.40	1.12	1.98	9533	1242	1095	12600	9270	1.03	382	15.2
	RAM	.79	.71	-.17	-.00	1.44	1.60	-.96	.01	.00
	BLEED	-.58	.54	.61	.04	-1.04	-1.42	2.00	.03	.00
	POWER	1.81	8.05	3.93	-.01	3.21	4.37	3.57	-.07	.00
.50	1.19	2.00	9382	1225	1094	12900	8700	1.08	370	15.2
	RAM	.80	.73	-.16	-.01	1.45	1.66	-1.02	.01	.00
	BLEED	-.53	.63	.64	-.02	-.98	-1.47	2.14	.02	.00
	POWER	1.95	8.39	4.03	.08	3.35	4.98	3.30	-.05	.00
.60	1.28	2.03	9141	1201	1095	13100	7980	1.15	355	15.2
	RAM	.84	.77	-.13	-.01	1.49	1.79	-1.12	.01	.00
	BLEED	-.63	.61	.61	.00	-1.06	-1.76	2.44	.02	.00
	POWER	2.19	8.95	4.21	-.06	3.58	5.91	2.92	-.04	.00
.90	1.69	2.08	7940	1110	1095	13800	5480	1.45	300	15.2
	RAM	.94	.89	-.05	-.02	1.56	2.40	-1.72	.01	.00
	BLEED	-.68	.70	.55	.01	-1.12	-2.83	3.68	.01	.00
	POWER	1.84	9.18	3.71	.03	3.05	7.72	1.39	-.03	.00
1.15	2.26	2.16	6575	1023	1095	14600	3130	2.10	254	15.2
	RAM	.93	.84	-.06	.01	1.51	3.37	-3.05	.00	.00
	BLEED	-.65	.95	.51	-.03	-1.10	-5.18	6.65	.01	.00
	POWER	1.80	10.81	3.63	.02	2.92	13.75	-2.70	-.03	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P. S. 10.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE      15000 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC
.30	NR =	1.00	1900	4440	1.30	789	39.8	193	1072
	P2 =	8.83	RAM 1.01	1.76	-1.56	-.03	.87	1.01	-.37
	T2 =	474	BLEED .01	-1.43	2.55	-.14	-.61	.01	.85
	ERI =	0	POWER -.03	6.59	4.64	.44	2.38	-.03	4.90
.40	NR =	1.00	2560	3910	1.43	791	39.9	195	1056
	P2 =	9.26	RAM 1.01	1.87	-1.72	-.03	.87	1.01	-.38
	T2 =	480	BLEED .01	-1.46	2.71	-.15	-.59	.01	.89
	ERI =	0	POWER -.04	7.76	3.87	.44	2.41	-.04	4.96
.50	NR =	1.00	3260	3360	1.62	795	40.4	199	1037
	P2 =	9.84	RAM 1.01	2.00	-1.90	-.03	.87	1.01	-.38
	T2 =	489	BLEED .01	-1.95	3.16	-.16	-.62	.01	.82
	ERI =	0	POWER -.04	9.32	2.76	.47	2.45	-.04	5.02
.60	NR =	1.00	4000	2730	1.91	799	40.8	203	1013
	P2 =	10.58	RAM 1.01	2.21	-2.20	-.03	.87	1.01	-.39
	T2 =	499	BLEED .02	-2.65	3.89	-.17	-.65	.02	.75
	ERI =	0	POWER -.05	11.76	1.05	.50	2.49	-.05	5.11

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.10.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 15000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.30	1.06	1.50	5757	1072	1120	6940	5040	1.14	306	15.2
	RAM	.55	.34	-.37	.02	1.46	1.63	-1.40	.01	.00
	BLEED	-.34	1.06	.85	-.04	-.94	-1.30	2.42	.01	.00
	POWER	1.62	11.36	4.90	.01	4.40	6.07	5.16	-.03	.00
.40	1.12	1.51	5603	1056	1120	7080	4520	1.24	298	15.2
	RAM	.55	.32	-.38	.01	1.45	1.70	-1.51	.01	.00
	BLEED	-.26	1.19	.89	-.09	-.83	-1.31	2.56	.01	.00
	POWER	1.65	11.75	4.96	-.01	4.46	7.01	4.61	-.04	.00
.50	1.19	1.51	5442	1037	1120	7250	3980	1.37	288	15.2
	RAM	.54	.29	-.38	.01	1.44	1.79	-1.64	.01	.00
	BLEED	-.33	1.12	.82	-.04	-.94	-1.72	2.91	.01	.00
	POWER	1.68	12.19	5.02	.00	4.49	8.21	3.85	-.04	.00
.60	1.28	1.52	5207	1013	1120	7350	3350	1.55	276	15.2
	RAM	.54	.25	-.39	.00	1.43	1.92	-1.84	.01	.00
	BLEED	-.38	1.08	.75	-.01	-1.02	-2.25	3.45	.02	.00
	POWER	1.70	12.86	5.11	.03	4.52	9.96	2.79	-.05	.00

8-19

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY PRESSURE ALTITUDE 15000 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	IC	
.30	NR =	1.00	1.06	1470	1580	2.26	725	28.7	149	951
	P2 =	8.83	RAM	1.01	1.58	-2.10	-.07	.72	1.01	-.70
	T2 =	474	BLEED	.01	-2.32	3.56	-.20	-.64	.01	.80
	ERI =	0	POWER	-.02	11.82	4.98	.76	3.27	-.02	6.50
.40	NR =	1.00	1.12	1990	1130	3.04	728	28.9	151	933
	P2 =	9.26	RAM	1.01	1.60	-2.24	-.07	.71	1.01	-.74
	T2 =	480	BLEED	.01	-2.98	4.45	-.19	-.62	.01	.84
	ERI =	0	POWER	-.03	18.57	-.58	.77	3.35	-.03	6.71
.50	NR =	1.00	1.19	2530	650	5.02	731	29.1	154	911
	P2 =	9.84	RAM	1.02	2.33	-3.19	-.07	.72	1.02	-.72
	T2 =	489	BLEED	.01	-5.24	7.25	-.17	-.59	.01	.86
	ERI =	0	POWER	-.05	32.16	-12.44	.75	3.32	-.05	6.67
.60	NR =	1.00	1.28	3100	110	27.92	734	29.3	157	886
	P2 =	10.58	RAM	1.02	9.32	-18.45	-.06	.73	1.02	-.70
	T2 =	499	BLEED	.02	-33.46	69.98	-.18	-.62	.02	.78
	ERI =	0	POWER	-.08	183.45	-112.64	.67	3.12	-.08	6.23
.90	NR =	1.00	1.69	5070	-1770	-1.125	741	29.8	171	771
	P2 =	14.03	RAM	1.01	.51	-1.80	-.06	.71	1.01	-.70
	T2 =	541	BLEED	.01	2.05	.39	-.16	-.63	.01	.78
	ERI =	0	POWER	-.04	-11.76	40.62	.61	3.35	-.04	6.16

8-20

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 15000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.30	1.06	1.20	3569	951	1256	3430	1960	1.82	237	10.2
	RAM	.23	-.35	-.70	-.03	1.29	1.50	-2.00	.01	.00
	BLEED	-.23	1.11	.80	.09	-1.20	-2.11	3.32	.01	.00
	POWER	.92	16.95	6.50	.59	5.80	10.16	6.62	-.02	.00
.40	1.12	1.20	3440	933	1257	3510	1520	2.26	231	10.2
	RAM	.20	-.46	-.74	.05	1.19	1.41	-2.02	.01	.00
	BLEED	-.18	1.27	.84	-.02	-1.04	-2.42	3.83	.01	.00
	POWER	1.18	17.97	6.71	.03	6.56	15.19	2.67	-.03	.00
.50	1.19	1.21	3275	911	1257	3580	1050	3.13	223	10.2
	RAM	.23	-.49	-.72	-.01	1.26	1.85	-2.58	.02	.00
	BLEED	-.19	1.44	.86	.01	-1.04	-3.59	5.31	.01	.00
	POWER	1.13	18.70	6.67	.14	3.35	21.86	-2.99	-.05	.00
.60	1.28	1.21	3053	886	1258	3600	500	6.05	214	10.2
	RAM	.23	-.53	-.70	.00	1.27	2.84	-3.93	.02	.00
	BLEED	-.20	1.40	.78	-.01	-1.09	-7.93	10.60	.02	.00
	POWER	1.12	18.88	6.23	-.05	6.05	43.68	-22.35	-.08	.00
.90	1.69	1.21	1987	771	1258	3700	-1360	-1.460	183	10.2
	RAM	.23	-1.25	-.70	.01	1.26	.35	-1.63	.01	.00
	BLEED	-.17	2.45	.78	-.10	-1.03	2.83	-.37	.01	.00
	POWER	1.19	27.75	6.16	-.18	6.15	-16.86	46.43	-.04	.00

8-21

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.12.4

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 15000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.30	NR =	1.00	1030	340	7.60	657	19.9	104	953	
	P2 =	8.83	RAM	1.02	1.07	-2.14	-.12	.55	1.02	-1.04
	T2 =	474	BLEED	.02	-5.2	6.84	-.19	-.56	.02	.87
	ERI =	0	POWER	-.12	31.21	5.69	1.19	4.58	-.12	10.07
.40	NR =	1.00	1400	0		658	20.0	107	924	
	P2 =	9.26	RAM	1.02		-.12	.55	1.02	-1.03	
	T2 =	480	BLEED	.02		-.21	-.59	.02	.80	
	ERI =	0	POWER	-.12		1.22	4.58	-.11	10.02	
.50	NR =	1.00	1800	-380	-5.805	659	20.2	110	885	
	P2 =	9.84	RAM	1.02	1.56	-3.08	-.13	.53	1.02	-1.08
	T2 =	489	BLEED	.02	4.01	-2.48	-.18	-.55	.02	.87
	ERI =	0	POWER	-.12	-38.80	71.45	1.24	4.83	-.12	10.30
.60	NR =	1.00	2230	-800	-2.480	660	20.3	113	842	
	P2 =	10.58	RAM	1.02	1.05	-2.64	-.13	.53	1.02	-1.05
	T2 =	499	BLEED	.01	2.10	-.68	-.21	-.60	.01	.80
	ERI =	0	POWER	-.09	-19.18	53.17	1.30	5.03	-.09	10.58

8-22

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.12.4

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 15000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.30	1.06	1.07	2551	953	1445	1490	460	5.54	166	10.2
	RAM	.07	-.96	-1.04	-.02	1.03	1.05	-2.12	.02	.00
	BLEED	-.11	1.10	.87	.24	-1.31	-4.29	5.76	.02	.00
	POWER	.25	25.29	10.07	2.88	6.86	22.48	2.73	-.12	.00
.40	1.12	1.07	2414	924	1441	1530	130	18.70	163	10.2
	RAM	.09	-1.04	-1.03	-.13	1.15	2.49	-4.03	.02	.00
	BLEED	-.14	1.07	.80	.41	-1.56	-18.69	27.46	.02	.00
	POWER	.14	26.48	10.02	3.59	6.05	73.05	-42.56	-.11	.00
.50	1.19	1.07	2221	885	1450	1550	-250	-8.745	159	10.2
	RAM	.05	-1.28	-1.08	.13	.84	2.10	-3.78	.02	.00
	BLEED	-.07	1.38	.87	-.00	-1.05	6.53	-4.69	.02	.00
	POWER	.71	29.13	10.30	-.00	10.22	-63.28	100.47	-.12	.00
.60	1.28	1.07	1981	842	1450	1560	-670	-2.965	154	10.2
	RAM	.07	-1.45	-1.05	-.00	1.00	1.07	-2.07	.02	.00
	BLEED	-.08	1.40	.80	-.00	-1.14	2.71	-1.26	.01	.00
	POWER	.73	32.73	10.58	.07	10.46	-24.75	59.30	-.09	.00

8-23

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 15000 FEET

M0		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.30	NR =	1.00	1.06	2940	29000	1.90	1050	80.2	286	2067
	P2 =	8.83	RAM	1.01	1.47	-.52	-.00	1.01	1.01	.00
	T2 =	514	BLEED	.03	-1.69	.90	-.31	-.97	.03	-.01
	ERI =	0	POWER	-.00	-.79	1.12	.03	.09	-.00	.00
.40	NR =	1.00	1.12	4060	29900	1.90	1058	83.1	296	2067
	P2 =	9.26	RAM	1.01	1.48	-.52	-.00	1.01	1.01	.00
	T2 =	521	BLEED	.03	-1.75	.97	-.28	-.96	.03	-.01
	ERI =	0	POWER	-.00	-.79	1.12	.03	.09	-.00	.00
.50	NR =	1.00	1.19	5310	31000	1.91	1069	86.9	310	2067
	P2 =	9.84	RAM	1.01	1.46	-.51	-.00	1.01	1.01	.00
	T2 =	531	BLEED	.05	-1.74	.98	-.26	-.94	.05	-.00
	ERI =	0	POWER	-.00	-.74	1.04	.02	.08	-.00	.00
.60	NR =	1.00	1.28	6720	32200	1.93	1083	91.6	327	2067
	P2 =	10.58	RAM	1.01	1.45	-.49	-.00	1.01	1.01	.00
	T2 =	542	BLEED	.07	-1.75	1.02	-.26	-.91	.07	.01
	ERI =	0	POWER	-.01	-.73	1.02	.02	.08	-.01	.01
.90	NR =	1.00	1.69	12300	38000	1.97	1140	112.4	400	2067
	P2 =	14.03	RAM	1.01	1.38	-.41	-.00	1.01	1.01	.00
	T2 =	587	BLEED	.10	-1.77	1.06	-.25	-.88	.10	-.00
	ERI =	0	POWER	-.01	-.58	.84	.02	.09	-.01	-.00
1.15	NR =	.994	2.26	19200	44800	2.02	1201	137.2	488	2067
	P2 =	18.76	RAM	1.02	1.32	-.33	.00	1.02	1.02	-.00
	T2 =	639	BLEED	.08	-1.85	1.14	-.27	-.89	.08	.00
	ERI =	0	POWER	-.01	-.60	.81	.02	.08	-.01	.00

8-24

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY + 40 F      PRESSURE ALTITUDE      15000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.30	1.06	3.35	54954	3501	1298	32500	29500	1.86	474	10.2
	RAM	1.01	.99	-.01	-.01	1.37	1.41	-.44	.01	.00
	BLEED	-1.36	-.82	-.06	.37	-1.49	-1.64	.84	.03	.00
	POWER	-1.93	.32	-.22	1.80	-.81	-.89	1.22	-.00	.00
.40	1.12	3.46	56771	3500	1300	34500	30400	1.87	471	10.2
	RAM	1.01	.99	-.01	-.01	1.36	1.41	-.44	.01	.00
	BLEED	-1.42	-.81	-.06	.42	-1.49	-1.69	.90	.03	.00
	POWER	-1.86	.31	-.21	1.74	-.76	-.86	1.18	-.00	.00
.50	1.19	3.60	59163	3499	1306	36800	31400	1.88	468	10.2
	RAM	1.01	1.00	-.01	-.01	1.35	1.40	-.44	.01	.00
	BLEED	-1.42	-.79	-.06	.44	-1.46	-1.71	.95	.05	.00
	POWER	-1.77	.30	-.20	1.65	-.70	-.82	1.13	-.00	.00
.60	1.28	3.77	62175	3496	1315	39300	32600	1.91	464	10.2
	RAM	1.01	1.00	-.01	-.01	1.33	1.40	-.43	.01	.00
	BLEED	-1.40	-.76	-.06	.44	-1.41	-1.71	.98	.07	.00
	POWER	-1.66	.29	-.19	1.55	-.64	-.77	1.07	-.01	.00
.90	1.69	4.50	75132	3489	1346	50700	38400	1.96	446	10.2
	RAM	1.01	1.00	-.00	-.00	1.29	1.38	-.41	.01	.00
	BLEED	-1.35	-.73	-.06	.42	-1.31	-1.76	1.06	.10	.00
	POWER	-1.30	.24	-.16	1.20	-.45	-.59	.84	-.01	.00
1.15	2.26	5.36	90275	3483	1374	64700	45500	1.99	424	10.2
	RAM	1.02	1.01	-.00	-.00	1.26	1.37	-.38	.01	.00
	BLEED	-1.33	-.74	-.06	.38	-1.27	-1.84	1.13	.08	.00
	POWER	-1.08	.20	-.15	.98	-.34	-.48	.69	-.01	.00

# CONFIDENTIAL

**CONFIDENTIAL**

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 15000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.30	NR =	1.00	2940	26900	1.72	1050	80.3	286	2067	
	P2 =	8.83	RAM	1.01	1.50	-.55	-.00	1.01	1.01	.00
	T2 =	514	BLEED	.03	-1.70	.93	-.32	-.96	.03	-.01
	ERI =	0	POWER	-.00	-.69	1.06	.03	.09	-.00	.00
.40	NR =	1.00	4060	27700	1.72	1058	83.2	296	2067	
	P2 =	9.26	RAM	1.01	1.51	-.56	-.00	1.01	1.01	.00
	T2 =	521	BLEED	.03	-1.76	1.00	-.29	-.96	.03	-.01
	ERI =	0	POWER	-.00	-.70	1.06	.03	.09	-.00	.00
.50	NR =	1.00	5310	28700	1.73	1070	86.9	310	2067	
	P2 =	9.84	RAM	1.01	1.49	-.54	-.00	1.01	1.01	.00
	T2 =	531	BLEED	.05	-1.76	1.02	-.26	-.94	.05	-.00
	ERI =	0	POWER	-.00	-.65	.99	.02	.08	-.00	.00
.60	NR =	1.00	6710	29800	1.75	1084	91.7	327	2067	
	P2 =	10.58	RAM	1.01	1.48	-.53	-.00	1.01	1.01	.00
	T2 =	542	BLEED	.07	-1.78	1.07	-.26	-.92	.07	-.00
	ERI =	0	POWER	-.01	-.68	1.01	.02	.08	-.01	.00
.90	NR =	1.00	12300	35100	1.79	1140	112.5	400	2067	
	P2 =	14.03	RAM	1.01	1.41	-.44	-.00	1.01	1.01	-.00
	T2 =	587	BLEED	.10	-1.81	1.14	-.25	-.87	.10	-.00
	ERI =	0	POWER	-.01	-.59	.87	.02	.09	-.01	-.00
1.15	NR =	.994	19200	41100	1.83	1201	137.4	488	2067	
	P2 =	18.76	RAM	1.02	1.34	-.36	.00	1.02	1.02	-.00
	T2 =	639	BLEED	.08	-1.86	1.19	-.27	-.89	.08	.00
	ERI =	0	POWER	-.01	-.48	.72	.02	.08	-.01	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY + 40 F      PRESSURE ALTITUDE 15000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.30	1.06	3.38	46212	3166	1212	30600	27700	1.67	474	10.2
	RAM	1.01	.99	-.01	-.01	1.36	1.40	-.44	.01	.00
	BLEED	-1.35	-.79	-.04	.36	-1.47	-1.63	.86	.03	.00
	POWER	-1.90	.37	-.17	1.78	-.76	-.84	1.22	-.00	.00
.40	1.12	3.49	47717	3165	1214	32500	28500	1.68	471	10.2
	RAM	1.01	.99	-.01	-.01	1.35	1.40	-.44	.01	.00
	BLEED	-1.40	-.78	-.04	.41	-1.47	-1.68	.92	.03	.00
	POWER	-1.84	.35	-.16	1.72	-.72	-.82	1.18	-.00	.00
.50	1.19	3.63	49697	3163	1219	34700	29400	1.69	468	10.2
	RAM	1.01	.99	-.01	-.01	1.34	1.40	-.44	.01	.00
	BLEED	-1.42	-.76	-.04	.44	-1.44	-1.71	.97	.05	.00
	POWER	-1.75	.34	-.15	1.63	-.66	-.78	1.13	-.00	.00
.60	1.28	3.80	52194	3160	1227	37100	30400	1.72	464	10.2
	RAM	1.01	.99	-.01	-.01	1.33	1.40	-.43	.01	.00
	BLEED	-1.40	-.74	-.04	.44	-1.40	-1.72	1.01	.07	.00
	POWER	-1.66	.32	-.15	1.55	-.61	-.74	1.07	-.01	.00
.90	1.69	4.54	62878	3150	1255	47800	35400	1.77	446	10.2
	RAM	1.01	1.00	-.01	-.01	1.28	1.38	-.41	.01	.00
	BLEED	-1.35	-.70	-.04	.42	-1.29	-1.78	1.10	.10	.00
	POWER	-1.28	.27	-.12	1.21	-.42	-.56	.85	-.01	.00
1.15	2.26	5.40	75310	3142	1281	60900	41600	1.81	424	10.2
	RAM	1.02	1.01	-.01	-.00	1.26	1.37	-.39	.01	.00
	BLEED	-1.33	-.71	-.04	.39	-1.26	-1.87	1.19	.08	.00
	POWER	-1.06	.23	-.11	.99	-.32	-.46	.70	-.01	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 15000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.30	NR =	1.00	1.06	2940	24300	1.54	1051	80.4	286	2067
	P2 =	8.83	RAM	1.01	1.53	-.59	-.00	1.01	1.01	.00
	T2 =	514	BLEED	.03	-1.72	1.00	-.32	-.96	.03	-.01
	ERI =	0	POWER	-.00	-.60	1.03	.03	.09	-.00	.00
.40	NR =	1.00	1.12	4060	25000	1.55	1059	83.2	296	2067
	P2 =	9.26	RAM	1.01	1.54	-.60	-.00	1.01	1.01	.00
	T2 =	521	BLEED	.03	-1.78	1.07	-.29	-.96	.03	-.01
	ERI =	0	POWER	-.00	-.60	1.03	.03	.09	-.00	.00
.50	NR =	1.00	1.19	5310	25800	1.56	1070	87.0	310	2067
	P2 =	9.84	RAM	1.01	1.53	-.58	-.00	1.01	1.01	.00
	T2 =	531	BLEED	.05	-1.79	1.10	-.27	-.94	.05	-.01
	ERI =	0	POWER	-.00	-.59	1.00	.03	.08	-.00	.00
.60	NR =	1.00	1.28	6710	26800	1.58	1084	91.8	327	2067
	P2 =	10.58	RAM	1.01	1.53	-.58	-.00	1.01	1.01	.00
	T2 =	542	BLEED	.07	-1.83	1.16	-.26	-.92	.07	-.00
	ERI =	0	POWER	-.01	-.63	1.01	.02	.08	-.01	.00
.90	NR =	1.00	1.69	12300	31400	1.61	1140	112.6	400	2067
	P2 =	14.03	RAM	1.01	1.44	-.48	-.00	1.01	1.01	-.00
	T2 =	587	BLEED	.10	-1.83	1.21	-.25	-.87	.10	-.00
	ERI =	0	POWER	-.01	-.48	.80	.02	.09	-.01	-.00
1.15	NR =	.994	2.26	19200	36600	1.65	1202	137.5	488	2067
	P2 =	18.76	RAM	1.02	1.38	-.41	.00	1.02	1.02	-.00
	T2 =	639	BLEED	.08	-1.93	1.30	-.26	-.89	.08	.00
	ERI =	0	POWER	-.01	-.41	.69	.02	.08	-.01	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 15000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.30	1.06	3.41	37453	2766	1114	28400	25500	1.47	474	10.2
	RAM	1.01	.99	-.01	-.01	1.36	1.40	-.44	.01	.00
	BLEED	-1.34	-.75	-.02	.35	-1.45	-1.62	.89	.03	.00
	POWER	-1.88	.43	-.12	1.78	-.72	-.81	1.25	-.00	.00
.40	1.12	3.52	38646	2764	1116	30200	26100	1.48	471	10.2
	RAM	1.01	.99	-.01	-.01	1.35	1.40	-.44	.01	.00
	BLEED	-1.39	-.74	-.03	.41	-1.45	-1.68	.96	.03	.00
	POWER	-1.82	.42	-.12	1.72	-.68	-.78	1.21	-.00	.00
.50	1.19	3.66	40214	2762	1120	32100	26800	1.50	468	10.2
	RAM	1.01	.99	-.01	-.01	1.33	1.40	-.44	.01	.00
	BLEED	-1.41	-.72	-.03	.45	-1.42	-1.72	1.02	.05	.00
	POWER	-1.74	.40	-.11	1.65	-.63	-.75	1.16	-.00	.00
.60	1.28	3.84	42188	2759	1127	34400	27700	1.52	464	10.2
	RAM	1.01	.99	-.01	-.01	1.32	1.40	-.44	.01	.00
	BLEED	-1.40	-.70	-.03	.45	-1.38	-1.74	1.06	.07	.00
	POWER	-1.63	.38	-.11	1.55	-.57	-.71	1.10	-.01	.00
.90	1.69	4.58	50603	2750	1152	44300	31900	1.59	446	10.2
	RAM	1.01	.99	-.01	-.01	1.28	1.38	-.42	.01	.00
	BLEED	-1.34	-.66	-.03	.42	-1.27	-1.81	1.18	.10	.00
	POWER	-1.27	.32	-.08	1.19	-.39	-.54	.87	-.01	.00
1.15	2.26	5.46	60317	2743	1175	56300	37100	1.63	424	10.2
	RAM	1.02	1.00	-.01	-.00	1.25	1.38	-.40	.01	.00
	BLEED	-1.32	-.67	-.03	.38	-1.24	-1.93	1.30	.08	.00
	POWER	-1.05	.27	-.08	.98	-.29	-.44	.72	-.01	.00

8-29

# CONFIDENTIAL

GEI 67870

**CONFIDENTIAL**

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 15000 FEET

M0		P2/PO	FD	FN	SFC	TE	PE	W2	TC	
.30	NR =	1.00	1.06	2940	21100	1.36	1051	80.5	286	2067
	P2 =	8.83	RAM	1.01	1.59	-.66	-.00	1.01	1.01	.00
	T2 =	514	BLEED	.03	-1.77	1.11	-.32	-.96	.03	-.01
	ERI =	0	POWER	-.00	-.47	1.01	.03	.09	-.00	.00
.40	NR =	1.00	1.12	4060	21600	1.37	1059	83.3	296	2067
	P2 =	9.26	RAM	1.01	1.59	-.66	-.00	1.01	1.01	.00
	T2 =	521	BLEED	.03	-1.80	1.16	-.29	-.96	.03	-.01
	ERI =	0	POWER	-.00	-.43	.95	.03	.09	-.00	.00
.50	NR =	1.00	1.19	5310	22300	1.38	1070	87.1	310	2067
	P2 =	9.84	RAM	1.01	1.58	-.64	-.00	1.01	1.01	.00
	T2 =	531	BLEED	.05	-1.85	1.22	-.27	-.94	.05	-.01
	ERI =	0	POWER	-.00	-.43	.93	.03	.08	-.00	.00
.60	NR =	1.00	1.28	6710	23000	1.40	1084	91.9	327	2067
	P2 =	10.58	RAM	1.01	1.59	-.66	-.00	1.01	1.01	.00
	T2 =	542	BLEED	.07	-1.89	1.29	-.26	-.92	.07	-.00
	ERI =	0	POWER	-.01	-.44	.92	.02	.08	-.01	.00
.90	NR =	1.00	1.69	12300	26800	1.43	1141	112.7	400	2067
	P2 =	14.03	RAM	1.01	1.50	-.56	-.00	1.01	1.01	-.00
	T2 =	587	BLEED	.10	-1.89	1.34	-.25	-.87	.10	-.00
	ERI =	0	POWER	-.01	-.35	.75	.02	.09	-.01	-.00
1.15	NR =	.994	2.26	19200	31200	1.45	1202	137.6	488	2067
	P2 =	18.76	RAM	1.02	1.44	-.48	.00	1.02	1.02	.00
	T2 =	639	BLEED	.08	-2.05	1.51	-.26	-.89	.08	.00
	ERI =	0	POWER	-.01	-.36	.69	.02	.08	-.01	-.00

8-30

**CONFIDENTIAL**

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P. S. 4.0

JANUARY 1964

STANDARD DAY + 40 F      PRESSURE ALTITUDE      15000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FN8	SFCB	W2K	BTANG
.30	1.06	3.44	28677	2326	1002	25800	22900	1.25	474	10.2
	RAM	1.01	.98	-.02	-.01	1.35	1.39	-.44	.01	.00
	BLEED	-1.32	-.68	-.00	.35	-1.43	-1.61	.95	.03	.00
	POWER	-1.85	.53	-.05	1.79	-.67	-.75	1.30	-.00	.00
.40	1.12	3.55	29557	2324	1004	27400	23400	1.27	471	10.2
	RAM	1.01	.98	-.02	-.01	1.34	1.40	-.45	.01	.00
	BLEED	-1.37	-.68	-.01	.40	-1.43	-1.68	1.03	.03	.00
	POWER	-1.79	.52	-.05	1.72	-.63	-.74	1.26	-.00	.00
.50	1.19	3.70	30712	2323	1008	29200	23900	1.29	468	10.2
	RAM	1.01	.98	-.02	-.01	1.33	1.40	-.45	.01	.00
	BLEED	-1.41	-.67	-.01	.45	-1.41	-1.73	1.09	.05	.00
	POWER	-1.71	.49	-.05	1.65	-.58	-.71	1.21	-.00	.00
.60	1.28	3.87	32163	2320	1014	31200	24500	1.31	463	10.2
	RAM	1.01	.99	-.02	-.01	1.31	1.40	-.44	.01	.00
	BLEED	-1.39	-.63	-.01	.45	-1.36	-1.76	1.15	.07	.00
	POWER	-1.61	.47	-.05	1.55	-.53	-.67	1.15	-.01	.00
.90	1.69	4.62	38307	2312	1036	40200	27800	1.38	446	10.2
	RAM	1.01	.99	-.01	-.01	1.27	1.39	-.43	.01	.00
	BLEED	-1.33	-.58	-.00	.42	-1.25	-1.85	1.31	.10	.00
	POWER	-1.25	.39	-.04	1.19	-.36	-.51	.91	-.01	.00
1.15	2.26	5.51	45298	2306	1056	51100	31900	1.42	424	10.2
	RAM	1.02	1.00	-.01	-.01	1.25	1.39	-.42	.01	.00
	BLEED	-1.31	-.59	-.01	.39	-1.22	-2.01	1.46	.08	.00
	POWER	-1.03	.33	-.04	.98	-.26	-.42	.75	-.01	.00

# CONFIDENTIAL

GEI 67870

**CONFIDENTIAL**

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 15000 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC	
.30	NR =	1.00	2940	20600	1.16	1053	80.8	286	2067	
	P2 =	8.83	RAM	1.01	1.51	-.54	-.00	1.01	1.01	.00
	T2 =	514	BLEED	.03	-1.73	1.11	-.33	-.96	.03	-.01
	ERI =	0	POWER	-.00	-.74	1.37	.03	.09	-.00	.00
.40	NR =	1.00	4060	20900	1.17	1061	83.6	296	2067	
	P2 =	9.26	RAM	1.01	1.50	-.53	-.00	1.01	1.01	.00
	T2 =	521	BLEED	.03	-1.74	1.13	-.31	-.95	.03	-.01
	ERI =	0	POWER	-.00	-.67	1.27	.03	.08	-.00	-.01
.50	NR =	1.00	5300	21400	1.19	1072	87.4	310	2067	
	P2 =	9.84	RAM	1.01	1.48	-.51	-.00	1.01	1.01	.00
	T2 =	531	BLEED	.05	-1.80	1.21	-.28	-.93	.05	-.00
	ERI =	0	POWER	-.00	-.64	1.23	.03	.08	-.00	.00
.60	NR =	1.00	6710	22000	1.21	1085	92.2	326	2067	
	P2 =	10.58	RAM	1.01	1.49	-.52	-.00	1.01	1.01	.00
	T2 =	542	BLEED	.07	-1.87	1.29	-.26	-.92	.07	-.02
	ERI =	0	POWER	-.00	-.64	1.18	.02	.07	-.00	-.01
.90	NR =	1.00	12300	24900	1.28	1142	113.0	400	2067	
	P2 =	14.03	RAM	1.01	1.44	-.46	-.00	1.01	1.01	-.00
	T2 =	587	BLEED	.11	-1.91	1.41	-.25	-.86	.11	-.00
	ERI =	0	POWER	-.01	-.44	.90	.02	.09	-.01	-.00
1.15	NR =	.994	19200	28300	1.33	1203	138.1	488	2067	
	P2 =	18.76	RAM	1.02	1.38	-.40	.00	1.02	1.02	.00
	T2 =	639	BLEED	.08	-2.06	1.56	-.26	-.88	.08	.00
	ERI =	0	POWER	-.01	-.37	.75	.02	.07	-.01	-.01

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY + 40 F      PRESSURE ALTITUDE      15000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.30	1.06	3.48	23787	2067	931	24300	21300	1.11	474	15.2
	RAM	1.01	1.01	.00	-.00	1.35	1.40	-.42	.01	.00
	BLEED	-1.29	-.65	-.01	.31	-1.41	-1.61	.98	.03	.00
	POWER	-1.83	.63	.00	1.79	-.62	-.71	1.35	-.00	.00
.40	1.12	3.59	24521	2067	933	25800	21700	1.13	471	15.2
	RAM	1.01	1.01	.00	-.00	1.34	1.41	-.43	.01	.00
	BLEED	-1.33	-.65	-.01	.35	-1.41	-1.68	1.06	.03	.00
	POWER	-1.78	.59	-.01	1.74	-.60	-.71	1.30	-.00	.00
.50	1.19	3.73	25476	2067	938	27400	22100	1.15	468	15.2
	RAM	1.01	1.01	.00	-.00	1.33	1.41	-.43	.01	.00
	BLEED	-1.35	-.62	-.00	.40	-1.38	-1.72	1.13	.05	.00
	POWER	-1.69	.58	.00	1.66	-.54	-.67	1.26	-.00	.00
.60	1.28	3.91	26686	2067	943	29400	22700	1.18	463	15.2
	RAM	1.01	1.01	.00	-.00	1.32	1.41	-.43	.01	.00
	BLEED	-1.40	-.62	-.02	.45	-1.37	-1.79	1.20	.07	.00
	POWER	-1.61	.54	-.01	1.57	-.50	-.65	1.19	-.00	.00
.90	1.69	4.67	31754	2067	965	37800	25500	1.25	445	15.2
	RAM	1.01	1.01	-.00	-.00	1.28	1.40	-.42	.01	.00
	BLEED	-1.32	-.54	-.00	.42	-1.24	-1.89	1.39	.11	.00
	POWER	-1.23	.46	-.00	1.20	-.33	-.49	.95	-.01	.00
1.15	2.26	5.57	37466	2067	986	48200	28900	1.29	424	15.2
	RAM	1.02	1.02	.00	.00	1.25	1.40	-.42	.01	.00
	BLEED	-1.30	-.54	.00	.38	-1.21	-2.07	1.58	.08	.00
	POWER	-1.02	.37	-.01	.99	-.24	-.40	.78	-.01	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 7.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 15000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.30	NR =	1.00	2810	14900	1.09	1005	70.0	273	1669
	P2 =	8.83	1.01	1.57	-.73	-.01	.98	1.01	-.07
	T2 =	514	.04	-.99	1.65	-.18	-.62	.04	.75
	ERI =	0	-.09	2.87	2.71	.33	1.31	-.09	3.03
.40	NR =	1.00	3870	15100	1.11	1014	72.5	282	1673
	P2 =	9.26	1.01	1.57	-.74	-.01	.98	1.01	-.08
	T2 =	521	.05	-1.06	1.68	-.18	-.63	.05	.72
	ERI =	0	-.09	2.82	2.59	.32	1.25	-.09	2.92
.50	NR =	1.00	5060	15400	1.14	1026	76.0	295	1682
	P2 =	9.84	1.01	1.54	-.71	-.01	.98	1.01	-.08
	T2 =	531	.05	-1.09	1.74	-.17	-.62	.05	.73
	ERI =	0	-.09	2.79	2.38	.30	1.19	-.09	2.78
.60	NR =	1.00	6380	15700	1.17	1040	80.1	310	1689
	P2 =	10.58	1.01	1.56	-.71	-.01	.99	1.01	-.06
	T2 =	542	.05	-1.27	1.79	-.18	-.66	.05	.63
	ERI =	0	-.10	2.78	2.18	.28	1.13	-.10	2.65
.90	NR =	1.00	11000	15200	1.27	1070	90.4	355	1640
	P2 =	14.03	1.01	1.71	-.77	-.00	1.01	1.01	-.00
	T2 =	587	.04	-1.60	2.09	-.19	-.69	.04	.57
	ERI =	0	-.05	3.06	1.61	.24	1.06	-.05	2.35
1.15	NR =	.994	15300	12800	1.39	1090	95.8	389	1534
	P2 =	18.76	1.02	1.89	-.95	.00	1.02	1.02	.01
	T2 =	639	.01	-1.95	2.64	-.18	-.70	.01	.61
	ERI =	0	-.02	3.76	1.24	.25	1.08	-.02	2.32

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 7.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 15000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	WZK	BTANG
.30	1.06	2.63	16223	1669	1045	18500	15600	1.04	452	15.2
	RAM	.92	.89	-.07	.00	1.39	1.46	-.61	.01	.00
	BLEED	-.48	.64	.75	-.03	-.77	-.92	1.57	.04	.00
	POWER	1.51	5.65	3.03	-.01	2.24	2.66	2.92	-.09	.00
.40	1.12	2.72	16751	1673	1045	19700	15800	1.06	449	15.2
	RAM	.92	.89	-.08	-.00	1.37	1.46	-.62	.01	.00
	BLEED	-.53	.59	.72	.00	-.80	-1.01	1.62	.05	.00
	POWER	1.44	5.47	2.92	-.00	2.13	2.67	2.73	-.09	.00
.50	1.19	2.84	17520	1682	1045	21200	16100	1.09	446	15.2
	RAM	.91	.88	-.08	-.00	1.35	1.46	-.62	.01	.00
	BLEED	-.51	.62	.73	-.00	-.77	-1.03	1.68	.05	.00
	POWER	1.36	5.23	2.78	-.00	1.98	2.64	2.53	-.09	.00
.60	1.28	2.99	18387	1689	1044	22800	16400	1.12	441	15.2
	RAM	.94	.91	-.06	-.02	1.35	1.48	-.61	.01	.00
	BLEED	-.64	.48	.63	.07	-.86	-1.21	1.73	.05	.00
	POWER	1.31	5.02	2.65	.04	1.86	2.63	2.33	-.10	.00
.90	1.69	3.36	19263	1640	1045	26800	15800	1.22	396	15.2
	RAM	1.00	1.00	-.00	.00	1.36	1.60	-.65	.01	.00
	BLEED	-.64	.44	.57	-.00	-.87	-1.51	1.99	.04	.00
	POWER	1.27	4.72	2.35	-.01	1.68	2.87	1.79	-.05	.00
1.15	2.26	3.54	17819	1534	1045	28700	13400	1.33	338	15.2
	RAM	1.03	1.03	.01	-.01	1.36	1.75	-.79	.01	.00
	BLEED	-.61	.61	.61	-.04	-.86	-1.85	2.53	.01	.00
	POWER	1.25	5.06	2.32	.01	1.66	3.57	1.43	-.02	.00

8-35

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 15000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.30	NR =	1.00	1.06	2060	5880	1.24	881	44.4	201	1234
	P2 =	8.83	RAM	1.01	1.68	-1.34	-.03	.89	1.01	-.32
	T2 =	514	BLEED	.01	-1.46	2.34	-.16	-.64	.01	.75
	ERI =	0	POWER	-.04	5.85	4.15	.52	2.22	-.04	4.65
.40	NR =	1.00	1.12	2790	5330	1.33	883	44.7	203	1217
	P2 =	9.26	RAM	1.01	1.77	-1.43	-.02	.90	1.01	-.30
	T2 =	521	BLEED	.01	-1.49	2.55	-.14	-.61	.01	.82
	ERI =	0	POWER	-.03	6.64	3.41	.43	2.17	-.03	4.55
.50	NR =	1.00	1.19	3530	4710	1.46	886	45.0	206	1195
	P2 =	9.84	RAM	1.01	1.90	-1.59	-.02	.90	1.01	-.30
	T2 =	531	BLEED	.01	-1.81	2.86	-.15	-.63	.01	.78
	ERI =	0	POWER	-.03	7.11	2.85	.37	2.08	-.03	4.35
.60	NR =	1.00	1.28	4320	4000	1.65	889	45.3	210	1167
	P2 =	10.58	RAM	1.01	2.05	-1.80	-.02	.90	1.01	-.30
	T2 =	542	BLEED	.01	-2.18	3.29	-.15	-.64	.01	.76
	ERI =	0	POWER	-.03	8.79	1.83	.39	2.15	-.03	4.48
.90	NR =	1.00	1.69	7050	1860	2.98	906	47.3	229	1070
	P2 =	14.03	RAM	1.01	3.53	-3.78	-.02	.91	1.01	-.27
	T2 =	587	BLEED	.01	-5.61	7.29	-.17	-.70	.01	.63
	ERI =	0	POWER	-.03	18.53	-6.01	.37	2.03	-.03	4.18
1.15	NR =	.994	2.26	9790	-410	-9.845	925	48.8	248	966
	P2 =	18.76	RAM	1.02	-10.85	7.20	-.02	.91	1.02	-.26
	T2 =	639	BLEED	.02	31.68	-20.81	-.23	-.80	.02	.37
	ERI =	0	POWER	-.04	-92.20	197.80	.47	2.25	-.04	4.42

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY + 40 F      PRESSURE ALTITUDE      15000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.30	1.06	1.65	7277	1234	1095	8600	6540	1.11	333	15.2
	RAM	.62	.45	-.32	-.01	1.43	1.56	-1.20	.01	.00
	BLEED	-.45	.83	.75	.03	-1.02	-1.34	2.22	.01	.00
	POWER	1.79	10.12	4.65	.04	4.07	5.36	4.63	-.04	.00
.40	1.12	1.66	7110	1217	1095	8780	6000	1.19	323	15.2
	RAM	.62	.47	-.30	.00	1.43	1.62	-1.26	.01	.00
	BLEED	-.39	1.00	.82	-.01	-.92	-1.36	2.40	.01	.00
	POWER	1.88	10.17	4.55	-.11	4.09	6.01	4.03	-.03	.00
.50	1.19	1.67	6888	1195	1095	8920	5380	1.28	312	15.2
	RAM	.63	.46	-.30	-.00	1.44	1.72	-1.37	.01	.00
	BLEED	-.43	.98	.78	.01	-.97	-1.61	2.66	.01	.00
	POWER	1.70	10.06	4.35	.02	3.81	6.32	3.62	-.03	.00
.60	1.28	1.67	6592	1167	1095	8990	4670	1.41	298	15.2
	RAM	.63	.43	-.30	-.00	1.43	1.81	-1.52	.01	.00
	BLEED	-.43	1.01	.76	-.00	-.98	-1.90	2.99	.01	.00
	POWER	1.80	10.70	4.48	-.04	3.96	7.64	2.95	-.03	.00
.90	1.69	1.72	5537	1070	1095	9590	2540	2.18	255	15.2
	RAM	.67	.42	-.27	-.01	1.45	2.66	-2.59	.01	.00
	BLEED	-.50	1.06	.63	.00	-1.09	-4.15	5.56	.01	.00
	POWER	1.69	11.96	4.18	.02	3.60	13.65	-1.58	-.03	.00
1.15	2.26	1.76	4075	966	1095	10100	280	14.71	216	15.2
	RAM	.69	.25	-.26	-.00	1.45	16.71	-100.01	.01	.00
	BLEED	-.62	.98	.37	.00	-1.29	-47.62	170.10	.02	.00
	POWER	1.84	16.60	4.42	-.01	3.76	138.12	-72.59	-.04	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 15000 FEET

M0		P2/PO	FD	FN	SFC	TE	PE	W2	TC	
.30	NR =	1.00	1.06	1230	960	3.36	752	24.1	120	1045
	P2 =	8.83	RAM	1.02	1.38	-2.11	-.08	.66	1.02	-.84
	T2 =	514	BLEED	.02	-2.38	3.72	-.17	-.57	.02	.89
	ERI =	0	POWER	-.08	17.29	1.86	.81	3.72	-.08	7.53
.40	NR =	1.00	1.12	1670	570	5.44	754	24.1	122	1023
	P2 =	9.26	RAM	1.02	1.62	-2.48	-.08	.65	1.02	-.85
	T2 =	521	BLEED	.01	-4.16	5.77	-.17	-.58	.01	.88
	ERI =	0	POWER	-.07	30.21	-9.52	.84	3.79	-.07	7.62
.50	NR =	1.00	1.19	2130	160	18.56	757	24.3	124	994
	P2 =	9.84	RAM	1.02	4.07	-6.00	-.08	.66	1.02	-.83
	T2 =	531	BLEED	.01	-19.54	29.18	-.20	-.64	.01	.75
	ERI =	0	POWER	-.05	87.68	-57.68	.82	3.65	-.05	7.20
.60	NR =	1.00	1.28	2630	-310	-8.675	760	24.6	128	954
	P2 =	10.58	RAM	1.02	.18	-1.16	-.10	.63	1.02	-.89
	T2 =	542	BLEED	.01	9.72	-7.47	-.23	-.67	.01	.71
	ERI =	0	POWER	-.06	-57.79	91.70	1.06	4.06	-.06	8.01
.90	NR =	1.00	1.69	4500	-1970	-.820	770	25.7	146	805
	P2 =	14.03	RAM	1.02	.73	-2.66	-.08	.66	1.02	-.81
	T2 =	587	BLEED	.02	1.96	-.12	-.23	-.73	.02	.54
	ERI =	0	POWER	-.08	-8.26	45.46	.90	4.02	-.08	7.51
1.15	NR =	.994	2.26	8920	-2960	-.665	886	40.9	226	812
	P2 =	18.76	RAM	1.71	-1.29	2.92	.26	1.82	1.71	.04
	T2 =	639	BLEED	-1.21	5.46	-7.33	-.66	-2.48	-1.21	-.38
	ERI =	100	POWER	-8.91	10.67	-20.11	-3.10	-10.26	-8.91	-1.89

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 15000 FEET

M0	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.30	1.06	1.14	3234	1045	1257	2480	1250	2.59	199	10.2
	RAM	.15	-.59	-.84	-.00	1.16	1.30	-2.02	.02	.00
	BLEED	-.13	1.21	.89	.01	-1.02	-2.04	3.35	.02	.00
	POWER	.97	19.22	7.53	.03	7.41	14.80	4.30	-.08	.00
.40	1.12	1.14	3098	1023	1257	2530	860	3.60	194	10.2
	RAM	.15	-.66	-.85	-.00	1.15	1.42	-2.23	.02	.00
	BLEED	-.13	1.25	.88	-.00	-1.03	-3.06	4.51	.01	.00
	POWER	.98	20.14	7.62	.04	7.51	22.17	-1.94	-.07	.00
.50	1.19	1.15	2929	994	1253	2590	460	6.38	188	10.2
	RAM	.17	-.71	-.83	-.07	1.23	2.22	-3.29	.02	.00
	BLEED	-.22	1.09	.75	.22	-1.39	-7.87	10.17	.01	.00
	POWER	.46	20.31	7.20	1.70	5.35	30.40	-9.54	-.05	.00
.60	1.28	1.15	2688	954	1256	2630	-10-427.135	182	10.2	
	RAM	.15	-.97	-.89	.00	1.11	-37.99	12.77	.02	.00
	BLEED	-.19	1.16	.71	.08	-1.29	542.81	-59.25	.01	.00
	POWER	.91	23.83	8.01	.55	7.3	-3087.19	-638.85	-.06	.00
.90	1.69	1.16	1622	805	1254	2850	-1650	-.985	163	10.2
	RAM	.19	-1.84	-.81	-.05	1.24	.63	-2.55	.02	.00
	BLEED	-.25	1.84	.54	.19	-1.53	2.71	-.84	.02	.00
	POWER	.59	36.52	7.51	1.52	5.71	-10.11	47.51	-.08	.00
1.15	2.26	1.40	1964	812	1252	6570	-2350	-.835	197	10.2
	RAM	.98	1.82	.04	-.02	3.10	-2.15	3.58	.75	.00
	BLEED	-1.40	-2.48	-.38	.06	-4.35	7.58	-9.03	-1.21	.00
	POWER	-5.76	-10.26	-1.89	.16	-17.93	16.31	-25.01	-8.91	.00

# CONFIDENTIAL

**CONFIDENTIAL**

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.12.4

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 15000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.30	NR =	1.00	1.06	910	180	13.47	687	17.7	88	1055
	P2 =	8.83	RAM	1.02	1.35	-2.68	-.16	.47	1.02	-1.16
	T2 =	514	BLEED	.01	-8.13	10.34	-.21	-.56	.01	.84
	ERI =	0	POWER	-.09	73.87	-40.58	1.62	5.57	-.09	12.64
.40	NR =	1.00	1.12	1240	-130	-18.215	687	17.8	91	1013
	P2 =	9.26	RAM	1.02	2.44	-4.31	-.17	.45	1.02	-1.20
	T2 =	521	BLEED	.01	11.12	-8.60	-.20	-.55	.01	.86
	ERI =	0	POWER	-.09	-49.68	83.75	1.47	5.09	-.09	11.59
.50	NR =	1.00	1.19	1610	-470	-4.485	688	18.0	94	965
	P2 =	9.84	RAM	1.02	1.05	-2.54	-.13	.49	1.02	-1.12
	T2 =	531	BLEED	.02	3.22	-1.87	-.18	-.55	.02	.86
	ERI =	0	POWER	-.12	-29.51	64.85	1.31	5.41	-.12	12.11
.60	NR =	1.00	1.28	2000	-850	-2.190	691	18.2	97	911
	P2 =	10.58	RAM	1.02	1.29	-3.16	-.13	.48	1.02	-1.14
	T2 =	542	BLEED	.01	1.55	-.11	-.18	-.56	.01	.83
	ERI =	0	POWER	-.10	-16.77	54.82	1.36	5.62	-.10	12.05
.90	NR =	1.00	1.69	4560	-2330	-.610	771	25.6	148	776
	P2 =	14.03	RAM	2.07	.80	-.83	.34	1.91	2.07	-.54
	T2 =	587	BLEED	-1.09	1.30	-1.27	-.65	-2.04	-1.09	.27
	ERI =	100	POWER	-16.25	-2.15	2.16	-5.47	-16.27	-16.25	1.50
1.15	NR =	.994	2.26	10100	-3290	-.690	923	47.3	257	816
	P2 =	18.76	RAM	1.64	-1.34	2.87	.19	1.72	1.64	.03
	T2 =	639	BLEED	-1.64	6.10	-8.26	-.71	-2.92	-1.64	-.43
	ERI =	100	POWER	-8.73	10.65	-19.46	-2.61	-9.86	-8.73	-1.63

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.12.4

JANUARY 1964

STANDARD DAY + 40 F      PRESSURE ALTITUDE      15000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.30	1.06	1.06	2454	1055	1440	1190	280	8.64	146	10.2
	RAM	.07	-1.15	-1.16	-.22	1.12	1.44	-2.79	.02	.00
	BLEED	-.10	.94	.84	.30	-1.41	-5.97	7.60	.01	.00
	POWER	.62	30.19	12.64	.67	12.03	50.76	-19.54	-.09	.00
.40	1.12	1.06	2292	1013	1439	1220	-20	108.065	144	10.2
	RAM	.05	-1.35	-1.20	-.00	.86	10.43	-24.60	.02	.00
	BLEED	-.08	1.08	.86	.19	-1.28	74.46	-34.66	.01	.00
	POWER	-.25	29.83	11.59	7.30	3.69	-217.47	317.67	-.09	.00
.50	1.19	1.06	2095	965	1444	1240	-360	-5.790	142	10.2
	RAM	.06	-1.35	-1.12	-.08	1.02	1.02	-2.50	.02	.00
	BLEED	-.09	1.26	.86	.26	-1.36	4.73	-3.24	.02	.00
	POWER	.65	33.41	12.11	.28	11.83	-41.17	77.80	-.12	.00
.60	1.28	1.06	1855	911	1450	1260	-740	-2.500	138	10.2
	RAM	.04	-1.67	-1.14	.12	.79	1.41	-3.31	.02	.00
	BLEED	-.06	1.44	.83	-.00	-1.11	1.92	-.47	.01	.00
	POWER	.68	37.15	12.05	.03	12.05	-20.78	59.14	-.10	.00
.90	1.69	1.11	1425	776	1455	2420	-2140	-.665	165	10.2
	RAM	.35	.00	-.54	.02	3.37	.60	-.62	1.12	.00
	BLEED	-.35	.00	.27	-.19	-3.53	1.65	-1.61	-1.09	.00
	POWER	-3.45	.00	1.50	1.40	-31.06	.46	-.4	-16.25	.00
1.15	2.26	1.38	2272	816	1445	7300	-2840	-.800	224	10.2
	RAM	.91	1.72	.03	-.05	3.00	-1.85	3.27	.66	.00
	BLEED	-1.62	-2.92	-.43	.13	-5.22	7.58	-9.43	-1.64	.00
	POWER	-5.45	-9.86	-1.63	.43	-17.60	14.08	-22.35	-8.73	.00

# CONFIDENTIAL

9. 2500 FHT

PREVIOUS PAGE WAS BLANK, THEREFORE WAS NOT FILMED

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE      25000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.30	NR =	1.00	1.06	2000	21800	1.78	933	57.0	211	1926
	P2 =	5.81	RAM	1.01	1.42	-.47	-.00	1.01	1.01	.00
	T2 =	437	BLEED	.01	-1.60	.79	-.33	-.98	.01	.00
	ERI =	101	POWER	-.00	-.98	1.45	.04	.14	-.00	-.00
.60	NR =	1.00	1.28	4670	26100	1.81	981	68.4	247	2026
	P2 =	6.96	RAM	1.01	1.36	-.39	-.00	1.01	1.01	.00
	T2 =	461	BLEED	.01	-1.65	.84	-.33	-.98	.01	.00
	ERI =	101	POWER	-.00	-.88	1.26	.03	.11	-.00	-.00
.90	NR =	1.00	1.69	8760	32200	1.84	1034	86.3	308	2067
	P2 =	9.23	RAM	1.01	1.29	-.31	-.00	1.01	1.01	.00
	T2 =	499	BLEED	.02	-1.66	.86	-.33	-.97	.02	-.01
	ERI =	0	POWER	-.00	-.70	1.01	.03	.09	-.00	.00
1.20	NR =	.991	2.41	15100	40100	1.88	1099	111.5	397	2067
	P2 =	13.12	RAM	1.02	1.30	-.31	-.00	1.02	1.02	.00
	T2 =	554	BLEED	.09	-1.79	1.07	-.26	-.90	.09	-.00
	ERI =	0	POWER	-.01	-.47	.71	.02	.07	-.01	.00
1.50	NR =	.971	3.57	24700	50600	1.86	1183	146.4	521	2067
	P2 =	19.44	RAM	1.03	1.07	-.57	.00	1.03	1.03	-.00
	T2 =	623	BLEED	.09	-1.55	1.34	-.26	-.89	.09	.00
	ERI =	0	POWER	-.01	-.39	.55	.02	.07	-.01	-.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 25000 FFFT

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	WZK	BTANG
.30	1.06	3.65	38910	3375	1307	24100	22100	1.76	490	10.2
	RAM	1.02	.99	-.01	-.01	1.34	1.37	-.41	.01	.00
	BLEED	-1.34	-.83	-.02	.34	-1.44	-1.57	.76	.01	.00
	POWER	-2.76	.45	-.17	2.65	-1.00	-1.09	1.56	-.00	.00
.60	1.28	4.41	47236	3468	1288	31000	26400	1.79	491	10.2
	RAM	1.01	.99	-.01	-.01	1.29	1.34	-.38	.01	.00
	BLEED	-1.32	-.83	-.04	.32	-1.38	-1.62	.82	.01	.00
	POWER	-2.21	.37	-.22	2.08	-.74	-.87	1.25	-.00	.00
.90	1.69	5.51	59318	3499	1293	41300	32600	1.82	481	10.2
	RAM	1.01	1.00	-.01	-.01	1.25	1.31	-.34	.01	.00
	BLEED	-1.33	-.83	-.05	.33	-1.32	-1.68	.87	.02	.00
	POWER	-1.79	.30	-.20	1.67	-.53	-.67	.98	-.00	.00
1.20	2.41	6.92	75264	3492	1324	56000	40900	1.84	460	2.9
	RAM	1.02	1.01	-.00	-.00	1.22	1.30	-.31	.01	50.34
	BLEED	-1.40	-.75	-.07	.45	-1.23	-1.72	.99	.09	.00
	POWER	-1.36	.23	-.17	1.26	-.36	-.50	.74	-.01	.00
1.50	3.57	8.75	94231	3436	1354	75900	51300	1.84	431	2.9
	RAM	1.05	.53	-.27	-.19	1.05	1.07	-.56	.00	.00
	BLEED	-1.35	-.23	.21	.58	-1.01	-1.54	1.34	.09	.00
	POWER	-1.00	.15	-.15	.91	-.26	-.38	.54	-.01	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 25000 FFFT

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.30	1.06	3.65	38910	3375	1307	24100	22100	1.76	490	10.2
	RAM	1.02	.99	-.01	-.01	1.34	1.37	-.41	.01	.00
	BLEED	-1.34	-.83	-.02	.34	-1.44	-1.57	.76	.01	.00
	POWER	-2.76	.45	-.17	2.65	-1.00	-1.09	1.56	-.00	.00
.60	1.28	4.41	47236	3468	1288	31000	26400	1.79	491	10.2
	RAM	1.01	.99	-.01	-.01	1.29	1.34	-.38	.01	.00
	BLEED	-1.32	-.83	-.04	.32	-1.38	-1.62	.82	.01	.00
	POWER	-2.21	.37	-.22	2.08	-.74	-.87	1.25	-.00	.00
.90	1.69	5.51	59318	3499	1293	41300	32600	1.82	481	10.2
	RAM	1.01	1.00	-.01	-.01	1.25	1.31	-.34	.01	.00
	BLEED	-1.33	-.83	-.05	.33	-1.32	-1.68	.87	.02	.00
	POWER	-1.79	.30	-.20	1.67	-.53	-.67	.98	-.00	.00
1.20	2.41	6.92	75264	3492	1324	56000	40900	1.84	460	2.9
	RAM	1.02	1.01	-.00	-.00	1.22	1.30	-.31	.01	50.34
	BLEED	-1.40	-.75	-.07	.45	-1.23	-1.72	.99	.09	.00
	POWER	-1.36	.23	-.17	1.26	-.36	-.50	.74	-.01	.00
1.50	3.57	8.75	94231	3436	1354	75900	51300	1.84	431	2.9
	RAM	1.05	.53	-.27	-.19	1.05	1.07	-.56	.00	.00
	BLEED	-1.35	-.23	.21	.58	-1.01	-1.54	1.34	.09	.00
	POWER	-1.00	.15	-.15	.91	-.26	-.38	.54	-.01	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE    25000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.30	NR = 1.00	1.06	2000	20300	1.61	933	57.1	211	1926
	P2 = 5.81	RAM	1.01	1.45	-.50	-.00	1.01	1.01	.00
	T2 = 437	BLEED	.01	-1.62	.84	-.33	-.98	.01	.00
	ERI = 101	POWER	-.00	-.86	1.38	.04	.14	-.00	-.00
.60	NR = 1.00	1.28	4670	24300	1.64	981	68.5	247	2026
	P2 = 6.96	RAM	1.01	1.38	-.42	-.00	1.01	1.01	.00
	T2 = 461	BLEED	.01	-1.66	.88	-.33	-.98	.01	.00
	ERI = 101	POWER	-.00	-.73	1.16	.03	.11	-.00	-.00
.90	NR = 1.00	1.69	8760	29800	1.67	1034	86.4	308	2067
	P2 = 9.23	RAM	1.01	1.31	-.34	-.00	1.01	1.01	.00
	T2 = 499	BLEED	.02	-1.68	.90	-.33	-.97	.02	-.01
	ERI = 0	POWER	-.00	-.59	.93	.03	.09	-.00	.00
1.20	NR = .991	2.41	15100	37000	1.71	1099	111.6	397	2067
	P2 = 13.12	RAM	1.02	1.27	-.28	-.00	1.02	1.02	.00
	T2 = 554	BLEED	.09	-1.71	1.02	-.26	-.90	.09	.01
	ERI = 0	POWER	-.01	-.54	.81	.02	.07	-.01	.00
1.50	NR = .971	3.57	24700	46500	1.74	1184	146.5	521	2067
	P2 = 19.44	RAM	1.03	1.33	-.32	.00	1.03	1.03	-.00
	T2 = 623	BLEED	.09	-1.83	1.16	-.26	-.89	.09	.01
	ERI = 0	POWER	-.01	-.32	.54	.02	.07	-.01	-.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 25000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.30	1.06	3.68	32696	3032	1217	22700	20700	1.58	490	10.2
	RAM	1.02	.99	-.02	-.01	1.34	1.37	-.41	.01	.00
	BLEED	-1.33	-.80	-.00	.34	-1.42	-1.56	.78	.01	.00
	POWER	-2.72	.52	-.12	2.59	-.95	-1.05	1.57	-.00	.00
.60	1.28	4.44	39785	3132	1202	29200	24500	1.62	491	10.2
	RAM	1.01	.99	-.01	-.01	1.29	1.34	-.38	.01	.00
	BLEED	-1.32	-.80	-.02	.32	-1.36	-1.62	.85	.01	.00
	POWER	-2.18	.43	-.17	2.05	-.69	-.82	1.26	-.00	.00
.90	1.69	5.55	49909	3164	1207	38900	30200	1.66	481	10.2
	RAM	1.01	.99	-.01	-.01	1.24	1.31	-.34	.01	.00
	BLEED	-1.32	-.80	-.04	.33	-1.30	-1.69	.91	.02	.00
	POWER	-1.77	.34	-.15	1.65	-.49	-.64	.98	-.00	.00
1.20	2.41	6.98	63105	3153	1235	52700	37600	1.68	460	10.2
	RAM	1.02	1.01	-.01	-.01	1.22	1.30	-.32	.01	.00
	BLEED	-1.38	-.72	-.04	.44	-1.21	-1.73	1.04	.09	.00
	POWER	-1.34	.27	-.13	1.26	-.34	-.47	.74	-.01	.00
1.50	3.57	8.82	80707	3142	1274	71900	47300	1.71	431	2.9
	RAM	1.03	1.02	-.00	-.00	1.21	1.30	-.30	.00	.00
	BLEED	-1.33	-.71	-.04	.39	-1.16	-1.81	1.14	.09	.00
	POWER	-.99	.21	-.10	.93	-.23	-.34	.56	-.01	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE    25000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.30	NR =	1.00	2000	18300	1.44	933	57.1	211	1926
	P2 =	5.81	1.01	1.48	-.54	-.00	1.01	1.01	.00
	T2 =	437	.01	-1.65	.91	-.33	-.98	.01	.00
	ERI =	101	POWER	-.00	-.75	1.36	.04	.14	-.00
.60	NR =	1.00	4670	21900	1.48	981	68.5	247	2026
	P2 =	6.96	1.01	1.42	-.47	-.00	1.01	1.01	-.00
	T2 =	461	.01	-1.69	.96	-.33	-.98	.01	.00
	ERI =	101	POWER	-.00	-.61	1.11	.03	.11	-.00
.90	NR =	1.00	8760	26900	1.51	1035	86.5	308	2067
	P2 =	9.23	1.01	1.34	-.37	-.00	1.01	1.01	.00
	T2 =	499	.02	-1.72	.99	-.33	-.97	.02	-.01
	ERI =	0	POWER	-.00	-.51	.91	.03	.09	-.00
1.20	NR =	.991	15100	33200	1.53	1100	111.7	397	2067
	P2 =	13.12	1.02	1.29	-.31	-.00	1.02	1.02	.00
	T2 =	554	.09	-1.78	1.13	-.26	-.90	.09	.00
	ERI =	0	POWER	-.01	-.49	.80	.02	.07	-.01
1.50	NR =	.971	24700	40900	1.58	1184	146.7	521	2067
	P2 =	19.44	1.03	1.36	-.37	.00	1.03	1.03	.00
	T2 =	623	.09	-1.93	1.30	-.26	-.88	.09	.01
	ERI =	0	POWER	-.01	-.29	.54	.02	.07	-.01

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 25000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FN8	SFCB	W2K	BTANG
.30	1.06	3.71	26470	2635	1115	21000	19000	1.39	490	10.2
	RAM	1.02	.98	-.02	-.01	1.33	1.36	-.41	.01	.00
	BLEED	-1.32	-.76	.01	.34	-1.41	-1.56	.82	.01	.00
	POWER	-2.67	.61	-.08	2.58	-.91	-1.00	1.62	-.00	.00
.60	1.28	4.48	32318	2731	1104	27100	22400	1.44	491	10.2
	RAM	1.01	.98	-.02	-.01	1.28	1.34	-.38	.01	.00
	BLEED	-1.31	-.76	-.00	.32	-1.35	-1.63	.90	.01	.00
	POWER	-2.15	.50	-.12	2.05	-.65	-.79	1.29	-.00	.00
.90	1.69	5.60	40481	2763	1109	36000	27300	1.49	481	10.2
	RAM	1.01	.99	-.01	-.01	1.24	1.31	-.35	.01	.00
	BLEED	-1.32	-.76	-.02	.33	-1.29	-1.71	.98	.02	.00
	POWER	-1.74	.40	-.11	1.66	-.46	-.61	1.01	-.00	.00
1.20	2.41	7.04	50924	2753	1134	48700	33600	1.51	460	10.2
	RAM	1.02	1.00	-.01	-.01	1.22	1.31	-.32	.01	.00
	BLEED	-1.38	-.68	-.03	.45	-1.20	-1.78	1.13	.09	.00
	POWER	-1.33	.31	-.09	1.25	-.31	-.45	.77	-.01	.00
1.50	3.57	8.90	64710	2742	1169	66500	41800	1.55	431	2.9
	RAM	1.03	1.02	-.01	-.00	1.21	1.31	-.31	.00	.00
	BLEED	-1.32	-.66	-.02	.39	-1.15	-1.88	1.26	.09	.00
	POWER	-.98	.25	-.07	.92	-.21	-.33	.58	-.01	.00

# CONFIDENTIAL

**CONFIDENTIAL**

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE      25000 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC	
.30	NR =	1.00	2000	16000	1.27	934	57.2	211	1926	
	P2 =	5.81	RAM	1.01	1.52	-.59	-.00	1.01	1.01	.00
	T2 =	437	BLEED	.01	-1.69	1.02	-.33	-.98	.01	.00
	ERI =	101	POWER	-.00	-.58	1.33	.04	.14	-.00	.00
.60	NR =	1.00	4670	19000	1.31	982	68.6	247	2026	
	P2 =	6.96	RAM	1.01	1.46	-.53	-.00	1.01	1.01	-.00
	T2 =	461	BLEED	.01	-1.75	1.08	-.33	-.98	.01	-.01
	ERI =	101	POWER	-.00	-.46	1.08	.03	.11	-.00	.00
.90	NR =	1.00	8760	23300	1.33	1035	86.6	308	2067	
	P2 =	9.23	RAM	1.01	1.39	-.44	-.00	1.01	1.01	.00
	T2 =	499	BLEED	.02	-1.81	1.15	-.33	-.97	.02	-.01
	ERI =	0	POWER	-.00	-.43	.93	.03	.08	-.00	.00
1.20	NR =	.991	15100	28600	1.35	1100	111.8	397	2067	
	P2 =	13.12	RAM	1.02	1.34	-.36	-.00	1.02	1.02	.00
	T2 =	554	BLEED	.09	-1.84	1.27	-.26	-.90	.09	.00
	ERI =	0	POWER	-.01	-.38	.77	.02	.07	-.01	.00
1.50	NR =	.971	24700	34900	1.40	1184	146.8	521	2067	
	P2 =	19.44	RAM	1.03	1.29	-.30	-.00	1.03	1.03	.00
	T2 =	623	BLEED	.09	-1.99	1.45	-.26	-.88	.09	.01
	ERI =	0	POWER	-.01	-.37	.68	.02	.07	-.01	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE

25000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.30	1.06	3.75	20232	2198	1000	19000	17000	1.19	490	10.2
	RAM	1.02	.97	-.03	-.02	1.32	1.36	-.41	.01	.00
	BLEED	-1.32	-.69	.02	.34	-1.40	-1.56	.89	.01	.00
	POWER	-2.62	.75	-.04	2.55	-.86	-.96	1.72	-.00	.00
.60	1.28	4.52	24837	2292	993	24500	19900	1.25	491	10.2
	RAM	1.01	.98	-.02	-.01	1.27	1.34	-.39	.01	.00
	BLEED	-1.32	-.70	.00	.33	-1.34	-1.66	.98	.01	.00
	POWER	-2.11	.62	-.05	2.04	-.60	-.74	1.36	-.00	.00
.90	1.69	5.65	31035	2323	998	32700	23900	1.30	481	10.2
	RAM	1.01	.98	-.02	-.01	1.23	1.31	-.36	.01	.00
	BLEED	-1.31	-.69	-.00	.33	-1.28	-1.75	1.09	.02	.00
	POWER	-1.72	.49	-.05	1.66	-.42	-.57	1.07	-.00	.00
1.20	2.41	7.11	38722	2313	1020	44100	29100	1.33	460	10.2
	RAM	1.02	1.00	-.01	-.01	1.21	1.31	-.33	.01	.00
	BLEED	-1.37	-.61	-.00	.45	-1.18	-1.84	1.26	.09	.00
	POWER	-1.31	.39	-.04	1.26	-.28	-.42	.81	-.01	.00
1.50	3.57	9.00	48684	2305	1051	60200	35500	1.37	431	10.2
	RAM	1.03	1.01	-.01	-.01	1.20	1.32	-.32	.00	.00
	BLEED	-1.31	-.58	.00	.39	-1.13	-1.97	1.43	.09	.00
	POWER	-.96	.31	-.03	.92	-.18	-.30	.61	-.01	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY PRESSURE ALTITUDE 25000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.30	NR =	1.00	1.06	2000	15200	1.08	935	57.4	211	1926
	P2 =	5.81	RAM	1.01	1.44	-.46	-.00	1.01	1.01	-.00
	T2 =	437	BLEED	.01	-1.64	1.00	-.33	-.97	.01	.00
	ERI =	101	POWER	-.00	-.86	1.79	.05	.15	-.00	.02
.60	NR =	1.00	1.28	4670	17900	1.15	983	68.9	247	2026
	P2 =	6.96	RAM	1.01	1.40	-.43	.00	1.01	1.01	.00
	T2 =	461	BLEED	.01	-1.72	1.07	-.33	-.98	.01	-.01
	ERI =	101	POWER	-.00	-.64	1.38	.04	.11	-.00	.00
.90	NR =	1.00	1.69	8760	21400	1.20	1036	86.9	308	2067
	P2 =	9.23	RAM	1.01	1.33	-.35	-.00	1.01	1.01	.00
	T2 =	499	BLEED	.02	-1.79	1.16	-.33	-.96	.02	-.01
	ERI =	0	POWER	-.00	-.51	1.09	.03	.08	-.00	.00
1.20	NR =	.991	2.41	15100	25900	1.24	1101	112.2	397	2067
	P2 =	13.12	RAM	1.02	1.39	-.40	-.00	1.02	1.02	.00
	T2 =	554	BLEED	.09	-1.92	1.40	-.25	-.89	.09	.01
	ERI =	0	POWER	-.01	-.37	.83	.02	.06	-.01	.00
1.50	NR =	.971	3.57	24700	31400	1.28	1185	147.3	520	2067
	P2 =	19.44	RAM	1.03	1.31	-.30	-.00	1.03	1.03	.00
	T2 =	623	BLEED	.09	-2.05	1.56	-.26	-.87	.09	-.00
	ERI =	0	POWER	-.01	-.29	.65	.02	.07	-.01	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE    25000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.30	1.06	3.79	16530	1926	922	17700	15700	1.05	490	15.2
	RAM	1.01	1.01	-.00	-.00	1.33	1.37	-.39	.01	.00
	BLEED	-1.31	-.67	.00	.32	-1.40	-1.57	.93	.01	.00
	POWER	-2.57	.92	.02	2.52	-.80	-.90	1.82	-.00	.00
.60	1.28	4.56	20556	2026	920	23000	18300	1.12	491	15.2
	RAM	1.01	1.01	.00	.00	1.28	1.35	-.37	.01	.00
	BLEED	-1.30	-.68	-.01	.31	-1.34	-1.68	1.03	.01	.00
	POWER	-2.08	.73	.00	2.04	-.55	-.69	1.43	-.00	.00
.90	1.69	5.71	25834	2067	928	30700	21900	1.18	481	15.2
	RAM	1.01	1.01	.00	-.00	1.24	1.33	-.35	.01	.00
	BLEED	-1.30	-.66	-.01	.32	-1.27	-1.79	1.16	.02	.00
	POWER	-1.70	.58	.00	1.66	-.38	-.53	1.12	-.00	.00
1.20	2.41	7.18	32219	2067	950	41500	26400	1.22	460	10.2
	RAM	1.02	1.02	.00	-.00	1.22	1.33	-.33	.01	.00
	BLEED	-1.36	-.56	.01	.44	-1.17	-1.88	1.36	.09	.00
	POWER	-1.30	.46	.00	1.27	-.25	-.39	.85	-.01	.00
1.50	3.57	9.09	40380	2067	981	56600	32000	1.26	431	10.2
	RAM	1.03	1.03	.00	-.00	1.20	1.34	-.33	.00	.00
	BLEED	-1.31	-.54	-.00	.40	-1.12	-2.06	1.56	.09	.00
	POWER	-.95	.36	.00	.93	-.16	-.28	.64	-.01	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 7.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE    25000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.30	NR =	1.00	1980	11900	1.01	904	52.0	209	1559
	P2 =	5.81	1.01	1.45	-.61	-.01	.98	1.01	-.08
	T2 =	437	.01	-1.03	1.49	-.20	-.67	.01	.69
	ERI =	0	POWER	3.61	3.45	.44	1.82	-.03	3.96
.60	NR =	1.00	4540	12800	1.07	933	59.9	239	1580
	P2 =	6.96	1.01	1.56	-.62	-.00	1.01	1.01	-.00
	T2 =	461	.02	-1.23	1.63	-.21	-.69	.02	.63
	ERI =	0	POWER	3.66	2.73	.40	1.63	-.03	3.54
.90	NR =	1.00	8380	15100	1.13	985	74.9	295	1634
	P2 =	9.23	1.01	1.49	-.53	-.00	1.01	1.01	-.00
	T2 =	499	.03	-1.24	1.77	-.17	-.65	.03	.67
	ERI =	0	POWER	3.09	2.15	.31	1.26	-.07	2.85
1.20	NR =	.991	14100	18000	1.20	1049	95.7	372	1679
	P2 =	13.12	1.02	1.43	-.44	.00	1.02	1.02	.00
	T2 =	554	.05	-1.33	1.88	-.19	-.66	.05	.64
	ERI =	0	POWER	2.64	1.72	.25	.98	-.08	2.31
1.50	NR =	.971	24700	28000	1.26	1176	142.9	522	1906
	P2 =	19.44	1.03	1.37	-.36	-.00	1.03	1.03	-.00
	T2 =	623	.06	-1.43	1.88	-.20	-.68	.06	.57
	ERI =	0	POWER	1.54	.95	.14	.55	-.04	1.29

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 7.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 25000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.30	1.06	2.93	11956	1559	1045	14300	12300	.97	486	15.2
	RAM	.91	.88	-.08	.00	1.33	1.38	-.54	.01	.00
	BLEED	-.57	.43	.69	-.01	-.85	-.99	1.44	.01	.00
	POWER	2.11	7.15	3.96	-.08	2.96	3.44	3.62	-.03	.00
.60	1.28	3.38	13678	1580	1045	17700	13200	1.04	476	15.2
	RAM	1.01	.99	-.00	-.00	1.36	1.48	-.52	.01	.00
	BLEED	-.62	.37	.63	-.02	-.86	-1.16	1.56	.02	.00
	POWER	1.94	6.47	3.54	-.01	2.57	3.47	2.93	-.03	.00
.90	1.69	4.23	17147	1634	1045	23900	15500	1.11	460	15.2
	RAM	1.01	1.00	-.00	-.00	1.29	1.45	-.48	.01	.00
	BLEED	-.59	.49	.67	.00	-.77	-1.20	1.73	.03	.00
	POWER	1.52	5.30	2.85	-.01	1.92	3.00	2.24	-.07	.00
1.20	2.41	5.42	21572	1679	1045	32500	18400	1.17	430	15.2
	RAM	1.02	1.02	.00	.00	1.26	1.44	-.45	.01	.00
	BLEED	-.60	.51	.64	.01	-.74	-1.34	1.89	.05	.00
	POWER	1.19	4.42	2.31	.01	1.48	2.67	1.70	-.08	.00
1.50	3.57	8.15	35408	1906	1045	53200	28500	1.24	432	10.2
	RAM	1.03	1.03	-.00	.00	1.21	1.37	-.37	.00	.00
	BLEED	-.63	.41	.57	.01	-.74	-1.42	1.87	.06	.00
	POWER	.67	2.53	1.29	.01	.80	1.54	.96	-.04	.00

# CONFIDENTIAL

GEI 67870

**CONFIDENTIAL**

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY PRESSURE ALTITUDE 25000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.30	NR =	1.00	1780	8030	.99	838	42.4	187	1282	
	P2 =	5.81	RAM	1.01	1.68	-.85	-.01	.99	1.01	-.06
	T2 =	437	BLEED	.04	-1.21	1.76	-.19	-.66	.04	.65
	ERI =	0	POWER	-.13	5.21	4.51	.52	2.29	-.13	5.19
.60	NR =	1.00	3890	7450	1.10	854	46.0	205	1256	
	P2 =	6.96	RAM	1.01	1.78	-.97	-.01	.99	1.01	-.06
	T2 =	461	BLEED	.04	-1.50	2.09	-.19	-.67	.04	.63
	ERI =	0	POWER	-.10	5.94	3.52	.50	2.17	-.10	4.85
.90	NR =	1.00	6440	6120	1.26	871	49.4	226	1182	
	P2 =	9.23	RAM	1.01	1.97	-1.21	-.01	.99	1.01	-.06
	T2 =	499	BLEED	.02	-2.02	2.84	-.14	-.67	.02	.67
	ERI =	0	POWER	-.05	7.68	2.41	.51	2.17	-.05	4.71
1.20	NR =	.991	9370	3880	1.65	890	51.4	247	1072	
	P2 =	13.12	RAM	1.02	2.59	-1.97	-.00	1.00	1.02	-.06
	T2 =	554	BLEED	.02	-3.75	4.71	-.18	-.74	.02	.50
	ERI =	0	POWER	-.03	11.08	.04	.39	2.00	-.03	4.25
1.50	NR =	.971	24800	25600	1.26	1170	139.8	522	1799	
	P2 =	19.44	RAM	1.03	1.38	-.37	-.00	1.03	1.03	-.00
	T2 =	623	BLEED	.04	-1.44	2.03	-.18	-.66	.04	.63
	ERI =	0	POWER	-.03	1.72	1.01	.13	.62	-.03	1.36

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY                  PRESSURE ALTITUDE    25000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.30	1.06	2.28	7943	1282	1095	10300	8490	.94	435	15.2
	RAM	.93	.90	-.06	.00	1.48	1.58	-.74	.01	.00
	BLEED	-.59	.52	.65	.01	-.93	-1.14	1.68	.04	.00
	POWER	2.57	9.84	5.19	-.01	4.02	4.88	4.84	-.13	.00
.60	1.28	2.46	8173	1256	1095	11800	7890	1.04	408	15.2
	RAM	.93	.89	-.06	-.00	1.44	1.65	-.82	.01	.00
	BLEED	-.59	.54	.63	-.00	-.92	-1.39	1.98	.04	.00
	POWER	2.40	9.57	4.85	-.01	3.65	5.49	3.95	-.10	.00
.90	1.69	2.62	7735	1182	1094	13000	6550	1.18	354	15.2
	RAM	.93	.88	-.06	-.00	1.40	1.78	-.98	.01	.00
	BLEED	-.66	.73	.67	.07	-.93	-1.86	2.67	.02	.00
	POWER	2.30	10.20	4.71	.06	3.49	6.96	3.11	-.05	.00
1.20	2.41	2.71	6397	1072	1094	13700	4280	1.50	286	15.2
	RAM	.94	.88	-.06	-.00	1.40	2.23	-1.52	.01	.00
	BLEED	-.71	.70	.50	.03	-1.03	-3.32	4.23	.02	.00
	POWER	2.05	11.12	4.25	.07	3.09	9.95	1.11	-.03	.00
1.50	3.57	7.52	32151	1799	1095	50900	26100	1.23	433	10.2
	RAM	1.03	1.03	-.00	.00	1.22	1.40	-.40	.00	.00
	BLEED	-.61	.55	.63	.00	-.72	-1.44	2.04	.04	.00
	POWER	.73	2.76	1.36	-.00	.87	1.72	1.00	-.03	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE    25000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.30	NR =	1.00	1130	1620	1.69	703	22.5	119	894
	P2 =	5.81	1.02	1.66	-1.92	-.05	.80	1.02	-.58
	T2 =	437	.01	-1.77	3.13	-.16	-.60	.01	.86
	ERI =	0	POWER	14.86	7.17	.90	4.40	-.08	8.83
.60	NR =	1.00	2380	540	4.44	711	23.0	126	838
	P2 =	6.96	1.01	3.25	-4.08	-.04	.81	1.01	-.53
	T2 =	461	.01	-6.07	8.26	-.16	-.63	.01	.80
	ERI =	0	POWER	43.75	-18.02	.78	4.17	-.06	8.19
.90	NR =	1.00	3880	-800	-2.170	724	23.7	136	752
	P2 =	9.23	1.01	-.58	.05	-.05	.80	1.01	-.54
	T2 =	499	.02	4.95	-3.05	-.21	-.71	.02	.60
	ERI =	0	POWER	-32.18	70.50	.99	4.56	-.08	8.59
1.20	NR =	.991	6820	-1850	-.800	786	30.8	180	717
	P2 =	13.12	1.28	-1.34	1.92	.08	1.27	1.28	-.12
	T2 =	554	-1.15	7.49	-8.86	-.61	-2.41	-1.15	-.40
	ERI =	100	POWER	21.83	-32.31	-3.80	-13.08	-11.43	-2.57
1.50	NR =	.971	24800	19900	1.27	1157	132.5	524	1563
	P2 =	19.44	1.03	1.49	-.50	-.00	1.03	1.03	-.00
	T2 =	623	.03	-1.35	2.53	-.09	-.56	.03	.88
	ERI =	0	POWER	2.11	1.00	.13	.65	-.03	1.45

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE    25000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.30	1.06	1.28	2739	894	1257	3060	1940	1.41	276	10.2
	RAM	.32	-.10	-.58	.00	1.36	1.56	-1.80	.02	.00
	BLEED	-.24	1.27	.86	-.01	-1.01	-1.60	2.94	.01	.00
	POWER	2.02	22.25	8.83	-.00	8.46	13.44	8.57	-.08	.00
.60	1.28	1.29	2394	838	1258	3250	870	2.75	250	10.2
	RAM	.34	-.16	-.53	.01	1.38	2.40	-2.90	.01	.00
	BLEED	-.26	1.44	.80	-.01	-1.08	-4.05	5.84	.01	.00
	POWER	1.89	24.04	8.19	.08	7.76	29.10	-4.76	-.06	.00
.90	1.69	1.31	1747	752	1257	3420	-460	-3.795	213	10.2
	RAM	.36	-.52	-.54	-.00	1.39	-1.76	1.13	.02	.00
	BLEED	-.31	1.67	.60	-.03	-1.22	9.24	-6.65	.02	.00
	POWER	2.04	33.60	8.59	.11	8.01	-60.20	107.22	-.08	.00
1.20	2.41	1.51	1477	717	1256	5410	-1400	-1.050	208	10.2
	RAM	.82	.71	-.12	-.01	2.15	-2.06	2.51	.29	.00
	BLEED	-1.62	-2.37	-.40	.09	-4.17	10.45	-11.08	-1.15	.00
	POWER	-8.86	-12.48	-2.57	.54	-22.70	32.01	-40.7	-11.43	.00
1.50	3.57	6.03	25228	1563	1257	45100	20300	1.24	434	10.2
	RAM	1.03	1.03	-.00	.00	1.25	1.52	-.53	.00	.00
	BLEED	-.48	1.13	.88	-.01	-.59	-1.36	2.53	.03	.00
	POWER	.78	3.15	1.45	-.00	.94	2.12	.99	-.03	.00

9-17

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.12.4

JANUARY 1964

STANDARD DAY                      PRESSURE ALTITUDE    25000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.30	NR =	1.00	760	340	5.16	628	14.6	80	866
	P2 =	5.81	1.02	1.19	-2.09	-.09	.61	1.02	-.94
	T2 =	437	.01	-2.92	4.45	-.17	-.55	.01	.96
	ERI =	0	-.09	47.15	-12.30	1.51	6.66	-.09	13.22
.60	NR =	1.00	1650	-460	-3.120	634	15.1	87	780
	P2 =	6.96	1.02	.86	-2.17	-.11	.60	1.02	-.97
	T2 =	461	.02	3.05	-1.56	-.22	-.62	.02	.79
	ERI =	0	-.15	-35.63	81.32	1.82	6.97	-.15	13.72
.90	NR =	1.00	3840	-1290	-1.100	718	22.8	135	707
	P2 =	9.23	1.51	-.31	.31	.14	1.39	1.51	-.45
	T2 =	499	-1.35	4.36	-4.09	-.60	-2.29	-1.35	.37
	ERI =	100	POWER-17.13	13.04	-12.71	-5.19	-17.20	-17.13	1.95
1.20	NR =	.991	7740	-2050	-.830	816	35.5	204	721
	P2 =	13.12	1.39	-1.77	2.95	.11	1.44	1.39	.02
	T2 =	554	-1.25	7.69	-9.12	-.59	-2.49	-1.25	-.44
	ERI =	100	POWER-10.73	19.91	-29.81	-3.08	-12.07	-10.73	-2.33
1.50	NR =	.971	24800	15900	1.37	1153	128.6	524	1440
	P2 =	19.44	1.03	1.59	-.62	-.00	1.03	1.03	-.01
	T2 =	623	.03	-1.70	2.94	-.10	-.59	.03	.81
	ERI =	0	POWER	-.02	2.12	.85	.07	.56	-.02

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.12.4

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE    25000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFC8	W2K	BTANG
.30	1.06	1.09	1768	866	1452	1200	440	4.01	186	10.2
	RAM	.08	-.78	-.94	.03	1.06	1.12	-2.01	.02	.00
	BLEED	-.06	1.33	.96	-.11	-.87	-2.39	3.86	.01	.00
	POWER	1.38	34.25	13.22	-1.52	14.85	40.62	-6.11	-.09	.00
.60	1.28	1.09	1435	780	1450	1290	-350	-4.050	173	10.2
	RAM	.09	-1.21	-.97	-.01	1.07	.82	-2.12	.02	.00
	BLEED	-.10	1.42	.79	.01	-1.15	4.28	-2.69	.02	.00
	POWER	1.18	42.74	13.72	.03	13.48	-49.86	97.56	-.15	.00
.90	1.69	1.20	1425	707	1447	2750	-1090	-1.305	211	10.2
	RAM	.43	.00	-.45	.00	2.41	-.74	.71	.54	.00
	BLEED	-.79	.00	.37	.21	-4.22	5.90	-5.42	-1.35	.00
	POWER	-6.27	.00	1.95	2.22	-32.41	21.33	-20.4	-17.13	.00
1.20	2.41	1.48	1705	721	1451	6010	-1730	-.985	236	10.2
	RAM	.87	1.44	.02	.05	2.44	-2.23	3.30	.40	.00
	BLEED	-1.55	-2.49	-.44	-.09	-4.29	9.32	-10.36	-1.25	.00
	POWER	-7.61	-12.07	-2.33	-.24	-20.93	24.73	-33.7	-10.73	.00
1.50	3.57	4.98	21720	1440	1450	41300	16500	1.32	434	10.2
	RAM	1.01	1.02	-.01	.02	1.28	1.64	-.68	.00	.00
	BLEED	-.53	1.16	.81	.01	-.66	-1.70	2.94	.03	.00
	POWER	.70	3.00	1.26	-.02	.84	2.14	.83	-.02	.00

# CONFIDENTIAL

**CONFIDENTIAL**

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 25000 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC	
.60	NR =	1.00	1.28	4550	23700	1.87	1039	64.4	230	2067
	P2 =	6.96	RAM	1.01	1.41	-.44	-.00	1.01	1.01	.00
	T2 =	503	BLEED	.02	-1.67	.88	-.34	-.97	.02	-.01
	ERI =	0	POWER	-.00	-.97	1.38	.03	.11	-.00	.00
.90	NR =	1.00	1.69	8400	28100	1.91	1089	79.2	282	2067
	P2 =	9.23	RAM	1.01	1.34	-.37	-.00	1.01	1.01	.00
	T2 =	546	BLEED	.07	-1.73	.99	-.26	-.91	.07	.00
	ERI =	0	POWER	-.01	-.82	1.16	.02	.09	-.01	.00
1.20	NR =	.991	2.41	14400	34600	1.96	1162	101.9	362	2067
	P2 =	13.12	RAM	1.02	1.29	-.30	-.00	1.02	1.02	-.00
	T2 =	605	BLEED	.09	-1.77	1.06	-.26	-.88	.09	.00
	ERI =	0	POWER	-.01	-.70	.99	.03	.10	-.01	.00
1.50	NR =	.971	3.57	23200	43300	1.98	1248	131.8	468	2067
	P2 =	19.45	RAM	1.04	1.38	-.37	.00	1.04	1.04	.00
	T2 =	681	BLEED	.06	-1.96	1.24	-.26	-.91	.06	.00
	ERI =	0	POWER	-.01	-.52	.75	.02	.08	-.01	.01

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1-0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 25000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	WZK	BTANG
.60	1.28	4.10	44410	3506	1296	28500	23900	1.86	478	10.2
	RAM	1.01	.99	-.01	-.01	1.31	1.37	-.40	.01	.00
	BLEED	-1.33	-.82	-.05	.33	-1.40	-1.67	.87	.02	.00
	POWER	-2.40	.40	-.27	2.24	-.86	-1.02	1.43	-.00	.00
.90	1.69	4.94	53810	3499	1319	36800	28400	1.89	461	10.2
	RAM	1.01	.99	-.01	-.01	1.27	1.34	-.38	.01	.00
	BLEED	-1.40	-.76	-.06	.44	-1.32	-1.73	.99	.07	.00
	POWER	-1.94	.32	-.23	1.79	-.62	-.81	1.14	-.01	.00
1.20	2.41	6.13	67839	3488	1359	49700	35300	1.92	439	10.2
	RAM	1.02	1.01	-.01	-.00	1.24	1.33	-.35	.01	.00
	BLEED	-1.35	-.73	-.06	.40	-1.24	-1.78	1.07	.09	.00
	POWER	-1.43	.28	-.18	1.32	-.41	-.58	.86	-.01	.00
1.50	3.57	7.70	85707	3481	1393	67200	44000	1.95	405	2.9
	RAM	1.04	1.03	-.00	-.00	1.24	1.34	-.33	.01	.00
	BLEED	-1.35	-.75	-.07	.38	-1.22	-1.90	1.18	.06	.00
	POWER	-1.18	.22	-.17	1.08	-.31	-.48	.70	-.01	.00

9-21

# CONFIDENTIAL

GEI 67870

**CONFIDENTIAL**

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 25000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.60	NR =	1.00	1.28	4550	16200	1.19	1041	64.8	230	2067
	P2 =	6.96	RAM	1.01	1.44	-.46	-.00	1.01	1.01	.00
	T2 =	503	BLEED	.02	-1.78	1.16	-.33	-.96	.02	-.01
	ERI =	0	POWER	-.00	-.78	1.57	.03	.11	-.00	.00
.90	NR =	1.00	1.69	8390	18600	1.24	1091	79.7	282	2067
	P2 =	9.23	RAM	1.01	1.40	-.42	-.00	1.01	1.01	.00
	T2 =	546	BLEED	.07	-1.89	1.33	-.26	-.91	.07	-.01
	ERI =	0	POWER	-.01	-.62	1.27	.02	.09	-.01	.00
1.20	NR =	.991	2.41	14400	22000	1.30	1164	102.5	362	2067
	P2 =	13.12	RAM	1.02	1.38	-.39	.00	1.02	1.02	.00
	T2 =	605	BLEED	.10	-2.05	1.55	-.25	-.87	.10	-.01
	ERI =	0	POWER	-.01	-.41	.91	.02	.09	-.01	-.01
1.50	NR =	.971	3.57	23200	26100	1.34	1250	132.6	468	2067
	P2 =	19.45	RAM	1.04	1.41	-.40	.00	1.04	1.04	.00
	T2 =	681	BLEED	.07	-2.26	1.78	-.27	-.90	.07	-.00
	ERI =	0	POWER	-.01	-.38	.80	.02	.08	-.01	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 25000 FEET

MO	P2/PO	P8/PO	WFT	T8	AB	FGB	FNB	SFCB	W2K	BTANG
.60	1.28	4.25	19240	2067	929	21200	16600	1.16	478	15.2
	RAM	1.01	1.01	.00	-.00	1.30	1.38	-.40	.01	.00
	BLEED	-1.30	-.66	-.01	.32	-1.35	-1.72	1.09	.02	.00
	POWER	-2.28	.78	.00	2.23	-.65	-.82	1.61	-.00	.00
.90	1.69	5.13	23014	2067	945	27400	19000	1.21	461	15.2
	RAM	1.01	1.01	.00	-.00	1.26	1.37	-.39	.01	.00
	BLEED	-1.38	-.59	-.01	.45	-1.26	-1.86	1.30	.07	.00
	POWER	-1.84	.64	.00	1.80	-.45	-.65	1.30	-.01	.00
1.20	2.41	6.37	28446	2067	974	36900	22500	1.26	438	10.2
	RAM	1.02	1.02	.00	-.00	1.23	1.37	-.37	.01	-9.80
	BLEED	-1.32	-.55	-.01	.42	-1.18	-1.99	1.49	.10	.00
	POWER	-1.37	.50	-.01	1.33	-.30	-.48	.98	-.01	.00
1.50	3.57	8.01	34970	2067	999	49800	26600	1.32	405	10.2
	RAM	1.04	1.04	.00	.00	1.23	1.39	-.38	.01	.00
	BLEED	-1.29	-.55	-.00	.36	-1.16	-2.23	1.74	.07	.00
	POWER	-1.11	.42	.00	1.09	-.20	-.37	.79	-.01	.00

9-23

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 25000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.60	NR =	1.00	1.28	3310	4480	1.30	873	36.5	167	1196
	P2 =	6.96	RAM	1.01	1.95	-1.37	-.01	.95	1.01	-.17
	T2 =	503	BLEED	.02	-1.76	2.65	-.14	-.65	.02	-.73
	ERI =	0	POWER	-.05	8.69	4.03	.62	2.77	-.05	5.92
.90	NR =	1.00	1.69	5340	2850	1.77	888	37.8	179	1104
	P2 =	9.23	RAM	1.01	2.53	-2.05	-.01	.96	1.01	-.12
	T2 =	546	BLEED	.01	-3.51	4.37	-.18	-.74	.01	.50
	ERI =	0	POWER	-.04	14.66	-.10	.52	2.75	-.04	5.85
1.20	NR =	.991	2.41	7850	910	4.25	909	39.6	198	991
	P2 =	13.12	RAM	1.02	6.54	-8.52	-.00	.99	1.02	-.07
	T2 =	605	BLEED	.01	-12.69	16.61	-.20	-.81	.01	.37
	ERI =	0	POWER	-.02	50.03	-25.48	.55	2.89	-.02	6.00
1.50	NR =	.971	3.57	23200	21800	1.32	1238	127.0	469	1846
	P2 =	19.45	RAM	1.04	1.47	-.46	.00	1.04	1.04	.00
	T2 =	681	BLEED	.04	-1.60	2.19	-.19	-.68	.04	.60
	ERI =	0	POWER	-.03	2.11	1.07	.15	.69	-.03	1.55

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 25000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.60	1.28	1.97	5825	1196	1095	8230	4920	1.18	347	15.2
	RAM	.79	.71	-.17	-.00	1.46	1.75	-1.15	.01	.00
	BLEED	-.56	.81	.73	.06	-.98	-1.65	2.53	.02	.00
	POWER	2.61	12.87	5.92	.05	4.82	8.09	4.62	-.05	.00
.90	1.69	2.03	5050	1104	1094	8640	3310	1.53	293	15.2
	RAM	.85	.75	-.12	-.02	1.49	2.26	-1.71	.01	.00
	BLEED	-.71	.62	.50	.03	-1.18	-3.11	3.91	.01	.00
	POWER	2.95	14.55	5.85	.01	4.92	12.93	1.54	-.04	.00
1.20	2.41	2.10	3850	991	1095	9220	1370	2.81	240	15.2
	RAM	.93	.81	-.07	.01	1.54	4.53	-4.82	.01	.00
	BLEED	-.77	.76	.37	.02	-1.27	-8.55	10.68	.01	.00
	POWER	3.09	19.27	6.00	-.06	4.98	33.64	-12.61	-.02	.00
1.50	3.57	6.85	28838	1846	1095	45500	22200	1.30	406	10.2
	RAM	1.04	1.04	.00	-.00	1.25	1.46	-.46	.01	.00
	BLEED	-.63	.53	.60	.01	-.76	-1.59	2.17	.04	.00
	POWER	.83	3.22	1.55	.01	1.00	2.09	1.10	-.03	.00

9-25

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY + 40 F    PRESSURE ALTITUDE    25000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.60	NR =	1.00	1.28	1980	20	86.98	737	18.7	100	895
	P2 =	6.96	RAM	1.02	23.70	131.13	-.07	.72	1.02	-.73
	T2 =	503	BLEED	.03	-98.76	-207.99	-.18	-.62	.03	.77
	ERI =	0	POWER	-.15	880.82	-354.97	1.09	4.98	-.15	9.99
.90	NR =	1.00	1.69	3420	-1120	-1.275	756	20.2	115	787
	P2 =	9.23	RAM	1.61	-.29	.29	.16	1.45	1.61	-.51
	T2 =	546	BLEED	-1.32	3.68	-3.49	-.63	-2.20	-1.32	.43
	ERI =	100	POWER	-20.17	8.74	-8.62	-6.20	-19.73	-20.17	2.95
1.20	NR =	.991	2.41	6690	-1950	-.735	852	29.9	169	773
	P2 =	13.12	RAM	1.14	-.94	1.05	.03	1.07	1.14	-.21
	T2 =	605	BLEED	-.60	5.87	-5.90	-.42	-1.68	-.60	-.10
	ERI =	100	POWER	-9.25	13.39	-15.68	-3.00	-9.92	-9.25	-.86
1.50	NR =	.971	3.57	23300	16600	1.35	1224	120.4	470	1607
	P2 =	19.45	RAM	1.04	1.58	-.59	-.00	1.04	1.04	-.00
	T2 =	681	BLEED	.03	-1.58	2.74	-.10	-.59	.03	.82
	ERI =	0	POWER	-.02	2.38	.99	.11	.68	-.02	1.49

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 25000 FEET

MO	P2/PO	P8/PO	WFT	T8	AB	FGB	FNB	SFCB	W2K	BTANG
.60	1.28	1.20	2010	895	1258	2260	270	7.36	208	10.2
	RAM	.22	-.59	-.73	.00	1.26	2.97	-4.18	.02	.00
	BLEED	-.19	1.36	.77	-.02	-1.08	-9.14	12.18	.03	.00
	POWER	1.77	29.64	9.99	-.23	9.85	82.50	-46.74	-.15	.00
.90	1.69	1.23	1425	787	1261	2580	-840	-1.695	188	10.2
	RAM	.47	.00	-.51	.07	2.45	-1.00	.95	.64	.00
	BLEED	-.63	.00	.43	-.35	-3.56	5.56	-5.13	-1.32	.00
	POWER	-5.97	.00	2.95	-2.25	-32.79	18.56	-18.0	-20.17	.00
1.20	2.41	1.49	1437	773	1257	5170	-1520	-.950	204	10.2
	RAM	.74	.16	-.21	-.09	1.92	-1.51	1.56	.14	.00
	BLEED	-1.27	-.55	-.10	.24	-3.15	8.10	-7.71	-.60	.00
	POWER	-6.83	-2.89	-.86	.51	-17.75	19.75	-21.44	-9.25	.00
1.50	3.57	5.50	22480	1607	1257	40200	16900	1.33	407	10.2
	RAM	1.04	1.04	-.00	-.00	1.28	1.61	-.62	.01	.00
	BLEED	-.53	1.10	.82	.01	-.65	-1.58	2.74	.03	.00
	POWER	.82	3.41	1.49	-.01	.99	2.38	.99	-.02	.00

9-27

# CONFIDENTIAL

10. 36089 FEET

PREVIOUS PAGE WAS BLANK, THEREFORE WAS NOT FILMED

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 36089 FEET

NO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.60	NR =	1.00	1.28	2800	15800	1.76	893	41.0	155	1843
	P2 =	4.19	RAM	1.02	1.38	-.42	-.00	1.02	1.02	.00
	T2 =	418	BLEED	.01	-1.65	.85	-.33	-.98	.01	.00
	ERI =	101	POWER	-.00	-1.46	2.11	.06	.20	-.00	.00
.90	NR =	1.00	1.69	5360	21000	1.79	966	54.5	198	1995
	P2 =	5.55	RAM	1.01	1.27	-.30	-.00	1.01	1.01	.00
	T2 =	453	BLEED	.01	-1.62	.82	-.33	-.98	.01	.00
	ERI =	101	POWER	-.00	-1.05	1.54	.04	.14	-.00	-.00
1.20	NR =	.991	2.41	9440	27900	1.81	1038	73.3	261	2067
	P2 =	7.89	RAM	1.02	1.32	-.35	-.00	1.02	1.02	.00
	T2 =	503	BLEED	.02	-1.73	.93	-.34	-.97	.02	-.01
	ERI =	0	POWER	-.00	-.66	1.02	.03	.10	-.00	.00
1.50	NR =	.971	3.56	15600	36100	1.81	1114	97.0	346	2067
	P2 =	11.70	RAM	1.04	1.31	-.30	-.00	1.04	1.04	-.00
	T2 =	566	BLEED	.09	-1.73	1.01	-.26	-.89	.09	-.00
	ERI =	0	POWER	-.01	-.46	.74	.02	.09	-.01	.00
1.80	NR =	.945	5.43	24900	46300	1.83	1206	129.3	460	2067
	P2 =	17.82	RAM	1.07	1.27	-.23	.00	1.07	1.07	.00
	T2 =	643	BLEED	.08	-1.77	1.05	-.27	-.89	.08	-.00
	ERI =	0	POWER	-.01	-.42	.64	.02	.08	-.01	.00
2.00	NR =	.925	7.24	33100	51900	1.82	1270	154.7	550	2067
	P2 =	23.76	RAM	1.08	.95	-.51	-.00	1.08	1.08	.00
	T2 =	702	BLEED	.05	-1.62	1.42	-.24	-.92	.05	.01
	ERI =	0	POWER	-.00	-.40	.56	.02	.07	-.00	-.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 36089 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.60	1.28	4.35	27846	3267	1312	18800	16000	1.74	488	10.2
	RAM	1.02	.99	.02	.01	1.31	1.37	-.41	.02	.00
	BLEED	-1.33	-.83	-.06	.32	-1.40	-1.64	.83	.01	.00
	POWER	-3.90	.63	-.29	3.72	-1.26	-1.48	2.13	-.00	.00
.90	1.69	5.81	37607	3447	1296	26700	21300	1.77	490	10.2
	RAM	1.01	.99	-.01	-.01	1.24	1.30	-.33	.01	.00
	BLEED	-1.32	-.82	-.03	.32	-1.30	-1.64	.83	.01	.00
	POWER	-2.79	.47	-.26	2.63	-.77	-.96	1.45	-.00	.00
1.20	2.41	7.76	50426	3503	1295	37800	28400	1.78	479	2.9
	RAM	1.02	1.00	-.01	-.01	1.21	1.27	-.29	.01	.00
	BLEED	-1.33	-.82	-.05	.33	-1.25	-1.67	.87	.02	.00
	POWER	-2.11	.35	-.24	1.97	-.52	-.69	1.05	-.00	.00
1.50	3.56	9.94	65351	3493	1332	52100	36500	1.79	454	.0
	RAM	1.04	1.03	-.01	-.01	1.21	1.28	-.27	.01	.00
	BLEED	-1.39	-.74	-.07	.44	-1.17	-1.71	.99	.09	.00
	POWER	-1.54	.27	-.19	1.42	-.35	-.50	.78	-.01	.00
1.80	5.43	12.73	85003	3483	1377	71900	46900	1.81	422	.0
	RAM	1.07	1.06	-.00	-.00	1.22	1.30	-.26	.01	.00
	BLEED	-1.33	-.74	-.07	.38	-1.14	-1.79	1.07	.08	.00
	POWER	-1.15	.22	-.16	1.05	-.25	-.38	.60	-.01	.00
2.00	7.24	14.98	94315	3374	1370	86100	53000	1.78	396	.0
	RAM	1.11	.46	-.35	-.24	1.02	.98	-.54	.00	.00
	BLEED	-1.44	-.23	.23	.63	-.99	-1.64	1.44	.05	.00
	POWER	-1.02	.15	-.16	.93	-.22	-.35	.51	-.00	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY                  PRESSURE ALTITUDE    36089 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.60	NR =	1.00	2800	14700	1.59	894	41.0	155	1843	
	P2 =	4.19	RAM	1.02	1.40	-.45	-.00	1.02	1.02	.00
	T2 =	418	BLEED	.01	-1.66	.88	-.33	-.98	.01	.00
	ERI =	101	POWER	-.00	-1.25	1.98	.06	.20	-.00	.00
.90	NR =	1.00	5360	19500	1.62	966	54.5	198	1995	
	P2 =	5.55	RAM	1.01	1.29	-.32	-.00	1.01	1.01	.00
	T2 =	453	BLEED	.01	-1.64	.86	-.33	-.98	.01	.00
	ERI =	101	POWER	-.00	-.88	1.43	.04	.14	-.00	.00
1.20	NR =	.991	9440	25600	1.66	1038	73.3	261	2067	
	P2 =	7.89	RAM	1.02	1.22	-.24	-.00	1.02	1.02	.00
	T2 =	503	BLEED	.02	-1.66	.88	-.33	-.97	.02	-.01
	ERI =	0	POWER	-.00	-.68	1.08	.03	.10	-.00	.00
1.50	NR =	.971	15600	32900	1.67	1114	97.1	346	2067	
	P2 =	11.70	RAM	1.04	1.30	-.29	-.00	1.04	1.04	.00
	T2 =	566	BLEED	.09	-1.75	1.07	-.26	-.89	.09	-.00
	ERI =	0	POWER	-.01	-.47	.79	.02	.09	-.01	.00
1.80	NR =	.945	24900	42000	1.69	1206	129.4	460	2067	
	P2 =	17.82	RAM	1.07	1.29	-.25	.00	1.07	1.07	.00
	T2 =	643	BLEED	.08	-1.82	1.14	-.27	-.89	.08	-.00
	ERI =	0	POWER	-.01	-.34	.59	.02	.08	-.01	.00
2.00	NR =	.925	33100	48400	1.72	1271	154.9	550	2067	
	P2 =	23.76	RAM	1.08	1.29	-.23	.00	1.08	1.08	.00
	T2 =	702	BLEED	.05	-1.96	1.27	-.24	-.92	.05	.01
	ERI =	0	POWER	-.00	-.34	.55	.02	.07	-.00	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 36089 FEET

	P8/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
	28	4.39	23379	2937	1223	17700	14900	1.57	488	10.2
	RAM	1.02	.98	.01	.00	1.30	1.36	-.41	.02	.00
	BLEED	-1.33	-.80	-.04	.32	-1.38	-1.64	.86	.01	.00
	POWER	-3.85	.71	-.22	3.66	-1.20	-1.42	2.15	-.00	.00
.90	1.69	5.86	31673	3110	1209	25100	19700	1.61	490	10.2
	RAM	1.02	.99	-.02	-.01	1.23	1.29	-.33	.01	.00
	BLEED	-1.32	-.79	-.01	.32	-1.29	-1.64	.87	.01	.00
	POWER	-2.75	.54	-.19	2.59	-.72	-.91	1.46	-.00	.00
1.20	2.41	7.82	42441	3169	1209	35600	26100	1.62	479	10.2
	RAM	1.02	1.00	-.01	-.01	1.20	1.27	-.29	.01	.00
	BLEED	-1.32	-.79	-.03	.33	-1.24	-1.69	.92	.02	.00
	POWER	-2.08	.40	-.18	1.94	-.48	-.66	1.06	-.00	.00
1.50	3.56	10.02	54774	3156	1242	49000	33400	1.64	453	2.9
	RAM	1.04	1.03	-.01	-.01	1.20	1.28	-.27	.01	.00
	BLEED	-1.38	-.71	-.05	.45	-1.15	-1.73	1.05	.09	.00
	POWER	-1.52	.31	-.15	1.43	-.32	-.47	.79	-.01	-76.22
1.80	5.43	12.84	70903	3143	1283	67500	42600	1.67	422	.0
	RAM	1.07	1.06	-.01	-.00	1.22	1.30	-.26	.01	.00
	BLEED	-1.33	-.71	-.05	.39	-1.12	-1.83	1.15	.08	.00
	POWER	-1.13	.24	-.12	1.06	-.22	-.35	.60	-.01	.00
2.00	7.24	15.08	83069	3137	1303	82300	49200	1.69	396	.0
	RAM	1.08	1.07	-.00	-.00	1.22	1.31	-.26	.00	.00
	BLEED	-1.41	-.73	-.05	.43	-1.16	-1.97	1.27	.05	.00
	POWER	-1.02	.21	-.12	.95	-.19	-.32	.53	-.00	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE    36089 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.60	NR =	1.00	1.28	2800	13300	1.43	894	41.1	155	1843
	P2 =	4.19	RAM	1.02	1.42	-.49	-.00	1.02	1.02	.00
	T2 =	418	BLEED	.01	-1.69	.96	-.33	-.98	.01	.00
	ERI =	101	POWER	-.00	-1.09	1.94	.06	.20	-.00	.00
.90	NR =	1.00	1.69	5360	17600	1.46	967	54.6	198	1995
	P2 =	5.55	RAM	1.01	1.32	-.36	-.00	1.01	1.01	.00
	T2 =	453	BLEED	.01	-1.68	.96	-.33	-.98	.01	.00
	ERI =	101	POWER	-.00	-.79	1.42	.04	.14	-.00	.00
1.20	NR =	.991	2.41	9440	23100	1.49	1038	73.4	261	2067
	P2 =	7.89	RAM	1.02	1.25	-.27	-.00	1.02	1.02	.00
	T2 =	503	BLEED	.02	-1.71	.98	-.33	-.97	.02	-.01
	ERI =	0	POWER	-.00	-.64	1.11	.03	.10	-.00	.00
1.50	NR =	.971	3.56	15600	29100	1.52	1114	97.2	346	2067
	P2 =	11.70	RAM	1.04	1.32	-.32	-.00	1.04	1.04	.00
	T2 =	566	BLEED	.09	-1.80	1.17	-.26	-.89	.09	-.00
	ERI =	0	POWER	-.01	-.40	.76	.02	.09	-.01	.00
1.80	NR =	.945	5.43	24900	36700	1.55	1207	129.5	460	2067
	P2 =	17.82	RAM	1.07	1.32	-.28	.00	1.07	1.07	.00
	T2 =	643	BLEED	.08	-1.90	1.27	-.27	-.89	.08	-.00
	ERI =	0	POWER	-.01	-.26	.55	.02	.08	-.01	.00
2.00	NR =	.925	7.24	33100	42100	1.57	1271	155.0	550	2067
	P2 =	23.76	RAM	1.08	1.32	-.27	-.00	1.08	1.08	.00
	T2 =	702	BLEED	.05	-2.04	1.40	-.24	-.92	.05	.01
	ERI =	0	POWER	-.00	-.26	.51	.02	.07	-.00	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 36089 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.60	1.28	4.43	18903	2552	1120	16300	13500	1.40	488	10.2
	RAM	1.02	.97	-.01	-.01	1.29	1.35	-.41	.02	.00
	BLEED	-1.32	-.76	-.01	.33	-1.36	-1.65	.91	.01	.00
	POWER	-3.79	.83	-.16	3.63	-1.13	-1.37	2.22	-.00	.00
.90	1.69	5.91	25727	2711	1110	23200	17800	1.44	490	10.2
	RAM	1.02	.98	-.02	-.02	1.23	1.29	-.34	.01	.00
	BLEED	-1.31	-.75	.00	.32	-1.28	-1.67	.94	.01	.00
	POWER	-2.71	.63	-.14	2.59	-.67	-.87	1.51	-.00	.00
1.00	2.41	7.89	34441	2769	1112	32900	23500	1.47	479	10.2
	RAM	1.02	.99	-.02	-.01	1.20	1.27	-.30	.01	.00
	BLEED	-1.32	-.75	-.02	.33	-1.23	-1.73	1.00	.02	.00
	POWER	-2.06	.47	-.13	1.95	-.44	-.62	1.10	-.00	.00
1.50	3.56	10.11	44177	2756	1141	45300	29700	1.49	453	2.9
	RAM	1.04	1.02	-.01	-.01	1.20	1.29	-.28	.01	.00
	BLEED	-1.37	-.67	-.03	.45	-1.14	-1.78	1.15	.09	.00
	POWER	-1.50	.36	-.10	1.41	-.30	-.45	.81	-.01	.00
1.80	5.43	12.97	56777	2744	1178	62300	37400	1.52	422	.0
	RAM	1.07	1.05	-.01	-.01	1.21	1.31	-.27	.01	.00
	BLEED	-1.32	-.67	-.03	.38	-1.11	-1.91	1.27	.08	.00
	POWER	-1.12	.29	-.09	1.04	-.20	-.33	.62	-.01	.00
2.00	7.24	15.23	66153	2738	1195	76000	42900	1.54	396	.0
	RAM	1.08	1.07	-.01	-.00	1.22	1.32	-.27	.00	.00
	BLEED	-1.40	-.68	-.03	.43	-1.14	-2.06	1.42	.05	.00
	POWER	-1.00	.25	-.08	.94	-.17	-.30	.55	-.00	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY                  PRESSURE ALTITUDE    36089 FEET

M0		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.60	NR =	1.00	1.28	2800	11500	1.26	894	41.1	155	1843
	P2 =	4.19	RAM	1.02	1.48	-.56	-.00	1.02	1.02	.00
	T2 =	418	BLEED	.01	-1.77	1.11	-.33	-.98	.01	.00
	ERI =	101	POWER	-.00	-.87	1.91	.06	.20	-.00	.00
.90	NR =	1.00	1.69	5360	15300	1.29	967	54.6	198	1995
	P2 =	5.55	RAM	1.01	1.37	-.43	-.00	1.01	1.01	.00
	T2 =	453	BLEED	.01	-1.77	1.12	-.33	-.98	.01	.00
	ERI =	101	POWER	-.00	-.70	1.49	.04	.14	-.00	.00
1.20	NR =	.991	2.41	9440	20100	1.32	1039	73.5	261	2067
	P2 =	7.89	RAM	1.02	1.29	-.32	-.00	1.02	1.02	.00
	T2 =	503	BLEED	.02	-1.80	1.15	-.33	-.97	.02	-.01
	ERI =	0	POWER	-.00	-.58	1.17	.03	.10	-.00	.00
1.50	NR =	.971	3.56	15600	24800	1.35	1115	97.3	345	2067
	P2 =	11.70	RAM	1.04	1.26	-.26	-.00	1.04	1.04	.00
	T2 =	566	BLEED	.10	-1.85	1.29	-.25	-.89	.10	-.00
	ERI =	0	POWER	-.01	-.43	.88	.02	.09	-.01	.00
1.80	NR =	.945	5.43	24900	30800	1.39	1207	129.7	460	2067
	P2 =	17.82	RAM	1.07	1.33	-.31	.00	1.07	1.07	.00
	T2 =	643	BLEED	.08	-2.05	1.50	-.27	-.89	.08	-.00
	ERI =	0	POWER	-.01	-.28	.63	.02	.08	-.01	-.00
2.00	NR =	.925	7.24	33100	34900	1.41	1271	155.2	550	2067
	P2 =	23.76	RAM	1.08	1.39	-.35	-.00	1.08	1.08	.00
	T2 =	702	BLEED	.05	-2.26	1.71	-.24	-.92	.05	-.00
	ERI =	0	POWER	-.00	-.25	.56	.02	.07	-.00	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 36000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FN8	SFCB	W2K	BTANG
.60	1.28	4.47	14418	2124	1004	14800	12000	1.21	488	10.2
	RAM	1.02	.96	-.01	-.01	1.29	1.35	-.42	.02	.00
	BLEED	-1.32	-.69	-.01	.32	-1.35	-1.67	1.01	.01	.00
	POWER	-3.72	1.03	-.16	3.55	-1.10	-1.35	2.40	-.00	.00
.90	1.69	5.97	19769	2273	998	21000	15600	1.26	490	10.2
	RAM	1.02	.97	-.03	-.02	1.22	1.29	-.35	.01	.00
	BLEED	-1.31	-.68	.02	.33	-1.26	-1.70	1.04	.01	.00
	POWER	-2.66	.78	-.07	2.58	-.61	-.82	1.61	-.00	.00
1.20	2.41	7.96	26425	2330	1001	29800	20400	1.30	479	10.2
	RAM	1.02	.99	-.02	-.01	1.19	1.28	-.31	.01	.00
	BLEED	-1.31	-.69	-.00	.33	-1.21	-1.78	1.13	.02	.00
	POWER	-2.03	.58	-.06	1.95	-.39	-.58	1.16	-.00	.00
1.50	3.56	10.21	33562	2318	1026	41000	25400	1.32	453	10.2
	RAM	1.04	1.02	-.02	-.01	1.20	1.29	-.29	.01	.00
	BLEED	-1.36	-.60	-.01	.45	-1.12	-1.86	1.30	.10	.00
	POWER	-1.48	.45	-.05	1.42	-.26	-.41	.86	-.01	.00
1.80	5.43	13.10	42626	2308	1058	56300	31400	1.36	422	2.9
	RAM	1.07	1.05	-.01	-.01	1.21	1.32	-.29	.01	.00
	BLEED	-1.31	-.59	-.01	.39	-1.10	-2.03	1.48	.08	.00
	POWER	-1.10	.35	-.04	1.05	-.17	-.30	.66	-.01	.00
2.00	7.24	15.39	49205	2303	1074	68700	35600	1.38	396	.0
	RAM	1.08	1.06	-.01	-.01	1.21	1.33	-.29	.00	.00
	BLEED	-1.39	-.61	-.01	.43	-1.12	-2.21	1.66	.05	.00
	POWER	-.99	.31	-.04	.94	-.14	-.27	.58	-.00	.00

# CONFIDENTIAL

GEI 67870

**CONFIDENTIAL**

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 36089 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.60	NR = 1.00	1.28	2800	10600	1.09	895	41.3	155	1843
	P2 = 4.19	RAM	1.02	1.42	-.43	-.00	1.02	1.02	.00
	T2 = 418	BLEED	.01	-1.74	1.10	-.33	-.97	.01	.00
	ERI = 101	POWER	-.00	-1.20	2.46	.06	.20	-.00	.00
.90	NR = 1.00	1.69	5360	13900	1.16	968	54.8	198	1995
	P2 = 5.55	RAM	1.01	1.32	-.33	-.00	1.01	1.01	.00
	T2 = 453	BLEED	.01	-1.76	1.12	-.33	-.98	.01	-.01
	ERI = 101	POWER	-.00	-.78	1.71	.04	.14	-.00	.00
1.20	NR = .991	2.41	9440	17800	1.23	1040	73.8	261	2067
	P2 = 7.89	RAM	1.02	1.25	-.25	-.00	1.02	1.02	.00
	T2 = 503	BLEED	.02	-1.82	1.20	-.33	-.96	.02	-.01
	ERI = 0	POWER	-.00	-.52	1.20	.03	.10	-.00	.00
1.50	NR = .971	3.56	15600	22400	1.24	1116	97.6	345	2067
	P2 = 11.70	RAM	1.04	1.29	-.27	-.00	1.04	1.04	.00
	T2 = 566	BLEED	.10	-1.93	1.42	-.25	-.88	.10	-.00
	ERI = 0	POWER	-.01	-.40	.93	.02	.08	-.01	.00
1.80	NR = .945	5.43	24900	27300	1.29	1208	130.1	459	2067
	P2 = 17.82	RAM	1.07	1.39	-.34	.00	1.07	1.07	.00
	T2 = 643	BLEED	.08	-2.17	1.69	-.26	-.89	.08	-.00
	ERI = 0	POWER	-.01	-.23	.65	.02	.08	-.01	-.00
2.00	NR = .925	7.24	33100	30700	1.32	1273	155.7	549	2067
	P2 = 23.76	RAM	1.08	1.35	-.28	.00	1.08	1.08	.00
	T2 = 702	BLEED	.06	-2.34	1.85	-.25	-.91	.06	-.00
	ERI = 0	POWER	-.00	-.20	.56	.02	.07	-.00	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 36089 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.60	1.28	4.52	11536	1843	920	13700	10900	1.06	488	15.2
	RAM 1.02	1.01	1.01	.00	-.00	1.29	1.36	-.37	.02	.00
	BLEED -1.31	-.68	.00	.32	-1.34	-1.69	1.04	.01	.00	.00
	POWER -3.65	1.25	.00	3.57	-.98	-1.23	2.49	-.00	.00	.00
.90	1.69	6.03	16199	1995	921	19600	14200	1.14	490	15.2
	RAM 1.01	1.01	.00	-.00	1.23	1.32	-.33	.01	.00	.00
	BLEED -1.31	-.68	-.01	.31	-1.27	-1.76	1.11	.01	.00	.00
	POWER -2.61	.93	.00	2.56	-.56	-.77	1.71	-.00	.00	.00
1.20	2.41	8.04	21892	2067	929	27900	18500	1.19	479	15.2
	RAM 1.02	1.02	.00	-.00	1.20	1.30	-.30	.01	.00	.00
	BLEED -1.30	-.66	-.01	.32	-1.21	-1.84	1.22	.02	.00	.00
	POWER -2.00	.68	.00	1.96	-.35	-.53	1.22	-.00	-34.02	.00
1.50	3.56	10.32	27801	2067	955	38400	22800	1.22	453	10.2
	RAM 1.04	1.04	.00	-.00	1.20	1.31	-.29	.01	.00	.00
	BLEED -1.35	-.56	-.00	.45	-1.11	-1.93	1.42	.10	.00	.00
	POWER -1.47	.53	.00	1.44	-.23	-.38	.91	-.01	.00	.00
1.80	5.43	13.23	35201	2067	987	52900	28000	1.26	422	2.9
	RAM 1.07	1.07	.00	.00	1.21	1.34	-.29	.01	.00	.00
	BLEED -1.30	-.54	-.00	.38	-1.09	-2.13	1.63	.08	.00	.00
	POWER -1.08	.41	-.00	1.05	-.15	-.27	.68	-.01	.00	.00
2.00	7.24	15.55	40468	2067	1003	64600	31500	1.28	395	.0
	RAM 1.08	1.08	.00	-.00	1.21	1.35	-.29	.00	.00	.00
	BLEED -1.35	-.55	-.00	.40	-1.10	-2.32	1.84	.06	.00	.00
	POWER -.97	.36	.00	.95	-.12	-.24	.60	-.00	.00	.00

10-11

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 7.0

JANUARY 1964

STANDARD DAY          PRESSURE ALTITUDE    36089 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.60	NR =	1.00	2800	8450	1.04	876	38.2	155	1525	
	P2 =	4.19	1.02	1.52	-.57	-.00	1.01	1.02	-.01	
	T2 =	418	BLEED	-.01	-1.18	1.53	-.20	-.70	.01	.64
	ERI =	101	POWER	-.02	5.46	4.17	.61	2.55	-.02	5.54
.90	NR =	1.00	5240	10200	1.09	925	48.4	193	1577	
	P2 =	5.55	1.01	1.48	-.49	-.00	1.02	1.01	.01	
	T2 =	453	BLEED	.01	-1.31	1.62	-.21	-.72	.01	.58
	ERI =	0	POWER	-.04	4.36	3.21	.47	1.94	-.04	4.21
1.20	NR =	.991	9030	12800	1.14	990	63.6	250	1640	
	P2 =	7.89	1.02	1.46	-.49	-.00	1.02	1.02	-.00	
	T2 =	503	BLEED	.03	-1.31	1.84	-.17	-.65	.03	.67
	ERI =	0	POWER	-.09	3.80	2.35	.37	1.48	-.09	3.37
1.50	NR =	.971	15700	19100	1.20	1103	93.3	347	1834	
	P2 =	11.70	1.04	1.34	-.32	-.00	1.04	1.04	-.00	
	T2 =	566	BLEED	.04	-1.26	1.80	-.18	-.65	.04	.66
	ERI =	0	POWER	-.07	2.60	1.60	.25	.99	-.07	2.26
1.80	NR =	.945	25000	24600	1.27	1200	126.6	460	1923	
	P2 =	17.82	1.07	1.43	-.39	.00	1.07	1.07	.00	
	T2 =	643	BLEED	.05	-1.54	1.98	-.20	-.69	.05	.56
	ERI =	0	POWER	-.05	1.85	1.00	.16	.62	-.05	1.45
2.00	NR =	.925	33100	28400	1.31	1267	152.7	550	1966	
	P2 =	23.76	1.08	1.36	-.30	-.00	1.08	1.08	-.00	
	T2 =	702	BLEED	.04	-1.63	2.07	-.19	-.71	.04	.54
	ERI =	0	POWER	-.02	1.60	.79	.12	.52	-.02	1.16

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 7.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 36089 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.60	1.28	3.57	8752	1525	1045	11500	8690	1.01	489	15.2
	RAM	1.01	1.00	-.01	.00	1.34	1.45	-.49	.02	.00
	BLEED	-.64	.33	.64	-.00	-.86	-1.14	1.49	.01	.00
	POWER	3.02	9.74	5.54	.01	3.98	5.27	4.36	-.02	.00
.90	1.69	4.53	11117	1577	1044	15700	10400	1.07	479	15.2
	RAM	1.03	1.02	.01	-.01	1.29	1.43	-.45	.01	.00
	BLEED	-.69	.28	.58	.03	-.86	-1.29	1.60	.01	.00
	POWER	2.19	7.66	4.21	.10	2.86	4.31	3.26	-.04	.00
1.20	2.41	5.98	14600	1640	1045	22100	13100	1.12	458	10.2
	RAM	1.02	1.00	-.00	.00	1.24	1.39	-.41	.01	.00
	BLEED	-.61	.49	.67	.01	-.73	-1.26	1.78	.03	.00
	POWER	1.78	6.22	3.37	-.01	2.16	3.71	2.44	-.09	.00
1.50	3.56	8.81	23017	1834	1045	35100	19500	1.18	455	10.2
	RAM	1.04	1.04	-.00	.00	1.21	1.35	-.34	.01	.00
	BLEED	-.58	.51	.66	-.01	-.68	-1.27	1.81	.04	.00
	POWER	1.26	4.26	2.26	-.06	1.42	2.61	1.59	-.07	.00
1.80	5.43	12.00	31254	1923	1045	50200	25300	1.24	423	2.9
	RAM	1.07	1.07	.00	.00	1.22	1.37	-.32	.01	.00
	BLEED	-.62	.40	.56	-.01	-.72	-1.48	1.92	.05	.00
	POWER	.77	2.88	1.45	-.01	.89	1.81	1.04	-.05	.00
2.00	7.24	14.50	37125	1966	1045	62300	29200	1.27	396	2.9
	RAM	1.08	1.08	-.00	.00	1.22	1.37	-.32	.00	.00
	BLEED	-.65	.40	.54	-.00	-.73	-1.61	2.06	.04	.00
	POWER	.63	2.42	1.16	-.00	.73	1.58	.81	-.02	-45.81

10-13

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 8.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 36069 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC	
.60	NR =	1.00	1.28	2700	7110	1.02	843	35.1	150	1375
	P2 =	4.19	RAM	1.02	1.59	-.65	-.00	1.01	1.02	-.01
	T2 =	418	BLEED	.01	-1.15	1.74	-.14	-.64	.01	.76
	ERI =	0	POWER	-.04	6.62	4.55	.57	2.83	-.04	6.23
.90	NR =	1.00	1.69	4990	8410	1.08	892	43.9	184	1425
	P2 =	5.55	RAM	1.01	1.53	-.59	-.00	1.01	1.01	-.01
	T2 =	453	BLEED	.03	-1.30	1.84	-.17	-.65	.03	.68
	ERI =	0	POWER	-.09	5.28	3.45	.44	2.12	-.09	4.74

10-14

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 8.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 36089 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCR	W2K	BTANG
.60	1.28	3.17	7242	1375	1070	10100	7360	.98	471	15.2
	RAM	1.01	.99	-.01	.00	1.38	1.51	-.57	.02	.00
	BLEED	-.57	.56	.76	-.01	-.80	-1.09	1.68	.01	.00
	POWER	3.57	11.30	6.23	-.19	4.62	6.33	4.83	-.04	.00
.90	1.69	3.98	9070	1425	1070	13600	8630	1.05	456	15.2
	RAM	1.01	.98	-.01	.00	1.31	1.48	-.53	.01	.00
	BLEED	-.60	.51	.68	.01	-.78	-1.26	1.80	.03	.00
	POWER	2.50	8.83	4.74	.01	3.22	5.13	3.59	-.09	.00

10-15

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE 36089 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.60	NR =	1.00	2560	5830	1.02	814	31.8	142	1250
	P2 =	4.19	RAM 1.02	1.60	-.77	-.01	.99	1.02	-.07
	T2 =	418	BLEED .04	-1.27	1.85	-.18	-.65	.04	.68
	ERI =	0	POWER -.15	7.27	5.24	.66	3.00	-.15	6.75
.90	NR =	1.00	4560	6140	1.10	849	37.7	168	1248
	P2 =	5.55	RAM 1.01	1.69	-.78	-.00	1.01	1.01	-.01
	T2 =	453	BLEED .04	-1.60	2.13	-.20	-.68	.04	.60
	ERI =	0	POWER -.13	7.75	3.94	.62	2.69	-.13	6.08
1.20	NR =	.991	6870	5160	1.23	872	41.2	190	1166
	P2 =	7.89	RAM 1.02	1.89	-.97	-.00	1.02	1.02	.01
	T2 =	503	BLEED .02	-2.03	2.86	-.14	-.67	.02	.66
	ERI =	0	POWER -.05	8.92	2.85	.43	2.48	-.05	5.39
1.50	NR =	.971	15700	17500	1.20	1098	91.3	347	1733
	P2 =	11.70	RAM 1.04	1.35	-.34	-.00	1.04	1.04	-.00
	T2 =	566	BLEED .04	-1.32	1.94	-.17	-.64	.04	.68
	ERI =	0	POWER -.04	2.50	1.55	.19	.94	-.04	2.08
1.80	NR =	.945	25000	22500	1.26	1194	123.9	461	1815
	P2 =	17.82	RAM 1.07	1.44	-.40	-.00	1.07	1.07	-.00
	T2 =	643	BLEED .04	-1.53	2.14	-.18	-.66	.04	.63
	ERI =	0	POWER -.04	2.11	1.03	.15	.70	-.04	1.55
2.00	NR =	.925	33100	25900	1.30	1261	149.5	551	1858
	P2 =	23.76	RAM 1.08	1.41	-.35	-.00	1.08	1.08	-.00
	T2 =	702	BLEED .03	-1.58	2.27	-.19	-.67	.03	.65
	ERI =	0	POWER -.03	1.87	.85	.13	.58	-.03	1.30

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 36089 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.60	1.28	2.80	5942	1250	1095	8630	6070	.98	447	15.2
	RAM	.93	.89	-.07	.00	1.37	1.52	-.67	.02	.00
	BLEED	-.57	.54	.68	.01	-.84	-1.21	1.79	.04	.00
	POWER	3.28	12.66	6.75	.03	4.82	6.92	5.59	-.15	.00
.90	1.69	3.31	6735	1248	1095	10900	6350	1.06	417	15.2
	RAM	1.00	.98	-.01	.01	1.36	1.61	-.69	.01	.00
	BLEED	-.64	.48	.60	.00	-.87	-1.53	2.05	.04	.00
	POWER	3.20	11.83	6.08	-.03	4.24	7.38	4.30	-.13	.00
1.20	2.41	3.60	6334	1166	1094	12200	5360	1.18	349	15.2
	RAM	1.04	1.01	.01	-.01	1.36	1.79	-.86	.01	.00
	BLEED	-.66	.74	.66	.03	-.85	-1.96	2.79	.02	.00
	POWER	2.81	11.90	5.39	.05	3.73	8.57	3.20	-.05	.00
1.50	3.56	8.14	21005	1733	1095	33600	17900	1.17	455	10.2
	RAM	1.04	1.04	-.00	.00	1.22	1.38	-.37	.01	.00
	BLEED	-.59	.58	.68	.00	-.69	-1.32	1.95	.04	.00
	POWER	1.12	4.10	2.08	-.00	1.32	2.51	1.54	-.04	.00
1.80	5.43	11.08	28362	1815	1095	48100	23100	1.23	424	2.9
	RAM	1.07	1.07	-.00	.00	1.23	1.39	-.35	.01	.00
	BLEED	-.59	.57	.63	-.01	-.69	-1.48	2.09	.04	.00
	POWER	.83	3.18	1.55	.00	.97	2.05	1.09	-.04	.00
2.00	7.24	13.39	33654	1858	1095	59800	26600	1.26	396	2.9
	RAM	1.08	1.08	-.00	.00	1.22	1.40	-.35	.00	.00
	BLEED	-.56	.64	.65	-.04	-.67	-1.55	2.24	.03	.00
	POWER	.69	2.75	1.30	.01	.81	1.85	.87	-.03	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 10.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE      36089 FEET

M0		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.60	NR = 1.00	1.28	2240	3700	1.09	762	25.8	124	1068
	P2 = 4.19	RAM	1.02	1.94	-1.15	-.01	.99	1.02	-.06
	T2 = 418	BLEED	.03	-1.76	2.31	-.21	-.70	.03	.57
	ERI = 0	POWER	-.15	12.46	6.11	1.00	4.21	-.15	9.30
.90	NR = 1.00	1.69	3670	2810	1.32	777	27.3	135	1000
	P2 = 5.55	RAM	1.01	2.26	-1.55	-.01	.99	1.01	-.06
	T2 = 453	BLEED	.01	-2.23	3.23	-.15	-.66	.01	.71
	ERI = 0	POWER	-.06	16.00	3.14	.67	3.93	-.06	8.45

10-18

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.10.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE 36089 FEET

MO	P2/PO	P8/PO	WFT	T8	AB	FGB	FNB	SFCB	W2K	BTANG
.60	1.28	2.22	4049	1068	1120	6200	3970	1.02	390	15.2
	RAM	.94	.90	-.06	.00	1.51	1.79	-.98	.02	.00
	BLEED	-.64	.49	.57	.01	-1.03	-1.63	2.17	.03	.00
	POWER	4.54	18.78	9.30	.06	7.27	11.45	7.10	-.15	.00
.90	1.69	2.34	3725	1000	1120	6740	3070	1.21	335	15.2
	RAM	.94	.89	-.06	-.00	1.47	2.02	-1.26	.01	.00
	BLEED	-.56	.89	.71	-.02	-.91	-2.01	3.00	.01	.00
	POWER	4.19	19.29	8.45	.03	6.55	14.45	4.64	-.06	.00

10-19

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 36089 FEET

M0		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.60	NR =	1.00	1730	980	2.00	689	17.5	96	818
	P2 =	4.19	RAM 1.02	2.53	-2.57	-.03	.89	1.02	-.36
	T2 =	418	BLEED .01	-3.13	4.57	-.16	-.64	.01	.77
	ERI =	0	POWER -.09	32.54	-1.17	1.09	5.82	-.09	11.95
.90	NR =	1.00	2820	80	19.89	702	18.2	104	747
	P2 =	5.55	RAM 1.01	21.60	268.24	-.03	.89	1.01	-.35
	T2 =	453	BLEED .01	-47.77	173.65	-.18	-.70	.01	.64
	ERI =	0	POWER -.08	413.09	-217.06	1.11	5.94	-.08	11.95
1.20	NR =	.991	4680	-520	-2.720	749	22.4	130	719
	P2 =	7.89	RAM .89	-3.02	2.63	-.06	.77	.89	-.26
	T2 =	503	BLEED -.42	16.20	-13.03	-.34	-1.39	-.42	.07
	ERI =	100	POWER -11.78	57.56	-51.17	-3.27	-11.81	-11.78	.33
1.50	NR =	.971	15700	13900	1.20	1087	86.6	348	1510
	P2 =	11.70	RAM 1.04	1.43	-.44	-.00	1.04	1.04	-.01
	T2 =	566	BLEED .02	-1.30	2.34	-.09	-.58	.02	.85
	ERI =	0	POWER -.03	2.90	1.51	.17	.94	-.03	2.11
1.80	NR =	.945	25000	17600	1.26	1180	117.4	462	1577
	P2 =	17.82	RAM 1.07	1.54	-.51	-.00	1.07	1.07	-.00
	T2 =	643	BLEED .03	-1.45	2.65	-.10	-.57	.03	.87
	ERI =	0	POWER -.03	2.61	.99	.15	.74	-.03	1.66
2.00	NR =	.925	33200	20000	1.31	1248	141.7	552	1620
	P2 =	23.76	RAM 1.08	1.49	-.43	.00	1.08	1.08	.01
	T2 =	702	BLEED .03	-1.68	2.83	-.11	-.60	.03	.79
	ERI =	0	POWER -.02	2.01	.78	.08	.55	-.02	1.20

10-20

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 36089 FEET

M0	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	WZK	BTANG
.60	1.28	1.46	1954	818	1257	2960	1230	1.59	301	10.2
	RAM	.52	.28	-.36	.02	1.49	2.15	-2.09	.02	.00
	BLEED	-.38	1.23	.77	-.01	-1.06	-2.57	3.96	.01	.00
	POWER	4.00	31.30	11.95	.02	11.09	26.75	4.35	-.09	.00
.90	1.69	1.50	1565	747	1257	3160	340	4.57	257	10.2
	RAM	.56	.14	-.35	.01	1.49	5.43	-7.26	.01	.00
	BLEED	-.48	1.44	.64	.04	-1.23	-11.40	15.49	.01	.00
	POWER	3.80	39.00	11.95	.25	10.51	97.59	-50.04	-.08	.00
1.20	2.41	1.72	1425	719	1254	4440	-240	-5.970	237	10.2
	RAM	.64	.00	-.26	-.07	1.30	-6.83	5.09	-.13	.00
	BLEED	-1.17	.00	.07	.13	-2.36	35.79	-23.29	-.42	.00
	POWER	-9.02	.00	.33	.11	-19.20	126.23	-99.0	-11.78	.00
1.50	3.56	6.53	16676	1510	1258	29900	14200	1.17	456	10.2
	RAM	1.03	1.02	-.01	.00	1.25	1.47	-.49	.01	.00
	BLEED	-.48	1.00	.85	-.02	-.61	-1.31	2.36	.02	.00
	POWER	1.18	4.47	2.11	-.05	1.37	2.92	1.50	-.03	.00
1.80	5.43	8.89	22181	1577	1258	43100	18000	1.23	424	2.9
	RAM	1.07	1.07	-.00	-.00	1.25	1.49	-.46	.01	.00
	BLEED	-.47	1.14	.87	-.02	-.57	-1.40	2.60	.03	.00
	POWER	.93	3.65	1.66	-.04	1.05	2.54	1.06	-.03	.00
2.00	7.24	10.76	26217	1620	1257	53800	20500	1.28	397	2.9
	RAM	1.09	1.09	.01	-.01	1.25	1.51	-.46	-.00	.00
	BLEED	-.56	1.08	.79	.02	-.62	-1.66	2.81	.03	.00
	POWER	.63	2.82	1.20	.02	.75	1.99	.80	-.02	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.12.4

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE    36089 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.90	NR =	1.00	2930	-270	-5.315	707	18.7	108	710
	P2 =	5.55	RAM .98	-4.23	3.49	-.04	.84	.98	-.36
	T2 =	453	BLEED -.72	21.28	-16.13	-.44	-1.64	-.72	.26
	ERI =	100	POWER-16.92	90.70	-77.59	-4.85	-16.50	-16.92	2.35
1.20	NR =	.991	5030	-820	-1.740	765	24.1	139	704
	P2 =	7.89	RAM .90	-1.51	1.41	-.06	.79	.90	-.26
	T2 =	503	BLEED -.60	10.31	-8.93	-.38	-1.57	-.60	.08
	ERI =	100	POWER-10.22	29.55	-27.53	-3.09	-10.39	-10.22	-.01
1.50	NR =	.971	15700	11300	1.28	1083	84.1	348	1391
	P2 =	11.70	RAM 1.04	1.49	-.51	-.00	1.04	1.04	-.00
	T2 =	566	BLEED .03	-1.50	2.69	-.09	-.59	.03	.84
	ERI =	0	POWER -.03	2.94	1.42	.10	.86	-.03	1.93
1.80	NR =	.945	25100	14300	1.33	1175	113.9	463	1452
	P2 =	17.82	RAM 1.07	1.66	-.65	-.00	1.07	1.07	-.00
	T2 =	643	BLEED .03	-1.77	3.05	-.10	-.59	.03	.82
	ERI =	0	POWER -.02	2.53	.86	.08	.64	-.02	1.41
2.00	NR =	.925	33200	16100	1.38	1242	137.3	552	1488
	P2 =	23.76	RAM 1.08	1.67	-.64	-.00	1.08	1.08	-.00
	T2 =	702	BLEED .03	-2.06	3.38	-.11	-.61	.03	.77
	ERI =	0	POWER -.02	2.43	.60	.08	.55	-.02	1.21

# CONFIDENTIAL

GEL67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.12.4

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 36089 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.90	1.69	1.37	1425	710	1450	2840	-90	-15.310	267	10.2
	RAM .43		-.00	-.36	.00	1.46	-13.72	8.14	-.02	.00
	BLEED -.83		.00	.26	-.04	-2.85	64.02	-32.66	-.72	.00
	POWER -7.16		.00	2.35	-2.31	-26.57	277.10	-182.7	-16.92	.00
1.20	2.41	1.60	1425	704	1450	4410	-620	-2.310	255	10.2
	RAM .55		.00	-.26	-.02	1.32	-2.11	1.91	-.11	.00
	BLEED -1.08		.00	.08	-.01	-2.61	13.82	-11.45	-.60	.00
	POWER -7.16		.00	-.01	-.05	-17.26	40.14	-36.5	-10.22	.00
1.50	3.56	5.40	14468	1391	1450	27500	11800	1.23	457	10.2
	RAM 1.04		1.02	-.00	-.00	1.28	1.60	-.63	.01	.00
	BLEED -.51		1.13	.84	-.00	-.64	-1.52	2.71	.03	.00
	POWER 1.03		4.41	1.93	.00	1.26	2.99	1.37	-.03	.00
1.80	5.43	7.33	19036	1452	1450	39800	14800	1.29	425	2.9
	RAM 1.07		1.06	-.00	.00	1.27	1.60	-.59	.01	.00
	BLEED -.49		1.21	.82	-.03	-.62	-1.72	3.00	.03	.00
	POWER .75		3.42	1.41	.00	.90	2.45	.93	-.02	.00
2.00	7.24	8.86	22215	1488	1450	49800	16500	1.34	397	.0
	RAM 1.08		1.08	-.00	.00	1.26	1.62	-.59	.00	.00
	BLEED -.52		1.22	.77	-.03	-.64	-1.97	3.29	.03	.00
	POWER .66		3.06	1.21	-.01	.76	2.33	.70	-.02	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY + 40 F      PRESSURE ALTITUDE    36089 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC
.60	NR =	1.00	2790	15600	1.84	982	40.9	147	2028
	P2 =	4.19	1.02	1.38	-.42	-.00	1.02	1.02	.00
	T2 =	461	.01	-1.67	.88	-.33	-.98	.01	.01
	ERI =	101	-.00	-1.58	2.22	.05	.18	-.00	-.00
.90	NR =	1.00	5240	19300	1.86	1035	51.6	184	2067
	P2 =	5.55	1.02	1.30	-.33	-.00	1.02	1.02	.00
	T2 =	500	.02	-1.65	.86	-.33	-.97	.02	-.00
	ERI =	0	-.00	-1.18	1.69	.04	.14	-.00	-.00
1.20	NR =	.991	9020	24000	1.89	1100	66.7	238	2067
	P2 =	7.90	1.02	1.30	-.32	-.00	1.02	1.02	-.00
	T2 =	554	.08	-1.80	1.07	-.26	-.91	.08	-.01
	ERI =	0	-.01	-.78	1.18	.03	.12	-.01	-.00
1.50	NR =	.971	14800	30700	1.90	1184	87.6	312	2067
	P2 =	11.70	1.04	1.32	-.31	-.00	1.04	1.04	.00
	T2 =	624	.08	-1.81	1.10	-.26	-.89	.08	-.00
	ERI =	0	-.01	-.66	.99	.03	.12	-.01	.00
2.00	NR =	.925	30700	44300	1.96	1347	136.8	486	2067
	P2 =	23.79	1.09	1.31	-.24	.00	1.09	1.09	-.00
	T2 =	774	.03	-2.05	1.30	-.25	-.94	.03	-.00
	ERI =	0	-.00	-.84	.39	.02	.08	-.00	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 36089 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.60	1.28	4.37	28583	3462	1289	18500	15700	1.82	487	10.2
	RAM 1.02	.99	.01	.00	1.31	1.36	-.40	.02	.00	
	BLEED -1.31	-.81	-.07	.29	-1.40	-1.65	.86	.01	.00	
	POWER -3.70	.63	-.50	3.40	-1.33	-1.57	2.21	-.00	.00	
.90	1.69	5.47	35799	3512	1298	24700	19500	1.84	478	10.2
	RAM 1.02	.99	-.00	-.01	1.26	1.32	-.35	.02	.00	
	BLEED -1.32	-.81	-.04	.32	-1.31	-1.67	.88	.02	.00	
	POWER -2.99	.50	-.34	2.79	-.89	-1.13	1.64	-.00	.00	
1.20	2.41	6.87	45351	3502	1329	33500	24500	1.85	457	2.9
	RAM 1.02	1.00	-.01	-.01	1.22	1.30	-.32	.01	50.34	
	BLEED -1.41	-.76	-.07	.45	-1.24	-1.73	1.00	.08	.00	
	POWER -2.26	.39	-.28	2.09	-.61	-.83	1.23	-.01	.00	
1.50	3.57	8.69	58140	3490	1370	45800	31100	1.87	429	2.9
	RAM 1.04	1.03	-.01	-.01	1.22	1.31	-.30	.01	.00	
	BLEED -1.34	-.74	-.06	.40	-1.18	-1.78	1.07	.08	.00	
	POWER -1.68	.32	-.22	1.54	-.42	-.61	.93	-.01	.00	
2.00	7.25	12.92	86684	3477	1427	75900	45100	1.92	367	.0
	RAM 1.09	1.08	-.00	-.00	1.24	1.35	-.29	.01	.00	
	BLEED -1.42	-.78	-.08	.41	-1.21	-2.05	1.31	.03	.00	
	POWER -1.15	-.45	-.52	.82	-.48	-.80	.35	-.00	.00	

10-25

# CONFIDENTIAL

GEI 67870

**CONFIDENTIAL**

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 36089 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.60	NR =	1.00	1.28	2790	10700	1.16	984	41.2	147	2028
	P2 =	4.19	RAM	1.02	1.42	-.43	-.00	1.02	1.02	.00
	T2 =	461	BLEED	.01	-1.73	1.10	-.33	-.97	.01	.00
	ERI =	101	POWER	-.00	-1.13	2.37	.05	.18	-.00	-.00
.90	NR =	1.00	1.69	5240	12800	1.21	1037	52.0	184	2067
	P2 =	5.55	RAM	1.02	1.34	-.35	-.00	1.01	1.02	.00
	T2 =	500	BLEED	.02	-1.80	1.17	-.33	-.96	.02	-.01
	ERI =	0	POWER	-.00	-.85	1.83	.04	.14	-.00	.00
1.20	NR =	.991	2.41	9010	15500	1.25	1102	67.1	238	2067
	P2 =	7.90	RAM	1.02	1.40	-.41	-.00	1.02	1.02	.00
	T2 =	554	BLEED	.09	-1.94	1.41	-.26	-.89	.09	-.01
	ERI =	0	POWER	-.01	-.63	1.40	.03	.11	-.01	.00
1.50	NR =	.971	3.57	14800	18800	1.29	1186	88.1	311	2067
	P2 =	11.70	RAM	1.04	1.33	-.31	-.00	1.04	1.04	-.00
	T2 =	624	BLEED	.08	-2.06	1.57	-.26	-.88	.08	.01
	ERI =	0	POWER	-.01	-.48	1.08	.03	.12	-.01	.00
2.00	NR =	.925	7.25	30700	24600	1.38	1349	137.7	486	2067
	P2 =	23.79	RAM	1.09	1.45	-.39	.00	1.09	1.09	.00
	T2 =	774	BLEED	.03	-2.66	2.19	-.25	-.94	.03	-.01
	ERI =	0	POWER	-.00	-.32	.75	.02	.08	-.00	.00

10-26

**CONFIDENTIAL**

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY + 40 F      PRESSURE ALTITUDE    36089 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FSB	FNB	SFCB	W2K	BTANG
.60	1.28	4.53	12319	2028	921	13700	10900	1.13	487	15.2
	RAM	1.02	1.01	.00	-.00	1.29	1.36	-.37	.02	.00
	BLEED	-1.30	-.66	.00	.31	-1.33	-1.68	1.04	.01	.00
	POWER	-3.48	1.22	-.00	3.41	-.93	-1.17	2.41	-.00	.00
.90	1.69	5.67	15468	2067	929	18300	13100	1.18	478	15.2
	RAM	1.02	1.01	.00	-.00	1.25	1.34	-.35	.02	.00
	BLEED	-1.30	-.66	-.01	.32	-1.27	-1.79	1.17	.02	.00
	POWER	-2.84	.97	.00	2.78	-.64	-.90	1.88	-.00	.00
1.20	2.41	7.13	19285	2067	951	24800	15800	1.22	457	10.2
	RAM	1.02	1.02	.00	-.00	1.22	1.33	-.34	.01	.00
	BLEED	-1.37	-.58	-.01	.45	-1.18	-1.91	1.37	.09	.00
	POWER	-2.17	.76	.00	2.12	-.42	-.66	1.43	-.01	.00
1.50	3.57	9.03	24154	2067	981	33900	19100	1.27	429	10.2
	RAM	1.04	1.04	-.00	-.00	1.21	1.35	-.33	.01	.00
	BLEED	-1.30	-.54	.01	.39	-1.12	-2.06	1.57	.08	.00
	POWER	-1.59	.60	.00	1.55	-.27	-.47	1.07	-.01	.00
2.00	7.25	13.47	34029	2067	1021	56000	25300	1.35	366	2.9
	RAM	1.09	1.09	.00	.00	1.24	1.41	-.35	.01	.00
	BLEED	-1.39	-.56	-.01	.42	-1.15	-2.59	2.11	.03	.00
	POWER	-1.12	.43	.00	1.09	-.15	-.32	.75	-.00	.00

10-27

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 36089 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.60	NR =	1.00	1.28	2320	4420	1.12	855	27.5	122	1258
	P2 =	4.19	RAM	1.02	1.79	-.98	-.01	.99	1.02	-.06
	T2 =	461	BLEED	.03	-1.52	2.07	-.20	-.68	.03	.62
	ERI =	0	POWER	-.17	10.00	5.62	.84	3.63	-.17	8.13
.90	NR =	1.00	1.69	3850	3620	1.29	872	29.5	135	1183
	P2 =	5.55	RAM	1.02	1.99	-1.23	-.01	.99	1.02	-.06
	T2 =	500	BLEED	.02	-1.85	2.79	-.13	-.64	.02	.75
	ERI =	0	POWER	-.08	13.20	3.47	.70	3.60	-.08	7.86
1.20	NR =	.991	2.41	5600	2280	1.70	890	30.7	148	1072
	P2 =	7.90	RAM	1.02	2.63	-2.03	-.01	1.00	1.02	-.06
	T2 =	554	BLEED	.02	-3.80	4.80	-.17	-.74	.02	.51
	ERI =	0	POWER	-.06	19.28	-.60	.66	3.38	-.06	7.18
1.50	NR =	.971	3.57	14800	15300	1.26	1171	83.6	313	1800
	P2 =	11.70	RAM	1.04	1.39	-.39	-.00	1.04	1.04	-.00
	T2 =	624	BLEED	.04	-1.45	2.04	-.18	-.66	.04	.62
	ERI =	0	POWER	-.06	2.90	1.67	.23	1.04	-.06	2.30
2.00	NR =	.925	7.25	30700	21300	1.38	1339	133.4	486	1906
	P2 =	23.79	RAM	1.09	1.52	-.46	.00	1.09	1.09	.00
	T2 =	774	BLEED	.02	-2.04	2.50	-.19	-.74	.02	.48
	ERI =	0	POWER	-.02	2.08	.84	.14	.61	-.02	1.33

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY + 40 F      PRESSURE ALTITUDE 36089 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.60	1.28	2.44	4945	1258	1095	7010	4690	1.05	405	15.2
	RAM	.94	.90	-.06	-.00	1.45	1.66	-.83	.02	.00
	BLEED	-.60	.50	.62	-.00	-.93	-1.41	1.96	.03	.00
	POWER	4.03	15.81	8.13	-.01	6.14	9.26	6.36	-.17	.00
.90	1.69	2.60	4679	1183	1095	7720	3880	1.21	351	15.2
	RAM	.93	.88	-.06	-.00	1.41	1.80	-1.01	.02	.00
	BLEED	-.54	.86	.75	-.01	-.84	-1.68	2.61	.02	.00
	POWER	4.22	16.83	7.86	-.27	6.01	12.05	4.59	-.08	.00
1.20	2.41	2.68	3871	1072	1094	8120	2520	1.53	284	15.2
	RAM	.95	.87	-.06	-.01	1.40	2.25	-1.56	.01	.00
	BLEED	-.72	.73	.51	.05	-1.03	-3.35	4.29	.02	.00
	POWER	3.50	18.64	7.18	.08	5.26	17.05	1.50	-.06	.00
1.50	3.57	7.48	19249	1800	1095	30400	15600	1.24	430	10.2
	RAM	1.04	1.03	-.00	-.00	1.23	1.42	-.42	.01	.00
	BLEED	-.61	.55	.62	.01	-.72	-1.45	2.04	.04	.00
	POWER	1.25	4.63	2.30	-.02	1.47	2.91	1.66	-.06	.00
2.00	7.25	11.98	29344	1906	1095	52600	21900	1.34	367	2.9
	RAM	1.09	1.10	.00	-.00	1.25	1.46	-.40	.01	.00
	BLEED	-.76	.39	.48	.06	-.81	-1.97	2.44	.02	.00
	POWER	.71	2.96	1.33	.02	.84	2.04	.88	-.02	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 36089 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.60	NR =	1.00	1420	310	4.70	712	13.8	75	842
	P2 =	4.19	RAM 1.02	3.29	-4.16	-.04	.81	1.02	-.54
	T2 =	461	BLEED .01	-6.24	8.45	-.16	-.63	.01	.80
	ERI =	0	POWER -.09	74.37	-32.07	1.31	6.97	-.09	13.67
.90	NR =	1.00	2640	-160	-8.935	756	16.8	93	797
	P2 =	5.55	RAM 1.05	-7.55	5.48	-.02	.90	1.05	-.40
	T2 =	500	BLEED -.65	32.81	-21.99	-.42	-1.56	-.65	.29
	ERI =	100	POWER-18.87	172.68	-134.93	-5.41	-18.28	-18.87	3.20
1.20	NR =	.991	4610	-610	-2.340	820	21.9	121	783
	P2 =	7.90	RAM .95	-2.23	2.01	-.04	.84	.95	-.27
	T2 =	554	BLEED -.60	13.10	-10.95	-.37	-1.56	-.60	.11
	ERI =	100	POWER-12.15	45.36	-41.24	-3.26	-12.17	-12.15	.44
1.50	NR =	.971	14900	11900	1.27	1159	79.3	313	1567
	P2 =	11.70	RAM 1.04	1.50	-.52	-.00	1.04	1.04	-.01
	T2 =	624	BLEED .03	-1.39	2.55	-.09	-.57	.03	.86
	ERI =	0	POWER -.04	3.36	1.61	.17	1.03	-.04	2.30
2.00	NR =	.925	30800	16100	1.42	1328	126.7	487	1668
	P2 =	23.79	RAM 1.09	1.61	-.57	-.00	1.09	1.09	-.00
	T2 =	774	BLEED .02	-1.95	3.14	-.12	-.62	.02	.75
	ERI =	0	POWER -.02	2.62	.75	.10	.64	-.02	1.39

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY + 40 F      PRESSURE ALTITUDE 36089 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.60	1.28	1.29	1477	842	1257	1930	510	2.88	248	10.2
	RAM	.33	-.19	-.54	.00	1.39	2.41	-2.96	.02	.00
	BLEED	-.26	1.42	.80	.00	-1.09	-4.14	5.92	.01	.00
	POWER	3.11	39.26	13.67	.19	12.92	49.01	-9.18	-.09	.00
.90	1.69	1.42	1425	797	1258	2730	90	16.36	241	10.2
	RAM	.50	.00	-.40	.01	1.54	16.21	-85.43	.05	.00
	BLEED	-.87	-.00	.29	-.04	-2.67	-63.91	1547.72	-.65	.00
	POWER	-9.05	.00	3.20	-2.00	-29.40	-348.95	802.6	-18.87	.00
1.20	2.41	1.69	1425	783	1257	4280	-330	-4.375	234	10.2
	RAM	.61	.00	-.27	.00	1.35	-4.27	3.52	-.06	.00
	BLEED	-1.12	.00	.11	-.04	-2.51	24.56	-17.95	-.60	.00
	POWER	-8.78	.00	.44	-.23	-19.58	85.55	-71.9	-12.15	.00
1.50	3.57	6.01	15156	1567	1257	27000	12100	1.25	431	10.2
	RAM	1.04	1.02	-.01	.00	1.26	1.53	-.56	.01	.00
	BLEED	-.50	1.10	.86	.01	-.61	-1.39	2.55	.03	.00
	POWER	1.25	5.03	2.30	-.01	1.50	3.38	1.59	-.04	.00
2.00	7.25	9.64	22747	1668	1257	47300	16600	1.37	367	2.9
	RAM	1.09	1.09	-.00	.00	1.26	1.58	-.54	.01	.00
	BLEED	-.56	1.10	.75	-.00	-.65	-1.90	3.09	.02	.00
	POWER	.77	3.41	1.39	-.01	.89	2.56	.81	-.02	.00

11. 4500 FEET

PREVIOUS PAGE WAS BLANK, THEREFORE WAS NOT FILMED

**CONFIDENTIAL**

GEI 67870

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY PRESSURE ALTITUDE 45000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.60	NR =	1.00	1810	10200	1.80	894	26.5	100	1843	
	P2 =	2.73	1.03	1.39	-.44	.00	1.03	1.03	.00	
	T2 =	418	BLEED	.01	-1.66	.86	-.33	-.98	.01	.00
	ERI =	101	POWER	-.00	-2.31	3.30	.09	.31	-.00	.00
.90	NR =	1.00	3470	13500	1.82	967	35.3	128	1995	
	P2 =	3.62	1.02	1.30	-.34	-.00	1.02	1.02	.00	
	T2 =	453	BLEED	.01	-1.65	.86	-.33	-.98	.01	.01
	ERI =	101	POWER	-.00	-1.76	2.51	.06	.21	-.00	-.00
1.20	NR =	.991	6120	18100	1.82	1038	47.5	169	2067	
	P2 =	5.14	1.02	1.36	-.39	-.00	1.02	1.02	.00	
	T2 =	503	BLEED	.02	-1.76	.98	-.33	-.97	.02	.00
	ERI =	0	POWER	-.00	-1.13	1.69	.05	.15	-.00	.00
1.50	NR =	.971	10100	23500	1.82	1114	62.9	224	2067	
	P2 =	7.62	1.04	1.31	-.31	-.00	1.04	1.04	-.00	
	T2 =	566	BLEED	.08	-1.73	1.01	-.26	-.90	.08	.00
	ERI =	0	POWER	-.01	-.71	1.14	.03	.14	-.01	.00
1.80	NR =	.945	16200	30100	1.84	1206	83.9	298	2067	
	P2 =	11.61	1.07	1.27	-.23	-.00	1.07	1.07	.00	
	T2 =	643	BLEED	.08	-1.78	1.07	-.27	-.89	.08	-.00
	ERI =	0	POWER	-.01	-.67	1.01	.03	.12	-.01	.00
2.00	NR =	.925	21500	34800	1.87	1270	100.5	357	2067	
	P2 =	15.48	1.09	1.28	-.21	-.00	1.09	1.09	.00	
	T2 =	702	BLEED	.05	-1.92	1.19	-.24	-.92	.05	.00
	ERI =	0	POWER	-.00	-.64	.94	.02	.11	-.00	.00
2.30	NR =	.893	32200	42300	1.95	1376	131.0	465	2067	
	P2 =	23.90	1.13	1.28	-.17	.00	1.13	1.13	.00	
	T2 =	802	BLEED	.03	-2.05	1.30	-.25	-.95	.03	-.01
	ERI =	0	POWER	-.00	-1.35	-.04	.02	.09	-.00	.00
2.45	NR =	.876	38900	45300	1.96	1431	148.6	528	2067	
	P2 =	29.64	1.14	.93	-.51	.00	1.14	1.14	.00	
	T2 =	857	BLEED	.02	-1.95	1.79	-.18	-.95	.02	-.01
	ERI =	0	POWER	-.00	-1.01	.28	.01	.08	-.00	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 45000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFC8	W2K	BTANG
.60	1.28	4.32	18288	3234	1308	12100	10200	1.78	485	10.2
	RAM	1.03	.98	.02	.01	1.33	1.38	-.43	.03	.00
	BLEED	-1.33	-.82	-.06	.32	-1.40	-1.65	.85	.01	.00
	POWER	-6.06	.96	-.52	5.74	-2.00	-2.36	3.34	-.00	.00
.90	1.69	5.77	24635	3427	1295	17200	13700	1.80	486	10.2
	RAM	1.02	.99	.03	.01	1.27	1.33	-.37	.02	.00
	BLEED	-1.31	-.81	-.08	.28	-1.33	-1.67	.88	.01	.00
	POWER	-4.31	.73	-.61	3.95	-1.30	-1.63	2.38	-.00	.00
1.20	2.41	7.71	32978	3509	1299	24500	18400	1.79	476	2.9
	RAM	1.02	1.00	.04	.02	1.24	1.31	-.33	.02	.00
	BLEED	-1.31	-.81	-.11	.28	-1.28	-1.71	.93	.02	.00
	POWER	-3.24	.54	-.53	2.93	-.89	-1.19	1.74	-.00	.00
1.50	3.56	9.88	42696	3502	1336	33800	23700	1.80	452	.0
	RAM	1.05	1.02	-.01	-.01	1.21	1.28	-.28	.01	.00
	BLEED	-1.38	-.74	-.06	.43	-1.17	-1.71	.99	.08	.00
	POWER	-2.36	.42	-.29	2.18	-.54	-.77	1.20	-.01	.00
1.80	5.43	12.68	55423	3490	1380	46700	30500	1.82	420	.0
	RAM	1.07	1.05	-.01	-.01	1.22	1.30	-.26	.01	.00
	BLEED	-1.33	-.74	-.06	.38	-1.14	-1.79	1.07	.08	.00
	POWER	-1.77	.33	-.25	1.61	-.39	-.58	.92	-.01	.00
2.00	7.24	14.90	65157	3485	1401	57000	35500	1.83	394	.0
	RAM	1.09	1.08	-.01	-.01	1.23	1.32	-.26	.01	.00
	BLEED	-1.42	-.76	-.07	.43	-1.17	-1.91	1.18	.05	.00
	POWER	-1.58	.29	-.23	1.44	-.33	-.52	.81	-.00	.00
2.30	11.2	18.87	82390	3477	1435	76300	44100	1.87	356	.0
	RAM	1.13	1.12	-.00	-.00	1.26	1.36	-.25	.01	.00
	BLEED	-1.41	-.79	-.08	.40	-1.18	-2.05	1.30	.03	.00
	POWER	-1.17	-1.39	-1.01	.53	-.77	-1.33	-.06	-.00	.00
2.45	13.9	21.20	88623	3410	1430	86600	47700	1.86	336	.0
	RAM	1.17	.45	-.37	-.26	1.05	.97	-.55	-.00	.00
	BLEED	-1.63	-.21	.20	.78	-1.02	-1.87	1.71	.02	.00
	POWER	-1.05	-.74	-.66	.64	-.52	-.94	.21	-.00	.00

11-3

# CONFIDENTIAL

**CONFIDENTIAL**

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY                      PRESSURE ALTITUDE    45000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.60	NR =	1.00	1810	9470	1.63	294	26.5	100	1843	
	P2 =	2.73	RAM	1.03	1.40	-.46	.00	1.03	1.03	-.00
	T2 =	418	BLEED	.01	-1.66	.89	-.33	-.98	.01	.00
	ERI =	101	POWER	-.00	-1.96	3.06	.09	.31	-.00	-.00
.90	NR =	1.00	1470	12600	1.65	967	35.3	128	1995	
	P2 =	3.62	RAM	1.02	1.31	-.35	-.00	1.02	1.02	.00
	T2 =	453	BLEED	.01	-1.65	.89	-.33	-.98	.01	.01
	ERI =	101	POWER	-.00	-1.44	2.28	.06	.21	-.00	.00
1.20	NR =	.991	6120	16600	1.67	1038	47.5	169	2067	
	P2 =	5.14	RAM	1.02	1.24	-.26	-.00	1.02	1.02	.00
	T2 =	503	BLEED	.02	-1.66	.90	-.33	-.97	.02	-.01
	ERI =	0	POWER	-.00	-1.09	1.70	.05	.15	-.00	-.01
1.50	NR =	.971	10100	21400	1.68	1115	63.0	224	2067	
	P2 =	7.62	RAM	1.04	1.29	-.30	-.00	1.04	1.04	.00
	T2 =	566	BLEED	.08	-1.75	1.07	-.26	-.90	.08	.01
	ERI =	0	POWER	-.01	-.73	1.21	.03	.14	-.01	-.00
1.80	NR =	.945	16200	27300	1.70	1206	84.0	298	2067	
	P2 =	11.61	RAM	1.07	1.29	-.26	-.00	1.07	1.07	.00
	T2 =	643	BLEED	.08	-1.82	1.14	-.27	-.89	.08	-.00
	ERI =	0	POWER	-.01	-.52	.90	.03	.12	-.01	.00
2.00	NR =	.925	21500	31500	1.72	1271	100.6	357	2067	
	P2 =	15.48	RAM	1.09	1.30	-.24	-.00	1.09	1.09	.00
	T2 =	702	BLEED	.05	-1.96	1.27	-.24	-.92	.05	.00
	ERI =	0	POWER	-.00	-.52	.85	.02	.11	-.00	.00
2.30	NR =	.893	32200	38000	1.79	1376	131.2	465	2067	
	P2 =	23.90	RAM	1.13	1.30	-.19	.00	1.13	1.13	.00
	T2 =	802	BLEED	.03	-2.11	1.40	-.25	-.95	.03	-.01
	ERI =	0	POWER	-.00	-.43	.69	.02	.09	-.00	.00
2.45	NR =	.876	38900	41300	1.83	1432	148.8	528	2067	
	P2 =	29.64	RAM	1.14	1.31	-.19	.00	1.14	1.14	.00
	T2 =	857	BLEED	.02	-2.30	1.60	-.18	-.94	.02	-.01
	ERI =	0	POWER	-.00	-.40	.65	.01	.08	-.00	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 45000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FGB	FNB	SFCB	WZK	BTANG
.60	1.28	4.35	15399	2930	1224	11400	9570	1.61	485	10.2
	RAM	1.03	.97	-.01	-.01	1.31	1.37	-.42	.03	.00
	BLEED	-1.33	-.79	-.02	.33	-1.38	-1.64	.87	.01	.00
	POWER	-5.98	1.08	-.35	5.70	-1.87	-2.23	3.33	-.00	.00
.90	1.69	5.81	20793	3116	1213	16200	12800	1.63	486	10.2
	RAM	1.02	.98	.00	-.01	1.25	1.32	-.36	.02	.00
	BLEED	-1.31	-.78	-.04	.30	-1.30	-1.66	.90	.01	.00
	POWER	-4.26	.82	-.42	3.95	-1.18	-1.50	2.34	-.00	.00
1.20	2.41	7.77	27806	3186	1214	23100	17000	1.64	476	10.2
	RAM	1.03	.99	.00	-.00	1.22	1.29	-.31	.02	.00
	BLEED	-1.32	-.78	-.05	.31	-1.24	-1.70	.94	.02	.00
	POWER	-3.23	.60	-.35	2.98	-.79	-1.07	1.68	-.00	.00
1.50	3.56	9.96	35834	3170	1247	31800	21700	1.65	452	2.9
	RAM	1.05	1.02	-.01	-.01	1.20	1.28	-.28	.01	.00
	BLEED	-1.37	-.71	-.04	.44	-1.15	-1.73	1.05	.08	.00
	POWER	-2.34	.47	-.23	2.20	-.50	-.73	1.21	-.0-117.37	
1.80	5.43	12.78	46275	3153	1286	43800	27700	1.67	420	.0
	RAM	1.07	1.05	-.01	-.01	1.22	1.30	-.27	.01	.00
	BLEED	-1.33	-.71	-.04	.39	-1.12	-1.83	1.15	.08	.00
	POWER	-1.75	.37	-.19	1.63	-.35	-.55	.93	-.01	.00
2.00	7.24	15.03	54200	3145	1305	53500	32000	1.69	394	.0
	RAM	1.09	1.08	-.01	-.01	1.23	1.32	-.26	.01	.00
	BLEED	-1.41	-.73	-.05	.44	-1.16	-1.96	1.27	.05	.00
	POWER	-1.56	.32	-.18	1.46	-.29	-.49	.82	-.00	.00
2.30	11.2	19.05	68103	3134	1336	71600	39400	1.73	356	.0
	RAM	1.13	1.12	-.01	-.00	1.26	1.36	-.26	.01	.00
	BLEED	-1.41	-.76	-.06	.41	-1.16	-2.13	1.42	.03	.00
	POWER	-1.22	.26	-.16	1.13	-.22	-.40	.66	-.00	.00
2.45	13.9	21.37	75705	3130	1348	82100	43200	1.75	336	.0
	RAM	1.14	1.13	-.00	-.00	1.26	1.38	-.26	-.00	.00
	BLEED	-1.60	-.75	-.09	.58	-1.20	-2.29	1.59	.02	.00
	POWER	-1.08	.24	-.14	1.00	-.19	-.35	.59	-.00	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY          PRESSURE ALTITUDE    45000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.60	NR =	1.00	1.28	1810	8580	1.46	895	26.6	100	1843
	P2 =	2.73	RAM	1.03	1.42	-.50	.00	1.03	1.03	-.00
	T2 =	418	BLEED	.01	-1.68	.96	-.33	-.98	.01	.00
	ERI =	101	POWER	-.00	-1.79	3.05	.09	.31	-.00	-.01
.90	NR =	1.00	1.69	3470	11400	1.48	967	35.3	128	1995
	P2 =	3.62	RAM	1.02	1.33	-.39	-.00	1.02	1.02	.00
	T2 =	453	BLEED	.01	-1.69	.98	-.33	-.98	.01	.01
	ERI =	101	POWER	-.00	-1.28	2.26	.06	.21	-.00	.00
1.20	NR =	.991	2.41	6120	15000	1.51	1039	47.6	169	2067
	P2 =	5.14	RAM	1.02	1.26	-.29	-.00	1.02	1.02	.00
	T2 =	503	BLEED	.02	-1.71	1.00	-.33	-.96	.02	-.00
	ERI =	0	POWER	-.00	-1.03	1.76	.05	.16	-.00	.00
1.50	NR =	.971	3.56	10100	19000	1.53	1115	63.1	224	2067
	P2 =	7.62	RAM	1.04	1.32	-.33	-.00	1.04	1.04	.00
	T2 =	566	BLEED	.09	-1.81	1.18	-.26	-.89	.09	.01
	ERI =	0	POWER	-.01	-.63	1.19	.03	.14	-.01	.00
1.80	NR =	.945	5.43	16200	23900	1.55	1207	84.0	298	2067
	P2 =	11.61	RAM	1.07	1.32	-.29	-.00	1.07	1.07	.00
	T2 =	643	BLEED	.08	-1.90	1.27	-.27	-.89	.08	-.00
	ERI =	0	POWER	-.01	-.41	.85	.03	.12	-.01	.00
2.00	NR =	.925	7.24	21500	27400	1.58	1271	100.7	357	2067
	P2 =	15.48	RAM	1.09	1.33	-.28	-.00	1.09	1.09	.00
	T2 =	702	BLEED	.05	-2.04	1.41	-.24	-.92	.05	.01
	ERI =	0	POWER	-.00	-.40	.78	.02	.11	-.00	.00
2.30	NR =	.893	11.2	32200	32900	1.64	1377	131.3	465	2067
	P2 =	23.90	RAM	1.13	1.32	-.22	.00	1.13	1.13	.00
	T2 =	802	BLEED	.03	-2.24	1.59	-.25	-.95	.03	-.01
	ERI =	0	POWER	-.00	-.37	.68	.02	.09	-.00	.00
2.45	NR =	.876	13.9	38900	35500	1.67	1432	148.9	528	2067
	P2 =	29.64	RAM	1.14	1.33	-.21	.00	1.14	1.14	.00
	T2 =	857	BLEED	.02	-2.43	1.80	-.18	-.94	.02	-.01
	ERI =	0	POWER	-.00	-.38	.66	.01	.08	-.00	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY          PRESSURE ALTITUDE    45000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.60	1.28	4.39	12505	2566	1126	10600	8750	1.43	485	10.2
	RAM	1.03	.96	-.03	-.02	1.30	1.35	-.42	.03	.00
	BLEED	-1.33	-.74	.01	.34	-1.35	-1.64	.92	.01	.00
	POWER	-5.90	1.25	-.23	5.67	-1.77	-2.14	3.41	-.00	.00
.90	1.69	5.86	16943	2728	1116	15000	11600	1.46	486	10.2
	RAM	1.03	.97	-.01	-.02	1.24	1.31	-.36	.02	.00
	BLEED	-1.31	-.73	-.01	.31	-1.28	-1.67	.96	.01	.00
	POWER	-4.20	.96	-.30	3.97	-1.09	-1.42	2.40	-.00	.00
1.20	2.41	7.84	22619	2790	1118	21400	15300	1.48	476	10.2
	RAM	1.03	.99	-.01	-.01	1.21	1.29	-.32	.02	.00
	BLEED	-1.30	-.73	-.03	.32	-1.23	-1.73	1.02	.02	.00
	POWER	-3.17	.72	-.25	2.98	-.72	-1.00	1.73	-.00	.00
1.50	3.56	10.05	28959	2772	1146	29400	19300	1.50	451	2.9
	RAM	1.05	1.01	-.02	-.01	1.20	1.28	-.29	.01	.00
	BLEED	-1.36	-.66	-.02	.44	-1.14	-1.78	1.15	.09	.00
	POWER	-2.31	.55	-.16	2.17	-.46	-.69	1.25	-.01	.00
1.80	5.43	12.91	37111	2756	1181	40500	24300	1.52	420	.0
	RAM	1.07	1.04	-.01	-.01	1.21	1.31	-.28	.01	.00
	BLEED	-1.32	-.66	-.02	.38	-1.11	-1.90	1.28	.08	.00
	POWER	-1.72	.44	-.14	1.61	-.31	-.51	.95	-.01	.00
2.00	7.24	15.18	43224	2748	1198	49400	27900	1.55	394	.0
	RAM	1.09	1.07	-.01	-.01	1.23	1.33	-.27	.01	.00
	BLEED	-1.40	-.68	-.03	.43	-1.14	-2.05	1.42	.05	.00
	POWER	-1.54	.38	-.13	1.44	-.26	-.46	.84	-.00	.00
2.30	11.2	19.24	53787	2738	1225	66100	33900	1.59	356	.0
	RAM	1.13	1.12	-.01	-.01	1.26	1.37	-.28	.01	.00
	BLEED	-1.40	-.70	-.04	.40	-1.15	-2.27	1.62	.03	.00
	POWER	-1.20	.31	-.11	1.13	-.19	-.37	.68	-.00	.00
2.45	13.9	21.60	59461	2734	1235	75800	36900	1.61	336	.0
	RAM	1.14	1.13	-.01	-.01	1.26	1.39	-.28	-.00	.00
	BLEED	-1.59	-.70	-.06	.58	-1.18	-2.44	1.81	.02	.00
	POWER	-1.06	.28	-.10	1.00	-.16	-.33	.61	-.00	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY                  PRESSURE ALTITUDE 45000 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC	
.60	NR =	1.00	1.28	1810	7420	1.29	895	26.6	100	1843
	P2 =	2.73	RAM	1.03	1.48	-.58	.00	1.03	1.03	-.00
	T2 =	418	BLEED	.01	-1.75	1.11	-.33	-.98	.01	.00
	ERI =	101	POWER	-.00	-1.35	2.90	.09	.31	-.00	-.00
.90	NR =	1.00	1.69	3470	9960	1.31	968	35.4	128	1995
	P2 =	3.62	RAM	1.02	1.38	-.46	-.00	1.02	1.02	.00
	T2 =	453	BLEED	.01	-1.77	1.14	-.33	-.98	.01	.01
	ERI =	101	POWER	-.00	-1.13	2.33	.06	.21	-.00	.00
1.20	NR =	.991	2.41	6120	13100	1.33	1039	47.6	169	2067
	P2 =	5.14	RAM	1.02	1.29	-.34	-.00	1.02	1.02	.00
	T2 =	503	BLEED	.02	-1.80	1.16	-.33	-.97	.02	-.01
	ERI =	0	POWER	-.00	-.93	1.83	.05	.15	-.00	.00
1.50	NR =	.971	3.56	10100	16200	1.36	1115	63.1	224	2067
	P2 =	7.62	RAM	1.04	1.26	-.28	-.00	1.04	1.04	.00
	T2 =	566	BLEED	.09	-1.84	1.30	-.26	-.89	.09	.01
	ERI =	0	POWER	-.01	-.70	1.39	.03	.14	-.01	.00
1.80	NR =	.945	5.43	16200	20100	1.39	1207	84.1	298	2067
	P2 =	11.61	RAM	1.07	1.33	-.31	-.00	1.07	1.07	.00
	T2 =	643	BLEED	.08	-2.04	1.50	-.27	-.89	.08	-.00
	ERI =	0	POWER	-.01	-.43	.97	.03	.12	-.01	.00
2.00	NR =	.925	7.24	21500	22800	1.41	1271	100.8	357	2067
	P2 =	15.48	RAM	1.09	1.40	-.36	-.00	1.09	1.09	.00
	T2 =	702	BLEED	.05	-2.24	1.70	-.24	-.92	.05	.01
	ERI =	0	POWER	-.00	-.37	.65	.02	.11	-.00	-.00
2.30	NR =	.893	11.2	32200	27000	1.46	1377	131.4	465	2067
	P2 =	23.90	RAM	1.13	1.38	-.29	.00	1.13	1.13	.00
	T2 =	802	BLEED	.03	-2.49	1.95	-.25	-.95	.03	-.01
	ERI =	0	POWER	-.00	-.33	.72	.02	.09	-.00	.00
2.45	NR =	.876	13.9	38900	28900	1.49	1432	149.0	528	2067
	P2 =	29.64	RAM	1.14	1.36	-.25	.00	1.14	1.14	.00
	T2 =	857	BLEED	.02	-2.67	2.16	-.18	-.94	.02	-.01
	ERI =	0	POWER	-.00	-.28	.63	.01	.08	-.00	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE 45000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.60	1.28	4.43	9606	2137	1009	9550	7740	1.24	485	10.2
	RAM	1.03	.94	-.02	-.01	1.30	1.36	-.45	.03	.00
	BLEED	-1.32	-.67	.00	.33	-1.35	-1.66	1.02	.01	.00
	POWER	-5.78	1.54	-.28	5.51	-1.74	-2.14	3.71	-.00	.00
.90	1.69	5.92	13086	2291	1004	13600	10200	1.29	486	10.2
	RAM	1.03	.96	-.02	-.02	1.23	1.31	-.37	.02	.00
	BLEED	-1.30	-.66	.01	.32	-1.27	-1.70	1.07	.01	.00
	POWER	-4.13	1.18	-.19	3.95	-1.00	-1.35	2.54	-.00	.00
1.20	2.41	7.91	17424	2353	1007	19400	13300	1.31	476	10.2
	RAM	1.03	.98	-.02	-.01	1.20	1.28	-.33	.02	.00
	BLEED	-1.31	-.67	-.01	.33	-1.22	-1.79	1.15	.02	.00
	POWER	-3.13	.89	-.15	2.99	-.64	-.93	1.83	-.00	.00
1.50	3.56	10.15	22072	2336	1032	26700	16500	1.33	451	10.2
	RAM	1.05	1.00	-.02	-.02	1.19	1.29	-.30	.01	.00
	BLEED	-1.35	-.58	.01	.44	-1.12	-1.85	1.31	.09	.00
	POWER	-2.28	.68	-.08	2.18	-.40	-.64	1.33	-.01	.00
1.80	5.43	13.04	27930	2321	1062	36700	20500	1.36	420	2.9
	RAM	1.07	1.04	-.02	-.01	1.21	1.31	-.30	.01	.00
	BLEED	-1.31	-.58	-.00	.39	-1.09	-2.02	1.48	.08	.00
	POWER	-1.69	.54	-.06	1.61	-.26	-.46	1.01	-.01	.00
2.00	7.24	15.34	32227	2314	1077	44700	23200	1.39	394	.0
	RAM	1.09	1.07	-.02	-.01	1.22	1.34	-.29	.01	.00
	BLEED	-1.39	-.59	-.00	.43	-1.12	-2.20	1.66	.05	.00
	POWER	-1.51	.47	-.06	1.45	-.22	-.41	.89	-.00	.00
2.30	11.2	19.46	39445	2306	1101	59700	27500	1.43	356	.0
	RAM	1.13	1.11	-.01	-.01	1.25	1.39	-.30	.01	.00
	BLEED	-1.39	-.61	-.02	.41	-1.13	-2.48	1.94	.03	.00
	POWER	-1.18	.39	-.05	1.14	-.15	-.33	.72	-.00	.00
2.45	13.9	21.85	43185	2303	1110	68500	29600	1.46	336	.0
	RAM	1.14	1.12	-.01	-.01	1.26	1.41	-.31	-.00	.00
	BLEED	-1.58	-.60	-.02	.58	-1.15	-2.70	2.18	.02	.00
	POWER	-1.04	.35	-.04	1.00	-.13	-.29	.65	-.00	.00

# CONFIDENTIAL

**CONFIDENTIAL**

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY PRESSURE ALTITUDE 45000 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC
.60	NR = 1.00	1.28	1810	6850	1.09	896	26.7	100	1843
	P2 = 2.73	RAM	1.03	1.44	-.44	.00	1.03	1.03	.00
	T2 = 418	BLEED	.01	-1.76	1.11	-.33	-.97	.01	.00
	ERI = 101	POWER	-.00	-1.93	3.87	.09	.31	-.00	.00
.90	NR = 1.00	1.69	3470	8990	1.17	969	35.5	128	1995
	P2 = 3.62	RAM	1.02	1.33	-.34	-.00	1.02	1.02	.00
	T2 = 453	BLEED	.01	-1.76	1.13	-.33	-.97	.01	.00
	ERI = 101	POWER	-.00	-1.23	2.68	.06	.21	-.00	.00
1.20	NR = .991	2.41	6120	11500	1.23	1040	47.8	169	2067
	P2 = 5.14	RAM	1.02	1.26	-.25	-.00	1.02	1.02	.00
	T2 = 503	BLEED	.02	-1.83	1.20	-.33	-.96	.02	-.01
	ERI = 0	POWER	-.00	-.81	1.92	.05	.15	-.00	.00
1.50	NR = .971	3.56	10100	14500	1.24	1116	63.3	224	2067
	P2 = 7.62	RAM	1.04	1.29	-.27	-.00	1.04	1.04	.00
	T2 = 566	BLEED	.09	-1.94	1.42	-.25	-.88	.09	-.00
	ERI = 0	POWER	-.01	-.62	1.44	.03	.13	-.01	.00
1.80	NR = .945	5.43	16200	17700	1.29	1208	84.4	298	2067
	P2 = 11.61	RAM	1.07	1.39	-.35	-.00	1.07	1.07	.00
	T2 = 643	BLEED	.08	-2.18	1.69	-.26	-.89	.08	-.00
	ERI = 0	POWER	-.01	-.36	1.00	.03	.12	-.01	.00
2.00	NR = .925	7.24	21500	19900	1.32	1273	101.1	357	2067
	P2 = 15.48	RAM	1.09	1.36	-.29	.00	1.09	1.09	.00
	T2 = 702	BLEED	.05	-2.34	1.85	-.24	-.91	.05	-.00
	ERI = 0	POWER	-.01	-.32	.87	.03	.11	-.01	.00
2.30	NR = .893	11.2	32200	23500	1.36	1378	131.9	465	2067
	P2 = 23.90	RAM	1.13	1.44	-.33	.00	1.13	1.13	.00
	T2 = 802	BLEED	.03	-2.69	2.23	-.25	-.94	.03	-.01
	ERI = 0	POWER	-.00	-.26	.72	.02	.08	-.00	.00
2.45	NR = .876	13.9	38900	24900	1.40	1433	149.6	527	2067
	P2 = 29.64	RAM	1.14	1.41	-.28	.00	1.14	1.14	.00
	T2 = 857	BLEED	.02	-2.90	2.46	-.18	-.94	.02	-.01
	ERI = 0	POWER	-.00	-.24	.67	.02	.08	-.00	-.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 45000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.60	1.28	4.48	7465	1843	922	8820	7010	1.07	485	15.2
	RAM	1.03	1.02	.00	.00	1.30	1.38	-.38	.03	.00
	BLEED	-1.31	-.68	.00	.32	-1.34	-1.69	1.04	.01	.00
	POWER	-5.67	1.92	.00	5.55	-1.54	-1.93	3.87	-.00	.00
.90	1.69	5.98	10499	1995	922	12600	9170	1.14	486	15.2
	RAM	1.02	1.02	.00	-.00	1.24	1.33	-.33	.02	.00
	BLEED	-1.29	-.66	.00	.31	-1.27	-1.75	1.12	.01	.00
	POWER	-4.05	1.44	.00	3.97	-.87	-1.20	2.66	-.00	.00
1.20	2.41	7.99	14210	2067	930	18100	11900	1.19	476	15.2
	RAM	1.03	1.02	.00	-.00	1.21	1.30	-.30	.02	.00
	BLEED	-1.30	-.65	-.01	.32	-1.21	-1.84	1.22	.02	.00
	POWER	-3.09	1.06	.00	3.03	-.55	-.83	1.90	-.00	-52.45
1.50	3.56	10.26	18059	2067	956	24900	14800	1.22	451	10.2
	RAM	1.05	1.04	.00	-.00	1.20	1.31	-.30	.01	.00
	BLEED	-1.35	-.55	-.00	.44	-1.11	-1.94	1.42	.09	.00
	POWER	-2.26	.81	.00	2.21	-.35	-.58	1.40	-.01	.00
1.80	5.43	13.18	22839	2067	987	34300	18200	1.26	420	2.9
	RAM	1.07	1.06	.00	-.00	1.21	1.34	-.30	.01	.00
	BLEED	-1.30	-.54	-.00	.38	-1.09	-2.13	1.64	.08	.00
	POWER	-1.66	.63	.00	1.62	-.22	-.41	1.05	-.01	.00
2.00	7.24	15.50	26280	2067	1003	41900	20400	1.29	394	2.9
	RAM	1.09	1.09	.00	.00	1.23	1.37	-.30	.01	.00
	BLEED	-1.37	-.55	-.00	.42	-1.11	-2.33	1.84	.05	.00
	POWER	-1.49	.55	.00	1.46	-.18	-.37	.92	-.01	-69.89
2.30	11.2	19.67	31924	2067	1027	56100	23900	1.33	356	.0
	RAM	1.13	1.13	.00	.00	1.26	1.42	-.31	.01	.00
	BLEED	-1.38	-.55	-.01	.40	-1.12	-2.67	2.20	.03	.00
	POWER	-1.17	.46	.00	1.14	-.12	-.29	.75	-.00	.00
2.45	13.9	22.10	34755	2067	1036	64400	25500	1.36	336	.0
	RAM	1.14	1.14	.00	-.00	1.26	1.44	-.32	-.00	.00
	BLEED	-1.56	-.54	-.01	.57	-1.14	-2.91	2.47	.02	.00
	POWER	-1.04	.42	-.00	1.02	-.10	-.26	.68	-.00	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 7.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 45000 FEET

M0		P2/PO	FD	FN	SFC	TE	PE	W2	TC	
.60	NR =	1.00	1.28	1810	5460	1.05	878	24.7	100	1530
	P2 =	2.73	RAM	1.03	1.55	-.58	-.00	1.03	1.03	-.00
	T2 =	418	BLEED	.01	-1.19	1.50	-.20	-.70	.01	.63
	ERI =	101	POWER	-.03	8.44	6.16	.94	3.95	-.03	8.55
.90	NR =	1.00	1.69	3390	6610	1.10	925	31.4	125	1579
	P2 =	3.62	RAM	1.02	1.46	-.51	-.00	1.01	1.02	-.01
	T2 =	453	BLEED	.01	-1.26	1.62	-.21	-.69	.01	.63
	ERI =	0	POWER	-.05	6.96	4.75	.75	3.07	-.05	6.67
1.20	NR =	.991	2.41	5850	8310	1.15	991	41.3	162	1643
	P2 =	5.14	RAM	1.02	1.46	-.50	-.00	1.02	1.02	-.01
	T2 =	503	BLEED	.03	-1.29	1.81	-.16	-.65	.03	.69
	ERI =	0	POWER	-.12	5.92	3.40	.54	2.27	-.12	5.18
1.50	NR =	.971	3.56	10200	12400	1.21	1104	60.5	225	1836
	P2 =	7.62	RAM	1.04	1.34	-.33	-.00	1.04	1.04	-.01
	T2 =	566	BLEED	.04	-1.24	1.82	-.16	-.64	.04	.69
	ERI =	0	POWER	-.10	3.84	2.40	.37	1.48	-.10	3.36
1.80	NR =	.945	5.43	16200	16000	1.27	1200	82.1	299	1923
	P2 =	11.61	RAM	1.07	1.43	-.40	-.00	1.07	1.07	-.00
	T2 =	643	BLEED	.04	-1.47	2.00	-.18	-.68	.04	.61
	ERI =	0	POWER	-.07	2.87	1.51	.24	.96	-.07	2.23
2.00	NR =	.925	7.24	21500	18400	1.31	1267	99.2	357	1966
	P2 =	15.48	RAM	1.09	1.38	-.31	-.00	1.09	1.09	-.00
	T2 =	702	BLEED	.04	-1.54	2.08	-.19	-.69	.04	.60
	ERI =	0	POWER	-.04	2.45	1.23	.18	.80	-.04	1.79
2.30	NR =	.893	11.2	32200	22600	1.36	1376	130.8	465	2024
	P2 =	23.90	RAM	1.13	1.44	-.33	.00	1.13	1.13	.00
	T2 =	802	BLEED	.02	-1.93	2.33	-.21	-.75	.02	.47
	ERI =	0	POWER	-.01	1.66	.85	.12	.53	-.01	1.11
2.45	NR =	.876	13.9	38900	24400	1.39	1432	149.0	528	2046
	P2 =	29.64	RAM	1.14	1.41	-.29	.00	1.14	1.14	.00
	T2 =	857	BLEED	.01	-1.78	2.52	-.14	-.69	.01	.63
	ERI =	0	POWER	-.00	.61	.71	.05	.27	-.00	.47

# CONFIDENTIAL

GEI 67370

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 7.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 45000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.60	1.28	3.55	5712	1530	1045	7430	5620	1.02	485	15.2
	RAM	1.02	1.01	-.00	.00	1.36	1.47	-.49	.03	.00
	BLEED	-.65	.29	.63	.00	-.87	-1.15	1.46	.01	.00
	POWER	4.67	14.77	8.55	.01	6.16	8.15	6.45	-.03	.00
.90	1.69	4.51	7250	1579	1045	10100	6750	1.07	476	15.2
	RAM	1.01	.99	-.01	.00	1.29	1.42	-.46	.02	.00
	BLEED	-.63	.33	.63	-.01	-.81	-1.23	1.58	.01	.00
	POWER	3.61	11.85	6.67	.03	4.57	6.89	4.83	-.05	.00
1.20	2.41	5.95	9540	1643	1045	14300	8480	1.13	456	10.2
	RAM	1.02	1.00	-.01	.00	1.24	1.39	-.42	.02	.00
	BLEED	-.59	.49	.69	-.00	-.72	-1.24	1.76	.03	.00
	POWER	2.80	9.44	5.18	-.06	3.34	5.74	3.59	-.12	.00
1.50	3.56	8.78	14991	1836	1045	22800	12600	1.19	453	10.2
	RAM	1.04	1.02	-.01	.00	1.21	1.35	-.35	.01	.00
	BLEED	-.57	.54	.69	-.01	-.68	-1.25	1.82	.04	.00
	POWER	1.78	6.32	3.36	.00	2.10	3.86	2.38	-.10	.00
1.80	5.43	11.95	20282	1923	1045	32600	16400	1.24	421	2.9
	RAM	1.07	1.06	-.00	.00	1.22	1.37	-.33	.01	.00
	BLEED	-.58	.48	.61	-.03	-.69	-1.42	1.94	.04	.00
	POWER	1.19	4.43	2.23	-.01	1.37	2.79	1.59	-.07	.00
2.00	7.24	14.45	24110	1966	1045	40400	18900	1.27	394	2.9
	RAM	1.09	1.09	-.00	.00	1.23	1.39	-.32	.01	.00
	BLEED	-.57	.50	.60	-.05	-.69	-1.52	2.07	.04	.00
	POWER	.97	3.72	1.79	.00	1.12	2.43	1.25	-.04	.00
2.30	11.2	19.09	30717	2024	1045	55300	23100	1.33	356	.0
	RAM	1.13	1.13	.00	-.00	1.26	1.43	-.32	.01	.00
	BLEED	-.71	.34	.47	.00	-.78	-1.90	2.31	.02	.00
	POWER	.37	2.54	1.11	.23	.68	1.64	.87	-.01	.00
2.45	13.9	21.77	34082	2046	1045	63900	25000	1.36	336	.0
	RAM	1.15	1.15	.00	-.00	1.26	1.45	-.33	-.00	.00
	BLEED	-.64	.67	.63	.01	-.69	-1.78	2.52	.01	.00
	POWER	-.37	1.32	.47	.61	.23	.60	.71	-.00	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 8.0

JANUARY 1964

STANDARD DAY PRESSURE ALTITUDE 45000 FEET

NO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.60	NR =	1.00	1.28	1750	4600	1.03	845	22.7	97	1380
	P2 =	2.73	RAM	1.03	1.61	-.66	-.00	1.02	1.03	-.01
	T2 =	418	BLEED	.01	-1.16	1.72	-.15	-.65	.01	.75
	ERI =	0	POWER	-.05	9.42	6.61	.75	4.11	-.05	8.97
.90	NR =	1.00	1.69	3230	5450	1.09	893	28.5	119	1429
	P2 =	3.62	RAM	1.02	1.54	-.60	-.01	1.01	1.02	-.01
	T2 =	453	BLEED	.03	-1.30	1.82	-.17	-.65	.03	.67
	ERI =	0	POWER	-.14	8.29	5.08	.69	3.29	-.14	7.38
1.20	NR =	.991	2.41	5400	6340	1.15	948	36.0	150	1454
	P2 =	5.14	RAM	1.02	1.47	-.52	-.00	1.02	1.02	-.01
	T2 =	503	BLEED	.04	-1.47	1.99	-.19	-.67	.04	.62
	ERI =	0	POWER	-.14	7.40	3.97	.61	2.66	-.14	6.03

11-14

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 8.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 45000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.60	1.28	3.16	4744	1380	1070	6510	4760	1.00	468	15.2
	RAM	1.02	.99	-.01	.00	1.40	1.53	-.58	.03	.00
	BLEED	-.58	.53	.75	-.01	-.80	-1.10	1.66	.01	.00
	POWER	4.80	16.20	8.97	.05	6.55	8.97	7.06	-.05	.00
.90	1.69	3.96	5940	1429	1070	8820	5590	1.06	453	15.2
	RAM	1.01	.99	-.01	.00	1.31	1.48	-.54	.02	.00
	BLEED	-.61	.48	.67	.01	-.79	-1.26	1.77	.03	.00
	POWER	3.95	13.52	7.38	-.04	5.04	8.03	5.34	-.14	.00
1.20	2.41	5.01	7276	1454	1070	11900	6490	1.12	421	15.2
	RAM	1.01	.99	-.01	.01	1.26	1.47	-.52	.02	.00
	BLEED	-.61	.48	.62	-.00	-.77	-1.45	1.97	.04	.00
	POWER	3.18	11.50	6.03	-.01	3.93	7.31	4.05	-.14	.00

11-15

# CONFIDENTIAL

## CONFIDENTIAL

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY PRESSURE ALTITUDE 45000 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC	
.60	NR =	1.00	1.28	1660	3770	1.03	815	20.6	92	1255
	P2 =	2.73	RAM	1.03	1.63	-.79	-.01	1.00	1.03	-.07
	T2 =	418	BLEED	.03	-1.27	1.82	-.18	-.65	.03	.69
	ERI =	0	POWER	-.22	11.31	7.72	1.03	4.65	-.22	10.45
.90	NR =	1.00	1.69	2950	3970	1.11	849	24.5	109	1250
	P2 =	3.62	RAM	1.02	1.70	-.79	-.00	1.01	1.02	-.01
	T2 =	453	BLEED	.03	-1.61	2.11	-.20	-.69	.03	.60
	ERI =	0	POWER	-.20	12.02	5.83	.96	4.16	-.20	9.41
1.20	NR =	.991	2.41	4450	3340	1.25	872	26.7	123	1167
	P2 =	5.14	RAM	1.02	1.86	-.97	-.00	1.02	1.02	-.01
	T2 =	503	BLEED	.02	-1.90	2.82	-.14	-.65	.02	.72
	ERI =	0	POWER	-.07	13.74	4.14	.62	3.79	-.07	8.25
1.50	NR =	.971	3.56	10200	11400	1.20	1099	59.2	225	1736
	P2 =	7.62	RAM	1.04	1.35	-.35	-.00	1.04	1.04	-.01
	T2 =	566	BLEED	.03	-1.32	1.93	-.17	-.65	.03	.68
	ERI =	0	POWER	-.06	3.85	2.30	.30	1.45	-.06	3.20
1.80	NR =	.945	5.43	16200	14600	1.26	1194	80.4	299	1816
	P2 =	11.61	RAM	1.07	1.44	-.41	-.00	1.07	1.07	-.00
	T2 =	643	BLEED	.04	-1.53	2.15	-.18	-.66	.04	.63
	ERI =	0	POWER	-.06	3.32	1.57	.24	1.10	-.06	2.44
2.00	NR =	.925	7.24	21500	16800	1.30	1261	97.1	357	1858
	P2 =	15.48	RAM	1.09	1.42	-.36	-.00	1.09	1.09	-.00
	T2 =	702	BLEED	.03	-1.59	2.27	-.19	-.67	.03	.64
	ERI =	0	POWER	-.04	2.89	1.30	.20	.90	-.04	2.01
2.30	NR =	.893	11.2	32200	20500	1.35	1369	128.0	465	1918
	P2 =	23.90	RAM	1.13	1.50	-.40	-.00	1.13	1.13	.00
	T2 =	802	BLEED	.02	-1.76	2.57	-.13	-.67	.02	.66
	ERI =	0	POWER	-.01	2.28	.86	.14	.64	-.01	1.40
2.45	NR =	.876	13.9	38900	22200	1.39	1428	146.1	528	1946
	P2 =	29.64	RAM	1.14	1.46	-.34	-.00	1.14	1.14	-.00
	T2 =	857	BLEED	.01	-1.92	2.72	-.14	-.69	.01	.62
	ERI =	0	POWER	-.01	1.91	.72	.08	.52	-.01	1.11

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE      45000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNR	SFCB	W2K	BTANG
.60	1.28	2.78	3901	1255	1095	5580	3930	.99	443	15.2
	RAM	.94	.90	-.07	.00	1.39	1.54	-.68	.03	.00
	BLEED	-.57	.52	.69	.00	-.84	-1.21	1.76	.03	.00
	POWER	5.12	19.24	10.45	.01	7.50	10.76	8.26	-.22	.00
.90	1.69	3.29	4416	1250	1095	7060	4110	1.07	414	15.2
	RAM	1.01	.98	-.01	.00	1.37	1.62	-.70	.02	.00
	BLEED	-.64	.46	.60	-.00	-.88	-1.53	2.03	.03	.00
	POWER	4.97	18.05	9.41	-.07	6.58	11.45	6.39	-.20	.00
1.20	2.41	3.58	4162	1167	1095	7920	3470	1.20	347	15.2
	RAM	1.01	.97	-.01	.01	1.34	1.75	-.85	.02	.00
	BLEED	-.57	.83	.72	-.03	-.79	-1.82	2.73	.02	.00
	POWER	4.37	18.05	8.25	.01	5.74	13.20	4.66	-.07	.00
1.50	3.56	8.11	13705	1736	1095	21800	11600	1.18	453	10.2
	RAM	1.04	1.02	-.01	-.00	1.22	1.38	-.39	.01	.00
	BLEED	-.59	.57	.68	.00	-.69	-1.33	1.93	.03	.00
	POWER	1.73	6.23	3.20	-.01	2.04	3.87	2.29	-.06	.00
1.80	5.43	11.03	18423	1816	1095	31200	15000	1.23	422	2.9
	RAM	1.07	1.06	-.00	.00	1.22	1.39	-.36	.01	.00
	BLEED	-.59	.57	.63	-.01	-.69	-1.48	2.10	.04	.00
	POWER	1.34	4.95	2.44	-.03	1.52	3.23	1.66	-.06	.00
2.00	7.24	13.35	21855	1858	1095	38800	17300	1.27	395	2.9
	RAM	1.09	1.09	-.00	.00	1.23	1.41	-.35	.01	.00
	BLEED	-.57	.62	.64	-.04	-.68	-1.57	2.24	.03	.00
	POWER	1.07	4.24	2.01	.02	1.25	2.85	1.33	-.04	.00
2.30	11.2	17.64	27772	1918	1095	53100	20900	1.33	356	.0
	RAM	1.13	1.13	.00	-.00	1.26	1.46	-.36	.01	.00
	BLEED	-.61	.74	.66	-.00	-.67	-1.74	2.55	.02	.00
	POWER	.80	3.17	1.40	-.03	.88	2.26	.87	-.01	.00
2.45	13.9	20.15	30918	1946	1095	61600	22700	1.36	336	.0
	RAM	1.14	1.14	-.00	.00	1.26	1.47	-.36	.00	.00
	BLEED	-.63	.72	.62	-.00	-.70	-1.92	2.72	.01	.00
	POWER	.62	2.66	1.11	-.00	.70	1.92	.71	-.01	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.10.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE 45000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.60	NR =	1.00	1450	2390	1.12	763	16.7	80	1072
	P2 =	2.73	RAM	2.01	-1.19	-.00	1.01	1.03	-.03
	T2 =	418	BLEED	-1.87	2.32	-.21	-.72	.03	.52
	ERI =	0	POWER	18.51	8.97	1.51	6.35	-.22	13.99
.90	NR =	1.00	2380	1820	1.36	777	17.7	88	1003
	P2 =	3.62	RAM	2.28	-1.58	-.01	1.00	1.02	-.06
	T2 =	453	BLEED	-2.23	3.21	-.15	-.66	.01	.72
	ERI =	0	POWER	24.63	4.32	1.04	6.05	-.09	12.99
1.20	NR =	.991	3460	960	2.06	794	18.4	96	904
	P2 =	5.14	RAM	3.47	-3.15	-.00	1.01	1.02	-.05
	T2 =	503	BLEED	-5.22	6.62	-.17	-.73	.02	.51
	ERI =	0	POWER	47.91	-11.13	1.08	6.04	-.12	12.83

11-18

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.10.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 45000 FEET

M0		P2/PO	FD	FN	SFC	TE	PE	W2	TC
.60	NR =	1.00	1450	2390	1.12	763	16.7	80	1072
	P2 =	2.73	RAM	2.01	-1.19	-.00	1.01	1.03	-.03
	T2 =	418	BLEED	-1.87	2.32	-.21	-.72	.03	.52
	ERI =	0	POWER	18.51	8.97	1.51	6.35	-.22	13.99
.90	NR =	1.00	2380	1820	1.36	777	17.7	88	1003
	P2 =	3.62	RAM	2.28	-1.58	-.01	1.00	1.02	-.06
	T2 =	453	BLEED	-2.23	3.21	-.15	-.66	.01	.72
	ERI =	0	POWER	24.63	4.32	1.04	6.05	-.09	12.99
1.20	NR =	.991	3460	960	2.06	794	18.4	96	904
	P2 =	5.14	RAM	3.47	-3.15	-.00	1.01	1.02	-.05
	T2 =	503	BLEED	-5.22	6.62	-.17	-.73	.02	.51
	ERI =	0	POWER	47.91	-11.13	1.08	6.04	-.12	12.83

11-18

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.10.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 45000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.60	1.28	2.21	2671	1072	1119	4010	2560	1.04	387	15.2
	RAM	.98	.95	-.03	-.02	1.56	1.86	-1.01	.03	.00
	BLEED	-.71	.38	.52	.05	-1.10	-1.74	2.17	.03	.00
	POWER	6.48	27.80	13.99	.43	10.76	16.96	10.51	-.22	.00
.90	1.69	2.33	2464	1003	1120	4360	1980	1.24	333	15.2
	RAM	.95	.88	-.06	-.00	1.48	2.04	-1.29	.02	.00
	BLEED	-.55	.87	.72	-.03	-.90	-2.00	2.97	.01	.00
	POWER	6.40	29.15	12.99	.10	10.06	22.22	6.65	-.09	.00
1.20	2.41	2.40	1977	904	1120	4590	1120	1.76	270	15.2
	RAM	.96	.87	-.05	-.01	1.48	2.88	-2.34	.02	.00
	BLEED	-.70	.88	.51	.02	-1.07	-4.40	5.66	.02	.00
	POWER	6.41	35.77	12.83	-.09	9.78	40.25	-4.16	-.12	.00

11-19

# CONFIDENTIAL

GEI 67870

**CONFIDENTIAL**

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P-S-11-0

JANUARY 1964

STANDARD DAY PRESSURE ALTITUDE 45000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.60	NR =	1.00	1.28	1170	770	1.85	700	12.0	65	841
	P2 =	2.73	RAM	.84	1.65	-1.79	-.09	.67	.84	-.42
	T2 =	418	BLEED	-.74	-5.26	5.71	-.41	-1.55	-.74	.53
	ERI =	100	POWER	-21.88	-54.40	58.32	-6.25	-20.05	-21.88	5.63
.90	NR =	1.00	1.69	2070	470	3.02	734	14.1	76	814
	P2 =	3.62	RAM	.81	2.49	-2.84	-.09	.66	.81	-.36
	T2 =	453	BLEED	-.50	-10.50	12.47	-.34	-1.37	-.50	.33
	ERI =	100	POWER	-18.34	-72.17	80.67	-5.11	-17.26	-18.34	3.57
1.20	NR =	.991	2.41	3400	90	16.51	782	17.2	94	796
	P2 =	5.14	RAM	.81	3.00	-3.53	-.09	.67	.81	-.30
	T2 =	503	BLEED	-.38	-52.38	244.50	-.33	-1.30	-.38	.15
	ERI =	100	POWER	-13.61	-136.93	181.34	-3.75	-13.19	-13.61	1.17
1.50	NR =	.971	3.56	10200	9020	1.21	1088	56.3	225	1513
	P2 =	7.62	RAM	1.04	1.43	-.45	-.00	1.04	1.04	-.01
	T2 =	566	BLEED	.02	-1.33	2.35	-.09	-.59	.02	.84
	ERI =	0	POWER	-.05	4.29	2.22	.20	1.40	-.05	3.12
1.80	NR =	.945	5.43	16200	11400	1.27	1181	76.2	300	1581
	P2 =	11.61	RAM	1.07	1.55	-.53	-.00	1.07	1.07	.00
	T2 =	643	BLEED	.03	-1.51	2.66	-.10	-.58	.03	.84
	ERI =	0	POWER	-.04	3.68	1.49	.18	1.06	-.04	2.35
2.00	NR =	.925	7.24	21600	13000	1.32	1248	92.1	358	1622
	P2 =	15.48	RAM	1.09	1.47	-.43	-.00	1.09	1.09	-.01
	T2 =	702	BLEED	.03	-1.67	2.82	-.11	-.60	.03	.79
	ERI =	0	POWER	-.03	3.08	1.20	.12	.85	-.03	1.85
2.30	NR =	.893	11.2	32300	15500	1.39	1359	121.7	466	1684
	P2 =	23.90	RAM	1.13	1.58	-.48	-.00	1.13	1.13	.00
	T2 =	802	BLEED	.02	-2.05	3.22	-.13	-.64	.02	.72
	ERI =	0	POWER	-.01	2.78	.78	.10	.67	-.01	1.44
2.45	NR =	.876	13.9	39000	16400	1.44	1416	138.7	528	1706
	P2 =	29.64	RAM	1.14	1.55	-.45	-.00	1.14	1.14	-.00
	T2 =	857	BLEED	.01	-2.30	3.49	-.14	-.66	.01	.67
	ERI =	0	POWER	-.01	2.70	.63	.10	.61	-.01	1.28

11-20

**CONFIDENTIAL**

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY                      PRESSURE ALTITUDE 45000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	WZK	BTANG
.60	1.28	1.51	1425	841	1257	2110	940	1.51	312	10.2
	RAM	.41	.00	-.42	.01	1.10	1.42	-1.53	-.17	.00
	BLEED	-.80	.00	.53	-.22	-2.37	-4.38	4.69	-.74	.00
	POWER	-12.24	.00	5.63	-.51	-32.93	-46.59	49.4	-21.88	.00
.90	1.69	1.68	1425	814	1257	2730	660	2.17	290	10.2
	RAM	.47	.00	-.36	.00	1.06	1.82	-2.00	-.20	.00
	BLEED	-.99	.00	.33	.00	-2.21	-7.60	8.58	-.50	.00
	POWER	-11.06	-.00	3.57	-1.52	-26.37	-51.71	55.9	-18.34	.00
1.20	2.41	1.97	1425	796	1255	3760	360	3.97	265	10.2
	RAM	.60	.00	-.30	-.04	1.06	3.46	-4.18	-.21	.00
	BLEED	-1.13	.00	.15	.03	-2.04	-17.83	24.33	-.38	.00
	POWER	-10.93	.00	1.17	-.26	-20.25	-83.06	97.5	-13.61	.00
1.50	3.56	6.52	10936	1513	1257	19400	9240	1.18	454	10.2
	RAM	1.04	1.01	-.01	.00	1.25	1.48	-.50	.01	.00
	BLEED	-.52	.98	.84	.01	-.62	-1.34	2.36	.02	.00
	POWER	1.74	6.58	3.12	-.06	2.03	4.31	2.19	-.05	.00
1.80	5.43	8.86	14467	1581	1257	28000	11700	1.23	423	2.9
	RAM	1.08	1.06	.00	-.01	1.25	1.50	-.48	.01	.00
	BLEED	-.53	1.10	.84	.02	-.60	-1.46	2.62	.03	.00
	POWER	1.23	5.23	2.35	.04	1.47	3.57	1.59	-.04	.00
2.00	7.24	10.73	17049	1622	1257	34900	13300	1.28	396	2.9
	RAM	1.08	1.07	-.01	.01	1.25	1.49	-.46	.01	.00
	BLEED	-.55	1.08	.79	.01	-.62	-1.65	2.81	.03	.00
	POWER	.96	4.33	1.85	.04	1.15	3.05	1.22	-.03	.00
2.30	11.2	14.22	21529	1684	1257	48100	15900	1.36	356	.0
	RAM	1.13	1.13	.00	-.00	1.28	1.57	-.47	.01	.00
	BLEED	-.59	1.07	.72	.00	-.66	-2.02	3.19	.02	.00
	POWER	.78	3.60	1.44	.01	.89	2.74	.82	-.01	.00
2.45	13.9	16.22	23663	1706	1258	55800	16900	1.40	336	.0
	RAM	1.14	1.14	.00	.00	1.28	1.58	-.49	.00	.00
	BLEED	-.61	1.07	.67	-.00	-.68	-2.28	3.47	.01	.00
	POWER	.71	3.36	1.28	-.00	.80	2.67	.65	-.01	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.12.4

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE    45000 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC
.60	NR =	1.00	1250	680	2.10	714	12.8	69	814
	P2 =	2.73	.81	1.92	-2.13	-.10	.65	.81	-.39
	T2 =	418	-.78	-6.68	7.42	-.38	-1.60	-.78	.47
	ERI =	100	POWER-19.27	-61.77	67.60	-5.46	-17.96	-19.27	4.01
.90	NR =	1.00	2210	320	4.45	749	15.0	82	791
	P2 =	3.62	.81	3.33	-4.00	-.10	.66	.81	-.35
	T2 =	453	-.54	-15.72	20.57	-.36	-1.42	-.54	.29
	ERI =	100	POWER-15.16	-92.69	109.26	-4.65	-14.52	-15.16	2.12
1.20	NR =	.991	3630	-30	-40.880	797	18.3	101	778
	P2 =	5.14	.82	-33.89	12.58	-.09	.69	.82	-.29
	T2 =	503	-.45	199.50	-49.97	-.34	-1.39	-.45	.13
	ERI =	100	POWER-12.20	829.03	-310.19	-3.58	-12.02	-12.20	.61
1.50	NR =	.971	10200	7320	1.30	1084	54.6	226	1395
	P2 =	7.62	1.04	1.49	-.52	-.00	1.04	1.04	-.01
	T2 =	566	.03	-1.50	2.66	-.09	-.59	.03	.84
	ERI =	0	POWER	-.04	4.69	1.99	.16	1.35	-.04
1.80	NR =	.945	16300	9290	1.34	1176	73.9	300	1455
	P2 =	11.61	1.07	1.65	-.67	-.00	1.07	1.07	-.01
	T2 =	643	.03	-1.80	3.06	-.10	-.59	.03	.81
	ERI =	0	POWER	-.04	3.88	1.27	.13	.98	-.04
2.00	NR =	.925	21600	10400	1.39	1243	89.2	359	1489
	P2 =	15.48	1.09	1.68	-.65	-.00	1.09	1.09	-.00
	T2 =	702	.03	-2.13	3.41	-.12	-.62	.03	.75
	ERI =	0	POWER	-.03	3.75	.92	.12	.85	-.03
2.30	NR =	.893	32300	12000	1.49	1352	117.7	466	1542
	P2 =	23.90	1.13	1.66	-.60	-.00	1.13	1.13	-.01
	T2 =	802	.02	-2.10	3.89	-.08	-.56	.02	.89
	ERI =	0	POWER	-.02	3.60	.57	.11	.71	-.02
2.45	NR =	.876	39000	12500	1.56	1409	134.2	528	1566
	P2 =	29.64	1.14	1.69	-.60	-.00	1.14	1.14	-.00
	T2 =	857	.01	-2.54	4.31	-.11	-.61	.01	.80
	ERI =	0	POWER	-.01	3.28	.41	.08	.60	-.01

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.12.4

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 45000 FEET

MO	P2/P0	P3/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.60	1.28	1.41	1425	814	1444	2050	800	1.78	335	10.2
	RAM	.40	.00	-.39	-.05	1.17	1.74	-1.90	-.19	.00
	BLEED	-.90	.00	.47	-.02	-2.75	-5.85	6.41	-.78	.00
	POWER	-11.89	.00	4.01	2.57	-33.50	-55.80	60.5	-19.27	.00
.90	1.69	1.55	1425	791	1450	2660	450	3.17	310	10.2
	RAM	.43	.00	-.35	-.00	1.09	2.46	-2.80	-.20	.00
	BLEED	-.93	.00	.29	-.00	-2.37	-11.35	13.68	-.54	.00
	POWER	-9.41	.00	2.12	-.01	-24.05	-67.70	76.1	-15.16	.00
1.20	2.41	1.80	1425	778	1450	3720	90	15.42	283	10.2
	RAM	.55	.00	-.29	.01	1.11	12.11	-30.71	-.19	.00
	BLEED	-1.16	.00	.13	.02	-2.27	-73.96	-676.22	-.45	.00
	POWER	-9.68	-.00	.61	-.12	-19.36	-300.68	764.4	-12.20	.00
1.50	3.56	5.38	9504	1395	1450	17800	7640	1.24	455	10.2
	RAM	1.04	1.01	-.01	-.00	1.28	1.60	-.64	.01	.00
	BLEED	-.51	1.10	.84	-.01	-.64	-1.52	2.69	.03	.00
	POWER	1.74	6.75	3.02	-.12	2.01	4.75	1.93	-.04	.00
1.80	5.43	7.31	12416	1455	1450	25800	9580	1.30	423	2.9
	RAM	1.06	1.04	-.01	.00	1.26	1.60	-.61	.01	.00
	BLEED	-.52	1.18	.81	-.01	-.63	-1.75	3.00	.03	.00
	POWER	1.14	5.20	2.17	.02	1.37	3.77	1.38	-.04	.00
2.00	7.24	8.83	14449	1489	1450	32300	10700	1.35	396	.0
	RAM	1.09	1.08	-.00	.00	1.27	1.63	-.59	.01	.00
	BLEED	-.58	1.18	.75	.02	-.66	-2.04	3.31	.03	.00
	POWER	1.01	4.72	1.87	-.01	1.17	3.59	1.08	-.03	.00
2.30	11.2	11.69	17886	1542	1450	44700	12400	1.44	356	.0
	RAM	1.11	1.11	-.01	.02	1.28	1.67	-.62	.01	.00
	BLEED	-.49	1.67	.89	.00	-.56	-2.06	3.85	.02	.00
	POWER	.86	4.21	1.55	-.02	.97	3.55	.62	-.02	.00
2.45	13.9	13.36	19560	1566	1450	52000	13000	1.50	337	.0
	RAM	1.14	1.14	-.00	.00	1.29	1.74	-.65	.00	.00
	BLEED	-.55	1.60	.80	.01	-.61	-2.50	4.26	.01	.00
	POWER	.69	3.72	1.29	.01	.80	3.23	.46	-.01	.00

# CONFIDENTIAL

GEI 67870

**CONFIDENTIAL**

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 45000 FEET

M0		P2/PO	FD	FN	SFC	TE	PE	W2	TC
.90	NR =	1.00	3390	12400	1.90	1036	33.4	119	2067
	P2 =	3.62	1.02	1.32	-.36	-.00	1.02	1.02	.00
	T2 =	500	.02	-1.69	.92	-.33	-.97	.02	.01
	ERI =	0	POWER	-.00	-1.97	2.76	.07	.22	-.00
1.20	NR =	.991	5840	15500	1.92	1101	43.2	154	2067
	P2 =	5.15	1.02	1.31	-.33	-.00	1.02	1.02	.00
	T2 =	554	.07	-1.84	1.11	-.26	-.92	.07	-.00
	ERI =	0	POWER	-.02	-1.29	1.90	.05	.19	-.02
1.50	NR =	.971	9580	19900	1.91	1185	56.8	202	2067
	P2 =	7.63	1.04	1.31	-.32	-.00	1.04	1.04	-.00
	T2 =	624	.08	-1.81	1.10	-.26	-.89	.08	-.01
	ERI =	0	POWER	-.02	-1.03	1.52	.05	.18	-.02
2.00	NR =	.925	19900	28800	1.96	1347	88.7	315	2067
	P2 =	15.50	1.09	1.31	-.25	-.00	1.09	1.09	.00
	T2 =	774	.03	-2.04	1.30	-.25	-.94	.03	.00
	ERI =	0	POWER	-.00	-1.50	.40	.03	.13	-.00
2.30	NR =	.893	29700	34400	2.02	1458	114.9	408	2067
	P2 =	23.94	1.13	1.34	-.21	-.00	1.13	1.13	.00
	T2 =	883	.02	-3.10	.89	-.18	-.94	.02	.01
	ERI =	7	POWER	-.00	-2.58	-.62	.02	.11	-.00

11-24

**CONFIDENTIAL**

# CONFIDENTIAL

GEL 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY + 40 F      PRESSURE ALTITUDE    45000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.90	1.69	5.42	23444	3478	1294	15900	12500	1.88	475	10.2
	RAM	1.02	.99	.03	.01	1.28	1.35	-.39	.02	.00
	BLEED	-1.31	-.79	-.10	.29	-1.34	-1.71	.94	.02	.00
	POWER	-4.60	.77	-.76	4.16	-1.50	-1.91	2.70	-.00	.00
1.20	2.41	6.82	29682	3492	1330	21700	15800	1.88	455	2.9
	RAM	1.03	1.00	.02	.00	1.24	1.32	-.35	.02	-50.34
	BLEED	-1.40	-.76	-.11	.42	-1.27	-1.76	1.04	.07	.00
	POWER	-3.46	.60	-.54	3.13	-1.00	-1.37	1.99	-.02	.00
1.50	3.57	8.64	38014	3500	1375	29800	20200	1.88	427	2.9
	RAM	1.04	1.02	-.01	-.01	1.22	1.31	-.31	.01	.00
	BLEED	-1.35	-.74	-.06	.40	-1.18	-1.79	1.08	.08	.00
	POWER	-2.59	.48	-.35	2.37	-.65	-.95	1.44	-.02	.00
2.00	7.25	12.86	56500	3484	1429	49200	29300	1.93	365	.0
	RAM	1.09	1.08	-.01	-.01	1.24	1.35	-.29	.01	.00
	BLEED	-1.41	-.77	-.07	.40	-1.20	-2.04	1.31	.03	.00
	POWER	-1.77	-1.10	-1.00	1.13	-.86	-1.44	.35	-.00	.00
2.30	11.2	16.26	69453	3446	1450	65200	35600	1.95	327	.0
	RAM	1.13	1.14	.00	.00	1.28	1.40	-.28	.01	.00
	BLEED	-1.51	-2.25	-.88	-.01	-1.71	-3.15	.94	.02	.00
	POWER	-1.27	-3.17	-2.03	-.00	-1.43	-2.61	-.58	-.00	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 45000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.90	NR =	1.00	1.69	3390	8250	1.21	1038	33.6	119	2067
	P2 =	3.62	RAM	1.02	1.35	-.35	-.00	1.02	1.02	.00
	T2 =	500	BLEED	.02	-1.79	1.18	-.33	-.96	.02	-.00
	ERI =	0	POWER	-.00	-1.35	2.82	.06	.20	-.00	-.03
1.20	NR =	.991	2.41	5840	10000	1.25	1103	43.5	154	2067
	P2 =	5.15	RAM	1.02	1.41	-.42	-.00	1.02	1.02	-.00
	T2 =	554	BLEED	.08	-1.98	1.44	-.26	-.90	.08	-.01
	ERI =	0	POWER	-.01	-1.02	2.20	.04	.18	-.01	-.00
1.50	NR =	.971	3.57	9580	12200	1.29	1187	57.2	202	2067
	P2 =	7.63	RAM	1.04	1.33	-.31	-.00	1.04	1.04	.00
	T2 =	624	BLEED	.08	-2.07	1.57	-.26	-.88	.08	-.00
	ERI =	0	POWER	-.01	-.74	1.67	.05	.18	-.01	.00
2.00	NR =	.925	7.25	19900	15900	1.39	1349	89.3	315	2067
	P2 =	15.50	RAM	1.09	1.45	-.39	-.00	1.09	1.09	-.00
	T2 =	774	BLEED	.03	-2.66	2.19	-.25	-.94	.03	-.01
	ERI =	0	POWER	-.00	-.49	1.16	.03	.13	-.00	.00
2.30	NR =	.893	11.2	29600	18200	1.44	1460	115.6	408	2067
	P2 =	23.94	RAM	1.13	1.55	-.46	-.00	1.13	1.13	.00
	T2 =	883	BLEED	.02	-3.13	2.73	-.18	-.94	.02	-.01
	ERI =	0	POWER	-.00	-.40	.96	.02	.10	-.00	.00

11-26

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY + 40 F      PRESSURE ALTITUDE    45000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.90	1.69	5.62	10018	2067	930	11800	8420	1.19	475	15.2
	RAM	1.03	1.02	.00	-.00	1.26	1.35	-.35	.02	.00
	BLEED	-1.30	-.65	-.00	.32	-1.27	-1.79	1.18	.02	.00
	POWER	-4.43	1.46	-.03	4.33	-1.03	-1.44	2.91	-.00	.00
1.20	2.41	7.08	12515	2067	952	16000	10200	1.23	455	10.2
	RAM	1.02	1.02	-.00	-.00	1.22	1.34	-.34	.02	.00
	BLEED	-1.37	-.58	-.01	.45	-1.19	-1.91	1.37	.08	.00
	POWER	-3.33	1.17	-.00	3.26	-.65	-1.02	2.20	-.01	.00
1.50	3.57	8.98	15694	2067	982	21900	12400	1.27	427	10.2
	RAM	1.05	1.04	.00	-.00	1.22	1.35	-.34	.01	.00
	BLEED	-1.31	-.55	-.00	.39	-1.13	-2.08	1.57	.08	.00
	POWER	-2.45	.92	.00	2.39	-.41	-.72	1.65	-.01	.00
2.00	7.25	13.41	22071	2067	1021	36300	16400	1.35	365	2.9
	RAM	1.09	1.09	-.00	-.00	1.24	1.42	-.35	.01	.00
	BLEED	-1.39	-.56	-.01	.42	-1.15	-2.59	2.12	.03	.00
	POWER	-1.72	.66	.00	1.68	-.22	-.49	1.16	-.00	.00
2.30	11.2	16.97	26313	2067	1042	48300	18600	1.41	327	.0
	RAM	1.13	1.13	.00	-.00	1.27	1.48	-.37	.01	.00
	BLEED	-1.55	-.53	-.01	.56	-1.16	-3.04	2.63	.02	.00
	POWER	-1.33	.56	.00	1.31	-.15	-.39	.95	-.00	.00

11-27

# CONFIDENTIAL

GEI 67870

**CONFIDENTIAL**

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 45000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.90	NR =	1.00	2490	2340	1.32	873	19.1	87	1188	
	P2 =	3.62	RAM	1.02	2.01	-1.25	-.01	1.00	1.02	-.07
	T2 =	500	BLEED	.02	-1.88	2.76	-.14	-.64	.02	.74
	ERI =	0	POWER	-.11	19.06	4.90	.85	5.23	-.11	11.38
1.20	NR =	.991	3630	1470	1.74	891	19.9	96	1074	
	P2 =	5.15	RAM	1.02	2.65	-2.06	-.01	1.00	1.02	-.06
	T2 =	554	BLEED	.02	-3.67	4.74	-.16	-.72	.02	.56
	ERI =	0	POWER	-.09	30.78	-2.05	1.02	5.26	-.09	11.20
1.50	NR =	.971	9610	9910	1.27	1172	54.3	203	1803	
	P2 =	7.63	RAM	1.04	1.39	-.39	-.00	1.04	1.04	-.01
	T2 =	624	BLEED	.04	-1.46	2.02	-.18	-.66	.04	.62
	ERI =	0	POWER	-.09	4.50	2.47	.35	1.60	-.09	3.56
2.00	NR =	.925	19900	13800	1.38	1339	86.5	315	1905	
	P2 =	15.50	RAM	1.09	1.52	-.47	-.00	1.09	1.09	-.00
	T2 =	774	BLEED	.02	-1.94	2.53	-.16	-.71	.02	.55
	ERI =	0	POWER	-.03	3.25	1.28	.21	.94	-.03	2.05
2.30	NR =	.893	29700	16300	1.45	1455	113.2	408	1957	
	P2 =	23.94	RAM	1.13	1.58	-.49	-.00	1.13	1.13	-.00
	T2 =	883	BLEED	.01	-2.08	2.88	-.15	-.70	.01	.60
	ERI =	0	POWER	-.01	2.66	.82	.11	.68	-.01	1.45

11-28

**CONFIDENTIAL**

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY + 40 F      PRESSURE ALTITUDE    45000 FEET

M0	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.90	1.69	2.58	3087	1188	1095	5000	2510	1.23	348	15.2
	RAM	.94	.88	-.07	-.00	1.42	1.81	-1.02	.02	.00
	BLEED	-.55	.81	.74	-.00	-.85	-1.71	2.58	.02	.00
	POWER	5.97	24.17	11.38	-.25	8.67	17.37	6.55	-.11	.00
1.20	2.41	2.67	2555	1074	1095	5250	1630	1.57	282	15.2
	RAM	.95	.86	-.06	-.00	1.41	2.27	-1.58	.02	.00
	BLEED	-.67	.81	.56	.03	-.99	-3.22	4.24	.02	.00
	POWER	5.62	28.59	11.20	-.03	8.29	26.96	1.53	-.09	.00
1.50	3.57	7.45	12568	1803	1095	19700	10100	1.24	428	10.2
	RAM	1.04	1.03	-.01	-.00	1.24	1.42	-.42	.01	.00
	BLEED	-.62	.52	.62	.01	-.73	-1.46	2.02	.04	.00
	POWER	1.94	7.06	3.56	-.04	2.27	4.51	2.46	-.09	.00
2.00	7.25	11.92	19026	1905	1094	34100	14200	1.34	365	2.9
	RAM	1.09	1.09	-.00	-.00	1.25	1.46	-.41	.01	.00
	BLEED	-.74	.51	.55	.07	-.77	-1.88	2.46	.02	.00
	POWER	1.10	4.58	2.05	.03	1.30	3.17	1.36	-.03	.00
2.30	11.2	15.62	23644	1957	1095	46400	16700	1.42	327	.0
	RAM	1.13	1.13	-.00	-.00	1.27	1.52	-.42	.01	.00
	BLEED	-.64	.71	.60	-.00	-.72	-2.02	2.82	.01	.00
	POWER	.81	3.51	1.45	-.01	.92	2.58	.90	-.01	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 45000 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC	
.90	NR =	1.00	1.69	2020	390	3.70	802	13.6	71	886
	P2 =	3.62	RAM	.84	3.03	-3.57	-.08	.69	.84	-.36
	T2 =	500	BLEED	-.48	-12.72	15.72	-.34	-1.37	-.48	.27
	ERI =	100	POWER	-17.67	-88.84	102.07	-5.00	-16.84	-17.67	2.80
1.20	NR =	.991	2.41	3330	40	36.21	855	16.7	88	866
	P2 =	5.15	RAM	.83	7.31	-11.53	-.08	.69	.83	-.30
	T2 =	554	BLEED	-.40	-114.71	-159.18	-.33	-1.32	-.40	.15
	ERI =	100	POWER	-13.20	-316.95	742.23	-3.69	-12.84	-13.20	1.01
1.50	NR =	.971	3.57	9630	7730	1.29	1160	51.5	203	1571
	P2 =	7.63	RAM	1.04	1.50	-.53	-.00	1.04	1.04	-.01
	T2 =	624	BLEED	.03	-1.41	2.52	-.10	-.57	.03	.85
	ERI =	0	POWER	-.06	4.93	2.31	.20	1.52	-.06	3.37
2.00	NR =	.925	7.25	20000	10400	1.42	1329	82.2	316	1670
	P2 =	15.50	RAM	1.09	1.61	-.58	-.00	1.09	1.09	-.00
	T2 =	774	BLEED	.02	-1.96	3.15	-.13	-.63	.02	.74
	ERI =	0	POWER	-.02	3.98	1.14	.15	.98	-.02	2.12
2.30	NR =	.893	11.2	29700	11900	1.52	1443	107.5	408	1717
	P2 =	23.94	RAM	1.13	1.72	-.65	-.00	1.13	1.13	-.00
	T2 =	883	BLEED	.01	-2.32	3.73	-.11	-.63	.01	.74
	ERI =	0	POWER	-.01	3.78	.65	.13	.79	-.01	1.67

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 45000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	WZK	BTANG
.90	1.69	1.64	1425	886	1256	2590	570	2.50	282	10.2
	RAM .49		.00	-.36	-.02	1.13	2.13	-2.39	-.17	.00
	BLEED -1.05		.00	.27	.10	-2.32	-8.82	10.16	-.48	.00
	POWER -11.95		.00	2.80	.33	-27.43	-61.96	68.1	-17.67	.00
1.20	2.41	1.93	1425	866	1256	3610	280	5.14	259	10.2
	RAM .59		.00	-.30	-.00	1.08	4.14	-5.22	-.19	.00
	BLEED -1.11		.00	.15	-.02	-2.08	-22.29	33.50	-.40	.00
	POWER -10.76		.00	1.01	-.16	-20.07	-102.71	126.1	-13.20	.00
1.50	3.57	5.99	9949	1571	1257	17500	7890	1.26	429	10.2
	RAM 1.04		1.01	-.01	-.00	1.26	1.53	-.56	.01	.00
	BLEED -.51		1.06	.85	.01	-.62	-1.41	2.52	.03	.00
	POWER 1.84		7.33	3.37	-.03	2.20	4.96	2.29	-.06	.00
2.00	7.25	9.60	14786	1670	1257	30700	10700	1.38	366	2.9
	RAM 1.09		1.07	-.00	.00	1.26	1.58	-.56	.01	.00
	BLEED -.57		1.10	.74	.00	-.66	-1.92	3.10	.02	.00
	POWER 1.14		5.18	2.12	.01	1.34	3.88	1.24	-.02	.00
2.30	11.2	12.58	17998	1717	1257	41900	12200	1.47	327	.0
	RAM 1.13		1.13	-.00	-.00	1.28	1.66	-.58	.01	.00
	BLEED -.57		1.27	.74	-.00	-.65	-2.25	3.65	.01	.00
	POWER .93		4.47	1.67	-.01	1.06	3.66	.76	-.01	.00

11-31

# CONFIDENTIAL



PREVIOUS PAGE WAS BLANK, THEREFORE WAS NOT FILMED

**CONFIDENTIAL**

GEI 67870

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY PRESSURE ALTITUDE 55000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.90	NR = 1.00	1.69	2120	8190	1.87	967	21.5	78	1995
	P2 = 2.24	RAM	1.03	1.33	-.37	-.00	1.03	1.03	-.00
	T2 = 453	BLEED	.01	-1.68	.90	-.33	-.98	.01	-.00
	ERI = 101	POWER	-.00	-3.02	4.23	.11	.35	-.00	-.00
1.20	NR = .991	2.41	3750	11000	1.87	1039	29.1	104	2067
	P2 = 3.18	RAM	1.04	1.36	-.39	.00	1.04	1.04	.00
	T2 = 503	BLEED	.03	-1.77	1.01	-.30	-.96	.03	.01
	ERI = 0	POWER	-.01	-1.84	2.74	.08	.25	-.01	.00
1.50	NR = .971	3.56	6220	14300	1.85	1115	38.7	138	2067
	P2 = 4.71	RAM	1.05	1.34	-.35	-.00	1.05	1.05	-.00
	T2 = 566	BLEED	.07	-1.77	1.05	-.26	-.91	.07	-.00
	ERI = 0	POWER	-.02	-1.25	1.94	.06	.24	-.02	-.00
1.80	NR = .945	5.43	9940	18500	1.86	1207	51.6	183	2067
	P2 = 7.18	RAM	1.07	1.30	-.27	-.00	1.07	1.07	.00
	T2 = 643	BLEED	.08	-1.82	1.12	-.26	-.89	.08	.01
	ERI = 0	POWER	-.02	-1.20	1.75	.05	.20	-.02	.00
2.00	NR = .925	7.24	13200	21400	1.88	1271	61.8	220	2067
	P2 = 9.57	RAM	1.09	1.28	-.22	-.00	1.09	1.09	.00
	T2 = 702	BLEED	.05	-1.92	1.20	-.24	-.92	.05	.00
	ERI = 0	POWER	-.01	-1.05	1.53	.04	.17	-.01	.00
2.30	NR = .893	11.2	19800	26100	1.95	1376	80.6	286	2067
	P2 = 14.78	RAM	1.13	1.28	-.18	-.00	1.13	1.13	-.00
	T2 = 802	BLEED	.03	-2.06	1.32	-.24	-.95	.03	-.01
	ERI = 0	POWER	-.00	-2.43	-.31	.03	.14	-.00	.00
2.50	NR = .870	14.9	25500	29000	2.00	1451	95.4	339	2067
	P2 = 19.69	RAM	1.16	1.33	-.16	-.00	1.16	1.16	.00
	T2 = 876	BLEED	.02	-3.11	.84	-.18	-.95	.02	-.01
	ERI = 7	POWER	-.00	-3.08	-.77	.02	.13	-.00	.00
2.70	NR = .846	19.8	32100	31800	2.06	1525	111.1	395	2067
	P2 = 26.13	RAM	1.19	1.33	-.13	-.00	1.19	1.19	-.00
	T2 = 955	BLEED	.02	-3.13	1.05	-.20	-.95	.02	-.01
	ERI = 7	POWER	-.00	-2.81	-.55	.02	.11	-.00	-.00
3.00	NR = .809	29.9	44300	37200	2.17	1641	138.5	490	2097
	P2 = 39.50	RAM	1.24	.93	-.35	-.00	1.24	1.24	.00
	T2 = 1083	BLEED	.02	-2.47	1.78	-.19	-.94	.02	.01
	ERI = 0	POWER	-.00	-1.08	.49	.01	.08	-.00	.00

12-2

**CONFIDENTIAL**

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 55000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.90	1.69	5.70	15353	3390	1290	10400	8300	1.85	480	10.2
	RAM	1.04	.98	.03	.01	1.29	1.36	-.40	.04	.00
	BLEED	-1.32	-.80	-.11	.28	-1.35	-1.69	.92	.01	.00
	POWER	-7.08	1.18	-1.19	6.39	-2.26	-2.83	4.04	-.00	.00
1.20	2.41	7.64	20513	3468	1293	14900	11200	1.84	472	2.9
	RAM	1.03	1.00	.02	.01	1.24	1.31	-.34	.03	.00
	BLEED	-1.37	-.79	-.10	.34	-1.28	-1.72	.96	.03	.00
	POWER	-5.28	.88	-.86	4.78	-1.45	-1.94	2.84	-.01	.00
1.50	3.56	9.80	26546	3485	1337	20700	14500	1.83	449	.0
	RAM	1.06	1.02	.02	.00	1.23	1.31	-.32	.02	.00
	BLEED	-1.39	-.75	-.10	.41	-1.21	-1.75	1.03	.07	.00
	POWER	-3.81	.68	-.59	3.45	-.94	-1.34	2.04	-.02	.00
1.80	5.43	12.59	34418	3499	1385	28700	18800	1.83	418	.0
	RAM	1.07	1.05	.03	.01	1.24	1.33	-.31	.02	.00
	BLEED	-1.33	-.73	-.11	.35	-1.17	-1.83	1.13	.08	.00
	POWER	-2.89	.53	-.52	2.56	-.69	-1.05	1.60	-.02	.00
2.00	7.24	14.80	40409	3495	1406	35100	21900	1.84	392	.0
	RAM	1.10	1.07	-.01	-.01	1.23	1.32	-.27	.01	.00
	BLEED	-1.43	-.76	-.07	.44	-1.17	-1.91	1.19	.05	.00
	POWER	-2.59	.46	-.38	2.35	-.54	-.86	1.33	-.01	.00
2.30	11.2	18.77	50987	3485	1438	47000	27200	1.87	354	.0
	RAM	1.13	1.11	-.01	-.01	1.26	1.35	-.26	.01	.00
	BLEED	-1.45	-.78	-.08	.43	-1.18	-2.06	1.32	.03	.00
	POWER	-1.89	-2.73	-1.87	.69	-1.40	-2.41	-.32	-.00	.00
2.50	14.9	21.86	58015	3452	1450	56200	30700	1.89	328	.0
	RAM	1.16	1.17	.01	.00	1.29	1.40	-.25	.01	.00
	BLEED	-1.53	-2.31	-.91	-.01	-1.71	-3.14	.87	.02	.00
	POWER	-1.53	-3.82	-2.43	-.01	-1.70	-3.11	-.74	-.00	.00
2.70	19.8	25.41	65501	3442	1450	66400	34300	1.91	301	.0
	RAM	1.19	1.19	-.00	.00	1.32	1.44	-.23	.01	.00
	BLEED	-1.47	-2.13	-.79	.00	-1.62	-3.15	1.07	.02	.00
	POWER	-1.32	-3.33	-2.11	.00	-1.46	-2.83	-.53	-.00	.00
3.00	29.9	32.46	80879	3522	1428	85500	41200	1.96	264	.0
	RAM	1.26	.56	-.32	-.22	1.14	1.03	-.45	.00	.00
	BLEED	-1.44	-.76	-.07	.42	-1.14	-2.39	1.69	.02	.00
	POWER	-1.13	-.59	-.58	.76	-.46	-.95	.36	-.00	.00

12-3

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY          PRESSURE ALTITUDE 55000 FEET

M0		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.90	NR =	1.00	1.69	2120	7700	1.69	968	21.6	78	1995
	P2 =	2.24	RAM	1.03	1.33	-.38	-.00	1.03	1.03	-.00
	T2 =	453	BLEED	.01	-1.66	.91	-.33	-.98	.01	-.00
	ERI =	101	POWER	-.00	-2.42	3.77	.11	.35	-.00	-.00
1.20	NR =	.991	2.41	3750	10200	1.70	1039	29.1	104	2067
	P2 =	3.18	RAM	1.04	1.25	-.28	.00	1.04	1.04	.00
	T2 =	503	BLEED	.03	-1.67	.94	-.31	-.96	.03	.01
	ERI =	0	POWER	-.01	-1.79	2.80	.08	.25	-.01	.00
1.50	NR =	.971	3.56	6220	13200	1.70	1116	38.7	138	2067
	P2 =	4.71	RAM	1.05	1.31	-.32	-.00	1.05	1.05	-.00
	T2 =	566	BLEED	.07	-1.79	1.10	-.26	-.91	.07	-.00
	ERI =	0	POWER	-.02	-1.25	2.03	.06	.23	-.02	.00
1.80	NR =	.945	5.43	9940	16900	1.71	1207	51.6	183	2067
	P2 =	7.18	RAM	1.07	1.30	-.28	-.00	1.07	1.07	.00
	T2 =	643	BLEED	.08	-1.82	1.16	-.26	-.89	.08	.01
	ERI =	0	POWER	-.02	-.89	1.50	.05	.20	-.02	.00
2.00	NR =	.925	7.24	13200	19400	1.73	1271	61.9	220	2067
	P2 =	9.57	RAM	1.09	1.30	-.25	-.00	1.09	1.09	.00
	T2 =	702	BLEED	.05	-1.96	1.28	-.24	-.92	.05	.00
	ERI =	0	POWER	-.01	-.85	1.38	.04	.17	-.01	.00
2.30	NR =	.893	11.2	19800	23500	1.80	1376	80.7	286	2067
	P2 =	14.78	RAM	1.13	1.29	-.20	-.00	1.13	1.13	.00
	T2 =	802	BLEED	.03	-2.12	1.41	-.24	-.95	.03	-.01
	ERI =	0	POWER	-.00	-.70	1.13	.03	.14	-.00	.00
2.50	NR =	.870	14.9	25500	26200	1.85	1451	95.5	339	2067
	P2 =	19.69	RAM	1.16	1.32	-.19	-.00	1.16	1.16	.00
	T2 =	876	BLEED	.02	-2.32	1.63	-.18	-.95	.02	-.01
	ERI =	0	POWER	-.00	-.66	1.04	.02	.13	-.00	.00
2.70	NR =	.846	19.8	32100	28600	1.92	1526	111.2	395	2067
	P2 =	26.13	RAM	1.19	1.33	-.14	-.00	1.19	1.19	-.00
	T2 =	955	BLEED	.02	-2.42	1.74	-.20	-.95	.02	-.01
	ERI =	0	POWER	-.00	-.60	.94	.02	.11	-.00	-.00
3.00	NR =	.809	29.9	44300	32500	2.02	1642	138.7	490	2097
	P2 =	39.50	RAM	1.24	1.34	-.11	-.00	1.24	1.24	.00
	T2 =	1083	BLEED	.02	-2.60	1.95	-.19	-.94	.02	.01
	ERI =	0	POWER	-.00	-.47	.74	.01	.08	-.00	.00

12-4

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 55000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.90	1.69	5.73	13008	3122	1217	9900	7780	1.67	480	10.2
	RAM	1.04	.97	-.01	-.01	1.27	1.33	-.39	.04	.00
	BLEED	-1.32	-.77	-.04	.31	-1.31	-1.67	.93	.01	.00
	POWER	-7.02	1.33	-.79	6.46	-2.02	-2.56	3.92	-.00	.00
1.20	2.41	7.69	17344	3186	1217	14100	10400	1.67	472	10.2
	RAM	1.03	.99	-.01	-.01	1.23	1.30	-.33	.03	.00
	BLEED	-1.36	-.75	-.05	.36	-1.25	-1.71	.98	.03	.00
	POWER	-5.24	.99	-.61	4.81	-1.30	-1.77	2.78	-.01	.00
1.50	3.56	9.87	22331	3178	1253	19600	13400	1.67	449	2.9
	RAM	1.06	1.01	.00	-.01	1.22	1.30	-.31	.02	.00
	BLEED	-1.39	-.72	-.07	.43	-1.18	-1.77	1.08	.07	.00
	POWER	-3.78	.76	-.45	3.50	-.86	-1.25	2.03	-.02	.00
1.80	5.43	12.69	28792	3171	1292	27000	17100	1.69	418	.0
	RAM	1.08	1.04	.00	-.00	1.23	1.32	-.29	.02	.00
	BLEED	-1.32	-.70	-.06	.37	-1.13	-1.84	1.17	.08	.00
	POWER	-2.85	.60	-.37	2.63	-.60	-.94	1.55	-.02	.00
2.00	7.24	14.93	33669	3161	1311	33000	19800	1.70	392	.0
	RAM	1.10	1.06	-.01	-.01	1.23	1.32	-.27	.01	.00
	BLEED	-1.42	-.72	-.05	.45	-1.16	-1.96	1.28	.05	.00
	POWER	-2.55	.52	-.30	2.37	-.49	-.80	1.33	-.01	.00
2.30	11.2	18.94	42199	3146	1340	44100	24300	1.74	354	.0
	RAM	1.13	1.11	-.01	-.01	1.26	1.36	-.27	.01	.00
	BLEED	-1.43	-.75	-.06	.43	-1.16	-2.13	1.43	.03	.00
	POWER	-1.99	.42	-.26	1.84	-.36	-.65	1.08	-.00	.00
2.50	14.9	22.06	48551	3138	1357	53000	27500	1.77	328	.0
	RAM	1.17	1.14	-.01	-.01	1.28	1.39	-.27	.01	.00
	BLEED	-1.59	-.75	-.08	.57	-1.19	-2.31	1.62	.02	.00
	POWER	-1.69	.37	-.22	1.56	-.29	-.56	.93	-.00	.00
2.70	19.8	25.63	54867	3136	1359	62700	30600	1.80	301	.0
	RAM	1.19	1.17	-.01	-.00	1.31	1.44	-.25	.01	.00
	BLEED	-1.52	-.74	-.07	.50	-1.17	-2.41	1.73	.02	.00
	POWER	-1.46	.33	-.19	1.35	-.24	-.49	.82	-.00	.00
3.00	29.9	32.76	65767	3171	1328	80100	35800	1.84	264	.0
	RAM	1.24	1.23	-.01	-.00	1.35	1.49	-.25	-.00	.00
	BLEED	-1.43	-.72	-.05	.43	-1.13	-2.55	1.90	.02	.00
	POWER	-1.15	.27	-.15	1.06	-.18	-.39	.66	-.00	.00

12-5

# CONFIDENTIAL

## CONFIDENTIAL

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY PRESSURE ALTITUDE 55000 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC
.90	NR =	1.00	2120	7010	1.52	968	21.6	78	1995
	P2 =	2.24	1.03	1.34	-.41	-.00	1.03	1.03	-.00
	T2 =	453	.01	-1.68	.99	-.33	-.98	.01	-.00
	ERI =	101	POWER	-.00	-2.30	3.87	.11	.35	-.00
1.20	NR =	.991	3750	9240	1.53	1039	29.1	104	2067
	P2 =	3.18	1.04	1.25	-.30	.00	1.04	1.04	.00
	T2 =	503	.02	-1.70	1.02	-.31	-.96	.02	.01
	ERI =	0	POWER	-.01	-1.71	2.89	.08	.25	-.01
1.50	NR =	.971	6220	11700	1.55	1116	38.7	138	2067
	P2 =	4.71	1.05	1.34	-.36	-.00	1.05	1.05	.00
	T2 =	566	.07	-1.84	1.20	-.26	-.91	.07	-.00
	ERI =	0	POWER	-.02	-1.09	1.99	.06	.23	-.02
1.80	NR =	.945	9940	14800	1.57	1207	51.7	183	2067
	P2 =	7.18	1.07	1.33	-.31	-.00	1.07	1.07	.00
	T2 =	643	.08	-1.90	1.29	-.27	-.89	.08	-.00
	ERI =	0	POWER	-.02	-.70	1.40	.05	.20	-.02
2.00	NR =	.925	13200	17000	1.59	1271	61.9	220	2067
	P2 =	9.57	1.09	1.33	-.29	-.00	1.09	1.09	.00
	T2 =	702	.05	-2.05	1.42	-.24	-.92	.05	.00
	ERI =	0	POWER	-.01	-.67	1.29	.04	.17	-.01
2.30	NR =	.893	19800	20300	1.64	1377	80.8	286	2067
	P2 =	14.78	1.13	1.32	-.23	-.00	1.13	1.13	.00
	T2 =	802	.03	-2.23	1.59	-.25	-.95	.03	-.01
	ERI =	0	POWER	-.00	-.62	1.12	.03	.14	-.00
2.50	NR =	.870	25500	22500	1.70	1452	95.6	339	2067
	P2 =	19.69	1.16	1.34	-.22	-.00	1.16	1.16	.00
	T2 =	876	.02	-2.48	1.86	-.18	-.94	.02	-.01
	ERI =	0	POWER	-.00	-.64	1.08	.02	.13	-.00
2.70	NR =	.846	32100	24200	1.76	1526	111.3	395	2067
	P2 =	26.13	1.19	1.34	-.16	-.00	1.19	1.19	-.00
	T2 =	955	.02	-2.61	2.01	-.20	-.95	.02	-.01
	ERI =	0	POWER	-.00	-.55	.95	.02	.11	-.00
3.00	NR =	.809	44300	26900	1.88	1642	138.8	490	2097
	P2 =	39.50	1.24	1.35	-.12	-.00	1.24	1.24	.00
	T2 =	1083	.02	-2.85	2.30	-.19	-.94	.02	.01
	ERI =	0	POWER	-.00	-.40	.73	.01	.08	-.00

CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 55000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.90	1.69	5.78	10658	2758	1125	9220	7100	1.50	480	10.2
	RAM 1.04	.96	-.03	-.03	-.03	1.26	1.32	-.39	.04	.00
	BLEED -1.31	-.72	-.01	.32	-1.29	-1.67	.98	.01	.00	
	POWER -6.93	1.54	-.57	6.50	-1.86	-2.42	3.99	-.00	.00	
1.20	2.41	7.75	14168	2809	1124	13100	9390	1.51	472	10.2
	RAM 1.04	.98	-.03	-.02	1.21	1.28	-.33	.03	.00	
	BLEED -1.34	-.71	-.01	.37	-1.22	-1.72	1.04	.02	.00	
	POWER -5.18	1.16	-.41	4.87	-1.17	-1.64	2.81	-.01	.00	
1.50	3.56	9.96	18108	2791	1154	18100	11900	1.52	448	2.9
	RAM 1.06	1.00	-.01	-.02	1.21	1.30	-.31	.02	.00	
	BLEED -1.38	-.67	-.04	.43	-1.16	-1.80	1.16	.07	.00	
	POWER -3.74	.89	-.33	3.48	-.78	-1.17	2.07	-.02	.00	
1.80	5.43	12.82	23156	2777	1188	25000	15100	1.54	418	.0
	RAM 1.08	1.03	-.01	-.01	1.22	1.32	-.30	.02	.00	
	BLEED -1.32	-.65	-.04	.38	-1.12	-1.91	1.29	.08	.00	
	POWER -2.81	.70	-.27	2.60	-.54	-.88	1.59	-.02	.00	
2.00	7.24	15.08	26916	2767	1204	30500	17300	1.56	392	.0
	RAM 1.10	1.06	-.02	-.02	1.22	1.32	-.29	.01	.00	
	BLEED -1.41	-.67	-.03	.44	-1.14	-2.05	1.42	.05	.00	
	POWER -2.51	.60	-.22	2.34	-.43	-.76	1.37	-.01	.00	
2.30	11.2	19.14	33393	2752	1229	40700	20900	1.60	354	.0
	RAM 1.13	1.10	-.02	-.01	1.25	1.37	-.28	.01	.00	
	BLEED -1.41	-.69	-.04	.41	-1.15	-2.26	1.62	.03	.00	
	POWER -1.96	.49	-.19	1.84	-.32	-.61	1.11	-.00	.00	
2.50	14.9	22.10	38125	2744	1244	48900	23400	1.63	328	.0
	RAM 1.17	1.14	-.01	-.01	1.28	1.40	-.29	.01	.00	
	BLEED -1.58	-.69	-.06	.57	-1.17	-2.47	1.84	.02	.00	
	POWER -1.66	.43	-.16	1.57	-.25	-.52	.97	-.00	.00	
2.70	19.8	25.91	42723	2741	1246	57800	25700	1.66	.01	.0
	RAM 1.19	1.17	-.01	-.00	1.31	1.45	-.26	.01	.00	
	BLEED -1.51	-.68	-.05	.50	-1.15	-2.61	2.00	.02	.00	
	POWER -1.43	.39	-.14	1.36	-.21	-.46	.86	-.00	.00	
3.00	29.9	33.10	50627	2772	1218	73800	29500	1.72	264	.0
	RAM 1.24	1.22	-.01	-.01	1.35	1.51	-.27	.00	.00	
	BLEED -1.42	-.65	-.03	.43	-1.11	-2.81	2.26	.02	.00	
	POWER -1.13	.32	-.11	1.05	.5	-.37	.70	-.00	.00	

12-7

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE    55000 FEET

M0		P2/PO	FD	FN	SFC	TE	PE	W2	TC
.90	NR =	1.00	2120	6150	1.37	968	21.6	78	1995
	P2 =	2.24	1.03	1.30	-.55	-.00	1.03	1.03	-.00
	T2 =	453	.01	-1.68	1.20	-.33	-.98	.01	.00
	ERI =	101	POWER	-.00	-1.96	3.79	.11	.35	-.00
1.20	NR =	.991	3750	8070	1.36	1040	29.2	104	2067
	P2 =	3.18	1.04	1.30	-.36	.00	1.04	1.04	.00
	T2 =	503	.02	-1.79	1.19	-.31	-.96	.02	.01
	ERI =	0	POWER	-.01	-1.57	3.00	.08	.25	-.01
1.50	NR =	.971	6220	10000	1.38	1116	38.8	138	2067
	P2 =	4.71	1.05	1.27	-.31	-.00	1.05	1.05	.00
	T2 =	566	.08	-1.88	1.33	-.26	-.90	.08	.00
	ERI =	0	POWER	-.02	-1.29	2.40	.06	.23	-.02
1.80	NR =	.945	9940	12400	1.41	1208	51.7	183	2067
	P2 =	7.18	1.07	1.34	-.34	-.00	1.07	1.07	.00
	T2 =	643	.08	-2.04	1.51	-.27	-.89	.08	-.00
	ERI =	0	POWER	-.02	-.74	1.60	.05	.20	-.02
2.00	NR =	.925	13200	14100	1.43	1272	62.0	220	2067
	P2 =	9.57	1.09	1.39	-.37	-.00	1.09	1.09	.00
	T2 =	702	.05	-2.24	1.71	-.24	-.92	.05	.00
	ERI =	0	POWER	-.01	-.63	1.39	.04	.17	-.01
2.30	NR =	.893	19800	16800	1.47	1377	80.8	286	2067
	P2 =	14.78	1.13	1.37	-.30	-.00	1.13	1.13	.00
	T2 =	802	.03	-2.47	1.94	-.25	-.95	.03	-.01
	ERI =	0	POWER	-.00	-.53	1.16	.03	.14	-.00
2.50	NR =	.870	25500	18300	1.51	1452	95.7	339	2067
	P2 =	19.69	1.16	1.37	-.26	-.00	1.16	1.16	.00
	T2 =	876	.02	-2.71	2.21	-.18	-.94	.02	-.01
	ERI =	0	POWER	-.00	-.46	1.02	.02	.13	-.00
2.70	NR =	.846	32100	19400	1.58	1526	111.4	395	2067
	P2 =	26.13	1.19	1.40	-.22	-.00	1.19	1.19	.00
	T2 =	955	.02	-2.95	2.50	-.19	-.94	.02	.00
	ERI =	0	POWER	-.00	-.44	.95	.02	.11	-.00
3.00	NR =	.809	44300	21100	1.68	1642	138.9	490	2097
	P2 =	39.50	1.24	1.47	-.24	-.00	1.24	1.24	.00
	T2 =	1083	.02	-3.40	3.03	-.19	-.94	.02	.01
	ERI =	0	POWER	-.00	-.42	.86	.01	.08	-.00

12-8

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 55000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	WZK	BTANG
.90	1.69	5.83	8401	2338	1017	8400	6280	1.34	480	10.2
	RAM	1.05	.79	-.15	-.09	1.19	1.24	-.49	.04	.00
	BLEED	-1.31	-.50	.11	.38	-1.22	-1.63	1.16	.01	.00
	POWER	-6.81	1.81	-.53	6.40	-1.79	-2.39	4.23	-.00	.00
1.20	2.41	7.82	10986	2374	1014	11900	8180	1.34	472	10.2
	RAM	1.04	.96	-.02	-.01	1.21	1.29	-.36	.03	.00
	BLEED	-1.33	-.63	-.00	.35	-1.21	-1.78	1.18	.02	.00
	POWER	-5.10	1.42	-.33	4.83	-1.10	-1.60	3.04	-.01	.00
1.50	3.56	10.06	13877	2356	1039	16400	10200	1.36	448	10.2
	RAM	1.06	.99	-.02	-.02	1.21	1.30	-.34	.02	.00
	BLEED	-1.36	-.59	-.01	.43	-1.14	-1.88	1.33	.08	.00
	POWER	-3.69	1.09	-.22	3.48	-.70	-1.11	2.21	-.02	.00
1.80	5.43	12.95	17511	2345	1069	22600	12700	1.38	418	2.9
	RAM	1.08	1.02	-.01	-.01	1.21	1.32	-.32	.02	.00
	BLEED	-1.31	-.58	-.02	.38	-1.10	-2.02	1.49	.08	.00
	POWER	-2.76	.85	-.16	2.61	-.46	-.81	1.67	-.02	.00
2.00	7.24	15.24	20151	2334	1083	27600	14400	1.40	392	.0
	RAM	1.10	1.05	-.03	-.02	1.22	1.33	-.31	.01	.00
	BLEED	-1.40	-.59	.00	.44	-1.12	-2.19	1.66	.05	.00
	POWER	-2.46	.75	-.10	2.36	-.36	-.68	1.44	-.01	.00
2.30	11.2	19.35	24570	2321	1105	36900	17000	1.44	354	.0
	RAM	1.13	1.09	-.02	-.01	1.25	1.38	-.31	.01	.00
	BLEED	-1.39	-.60	-.01	.41	-1.13	-2.47	1.94	.03	.00
	POWER	-1.93	.62	-.09	1.85	-.25	-.54	1.17	-.00	.00
2.50	14.9	22.56	27680	2314	1118	44200	18700	1.48	328	.0
	RAM	1.17	1.13	-.02	-.01	1.27	1.42	-.32	.01	.00
	BLEED	-1.57	-.59	-.02	.57	-1.15	-2.73	2.23	.02	.00
	POWER	-1.63	.55	-.07	1.57	-.20	-.47	1.02	-.00	.00
2.70	19.8	26.20	30549	2310	1120	52200	20100	1.52	301	.0
	RAM	1.20	1.16	-.01	-.01	1.31	1.48	-.30	.01	.00
	BLEED	-1.48	-.56	-.01	.49	-1.12	-2.94	2.49	.02	.00
	POWER	-1.40	.51	-.05	1.35	-.16	-.40	.92	-.00	.00
3.00	29.9	33.46	35458	2337	1095	66700	22400	1.59	264	.0
	RAM	1.24	1.21	-.01	-.01	1.34	1.55	-.31	-.00	.00
	BLEED	-1.41	-.53	-.00	.44	-1.09	-3.30	2.92	.02	.00
	POWER	-1.11	.43	-.05	1.07	-.11	-.34	.77	-.00	.00

12-9

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY          PRESSURE ALTITUDE 55000 FEET

MO		L/20	FD	FN	SFC	TE	PE	W2	TC
.90	NR =	69	2120	5460	1.18	970	21.7	78	1995
	P2 =	2.03	1.03	1.35	-.35	-.00	1.03	1.03	-.00
	T2 =	45 BLEED	.01	-1.77	1.14	-.33	-.97	.01	.00
	ERI =	101 POWER	-.00	-2.01	4.40	.10	.35	-.00	.00
1.20	NR =	.991 2.41	3750	7050	1.24	1041	29.3	104	2067
	P2 =	3.18 RAM	1.04	1.27	-.26	.00	1.04	1.04	.00
	T2 =	503 BLEED	.02	-1.82	1.21	-.33	-.96	.02	.00
	ERI =	0 POWER	-.01	3.43	-1.66	.08	.25	-.01	.01
1.50	NR =	.971 3.56	6220	8900	1.25	1117	38.9	138	2067
	P2 =	4.71 RAM	1.05	1.30	-.28	-.00	1.05	1.05	.00
	T2 =	566 BLEED	.08	-1.95	1.43	-.26	-.89	.08	.00
	ERI =	0 POWER	-.02	-1.01	2.34	.06	.22	-.02	.00
1.80	NR =	.945 5.43	9930	10900	1.29	1209	51.9	183	2067
	P2 =	7.18 RAM	1.07	1.39	-.35	-.00	1.07	1.07	.00
	T2 =	643 BLEED	.08	-2.18	1.69	-.27	-.89	.08	-.00
	ERI =	0 POWER	-.02	-.58	1.61	.05	.20	-.02	.00
2.00	NR =	.925 7.24	13200	12200	1.32	1273	62.2	220	2067
	P2 =	9.57 RAM	1.09	1.37	-.30	-.00	1.09	1.09	.00
	T2 =	702 BLEED	.05	-2.34	1.86	-.24	-.91	.05	.01
	ERI =	0 POWER	-.01	-.55	1.45	.04	.17	-.01	.00
2.30	NR =	.893 11.2	19800	14400	1.36	1378	81.1	286	2067
	P2 =	14.78 RAM	1.13	1.44	-.33	-.00	1.13	1.13	.00
	T2 =	802 BLEED	.03	-2.70	2.24	-.25	-.94	.03	-.01
	ERI =	0 POWER	-.00	-.41	1.16	.03	.14	-.00	.00
2.50	NR =	.870 14.9	25500	15600	1.41	1453	96.1	339	2067
	P2 =	19.69 RAM	1.16	1.43	-.29	-.00	1.16	1.16	.00
	T2 =	876 BLEED	.02	-2.99	2.56	-.18	-.94	.02	-.01
	ERI =	0 POWER	-.00	-.40	1.07	.02	.12	-.00	-.00
2.70	NR =	.846 19.8	32100	16300	1.47	1527	111.9	395	2067
	P2 =	26.13 RAM	1.19	1.46	-.25	-.00	1.19	1.19	.00
	T2 =	955 BLEED	.02	-3.28	2.94	-.19	-.94	.02	.01
	ERI =	0 POWER	-.00	-.40	1.02	.02	.11	-.00	.00
3.00	NR =	.809 29.9	44300	17300	1.59	1643	139.4	490	2097
	P2 =	39.50 RAM	1.24	1.53	-.27	-.00	1.24	1.24	.00
	T2 =	1083 BLEED	.02	-3.89	3.66	-.19	-.94	.02	-.00
	ERI =	0 POWER	-.00	-.36	.90	.01	.08	-.00	.00

12-10

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 55000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.90	1.69	5.90	6418	1995	923	7690	5580	1.15	480	15.2
	RAM	1.04	1.03	-.00	-.01	1.26	1.35	-.34	.04	.00
	BLEED	-1.30	-.66	.00	.31	-1.27	-1.76	1.13	.01	.00
	POWER	-6.68	2.37	.00	6.55	-1.46	-2.01	4.40	-.00	.00
1.20	2.41	7.91	8714	2067	931	11000	7290	1.19	472	15.2
	RAM	1.03	1.03	.00	.00	1.22	1.32	-.31	.03	.00
	BLEED	-1.29	-.63	.00	.31	-1.20	-1.83	1.23	.02	.00
	POWER	-5.03	1.75	.01	4.94	-.90	-1.35	3.12	-.01	-85.53
1.50	3.56	10.17	11110	2067	958	15300	9060	1.23	448	10.2
	RAM	1.06	1.05	.00	-.01	1.21	1.33	-.30	.02	.00
	BLEED	-1.35	-.56	.00	.43	-1.12	-1.95	1.43	.08	.00
	POWER	-3.66	1.32	.00	3.57	-.57	-.95	2.28	-.02	.00
1.80	5.43	13.09	14077	2067	988	21100	11200	1.26	418	2.9
	RAM	1.08	1.07	.00	-.00	1.22	1.35	-.30	.02	.00
	BLEED	-1.30	-.55	-.00	.38	-1.09	-2.13	1.64	.08	.00
	POWER	-2.71	1.02	.00	2.64	-.37	-.68	1.71	-.02	.00
2.00	7.24	15.41	16192	2067	1003	25800	12600	1.29	392	2.9
	RAM	1.10	1.09	.00	-.00	1.23	1.37	-.31	.01	.00
	BLEED	-1.38	-.54	.01	.42	-1.11	-2.33	1.86	.05	.00
	POWER	-2.41	.90	.00	2.36	-.29	-.59	1.50	-.0	-113.51
2.30	11.2	19.57	19642	2067	1027	34500	14700	1.34	354	.0
	RAM	1.13	1.13	.00	-.00	1.26	1.42	-.32	.01	.00
	BLEED	-1.38	-.55	-.01	.40	-1.12	-2.67	2.21	.03	.00
	POWER	-1.90	.74	.00	1.86	-.20	-.47	1.22	-.00	.00
2.50	14.9	22.83	21985	2067	1040	41500	16000	1.38	328	.0
	RAM	1.16	1.16	.00	-.00	1.28	1.47	-.33	.01	.00
	BLEED	-1.57	-.55	-.01	.57	-1.14	-2.99	2.56	.02	.00
	POWER	-1.60	.67	-.00	1.57	-.16	-.40	1.07	-.00	.00
2.70	19.8	26.51	24039	2067	1043	49000	16900	1.42	301	.0
	RAM	1.20	1.19	.00	-.00	1.31	1.53	-.32	.01	.00
	BLEED	-1.47	-.48	.01	.49	-1.11	-3.25	2.91	.02	.00
	POWER	-1.39	.61	.00	1.36	-.12	-.36	.97	-.00	.00
3.00	29.9	33.83	27527	2097	1022	62600	18300	1.50	264	.0
	RAM	1.24	1.24	.00	-.00	1.35	1.61	-.34	.00	.00
	BLEED	-1.42	-.45	-.00	.44	-1.09	-3.78	3.53	.02	.00
	POWER	-1.10	.53	.00	1.07	-.09	-.29	.82	-.00	.00

12-11

# CONFIDENTIAL

**CONFIDENTIAL**

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 7.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE      55000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.90	NR =	1.00	1.69	2070	4030	1.11	927	19.2	76	1586
	P2 =	2.24	RAM	1.03	1.48	-.52	-.01	1.03	1.03	-.02
	T2 =	453	BLEED	.01	-1.24	1.64	-.16	-.67	.01	.68
	ERI =	0	POWER	-.08	11.38	7.28	1.23	4.97	-.08	10.78
1.20	NR =	.991	2.41	3580	5100	1.16	992	25.3	99	1649
	P2 =	3.18	RAM	1.03	1.48	-.50	-.00	1.03	1.03	-.01
	T2 =	503	BLEED	.03	-1.31	1.78	-.17	-.65	.03	.67
	ERI =	0	POWER	-.15	9.53	5.04	.75	3.62	-.15	8.17
1.50	NR =	.771	3.56	6230	7630	1.22	1105	37.2	138	1842
	P2 =	4.71	RAM	1.05	1.34	-.34	-.01	1.04	1.05	-.01
	T2 =	566	BLEED	.04	-1.24	1.78	-.15	-.64	.04	.69
	ERI =	0	POWER	-.13	6.23	3.68	.54	2.39	-.13	5.41
1.80	NR =	.945	5.43	9950	9820	1.28	1201	50.6	184	1926
	P2 =	7.18	RAM	1.07	1.40	-.41	-.00	1.06	1.07	-.03
	T2 =	643	BLEED	.04	-1.52	1.98	-.19	-.69	.04	.58
	ERI =	0	POWER	-.10	4.64	2.32	.37	1.56	-.10	3.57
2.00	NR =	.925	7.24	13200	11300	1.31	1267	61.0	220	1968
	P2 =	9.57	RAM	1.09	1.38	-.32	-.00	1.09	1.09	-.00
	T2 =	702	BLEED	.04	-1.63	2.07	-.20	-.71	.04	.54
	ERI =	0	POWER	-.06	4.00	1.95	.29	1.31	-.06	2.92
2.30	NR =	.893	11.2	19800	13900	1.36	1376	80.5	286	2024
	P2 =	14.78	RAM	1.13	1.42	-.34	-.00	1.13	1.13	-.01
	T2 =	802	BLEED	.02	-1.92	2.34	-.20	-.75	.02	.48
	ERI =	0	POWER	-.02	2.73	1.36	.19	.87	-.02	1.82
2.50	NR =	.870	14.9	25500	15400	1.41	1453	95.9	339	2057
	P2 =	19.69	RAM	1.16	1.42	-.29	-.00	1.16	1.16	-.00
	T2 =	876	BLEED	.01	-2.36	2.58	-.16	-.80	.01	.33
	ERI =	0	POWER	-.00	.26	1.09	.04	.27	-.00	.35
2.70	NR =	.846	19.8	32100	16200	1.47	1527	111.8	395	2063
	P2 =	26.13	RAM	1.19	1.46	-.25	-.00	1.19	1.19	-.00
	T2 =	955	BLEED	.02	-3.00	2.93	-.18	-.88	.02	.14
	ERI =	0	POWER	-.00	-.13	1.01	.03	.16	-.00	.13
3.00	NR =	.809	29.9	44300	16200	1.61	1641	138.0	491	2044
	P2 =	39.50	RAM	1.24	1.55	-.29	.00	1.24	1.24	.00
	T2 =	1083	BLEED	.02	-2.77	3.65	-.16	-.73	.02	.51
	ERI =	0	POWER	-.01	2.91	.51	.10	.59	-.01	1.26

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 7.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 55000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
.90	1.69	4.46	4474	1586	1045	6190	4120	1.09	469	15.2
	RAM	1.02	1.00	-.02	.00	1.30	1.44	-.47	.04	.00
	BLEED	-.65	.37	.68	.03	-.80	-1.20	1.60	.01	.00
	POWER	5.74	18.87	10.78	.13	7.37	11.12	7.53	-.08	.00
1.20	2.41	5.91	5909	1649	1045	8780	5200	1.14	451	10.2
	RAM	1.03	1.02	-.01	-.00	1.26	1.41	-.42	.03	.00
	BLEED	-.61	.43	.67	.01	-.73	-1.26	1.73	.03	.00
	POWER	4.47	14.73	8.17	-.08	5.34	9.13	5.43	-.15	.00
1.50	3.56	8.73	9284	1842	1045	14000	7770	1.20	450	10.2
	RAM	1.04	1.03	-.01	.00	1.22	1.36	-.36	.02	.00
	BLEED	-.57	.51	.69	-.01	-.68	-1.25	1.79	.04	.00
	POWER	2.94	10.02	5.41	-.04	3.41	6.26	3.64	-.13	.00
1.80	5.43	11.89	12551	1926	1045	20000	10100	1.25	419	2.9
	RAM	1.04	1.02	-.03	.02	1.21	1.34	-.34	.02	.00
	BLEED	-.62	.41	.58	-.01	-.72	-1.47	1.92	.04	.00
	POWER	1.93	7.04	3.57	-.02	2.21	4.49	2.47	-.10	.00
2.00	7.24	14.38	14889	1968	1045	24900	11600	1.28	392	2.9
	RAM	1.09	1.08	-.00	-.00	1.23	1.39	-.33	.01	.00
	BLEED	-.65	.39	.54	-.00	-.74	-1.62	2.06	.04	.00
	POWER	1.60	6.01	2.92	-.01	1.82	3.96	1.98	-.06	.00
2.30	11.2	18.99	18897	2024	1045	34000	14200	1.33	354	.0
	RAM	1.11	1.10	-.01	.01	1.25	1.41	-.33	.01	.00
	BLEED	-.71	.35	.48	.00	-.78	-1.90	2.31	.02	.00
	POWER	.63	4.14	1.82	.37	1.11	2.69	1.41	-.02	.00
2.50	14.9	22.66	21770	2057	1045	41300	15800	1.38	328	.0
	RAM	1.16	1.16	-.00	-.00	1.28	1.47	-.33	.01	.00
	BLEED	-1.06	.12	.33	.26	-.90	-2.36	2.58	.01	.00
	POWER	-1.09	1.36	.35	1.26	.10	.27	1.09	-.00	.00
2.70	19.8	26.42	23932	2063	1045	48900	16800	1.42	301	.0
	RAM	1.19	1.19	-.00	.00	1.31	1.53	-.32	.01	.00
	BLEED	-1.27	-.20	.14	.36	-1.01	-2.98	2.91	.02	.00
	POWER	-1.20	.87	.13	1.24	-.03	-.09	.96	-.00	.00
3.00	29.9	32.58	25967	2044	1045	61500	17200	1.51	264	.0
	RAM	1.24	1.24	.00	-.00	1.35	1.63	-.36	-.00	.00
	BLEED	-.68	.73	.51	-.01	-.74	-2.70	3.57	.02	.00
	POWER	.70	3.45	1.26	.00	.78	2.84	.58	-.01	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE    55000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
.90	NR =	1.00	1800	2410	1.14	851	15.0	67	1255	
	P2 =	2.24	1.03	1.74	-.82	-.01	1.03	1.03	-.02	
	T2 =	453	BLEED	.03	-1.59	2.08	-.20	-.68	.03	-.61
	ERI =	0	POWER	-.28	19.67	8.74	1.59	6.83	-.28	15.31
1.20	NR =	.991	2730	2040	1.28	874	16.4	76	1172	
	P2 =	3.18	1.04	1.90	-1.00	-.00	1.03	1.04	-.01	
	T2 =	503	BLEED	.02	-1.96	2.79	-.14	-.66	.02	.69
	ERI =	0	POWER	-.11	21.95	6.16	1.04	6.10	-.11	13.22
1.50	NR =	.971	6240	7000	1.21	1100	36.4	138	1741	
	P2 =	4.71	1.05	1.36	-.36	-.01	1.04	1.05	-.01	
	T2 =	566	BLEED	.03	-1.29	1.90	-.17	-.64	.03	.70
	ERI =	0	POWER	-.10	6.27	3.56	.49	2.36	-.10	5.22
1.80	NR =	.945	9960	8980	1.27	1195	49.5	184	1820	
	P2 =	7.18	1.07	1.44	-.41	-.00	1.07	1.07	-.01	
	T2 =	643	BLEED	.04	-1.53	2.12	-.18	-.66	.04	.63
	ERI =	0	POWER	-.09	5.28	2.42	.39	1.75	-.09	3.89
2.00	NR =	.925	13200	10400	1.31	1261	59.7	220	1861	
	P2 =	9.57	1.09	1.42	-.37	-.00	1.09	1.09	-.01	
	T2 =	702	BLEED	.03	-1.64	2.26	-.19	-.68	.03	.62
	ERI =	0	POWER	-.06	4.62	2.00	.32	1.45	-.06	3.21
2.30	NR =	.893	19800	12600	1.36	1370	78.8	286	1920	
	P2 =	14.78	1.13	1.50	-.42	-.00	1.13	1.13	-.00	
	T2 =	802	BLEED	.02	-1.76	2.59	-.13	-.67	.02	.67
	ERI =	0	POWER	-.02	3.50	1.34	.17	.99	-.02	2.15
2.50	NR =	.870	25500	14000	1.41	1448	94.0	339	1955	
	P2 =	19.69	1.16	1.45	-.32	-.00	1.16	1.16	-.00	
	T2 =	876	BLEED	.01	-1.98	2.78	-.14	-.70	.01	.61
	ERI =	0	POWER	-.01	3.06	1.09	.13	.81	-.01	1.74
2.70	NR =	.846	32100	14500	1.49	1522	109.5	395	1959	
	P2 =	26.13	1.19	1.49	-.28	-.00	1.19	1.19	-.00	
	T2 =	955	BLEED	.01	-2.30	3.15	-.16	-.72	.01	.57
	ERI =	0	POWER	-.01	3.06	.83	.12	.72	-.01	1.53
3.00	NR =	.809	44300	14000	1.65	1635	135.2	491	1941	
	P2 =	39.50	1.24	1.60	-.34	.00	1.24	1.24	.00	
	T2 =	1083	BLEED	.02	-3.13	4.14	-.16	-.74	.02	.49
	ERI =	0	POWER	-.01	3.21	.40	.10	.59	-.01	1.25

12-14

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY                  PRESSURE ALTITUDE    55000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FGB	FN8	SFCB	W2K	BTANG
.90	1.69	3.25	2744	1255	1095	4310	2500	1.10	409	15.2
	RAM	1.03	.99	-.02	-.00	1.39	1.65	-.72	.04	.00
	BLEED	-.62	.44	.61	-.01	-.87	-1.52	2.00	.03	.00
	POWER	8.02	28.73	15.31	-.01	10.76	18.72	9.68	-.28	.00
1.20	2.41	3.56	2608	1172	1095	4850	2120	1.23	343	15.2
	RAM	1.02	.99	-.01	.01	1.36	1.78	-.87	.03	.00
	BLEED	-.61	.75	.69	-.00	-.82	-1.89	2.71	.02	.00
	POWER	6.81	28.37	13.22	.20	9.16	21.06	7.03	-.11	.00
1.50	3.56	8.06	8501	1741	1095	13400	7160	1.19	450	10.2
	RAM	1.04	1.02	-.01	-.00	1.23	1.39	-.39	.02	.00
	BLEED	-.56	.57	.70	-.02	-.68	-1.30	1.90	.03	.00
	POWER	2.82	9.95	5.22	-.02	3.32	6.30	3.54	-.10	.00
1.80	5.43	10.98	11419	1820	1095	19200	9230	1.24	419	2.9
	RAM	1.07	1.06	-.01	-.00	1.23	1.40	-.37	.02	.00
	BLEED	-.60	.54	.63	-.01	-.70	-1.49	2.07	.04	.00
	POWER	2.07	7.79	3.89	.02	2.42	5.12	2.58	-.09	.00
2.00	7.24	13.29	13526	1861	1094	23900	10600	1.27	393	2.9
	RAM	1.09	1.07	-.01	.00	1.24	1.41	-.37	.01	.00
	BLEED	-.60	.57	.62	-.02	-.70	-1.61	2.23	.03	.00
	POWER	1.68	6.69	3.21	.06	1.99	4.55	2.07	-.06	.00
2.30	11.2	17.56	17130	1920	1095	32700	12900	1.33	354	.0
	RAM	1.13	1.12	-.00	-.00	1.26	1.46	-.37	.01	.00
	BLEED	-.60	.75	.67	-.01	-.67	-1.73	2.55	.02	.00
	POWER	1.23	4.90	2.15	-.04	1.36	3.48	1.37	-.02	.00
2.50	14.9	20.97	19718	1955	1095	39800	14300	1.38	329	.0
	RAM	1.16	1.15	-.00	.00	1.28	1.50	-.37	.01	.00
	BLEED	-.64	.72	.61	-.00	-.70	-1.98	2.78	.01	.00
	POWER	.97	4.20	1.74	-.00	1.10	3.07	1.09	-.01	.00
2.70	19.8	24.44	21500	1959	1095	47100	15000	1.43	301	.0
	RAM	1.19	1.19	-.00	.00	1.32	1.57	-.35	.01	.00
	BLEED	-.64	.74	.57	-.03	-.72	-2.29	3.13	.01	.00
	POWER	.87	3.93	1.53	-.01	.96	3.04	.85	-.01	.00
3.00	29.9	30.14	23008	1941	1095	59300	15000	1.53	264	.0
	RAM	1.24	1.24	.00	-.00	1.35	1.69	-.41	-.00	.00
	BLEED	-.68	.81	.49	-.02	-.75	-3.04	4.03	.02	.00
	POWER	.70	3.64	1.25	-.01	.78	3.10	.51	-.01	.00

12-15

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 55000 FEET

M0		P2/PO	FD	FN	SFC	TE	PE	W2	TC
.90	NR =	1.00	1510	800	1.78	786	11.1	56	940
	P2 =	2.24	RAM .70	1.21	-1.29	-.15	.54	.70	-.37
	T2 =	453	BLEED -.40	-4.95	5.35	-.30	-1.23	-.40	.38
	ERI =	100	POWER-17.11	-43.09	45.57	-5.05	-15.63	-17.11	3.55
1.20	NR =	.991	2390	610	2.34	825	12.9	66	914
	P2 =	3.18	RAM .72	1.74	-1.90	-.13	.57	.72	-.32
	T2 =	503	BLEED -.37	-8.36	9.56	-.30	-1.25	-.37	.24
	ERI =	100	POWER-14.32	-53.81	58.39	-4.32	-13.63	-14.32	1.51
1.50	NR =	.971	6250	5560	1.23	1090	34.6	138	1520
	P2 =	4.71	RAM 1.05	1.43	-.46	-.01	1.04	1.05	-.02
	T2 =	566	BLEED .02	-1.29	2.32	-.09	-.58	.02	.86
	ERI =	0	POWER -.07	6.70	3.43	.27	2.21	-.07	4.91
1.80	NR =	.945	9990	7040	1.28	1182	46.9	184	1586
	P2 =	7.18	RAM 1.07	1.53	-.54	-.00	1.07	1.07	-.01
	T2 =	643	BLEED .03	-1.46	2.61	-.10	-.57	.03	.86
	ERI =	0	POWER -.06	5.73	2.21	.21	1.65	-.06	3.65
2.00	NR =	.925	13300	7990	1.33	1249	56.7	220	1625
	P2 =	9.57	RAM 1.09	1.48	-.46	-.00	1.09	1.09	-.01
	T2 =	702	BLEED .03	-1.63	2.81	-.11	-.59	.03	.81
	ERI =	0	POWER -.04	5.08	1.86	.19	1.39	-.04	3.04
2.30	NR =	.893	19800	9540	1.39	1359	74.9	287	1685
	P2 =	14.78	RAM 1.13	1.57	-.50	-.00	1.13	1.13	-.01
	T2 =	802	BLEED .02	-2.03	3.22	-.13	-.64	.02	.72
	ERI =	0	POWER -.02	4.53	1.25	.17	1.09	-.02	2.34
2.50	NR =	.870	25500	10300	1.46	1436	89.2	339	1715
	P2 =	19.69	RAM 1.16	1.59	-.46	-.00	1.16	1.16	-.00
	T2 =	876	BLEED .01	-2.23	3.60	-.11	-.63	.01	.74
	ERI =	0	POWER -.01	4.32	.93	.15	.94	-.01	2.00
2.70	NR =	.846	32100	10100	1.58	1509	103.9	395	1716
	P2 =	26.13	RAM 1.19	1.63	-.40	-.00	1.19	1.19	.00
	T2 =	955	BLEED .01	-2.89	4.27	-.14	-.68	.01	.63
	ERI =	0	POWER -.01	4.39	.57	.13	.82	-.01	1.72
3.00	NR =	.809	44400	8460	1.89	1620	127.8	491	1691
	P2 =	39.50	RAM 1.24	1.80	-.51	.00	1.24	1.24	.00
	T2 =	1083	BLEED .01	-4.58	6.47	-.15	-.71	.01	.55
	ERI =	0	POWER -.01	5.65	-.36	.12	.72	-.01	1.49

12-16

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 55000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.90	1.69	2.06	1425	940	1257	2500	990	1.44	343	10.2
	RAM	.49	.00	-.37	.01	.83	1.01	-1.07	-.31	.00
	BLEED	-1.05	.00	.38	-.10	-1.85	-4.08	4.34	-.40	.00
	POWER	-14.73	.00	3.55	.06	-24.45	-35.70	37.3	-17.11	.00
1.20	2.41	2.39	1425	914	1254	3180	790	1.81	301	10.2
	RAM	.59	.00	-.32	-.05	.86	1.28	-1.37	-.30	.00
	BLEED	-1.17	.00	.24	-.01	-1.82	-6.24	6.89	-.37	.00
	POWER	-14.29	.00	1.51	1.35	-20.70	-40.06	42.5	-14.32	.00
1.50	3.56	6.48	6824	1520	1257	11900	5690	1.20	451	10.2
	RAM	1.04	1.01	-.02	-.00	1.25	1.48	-.51	.02	.00
	BLEED	-.50	.98	.86	-.01	-.61	-1.30	2.33	.02	.00
	POWER	2.66	10.24	4.91	-.02	3.18	6.75	3.38	-.07	.00
1.80	5.43	8.82	9018	1586	1257	17200	7230	1.25	420	2.9
	RAM	1.07	1.03	-.01	.00	1.25	1.48	-.49	.02	.00
	BLEED	-.49	1.09	.86	-.01	-.58	-1.42	2.57	.03	.00
	POWER	1.96	8.03	3.65	.00	2.30	5.56	2.38	-.06	.00
2.00	7.24	10.68	10600	1625	1257	21500	8220	1.29	393	2.9
	RAM	1.09	1.06	-.01	.00	1.25	1.50	-.48	.01	.00
	BLEED	-.52	1.11	.81	-.01	-.60	-1.61	2.79	.03	.00
	POWER	1.63	7.02	3.04	.01	1.90	5.04	1.91	-.04	.00
2.30	11.2	14.15	13293	1685	1257	29600	9770	1.36	354	.0
	RAM	1.13	1.10	-.01	.00	1.27	1.56	-.49	.01	.00
	BLEED	-.57	1.09	.72	-.01	-.65	-2.00	3.19	.02	.00
	POWER	1.27	5.85	2.34	.01	1.46	4.47	1.31	-.02	.00
2.50	14.9	16.88	15034	1715	1257	36100	10600	1.42	329	.0
	RAM	1.16	1.16	-.00	-.00	1.30	1.62	-.50	.01	.00
	BLEED	-.58	1.25	.74	.01	-.64	-2.20	3.57	.01	.00
	POWER	1.09	5.31	2.00	.01	1.24	4.27	.98	-.01	.00
2.70	19.8	19.67	16014	1716	1257	42800	10700	1.50	302	.0
	RAM	1.20	1.20	.00	-.00	1.33	1.73	-.49	.01	.00
	BLEED	-.65	1.19	.63	.01	-.70	-2.84	4.22	.01	.00
	POWER	.95	5.00	1.72	-.01	1.07	4.32	.64	-.01	.00
3.00	29.9	24.18	16010	1691	1257	53800	9400	1.70	264	.0
	RAM	1.24	1.24	.00	-.00	1.36	1.95	-.65	-.00	.00
	BLEED	-.69	1.45	.55	.02	-.74	-4.30	6.15	.01	.00
	POWER	.82	5.25	1.49	-.00	.92	5.31	-.05	-.01	.00

12-17

# CONFIDENTIAL

**CONFIDENTIAL**

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.12.4

JANUARY 1964

STANDARD DAY PRESSURE ALTITUDE 55000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
.90	NR =	1.00	1610	760	1.87	800	11.7	59	912
	P2 =	2.24	.72	1.23	-1.31	-.14	.56	.72	-.37
	T2 =	453	BLEED -.57	-5.73	6.27	-.29	-1.38	-.57	.40
	ERI =	100	POWER-16.59	-42.31	44.98	-5.04	-15.42	-16.59	3.06
1.20	NR =	.991	2560	520	2.72	842	13.8	71	890
	P2 =	3.18	.73	2.04	-2.27	-.12	.59	.73	-.31
	T2 =	503	BLEED -.46	-10.48	12.44	-.31	-1.35	-.46	.23
	ERI =	100	POWER-14.30	-58.37	64.54	-4.34	-13.75	-14.30	1.43
1.50	NR =	.971	6260	4510	1.32	1086	33.6	139	1401
	P2 =	4.71	1.05	1.49	-.52	-.01	1.04	1.05	-.02
	T2 =	566	BLEED .03	-1.49	2.63	-.10	-.59	.03	.85
	ERI =	0	POWER -.07	7.35	3.23	.27	2.16	-.07	4.83
1.80	NR =	.945	10000	5730	1.35	1178	45.5	184	1459
	P2 =	7.18	1.07	1.66	-.69	-.00	1.07	1.07	-.01
	T2 =	643	BLEED .03	-1.85	3.06	-.10	-.60	.03	.79
	ERI =	0	POWER -.06	6.26	1.99	.21	1.58	-.06	3.51
2.00	NR =	.925	13300	6430	1.40	1244	54.9	221	1493
	P2 =	9.57	1.09	1.66	-.66	-.00	1.09	1.09	-.01
	T2 =	702	BLEED .03	-2.15	3.40	-.12	-.62	.03	.74
	ERI =	0	POWER -.05	6.12	1.37	.19	1.38	-.05	3.05
2.30	NR =	.893	19900	7430	1.49	1353	72.5	287	1546
	P2 =	14.78	1.13	1.68	-.64	-.00	1.13	1.13	-.01
	T2 =	802	BLEED .02	-2.14	3.90	-.08	-.57	.02	.87
	ERI =	0	POWER -.02	5.54	.92	.15	1.11	-.02	2.41
2.50	NR =	.870	25500	7750	1.60	1429	86.3	339	1575
	P2 =	19.69	1.16	1.70	-.61	-.00	1.16	1.16	-.01
	T2 =	876	BLEED .01	-2.68	4.45	-.11	-.62	.01	.78
	ERI =	0	POWER -.02	5.36	.55	.13	.94	-.02	2.02
2.70	NR =	.846	32100	7120	1.80	1501	100.3	395	1570
	P2 =	26.13	1.19	1.82	-.56	.00	1.20	1.19	.01
	T2 =	955	BLEED .01	-3.77	5.69	-.15	-.67	.01	.66
	ERI =	0	POWER -.01	6.21	-.12	.14	.87	-.01	1.85
3.00	NR =	.809	44400	4640	2.60	1612	123.3	491	1545
	P2 =	39.50	1.24	2.26	-.91	.00	1.24	1.24	.00
	T2 =	1083	BLEED .01	-6.92	10.45	-.12	-.66	.01	.68
	ERI =	0	POWER -.01	9.42	-2.61	.09	.71	-.01	1.49

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.12.4

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE 55000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
.90	1.69	1.87	1425	912	1447	2450	840	1.69	364	10.2
	RAM .45		.00	-.37	.02	.87	1.14	-1.21	-.29	.00
	BLEED -1.17		.00	.40	.02	-2.21	-5.34	5.81	-.57	.00
	POWER-13.15		.00	3.06	.36	-24.60	-39.88	42.2	-16.59	.00
1.20	2.41	2.16	1425	890	1452	3170	620	2.31	322	10.2
	RAM .58		.00	-.31	-.02	.91	1.67	-1.83	-.29	.00
	BLEED -1.25		.00	.23	-.05	-2.06	-8.68	9.98	-.46	.00
	POWER-12.34		.00	1.43	-.83	-20.65	-47.01	50.9	-14.30	.00
1.50	3.56	5.35	5942	1401	1450	11000	4710	1.26	451	10.2
	RAM 1.04		1.00	-.02	.00	1.28	1.59	-.64	.02	.00
	BLEED -.50		1.08	.85	-.01	-.63	-1.51	2.65	.03	.00
	POWER 2.60		10.71	4.83	-.02	3.17	7.48	3.11	-.07	.00
1.80	5.43	7.28	7758	1459	1449	15900	5910	1.31	421	2.9
	RAM 1.06		1.03	-.01	.00	1.27	1.59	-.62	.02	.00
	BLEED -.57		1.13	.79	.03	-.65	-1.79	3.00	.03	.00
	POWER 1.83		8.34	3.51	.05	2.22	6.08	2.17	-.06	.00
2.00	7.24	8.80	9012	1493	1449	19900	6620	1.36	394	.0
	RAM 1.09		1.06	-.01	.00	1.27	1.62	-.62	.01	.00
	BLEED -.60		1.14	.74	.03	-.67	-2.06	3.30	.03	.00
	POWER 1.64		7.56	3.05	.00	1.92	5.86	1.62	-.05	.00
2.30	11.2	11.65	11095	1546	1449	27500	7650	1.45	355	.0
	RAM 1.13		1.09	-.01	.00	1.29	1.69	-.65	.01	.00
	BLEED -.52		1.64	.87	.02	-.57	-2.10	3.86	.02	.00
	POWER 1.28		6.52	2.41	.02	1.50	5.45	1.00	-.02	.00
2.50	14.9	13.90	12404	1575	1450	33600	8100	1.53	329	.0
	RAM 1.16		1.14	-.01	.00	1.31	1.76	-.68	.01	.00
	BLEED -.55		1.60	.78	-.01	-.62	-2.64	4.41	.01	.00
	POWER 1.10		5.95	2.02	.00	1.26	5.28	.62	-.02	.00
2.70	19.8	16.15	12806	1570	1450	39800	7690	1.67	302	.0
	RAM 1.22		1.22	.01	-.02	1.35	1.99	-.70	.01	.00
	BLEED -.61		1.60	.66	-.01	-.70	-3.64	5.55	.01	.00
	POWER 1.01		6.07	1.85	.00	1.15	6.00	.07	-.01	.00
3.00	29.9	19.85	12065	1545	1450	50100	5740	2.10	264	.0
	RAM 1.24		1.25	.00	-.01	1.37	2.45	-1.07	-.00	.00
	BLEED -.59		2.45	.68	-.02	-.67	-5.95	9.22	.01	.00
	POWER .82		6.34	1.49	-.00	.91	8.05	-1.49	-.01	.00

12-19

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 55000 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC	
1.50	NR =	.971	3.57	5880	12100	1.95	1186	34.9	124	2067
	P2 =	4.72	RAM	1.05	1.36	-.36	-.00	1.05	1.05	.00
	T2 =	624	BLEED	.08	-1.87	1.17	-.26	-.90	.08	.00
	ERI =	0	POWER	-.02	-1.83	2.63	.08	.30	-.02	.01
2.00	NR =	.925	7.25	12300	17700	1.98	1347	54.6	194	2067
	P2 =	9.59	RAM	1.10	1.34	-.29	-.00	1.10	1.10	.00
	T2 =	774	BLEED	.03	-2.07	1.35	-.25	-.94	.03	.01
	ERI =	0	POWER	-.01	-3.12	.12	.05	.20	-.01	.00
2.50	NR =	.870	14.9	23200	23300	2.08	1534	82.5	293	2067
	P2 =	19.74	RAM	1.16	1.37	-.17	-.00	1.16	1.16	.00
	T2 =	963	BLEED	.02	-3.13	1.09	-.20	-.95	.02	-.01
	ERI =	7	POWER	-.00	-3.82	-.73	.03	.15	-.00	-.01
2.80	NR =	.834	22.8	32500	27700	2.19	1651	103.5	367	2098
	P2 =	30.14	RAM	1.21	1.37	-.16	.00	1.21	1.21	.00
	T2 =	1095	BLEED	.02	-2.52	1.81	-.20	-.95	.02	-.01
	ERI =	0	POWER	-.00	-1.36	.76	.02	.11	-.00	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 55000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
1.50	3.57	8.56	23646	3470	1372	18200	12300	1.92	424	2.9
	RAM	1.06	1.02	.02	.01	1.25	1.35	-.35	.02	.00
	BLEED	-1.36	-.73	-.11	.38	-1.22	-1.84	1.14	-.08	.00
	POWER	-4.19	.78	-.77	3.72	-1.16	-1.71	2.51	-.02	.00
2.00	7.25	12.78	35086	3494	1435	30300	18100	1.94	363	.0
	RAM	1.10	1.07	.03	.01	1.27	1.38	-.34	.02	.00
	BLEED	-1.40	-.76	-.12	.37	-1.22	-2.07	1.35	.03	.00
	POWER	-2.82	-3.00	-2.32	1.33	-1.84	-3.08	.08	-.01	.00
2.50	14.9	18.86	48402	3437	1450	47700	24500	1.98	298	.0
	RAM	1.16	1.21	.03	.02	1.32	1.46	-.27	.01	.00
	BLEED	-1.46	-2.10	-.77	.00	-1.62	-3.18	1.14	.02	.00
	POWER	-1.79	-4.51	-2.84	.00	-1.99	-3.88	-.66	-.00	.00
2.80	22.8	24.32	60441	3528	1427	62200	29700	2.03	260	.0
	RAM	1.21	1.20	-.01	-.01	1.34	1.48	-.26	.01	.00
	BLEED	-1.44	-.77	-.08	.42	-1.16	-2.46	1.74	.02	.00
	POWER	-1.52	-.61	-.68	1.08	-.57	-1.19	.59	-.00	.00

12-21

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 55000 FEET

M0		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
1.50	NR =	.971	3.57	5880	11100	1.79	1186	34.9	124	2067
	P2 =	4.72	RAM	1.05	1.36	-.37	-.00	1.05	1.05	.00
	T2 =	624	BLEED	.08	-1.86	1.20	-.26	-.90	.08	-.00
	ERI =	0	POWER	-.02	-1.44	2.32	.08	.30	-.02	.01
2.00	NR =	.925	7.25	12300	16000	1.82	1347	54.6	194	2067
	P2 =	9.59	RAM	1.10	1.34	-.30	-.00	1.10	1.10	.00
	T2 =	774	BLEED	.03	-2.10	1.41	-.25	-.94	.03	.01
	ERI =	0	POWER	-.01	-1.03	1.64	.05	.20	-.01	.00
2.50	NR =	.870	14.9	23200	21000	1.94	1534	82.6	293	2067
	P2 =	19.74	RAM	1.16	1.34	-.23	-.00	1.16	1.16	-.00
	T2 =	963	BLEED	.02	-2.44	1.77	-.20	-.95	.02	.00
	ERI =	0	POWER	-.00	-.83	1.29	.03	.15	-.00	.01
2.80	NR =	.834	22.8	32500	24200	2.03	1651	103.6	367	2098
	P2 =	30.14	RAM	1.21	1.37	-.17	.00	1.21	1.21	.00
	T2 =	1095	BLEED	.02	-2.65	2.00	-.19	-.95	.02	-.01
	ERI =	0	POWER	-.00	-.67	1.04	.02	.11	-.00	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 55000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FGB	FNB	SFCB	WZK	BTANG
1.50	3.57	8.63	19844	3170	1287	17200	11300	1.76	424	2.9
	RAM	1.06	1.01	.00	-.01	1.24	1.34	-.35	.02	.00
	BLEED	-1.36	-.70	-.06	.40	-1.19	-1.85	1.18	.08	.00
	POWER	-4.16	.87	-.56	3.82	-1.03	-1.56	2.44	-.02	.00
2.00	7.25	12.89	29135	3161	1338	28500	16300	1.79	363	.0
	RAM	1.10	1.06	.00	-.00	1.25	1.37	-.33	.02	.00
	BLEED	-1.40	-.73	-.07	.39	-1.20	-2.12	1.44	.03	.00
	POWER	-2.93	.60	-.43	2.68	-.63	-1.11	1.72	-.01	.00
2.50	14.9	19.01	40816	3143	1363	45100	21900	1.86	298	.0
	RAM	1.16	1.13	-.01	-.01	1.29	1.42	-.31	.01	.00
	BLEED	-1.49	-.73	-.06	.48	-1.18	-2.45	1.79	.02	.00
	POWER	-1.95	.45	-.25	1.81	-.35	-.72	1.18	-.00	.00
2.80	22.8	24.55	49146	3179	1327	58300	25800	1.91	260	.0
	RAM	1.21	1.19	-.01	-.01	1.34	1.49	-.28	.01	.00
	BLEED	-1.44	-.73	-.06	.43	-1.15	-2.62	1.97	.02	.00
	POWER	-1.53	.36	-.20	1.42	-.25	-.57	.94	-.00	.00

12-23

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 55000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
1.50	NR =	.971	3.57	5880	9830	1.63	1186	34.9	124	2067
	P2 =	4.72	RAM	1.05	1.38	-.40	-.00	1.05	1.05	.00
	T2 =	624	BLEED	.08	-1.93	1.31	-.26	-.89	.08	-.00
	ERI =	0	POWER	-.02	-1.23	2.24	.08	.30	-.02	.01
2.00	NR =	.925	7.25	12300	13900	1.67	1348	54.7	194	2067
	P2 =	9.59	RAM	1.10	1.38	-.34	-.00	1.10	1.10	.00
	T2 =	774	BLEED	.03	-2.21	1.59	-.25	-.94	.03	.01
	ERI =	0	POWER	-.01	-.87	1.59	.05	.20	-.01	.00
2.50	NR =	.870	14.9	23200	17800	1.78	1534	82.7	293	2067
	P2 =	19.74	RAM	1.16	1.38	-.27	-.00	1.16	1.16	.00
	T2 =	963	BLEED	.02	-2.68	2.09	-.20	-.95	.02	-.01
	ERI =	0	POWER	-.00	-.82	1.35	.03	.15	-.00	.00
2.80	NR =	.834	22.8	32500	20100	1.88	1652	103.7	367	2098
	P2 =	30.14	RAM	1.21	1.38	-.19	.00	1.21	1.21	-.00
	T2 =	1095	BLEED	.02	-2.90	2.33	-.19	-.95	.02	-.01
	ERI =	0	POWER	-.00	-.56	1.00	.02	.11	-.00	.00

12-24

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 55000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
1.50	3.57	8.71	16035	2789	1186	15900	10100	1.59	424	2.9
	RAM	1.06	1.00	-.01	-.01	1.23	1.33	-.35	.02	.00
	BLEED	-1.35	-.65	-.03	.41	-1.17	-1.90	1.28	.08	.00
	POWER	-4.10	1.00	-.40	3.79	-.93	-1.46	2.48	-.02	.00
2.00	7.25	13.03	23173	2770	1228	26400	14100	1.64	363	.0
	RAM	1.10	1.06	-.01	-.01	1.25	1.38	-.34	.02	.00
	BLEED	-1.39	-.67	-.04	.40	-1.18	-2.23	1.61	.03	.00
	POWER	-2.88	.70	-.32	2.68	-.56	-1.04	1.76	-.01	.00
2.50	14.9	19.22	31801	2750	1250	41600	18500	1.72	298	.0
	RAM	1.16	1.13	-.01	-.01	1.28	1.44	-.34	.01	.00
	BLEED	-1.49	-.67	-.05	.49	-1.17	-2.66	2.07	.02	.00
	POWER	-1.93	.52	-.19	1.83	-.31	-.70	1.23	-.00	.00
2.80	22.8	24.80	37830	2780	1218	53800	21300	1.78	260	.0
	RAM	1.21	1.18	-.01	-.00	1.33	1.51	-.30	.01	.00
	BLEED	-1.43	-.67	-.04	.43	-1.14	-2.90	2.33	.02	.00
	POWER	-1.51	.43	-.14	1.41	-.22	-.55	.99	-.00	.00

12-25

# CONFIDENTIAL

GEI 67870

**CONFIDENTIAL**

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 55000 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC	
1.50	NR =	.971	3.57	5880	8430	1.45	1187	35.0	124	2067
	P2 =	4.72	RAM	1.05	1.31	-.35	-.00	1.05	1.05	.00
	T2 =	624	BLEED	.08	-2.00	1.47	-.26	-.89	.08	-.00
	ERI =	0	POWER	-.02	-1.62	2.86	.08	.30	-.02	.01
2.00	NR =	.925	7.25	12200	11400	1.51	1348	54.7	194	2067
	P2 =	9.59	RAM	1.10	1.40	-.38	-.00	1.10	1.10	.00
	T2 =	774	BLEED	.03	-2.45	1.94	-.25	-.94	.03	.00
	ERI =	0	POWER	-.01	-1.03	1.92	.05	.20	-.01	.00
2.50	NR =	.870	14.9	23200	14200	1.60	1534	82.8	293	2067
	P2 =	19.74	RAM	1.16	1.45	-.36	-.00	1.16	1.16	.00
	T2 =	963	BLEED	.02	-3.02	2.58	-.20	-.95	.02	-.01
	ERI =	0	POWER	-.00	-.67	1.35	.03	.15	-.00	.00
2.80	NR =	.834	22.8	32500	15500	1.71	1652	103.8	367	2098
	P2 =	30.14	RAM	1.21	1.47	-.28	.00	1.21	1.21	-.00
	T2 =	1095	BLEED	.02	-3.44	3.05	-.19	-.95	.02	-.01
	ERI =	0	POWER	-.00	-.57	1.13	.02	.11	-.00	-.01

12-26

**CONFIDENTIAL**

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 55000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
1.50	3.57	8.80	12220	2358	1068	14500	8590	1.42	424	10.2
	RAM	1.06	.99	-.02	-.02	1.22	1.34	-.37	.02	.00
	BLEED	-1.33	-.58	-.01	.41	-1.15	-1.99	1.45	.08	.00
	POWER	-4.04	1.22	-.23	3.81	-.82	-1.36	2.60	-.02	.00
2.00	7.25	13.17	17200	2340	1105	23900	11700	1.48	363	2.9
	RAM	1.10	1.04	-.01	-.01	1.24	1.39	-.38	.02	.00
	BLEED	-1.38	-.58	-.02	.40	-1.16	-2.41	1.90	.03	.00
	POWER	-2.84	.88	-.19	2.70	-.48	-.97	1.86	-.01	.00
2.50	14.9	19.44	22765	2320	1123	37700	14500	1.57	298	.0
	RAM	1.16	1.11	-.02	-.01	1.28	1.47	-.38	.01	.00
	BLEED	-1.48	-.56	-.01	.49	-1.15	-3.01	2.56	.02	.00
	POWER	-1.90	.67	-.09	1.82	-.25	-.64	1.32	-.00	.00
2.80	22.8	25.07	26492	2345	1095	48600	16100	1.64	250	.0
	RAM	1.21	1.17	-.02	-.01	1.32	1.55	-.35	.01	.00
	BLEED	-1.42	-.55	-.01	.43	-1.12	-3.41	3.01	.02	.00
	POWER	-1.50	.56	-.07	1.44	-.18	-.53	1.10	-.00	.00

12-27

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 55000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
1.50	NR =	.971	3.57	5880	7440	1.30	1188	35.1	124	2067
	P2 =	4.72	RAM	1.05	1.36	-.33	-.00	1.05	1.05	.00
	T2 =	624	BLEED	.08	-2.08	1.57	-.26	-.89	.08	-.01
	ERI =	0	POWER	-.02	-1.25	2.70	.07	.29	-.02	-.03
2.00	NR =	.925	7.25	12200	9770	1.39	1349	54.9	194	2067
	P2 =	9.59	RAM	1.10	1.46	-.40	-.00	1.10	1.10	.00
	T2 =	774	BLEED	.03	-2.65	2.20	-.25	-.94	.03	.00
	ERI =	0	POWER	-.01	-.80	1.87	.05	.20	-.01	.00
2.50	NR =	.870	14.9	23200	11800	1.50	1536	83.1	293	2067
	P2 =	19.74	RAM	1.16	1.54	-.42	-.00	1.16	1.16	.00
	T2 =	963	BLEED	.02	-3.39	3.06	-.20	-.94	.02	-.01
	ERI =	0	POWER	-.00	-.58	1.41	.03	.15	-.00	.00
2.80	NR =	.834	22.8	32500	12600	1.61	1653	104.2	367	2097
	P2 =	30.14	RAM	1.21	1.56	-.32	.00	1.21	1.21	.00
	T2 =	1095	BLEED	.02	-3.94	3.73	-.19	-.94	.02	.00
	ERI =	0	POWER	-.00	-.50	1.22	.02	.11	-.00	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 55000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FN8	SFCB	W2K	BTANG
1.50	3.57	8.90	9647	2067	984	13400	7570	1.28	424	10.2
	RAM	1.06	1.05	.00	-.00	1.23	1.37	-.34	.02	.00
	BLEED	-1.32	-.57	-.01	.40	-1.14	-2.09	1.57	.08	.00
	POWER	-4.03	1.44	-.03	3.91	-.70	-1.23	2.68	-.02	.00
2.00	7.25	13.32	13611	2067	1022	22300	10000	1.36	363	2.9
	RAM	1.10	1.09	.00	-.00	1.24	1.42	-.36	.02	.00
	BLEED	-1.38	-.54	.00	.41	-1.15	-2.58	2.12	.03	.00
	POWER	-2.80	1.07	.00	2.74	-.37	-.81	1.88	-.01	.00
2.50	14.9	19.67	17729	2067	1044	35300	12100	1.46	298	.0
	RAM	1.16	1.15	.00	-.00	1.29	1.53	-.41	.01	.00
	BLEED	-1.47	-.49	-.01	.48	-1.14	-3.35	3.02	.02	.00
	POWER	-1.87	.82	.00	1.83	-.20	-.57	1.40	-.00	.00
2.80	22.8	25.34	20360	2097	1020	45600	13100	1.55	260	.0
	RAM	1.21	1.21	.00	.00	1.33	1.63	-.39	.01	.00
	BLEED	-1.40	-.44	.00	.42	-1.10	-3.89	3.67	.02	.00
	POWER	-1.47	.71	.00	1.44	-.13	-.46	1.18	-.00	.00

12-29

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 55000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
1.50	NR =	.971	3.57	5900	6090	1.28	1174	33.4	124	1809
	P2 =	4.72	RAM	1.05	1.41	-.40	-.00	1.05	1.05	-.01
	T2 =	624	BLEED	.04	-1.37	1.98	-.18	-.65	.04	.68
	ERI =	0	POWER	-.14	7.35	3.81	.58	2.61	-.14	5.81
2.00	NR =	.925	7.25	12300	8470	1.39	1340	53.2	194	1907
	P2 =	9.59	RAM	1.10	1.52	-.48	-.00	1.10	1.10	-.00
	T2 =	774	BLEED	.02	-1.79	2.52	-.13	-.67	.02	.65
	ERI =	0	POWER	-.04	5.34	1.93	.34	1.53	-.04	3.35
2.50	NR =	.870	14.9	23200	10500	1.51	1530	81.3	293	1960
	P2 =	19.74	RAM	1.16	1.59	-.49	-.00	1.16	1.16	-.00
	T2 =	963	BLEED	.01	-2.46	3.26	-.16	-.73	.01	.53
	ERI =	0	POWER	-.01	4.19	1.05	.17	.96	-.01	2.06
2.80	NR =	.834	22.8	32500	10100	1.67	1644	100.9	367	1938
	P2 =	30.14	RAM	1.21	1.63	-.39	.00	1.21	1.21	-.00
	T2 =	1095	BLEED	.01	-3.47	4.31	-.17	-.78	.01	.41
	ERI =	0	POWER	-.01	4.23	.58	.13	.77	-.01	1.63

12-30

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 55000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
1.50	3.57	7.40	7791	1809	1095	12100	6210	1.25	425	10.2
	RAM	1.05	1.04	-.01	.00	1.25	1.43	-.43	.03	.00
	BLEED	-.53	.58	.68	-.05	-.69	-1.37	1.99	.04	.00
	POWER	3.17	11.29	5.81	-.05	3.71	7.37	3.79	-.14	.00
2.00	7.25	11.86	11783	1907	1095	21000	8710	1.35	363	2.9
	RAM	1.10	1.08	-.00	-.00	1.25	1.47	-.42	.02	.00
	BLEED	-.67	.67	.65	.05	-.71	-1.73	2.46	.02	.00
	POWER	1.83	7.35	3.35	.01	2.13	5.18	2.08	-.04	.00
2.50	14.9	18.16	15869	1960	1095	33900	10700	1.48	298	.0
	RAM	1.16	1.14	-.00	-.00	1.29	1.57	-.47	.01	.00
	BLEED	-.69	.68	.53	.00	-.76	-2.43	3.23	.01	.00
	POWER	1.14	5.29	2.06	.00	1.30	4.14	1.10	-.01	.00
2.80	22.8	22.53	16908	1938	1094	43100	10600	1.60	260	.0
	RAM	1.21	1.21	-.00	.00	1.34	1.73	-.48	.01	.00
	BLEED	-.80	.62	.41	.04	-.83	-3.42	4.26	.01	.00
	POWER	.87	4.85	1.63	.03	1.02	4.18	.63	-.01	.00

12-31

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 55000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
1.50	NR =	.971	3.57	5910	4760	1.31	1163	31.7	125	1580
	P2 =	4.72	RAM	1.05	1.52	-.54	-.01	1.05	1.05	-.01
	T2 =	624	BLEED	.03	-1.34	2.47	-.10	-.56	.03	.88
	ERI =	0	POWER	-.10	7.86	3.57	.31	2.43	-.10	5.40
2.00	NR =	.925	7.25	12300	6420	1.44	1330	50.6	194	1674
	P2 =	9.59	RAM	1.10	1.61	-.59	-.00	1.09	1.10	-.01
	T2 =	774	BLEED	.02	-1.97	3.12	-.13	-.63	.02	.74
	ERI =	0	POWER	-.04	6.46	1.75	.24	1.59	-.04	3.44
2.50	NR =	.870	14.9	23200	7270	1.63	1517	77.2	294	1718
	P2 =	19.74	RAM	1.16	1.78	-.69	-.00	1.16	1.16	.00
	T2 =	963	BLEED	.01	-3.09	4.47	-.14	-.69	.01	.61
	ERI =	0	POWER	-.02	6.03	.61	.17	1.09	-.02	2.29
2.80	NR =	.834	22.8	32500	5960	1.95	1629	95.3	367	1684
	P2 =	30.14	RAM	1.21	1.95	-.66	.00	1.21	1.21	.00
	T2 =	1095	BLEED	.01	-4.51	6.72	-.13	-.67	.01	.63
	ERI =	0	POWER	-.01	8.24	-.73	.17	.99	-.01	2.07

13. 6500 FEET

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P-S-11-0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 55000 FEET

MO P2/P0 PA/P0 WET TR AR FGR FNB SFCB W2K BTANG

2.00	7.25	9.56	921*	1674	1257	18900	6620	1.39	364	2.9
	RAM	1.09	1.06	-.01	-.00	1.27	1.58	-.56	.02	.00
	BLEED	-.57	1.06	.74	.01	-.66	-1.93	3.07	.02	.00
	POWER	1.86	8.29	3.44	.01	2.18	6.31	1.90	-.04	.00
2.50	14.9	14.62	11813	1718	1257	30700	7500	1.57	298	.0
	RAM	1.17	1.14	.00	-.01	1.31	1.77	-.68	.01	.00
	BLEED	-.67	1.18	.61	.02	-.73	-3.02	4.39	.01	.00
	POWER	1.21	6.68	2.29	.04	1.43	5.89	.73	-.02	.00
2.80	22.8	18.03	11605	1684	1257	38900	6350	1.83	260	.0
	RAM	1.22	1.23	.00	-.00	1.36	2.09	-.78	.01	.00
	BLEED	-.64	1.76	.63	.01	-.70	-4.36	6.54	.01	.00
	POWER	1.19	7.42	2.07	-.05	1.29	7.96	-.48	-.01	.00

12-33

# CONFIDENTIAL

PREVIOUS PAGE WAS BLANK, THEREFORE WAS NOT FILMED

**CONFIDENTIAL**

GEI 67870

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY PRESSURE ALTITUDE 65000 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC	
1.50	NR =	.971	3.56	3800	8660	1.91	1117	23.6	84	2067
	P2 =	2.92	RAM	1.06	1.37	-.38	-.01	1.06	1.06	.00
	T2 =	566	BLEED	.07	-1.81	1.11	-.26	-.91	.07	.00
	ERI =	0	POWER	-.03	-2.22	3.38	.11	.42	-.03	.02
1.80	NR =	.945	5.43	6090	11300	1.90	1208	31.6	112	2067
	P2 =	4.44	RAM	1.09	1.31	-.28	-.00	1.08	1.09	.00
	T2 =	643	BLEED	.06	-1.86	1.15	-.25	-.91	.06	-.00
	ERI =	0	POWER	-.03	-1.97	2.84	.09	.33	-.03	.00
2.00	NR =	.925	7.24	8120	13100	1.92	1272	38.0	135	2067
	P2 =	5.92	RAM	1.10	1.32	-.27	-.00	1.10	1.10	.00
	T2 =	702	BLEED	.05	-1.98	1.25	-.25	-.93	.05	-.01
	ERI =	0	POWER	-.01	-1.87	2.64	.06	.29	-.01	.00
2.30	NR =	.893	11.2	12200	16000	1.98	1376	49.6	176	2067
	P2 =	9.14	RAM	1.14	1.31	-.22	-.00	1.14	1.14	.00
	T2 =	802	BLEED	.02	-2.28	1.27	-.21	-.94	.02	-.01
	ERI =	0	POWER	-.01	-4.33	-.76	.05	.23	-.01	.02
2.50	NR =	.870	14.9	15700	17700	2.00	1452	58.7	208	2067
	P2 =	12.18	RAM	1.16	1.32	-.20	-.00	1.16	1.16	.00
	T2 =	876	BLEED	.02	-3.00	.95	-.18	-.95	.02	-.01
	ERI =	7	POWER	-.00	-4.81	-1.07	.03	.21	-.00	.00
2.70	NR =	.846	19.8	19700	19500	2.06	1526	68.4	243	2067
	P2 =	16.16	RAM	1.19	1.32	-.14	-.00	1.19	1.19	.00
	T2 =	955	BLEED	.02	-3.09	1.08	-.20	-.95	.02	-.01
	ERI =	7	POWER	-.00	-4.51	-.84	.03	.18	-.00	-.00
3.00	NR =	.809	29.9	27300	23000	2.18	1641	85.3	302	2097
	P2 =	24.43	RAM	1.25	1.35	-.11	-.00	1.25	1.25	.00
	T2 =	1083	BLEED	.02	-2.47	1.77	-.19	-.94	.02	.01
	ERI =	0	POWER	-.00	-2.05	.59	.02	.13	-.00	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 65000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
1.50	3.56	9.66	16524	3445	1334	12600	8770	1.88	443	.0
	RAM 1.08		1.01	.04	.01	1.26	1.35	-.36	.04	.00
	BLEED -1.37		-.73	-.14	.37	-1.23	-1.79	1.09	.07	.00
	POWER -6.15		1.13	-1.23	5.41	-1.67	-2.38	3.54	-.03	.00
1.80	5.43	12.47	21414	3462	1380	17500	11400	1.88	415	.0
	RAM 1.08		1.04	.02	.01	1.25	1.34	-.31	.03	.00
	BLEED -1.40		-.74	-.12	.40	-1.20	-1.87	1.16	.06	.00
	POWER -4.73		.85	-.88	4.18	-1.15	-1.76	2.63	-.03	.00
2.00	7.24	14.67	25136	3473	1405	21500	13400	1.88	389	.0
	RAM 1.11		1.07	.03	.00	1.26	1.36	-.31	.02	.00
	BLEED -1.44		-.76	-.13	.42	-1.21	-1.97	1.25	.05	.00
	POWER -4.19		.74	-.81	3.70	-.98	-1.57	2.33	-.01	.00
2.30	11.2	18.64	31688	3485	1442	28900	16700	1.89	352	.0
	RAM 1.14		1.11	.02	.01	1.28	1.39	-.30	.02	.00
	BLEED -1.53		-1.06	-.28	.39	-1.32	-2.29	1.28	.02	.00
	POWER -3.02		-5.07	-3.42	.81	-2.52	-4.35	-.74	-.01	.00
2.50	14.9	21.72	35453	3436	1449	34500	18800	1.89	327	.0
	RAM 1.17		1.13	.00	-.01	1.29	1.40	-.29	.01	.00
	BLEED -1.54		-2.10	-.79	.07	-1.64	-3.02	.97	.02	.00
	POWER -2.50		-5.84	-3.76	.12	-2.64	-4.85	-1.04	-.00	.00
2.70	19.8	25.26	40201	3435	1450	40800	21000	1.91	300	.0
	RAM 1.20		1.17	-.01	-.01	1.32	1.43	-.24	.01	.00
	BLEED -1.47		-2.06	-.75	.02	-1.60	-3.11	1.10	.02	.00
	POWER -2.15		-5.31	-3.36	.03	-2.34	-4.54	-.81	-.00	.00
3.00	29.9	32.32	50104	3530	1431	52800	25500	1.97	263	.0
	RAM 1.25		1.23	-.01	-.01	1.37	1.49	-.24	.01	.00
	BLEED -1.44		-.76	-.07	.42	-1.14	-2.38	1.68	.02	.00
	POWER -1.82		-1.47	-1.19	1.06	-.90	-1.87	.40	-.00	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY PRESSURE ALTITUDE 65000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
1.50	NR =	.971	3.56	3800	8020	1.74	1117	23.6	84	2067
	P2 =	2.92	RAM	1.06	1.33	-.35	-.01	1.06	1.06	.00
	T2 =	566	BLEED	.07	-1.79	1.12	-.27	-.91	.07	-.01
	ERI =	0	POWER	-.03	-2.10	3.34	.10	.40	-.03	-.02
1.80	NR =	.945	5.43	6090	10300	1.74	1208	31.7	112	2067
	P2 =	4.44	RAM	1.09	1.31	-.29	-.00	1.08	1.09	.00
	T2 =	643	BLEED	.06	-1.87	1.19	-.25	-.91	.06	-.01
	ERI =	0	POWER	-.03	-1.50	2.47	.09	.33	-.03	.00
2.00	NR =	.925	7.24	8120	11900	1.76	1272	38.0	135	2067
	P2 =	5.92	RAM	1.10	1.32	-.28	-.00	1.10	1.10	.00
	T2 =	702	BLEED	.05	-2.00	1.31	-.25	-.93	.05	-.01
	ERI =	0	POWER	-.01	-1.48	2.32	.06	.29	-.01	.00
2.30	NR =	.893	11.2	12200	14500	1.81	1377	49.6	176	2067
	P2 =	9.14	RAM	1.14	1.31	-.22	-.00	1.14	1.14	.00
	T2 =	802	BLEED	.02	-2.17	1.47	-.21	-.95	.02	-.01
	ERI =	0	POWER	-.00	-1.21	1.87	.05	.22	-.00	-.02
2.50	NR =	.870	14.9	15700	16200	1.87	1452	58.8	208	2067
	P2 =	12.18	RAM	1.16	1.32	-.21	-.00	1.16	1.16	-.00
	T2 =	876	BLEED	.02	-2.31	1.63	-.18	-.95	.02	-.01
	ERI =	0	POWER	-.00	-1.14	1.75	.03	.21	-.00	.00
2.70	NR =	.846	19.8	19700	17700	1.93	1526	68.4	243	2067
	P2 =	16.16	RAM	1.19	1.32	-.15	-.00	1.19	1.19	.00
	T2 =	955	BLEED	.02	-2.41	1.74	-.20	-.95	.02	-.01
	ERI =	0	POWER	-.00	-1.03	1.56	.03	.18	-.00	-.00
3.00	NR =	.809	29.9	27300	20100	2.03	1642	85.4	302	2097
	P2 =	24.43	RAM	1.25	1.34	-.11	-.00	1.25	1.25	.00
	T2 =	1083	BLEED	.02	-2.59	1.95	-.19	-.94	.02	.01
	ERI =	0	POWER	-.00	-.76	1.20	.02	.13	-.00	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE

65000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
1.50	3.56	9.73	13952	3180	1258	11900	8140	1.71	443	2.9
	RAM	1.08	1.01	.00	-.02	1.24	1.32	-.34	.04	.00
	BLEED	-1.38	-.70	-.08	.42	-1.19	-1.78	1.10	.07	.00
	POWER	-6.17	1.22	-.86	5.66	-1.47	-2.14	3.38	-.03	.00
1.80	5.43	12.56	17965	3169	1296	16600	10500	1.72	414	.0
	RAM	1.09	1.04	-.00	-.01	1.24	1.32	-.31	.03	.00
	BLEED	-1.40	-.71	-.07	.42	-1.17	-1.89	1.21	.06	.00
	POWER	-4.68	.95	-.66	4.29	-1.02	-1.60	2.57	-.03	.00
2.00	7.24	14.79	20998	3164	1315	20300	12100	1.73	389	.0
	RAM	1.11	1.06	.01	-.01	1.25	1.35	-.31	.02	.00
	BLEED	-1.44	-.73	-.09	.44	-1.18	-2.00	1.31	.05	.00
	POWER	-4.15	.83	-.61	3.80	-.86	-1.42	2.27	-.01	.00
2.30	11.2	18.81	26288	3160	1345	27200	15000	1.75	352	.0
	RAM	1.14	1.10	.00	-.01	1.27	1.38	-.30	.02	.00
	BLEED	-1.53	-.74	-.10	.51	-1.20	-2.19	1.49	.02	.00
	POWER	-3.27	.64	-.50	2.99	-.63	-1.14	1.80	-.00	.00
2.50	14.9	21.90	30207	3154	1364	32700	17000	1.78	327	.0
	RAM	1.17	1.13	-.01	-.01	1.28	1.39	-.29	.01	.00
	BLEED	-1.59	-.73	-.08	.57	-1.19	-2.30	1.62	.02	.00
	POWER	-2.75	.59	-.37	2.54	-.48	-.92	1.52	-.00	.00
2.70	19.8	25.47	34084	3150	1365	38600	18900	1.80	300	.0
	RAM	1.20	1.16	-.01	-.01	1.31	1.43	-.25	.01	.00
	BLEED	-1.51	-.73	-.07	.50	-1.16	-2.40	1.73	.02	.00
	POWER	-2.37	.52	-.31	2.19	-.39	-.80	1.34	-.00	.00
3.00	29.9	32.62	40799	3183	1332	49400	22100	1.84	263	.0
	RAM	1.25	1.23	-.01	-.01	1.36	1.50	-.25	.01	.00
	BLEED	-1.43	-.72	-.05	.43	-1.13	-2.54	1.90	.02	.00
	POWER	-1.86	.43	-.24	1.73	-.29	-.64	1.08	-.00	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE      65000 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC	
1.50	NR =	.971	3.56	3800	7180	1.58	1117	23.7	84	2067
	P2 =	2.92	RAM	1.06	1.35	-.38	-.01	1.06	1.06	-.00
	T2 =	566	BLEED	.07	-1.83	1.22	-.26	-.91	.07	.01
	ERI =	0	POWER	-.03	-1.77	3.26	.11	.43	-.03	.04
1.80	NR =	.945	5.43	6090	9100	1.59	1208	31.7	112	2067
	P2 =	4.44	RAM	1.09	1.32	-.32	-.00	1.08	1.09	.00
	T2 =	643	BLEED	.06	-1.91	1.29	-.25	-.90	.06	.00
	ERI =	0	POWER	-.03	-1.15	2.26	.09	.33	-.03	.00
2.00	NR =	.925	7.24	8120	10500	1.61	1273	38.0	135	2067
	P2 =	5.92	RAM	1.10	1.34	-.32	-.00	1.10	1.10	.00
	T2 =	702	BLEED	.05	-2.08	1.44	-.25	-.93	.05	-.01
	ERI =	0	POWER	-.01	-1.19	2.17	.06	.29	-.01	.00
2.30	NR =	.893	11.2	12200	12600	1.66	1377	49.6	176	2067
	P2 =	9.14	RAM	1.14	1.33	-.25	-.00	1.14	1.14	.00
	T2 =	802	BLEED	.02	-2.27	1.64	-.22	-.94	.02	-.01
	ERI =	0	POWER	-.01	-1.11	1.90	.05	.22	-.01	-.00
2.50	NR =	.870	14.9	15700	13900	1.71	1453	58.8	208	2067
	P2 =	12.18	RAM	1.16	1.34	-.24	-.00	1.16	1.16	.00
	T2 =	876	BLEED	.02	-2.49	1.88	-.18	-.94	.02	-.01
	ERI =	0	POWER	-.00	-1.08	1.78	.03	.21	-.00	.00
2.70	NR =	.846	19.8	19700	15000	1.77	1526	68.5	243	2067
	P2 =	16.16	RAM	1.19	1.34	-.17	-.00	1.19	1.19	.00
	T2 =	955	BLEED	.02	-2.61	2.02	-.20	-.95	.02	-.01
	ERI =	0	POWER	-.00	-.92	1.55	.03	.18	-.00	-.00
3.00	NR =	.809	29.9	27300	16700	1.80	1642	85.5	302	2097
	P2 =	24.43	RAM	1.25	1.35	-.13	-.00	1.25	1.25	.00
	T2 =	1083	BLEED	.02	-2.84	2.29	-.19	-.94	.02	.01
	ERI =	0	POWER	-.00	-.65	1.18	.02	.13	-.00	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY                  PRESSURE ALTITUDE 65000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
1.50	3.56	9.81	11371	2816	1164	11100	7310	1.55	443	2.9
	RAM	1.08	.99	-.02	-.03	1.23	1.31	-.35	.04	.00
	BLEED	-1.36	-.64	-.03	.41	-1.16	-1.80	1.19	.07	.00
	POWER	-6.02	1.47	-.59	5.58	-1.29	-1.94	3.43	-.03	.00
1.80	5.43	12.68	14510	2793	1194	15400	9260	1.57	414	.0
	RAM	1.09	1.02	-.03	-.02	1.22	1.31	-.31	.03	.00
	BLEED	-1.37	-.65	-.03	.42	-1.14	-1.92	1.31	.06	.00
	POWER	-4.62	1.10	-.46	4.27	-.89	-1.46	2.58	-.03	.00
2.00	7.24	14.94	16853	2782	1210	18800	10700	1.58	389	.0
	RAM	1.11	1.05	-.01	-.02	1.24	1.34	-.31	.02	.00
	BLEED	-1.43	-.68	-.05	.45	-1.16	-2.08	1.44	.05	.00
	POWER	-4.09	.96	-.44	3.78	-.75	-1.32	2.29	-.01	.00
2.30	11.2	19.00	20873	2770	1235	25100	12900	1.61	352	.0
	RAM	1.14	1.09	-.01	-.01	1.26	1.38	-.31	.02	.00
	BLEED	-1.50	-.69	-.06	.49	-1.17	-2.30	1.67	.02	.00
	POWER	-3.19	.77	-.36	2.98	-.55	-1.05	1.84	-.01	.00
2.50	14.9	22.13	23795	2763	1252	30200	14500	1.64	327	.0
	RAM	1.17	1.12	-.02	-.02	1.28	1.40	-.31	.01	.00
	BLEED	-1.58	-.68	-.05	.57	-1.17	-2.45	1.84	.02	.00
	POWER	-2.70	.69	-.27	2.55	-.42	-.86	1.57	-.00	.00
2.70	19.8	25.75	26613	2757	1251	35700	15900	1.67	300	.0
	RAM	1.20	1.15	-.02	-.01	1.31	1.45	-.27	.01	.00
	BLEED	-1.50	-.67	-.04	.50	-1.15	-2.59	2.00	.02	.00
	POWER	-2.33	.62	-.23	2.21	-.34	-.76	1.39	-.00	.00
3.00	29.9	32.95	31476	2785	1222	45600	18300	1.72	263	.0
	RAM	1.25	1.22	-.01	-.01	1.36	1.51	-.27	.01	.00
	BLEED	-1.42	-.65	-.03	.43	-1.11	-2.80	2.25	.02	.00
	POWER	-1.83	.52	-.18	1.72	-.25	-.61	1.14	-.00	.00

13-7

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE      65000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
1.50	NR =	.971	3.56	3800	6160	1.43	1118	23.7	84	2067
	P2 =	2.92	RAM	1.06	1.22	-.40	-.01	1.06	1.06	.00
	T2 =	566	BLEED	.07	-1.87	1.39	-.26	-.91	.07	-.00
	ERI =	0	POWER	-.03	-2.29	4.05	.10	.41	-.03	.01
1.80	NR =	.945	5.43	6090	7670	1.44	1209	31.7	112	2067
	P2 =	4.44	RAM	1.09	1.34	-.36	-.00	1.09	1.09	.00
	T2 =	643	BLEED	.07	-2.06	1.54	-.25	-.90	.07	.00
	ERI =	0	POWER	-.03	-1.29	2.64	.09	.33	-.03	.00
2.00	NR =	.925	7.24	8110	8730	1.45	1273	38.1	135	2067
	P2 =	5.92	RAM	1.10	1.41	-.41	-.00	1.10	1.10	.00
	T2 =	702	BLEED	.05	-2.28	1.74	-.24	-.92	.05	-.01
	ERI =	0	POWER	-.01	-1.21	2.37	.06	.28	-.01	-.02
2.30	NR =	.893	11.2	12200	10400	1.49	1377	49.7	176	2067
	P2 =	9.14	RAM	1.14	1.38	-.33	-.00	1.14	1.14	.00
	T2 =	802	BLEED	.02	-2.50	1.98	-.22	-.94	.02	-.01
	ERI =	0	POWER	-.01	-.93	1.91	.05	.22	-.01	.00
2.50	NR =	.870	14.9	15700	11400	1.53	1453	58.9	208	2067
	P2 =	12.18	RAM	1.16	1.36	-.28	-.00	1.16	1.16	.00
	T2 =	876	BLEED	.02	-2.68	2.19	-.18	-.94	.02	-.01
	ERI =	0	POWER	-.00	-.81	1.69	.03	.21	-.00	.00
2.70	NR =	.846	19.8	19700	12100	1.59	1526	68.6	243	2067
	P2 =	16.16	RAM	1.19	1.39	-.24	-.00	1.19	1.19	.00
	T2 =	955	BLEED	.02	-2.93	2.48	-.20	-.95	.02	-.01
	ERI =	0	POWER	-.00	-.76	1.56	.03	.18	-.00	-.00
3.00	NR =	.809	29.9	27300	13100	1.69	1642	85.5	302	2097
	P2 =	24.43	RAM	1.25	1.47	-.25	-.00	1.25	1.25	.00
	T2 =	1083	BLEED	.02	-3.37	3.00	-.19	-.94	.02	.01
	ERI =	0	POWER	-.00	-.69	1.39	.02	.13	-.00	.00

13-8

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE

65000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
1.50	3.56	9.91	8788	2379	1049	10100	6290	1.40	443	10.2
	RAM	1.08	.84	-.11	-.08	1.18	1.24	-.43	.04	.00
	BLEED	-1.37	-.53	.02	.44	-1.13	-1.86	1.37	.07	.00
	POWER	-5.98	1.74	-.48	5.58	-1.21	-1.92	3.68	-.03	.00
1.80	5.43	12.81	11049	2361	1076	13900	7840	1.41	414	2.9
	RAM	1.09	1.01	-.01	-.01	1.23	1.33	-.35	.03	.00
	BLEED	-1.36	-.57	-.02	.41	-1.13	-2.05	1.53	.07	.00
	POWER	-4.53	1.34	-.36	4.23	-.81	-1.43	2.79	-.03	.00
2.00	7.24	15.10	12700	2351	1090	17000	8900	1.43	389	.0
	RAM	1.11	1.03	-.02	-.02	1.23	1.35	-.34	.02	.00
	BLEED	-1.42	-.60	-.02	.45	-1.14	-2.22	1.67	.05	.00
	POWER	-4.06	1.14	-.28	3.85	-.65	-1.24	2.40	-.01	.00
2.30	11.2	19.21	15450	2341	1112	22800	10600	1.46	352	.0
	RAM	1.14	1.07	-.01	-.01	1.26	1.39	-.35	.02	.00
	BLEED	-1.47	-.59	-.03	.48	-1.15	-2.50	1.98	.02	.00
	POWER	-3.13	.97	-.20	2.98	-.45	-.95	1.94	-.01	.00
2.50	14.9	22.39	17370	2335	1126	27300	11700	1.49	327	.0
	RAM	1.17	1.10	-.02	-.02	1.27	1.42	-.34	.01	.00
	BLEED	-1.57	-.58	-.01	.57	-1.14	-2.71	2.22	.02	.00
	POWER	-2.65	.87	-.13	2.55	-.33	-.77	1.65	-.00	.00
2.70	19.8	26.04	19128	2328	1126	32300	12500	1.53	300	.0
	RAM	1.20	1.14	-.02	-.02	1.30	1.47	-.31	.01	.00
	BLEED	-1.49	-.56	-.01	.50	-1.12	-2.93	2.47	.02	.00
	POWER	-2.29	.79	-.11	2.20	-.27	-.69	1.48	-.00	.00
3.00	29.9	33.31	22136	2352	1099	41200	13900	1.59	263	.0
	RAM	1.25	1.21	-.02	-.01	1.35	1.55	-.32	.01	.00
	BLEED	-1.41	-.52	-.00	.44	-1.09	-3.27	2.89	.02	.00
	POWER	-1.80	.68	-.08	1.74	-.19	-.55	1.24	-.00	.00

*Handwritten:*  
2/10/64  
M  
1/10/64

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY                  PRESSURE ALTITUDE    65000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
1.50	NR =	.971	3.56	3800	5420	1.25	1119	23.8	84	2067
	P2 =	2.92	RAM	1.06	1.33	-.29	-.01	1.06	1.06	.00
	T2 =	566	BLEED	.07	-1.98	1.43	-.26	-.91	.07	-.01
	ERI =	0	POWER	-.03	-1.64	3.82	.10	.39	-.03	.00
1.80	NR =	.945	5.43	6090	6650	1.30	1210	31.8	112	2067
	P2 =	4.44	RAM	1.09	1.41	-.35	-.00	1.08	1.09	.00
	T2 =	643	BLEED	.07	-2.19	1.69	-.26	-.89	.07	.01
	ERI =	0	POWER	-.03	-.97	2.63	.08	.33	-.03	.00
2.00	NR =	.925	7.24	8110	7500	1.33	1274	38.2	135	2067
	P2 =	5.92	RAM	1.10	1.38	-.30	-.00	1.10	1.10	-.00
	T2 =	702	BLEED	.05	-2.37	1.86	-.24	-.92	.05	-.01
	ERI =	0	POWER	-.01	-.97	2.41	.06	.28	-.01	.00
2.30	NR =	.893	11.2	12200	8850	1.37	1379	49.9	176	2067
	P2 =	9.14	RAM	1.14	1.44	-.34	-.00	1.14	1.14	.00
	T2 =	802	BLEED	.02	-2.70	2.24	-.24	-.94	.02	-.01
	ERI =	0	POWER	-.01	-.67	1.87	.05	.22	-.01	.00
2.50	NR =	.870	14.9	15700	9570	1.42	1454	59.1	208	2067
	P2 =	12.18	RAM	1.16	1.43	-.30	-.00	1.16	1.16	.00
	T2 =	876	BLEED	.02	-2.98	2.57	-.18	-.94	.02	-.01
	ERI =	0	POWER	-.00	-.66	1.73	.03	.20	-.00	.00
2.70	NR =	.846	19.8	19700	10000	1.48	1528	68.8	243	2067
	P2 =	16.16	RAM	1.19	1.46	-.26	-.00	1.19	1.19	-.00
	T2 =	955	BLEED	.02	-3.30	2.95	-.20	-.94	.02	-.01
	ERI =	0	POWER	-.00	-.66	1.65	.03	.18	-.00	-.00
3.00	NR =	.809	29.9	27300	10600	1.59	1643	85.9	302	2097
	P2 =	24.43	RAM	1.25	1.55	-.27	-.00	1.25	1.25	.00
	T2 =	1083	BLEED	.02	-3.88	3.66	-.19	-.93	.02	.01
	ERI =	0	POWER	-.00	-.59	1.46	.02	.13	-.00	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY                  PRESSURE ALTITUDE 65000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
1.50	3.56	10.02	6794	2067	960	9310	5510	1.23	443	10.2
	RAM 1.08		1.06	.00	-.01	1.23	1.35	-.31	.04	.00
	BLEED -1.37		-.59	-.01	.43	-1.14	-1.98	1.44	.07	.00
	POWER -5.94		2.17	.00	5.81	-.93	-1.55	3.74	-.03	.00
1.80	5.43	12.95	8641	2067	990	12900	6820	1.27	414	2.9
	RAM 1.09		1.08	.00	-.00	1.23	1.36	-.30	.03	.00
	BLEED -1.32		-.55	.01	.39	-1.10	-2.14	1.65	.07	.00
	POWER -4.45		1.65	.00	4.34	-.61	-1.12	2.79	-.03	.00
2.00	7.24	15.27	9965	2067	1005	15800	7690	1.30	389	2.9
	RAM 1.11		1.09	-.00	-.01	1.24	1.38	-.31	.02	.00
	BLEED -1.40		-.57	-.01	.44	-1.12	-2.36	1.85	.05	.00
	POWER -3.96		1.44	.00	3.88	-.49	-.98	2.43	-.01	.00
2.30	11.2	19.43	12119	2067	1028	21200	9020	1.34	352	.0
	RAM 1.14		1.13	.00	-.00	1.26	1.43	-.33	.02	.00
	BLEED -1.40		-.55	-.01	.42	-1.13	-2.68	2.22	.02	.00
	POWER -3.09		1.19	.00	3.03	-.33	-.76	1.96	-.01	.00
2.50	14.9	22.67	13565	2067	1042	25500	9810	1.38	327	.0
	RAM 1.17		1.15	.00	-.01	1.28	1.47	-.35	.01	.00
	BLEED -1.55		-.53	-.01	.56	-1.14	-2.98	2.57	.02	.00
	POWER -2.61		1.07	.00	2.56	-.25	-.65	1.73	-.00	.00
2.70	19.8	26.36	14822	2067	1043	30100	10400	1.43	300	.0
	RAM 1.19		1.18	-.00	-.00	1.31	1.53	-.33	.01	.00
	BLEED -1.48		-.49	-.01	.49	-1.12	-3.28	2.93	.02	.00
	POWER -2.26		.98	-.00	2.21	-.20	-.58	1.57	-.00	.00
3.00	29.9	33.69	16951	2097	1022	38500	11300	1.50	263	.0
	RAM 1.25		1.25	.00	-.00	1.36	1.63	-.35	.01	.00
	BLEED -1.40		-.43	.01	.43	-1.08	-3.76	3.53	.02	.00
	POWER -1.78		.86	.00	1.74	-.14	-.48	1.34	-.00	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 7.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE    65000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
1.50	NR =	.971	3.56	3810	4670	1.23	1108	22.8	84	1851
	P2 =	2.92	RAM	1.07	1.36	-.35	-.01	1.06	1.07	-.02
	T2 =	566	BLEED	.04	-1.25	1.76	-.17	-.64	.04	.69
	ERI =	0	POWER	-.17	9.95	5.65	.80	3.84	-.17	8.64
1.80	NR =	.945	5.43	6100	6030	1.29	1203	31.0	113	1934
	P2 =	4.44	RAM	1.09	1.47	-.40	.00	1.09	1.09	.02
	T2 =	643	BLEED	.04	-1.64	1.95	-.19	-.72	.04	.50
	ERI =	0	POWER	-.12	7.10	3.46	.54	2.43	-.12	5.46
2.00	NR =	.925	7.24	8120	6980	1.32	1269	37.5	135	1974
	P2 =	5.92	RAM	1.10	1.40	-.32	-.00	1.10	1.10	.01
	T2 =	702	BLEED	.04	-1.72	2.04	-.20	-.73	.04	.48
	ERI =	0	POWER	-.09	6.25	2.99	.47	2.07	-.09	4.60
2.30	NR =	.893	11.2	12200	8550	1.37	1376	49.5	176	2026
	P2 =	9.14	RAM	1.14	1.44	-.34	-.00	1.13	1.14	-.00
	T2 =	802	BLEED	.02	-1.83	2.34	-.17	-.72	.02	.54
	ERI =	0	POWER	-.03	4.15	2.11	.30	1.35	-.03	2.80
2.50	NR =	.870	14.9	15700	9510	1.42	1454	59.0	208	2060
	P2 =	12.18	RAM	1.16	1.43	-.30	-.00	1.16	1.16	-.00
	T2 =	876	BLEED	.02	-2.57	2.57	-.17	-.85	.02	.22
	ERI =	0	POWER	-.01	.04	1.75	.06	.35	-.01	.38
2.70	NR =	.846	19.8	19700	9990	1.48	1527	68.8	243	2064
	P2 =	16.16	RAM	1.19	1.45	-.26	-.00	1.19	1.19	-.00
	T2 =	955	BLEED	.02	-3.11	2.95	-.19	-.90	.02	.09
	ERI =	0	POWER	-.00	-.39	1.64	.04	.23	-.00	.13
3.00	NR =	.809	29.9	27300	9940	1.61	1641	85.0	302	2044
	P2 =	24.43	RAM	1.25	1.57	-.30	-.00	1.25	1.25	.00
	T2 =	1083	BLEED	.02	-2.78	3.65	-.16	-.73	.02	.51
	ERI =	0	POWER	-.02	4.77	.82	.16	.97	-.02	2.06

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 7.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 65000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFC8	W2K	BTANG
1.50	3.56	8.64	5728	1851	1045	8560	4750	1.21	444	10.2
	RAM	1.05	1.03	-.02	-.00	1.23	1.37	-.36	.04	.00
	BLEED	-.59	.48	.69	.01	-.68	-1.25	1.77	.04	.00
	POWER	4.64	15.78	8.64	.02	5.48	10.01	5.60	-.17	.00
1.80	5.43	11.82	7767	1934	1044	12300	6200	1.25	415	2.9
	RAM	1.11	1.11	.02	-.02	1.25	1.42	-.33	.03	50.34
	BLEED	-.73	.25	.50	.06	-.78	-1.58	1.88	.04	.00
	POWER	2.75	10.67	5.46	.18	3.38	6.83	3.73	-.12	.00
2.00	7.24	14.31	9224	1974	1044	15300	7160	1.29	390	2.9
	RAM	1.12	1.10	.01	-.01	1.25	1.41	-.33	.02	.00
	BLEED	-.73	.27	.48	.04	-.78	-1.70	2.02	.04	.00
	POWER	2.38	9.35	4.60	.12	2.86	6.20	3.05	-.09	.00
2.30	11.2	18.89	11691	2026	1045	20900	8710	1.34	352	.0
	RAM	1.13	1.12	-.00	.00	1.26	1.43	-.34	.02	.00
	BLEED	-.70	.44	.54	.02	-.74	-1.81	2.32	.02	.00
	POWER	.78	6.32	2.80	.74	1.68	4.08	2.18	-.03	.00
2.50	14.9	22.56	13479	2060	1045	25400	9750	1.38	327	.0
	RAM	1.16	1.14	-.00	-.00	1.28	1.47	-.35	.01	.00
	BLEED	-1.23	-.10	.22	.36	-.98	-2.58	2.58	.02	.00
	POWER	-2.08	1.79	.38	2.23	.02	.05	1.74	-.01	.00
2.70	19.8	26.30	14778	2064	1045	30100	10400	1.43	300	.0
	RAM	1.19	1.17	-.00	.00	1.31	1.53	-.33	.01	.00
	BLEED	-1.35	-.31	.09	.41	-1.05	-3.09	2.92	.02	.00
	POWER	-2.07	1.24	.13	2.10	-.11	-.32	1.56	-.00	.00
3.00	29.9	32.44	15986	2044	1045	37900	10600	1.51	263	.0
	RAM	1.25	1.25	.00	-.00	1.36	1.65	-.37	.01	.00
	BLEED	-.68	.72	.51	-.01	-.74	-2.70	3.57	.02	.00
	POWER	1.15	5.64	2.06	-.01	1.28	4.65	.94	-.02	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P. S. 9.0

JANUARY 1964

STANDARD DAY          PRESSURE ALTITUDE    65000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
1.50	NR =	.971	3.56	3810	4290	1.23	1103	22.3	84	1751
	P2 =	2.92	RAM	1.07	1.38	-.37	-.01	1.06	1.07	-.01
	T2 =	566	BLEED	.03	-1.34	1.87	-.17	-.65	.03	.67
	ERI =	0	POWER	-.15	10.02	5.51	.80	3.81	-.15	8.36
1.80	NR =	.945	5.43	6110	5520	1.28	1197	30.4	113	1826
	P2 =	4.44	RAM	1.09	1.46	-.42	-.00	1.09	1.09	-.00
	T2 =	643	BLEED	.03	-1.58	2.09	-.19	-.68	.03	.60
	ERI =	0	POWER	-.14	8.73	3.70	.64	2.88	-.14	6.43
2.00	NR =	.925	7.24	8130	6370	1.32	1263	36.7	135	1866
	P2 =	5.92	RAM	1.10	1.42	-.38	-.00	1.10	1.10	-.01
	T2 =	702	BLEED	.03	-1.67	2.22	-.19	-.69	.03	.60
	ERI =	0	POWER	-.08	7.38	3.04	.52	2.32	-.08	5.14
2.30	NR =	.893	11.2	12200	7780	1.37	1371	48.5	176	1924
	P2 =	9.14	RAM	1.14	1.51	-.43	-.00	1.13	1.14	-.01
	T2 =	802	BLEED	.02	-1.78	2.57	-.13	-.67	.02	.66
	ERI =	0	POWER	-.03	5.39	2.02	.23	1.53	-.03	3.31
2.50	NR =	.870	14.9	15700	8610	1.42	1449	57.8	208	1958
	P2 =	12.18	RAM	1.16	1.45	-.34	-.00	1.16	1.16	-.01
	T2 =	876	BLEED	.01	-1.98	2.76	-.15	-.70	.01	.60
	ERI =	0	POWER	-.02	4.96	1.68	.21	1.32	-.02	2.82
2.70	NR =	.846	19.8	19700	8910	1.49	1522	67.4	243	1960
	P2 =	16.16	RAM	1.19	1.48	-.29	-.00	1.19	1.19	-.00
	T2 =	955	BLEED	.01	-2.38	3.15	-.16	-.73	.01	.53
	ERI =	0	POWER	-.02	4.98	1.28	.20	1.17	-.02	2.50
3.00	NR =	.809	29.9	27300	8590	1.65	1635	83.2	302	1941
	P2 =	24.43	RAM	1.25	1.62	-.34	-.00	1.25	1.25	-.00
	T2 =	1083	BLEED	.02	-3.15	4.14	-.16	-.75	.02	.49
	ERI =	0	POWER	-.02	5.24	.65	.16	.95	-.02	2.03

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE

65000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
1.50	3.56	7.99	5256	1751	1095	8190	4380	1.20	444	10.2
	RAM	1.07	1.04	-.01	-.01	1.25	1.41	-.40	.04	.00
	BLEED	-.60	.49	.67	-.00	-.70	-1.34	1.87	.03	.00
	POWER	4.39	15.70	8.36	.12	5.32	10.07	5.46	-.15	.00
1.80	5.43	10.91	7072	1826	1095	11800	5670	1.25	415	2.9
	RAM	1.09	1.07	-.00	-.00	1.25	1.42	-.37	.03	.00
	BLEED	-.63	.46	.60	.00	-.72	-1.53	2.04	.03	.00
	POWER	3.47	12.57	6.43	-.01	4.01	8.47	3.95	-.14	.00
2.00	7.24	13.22	8389	1866	1094	14700	6540	1.28	390	2.9
	RAM	1.10	1.07	-.01	-.00	1.24	1.42	-.37	.02	.00
	BLEED	-.63	.50	.60	-.00	-.72	-1.64	2.20	.03	.00
	POWER	2.65	10.54	5.14	.13	3.19	7.27	3.15	-.08	.00
2.30	11.2	17.48	10639	1924	1095	20100	7930	1.34	352	.0
	RAM	1.13	1.11	-.01	-.00	1.26	1.46	-.37	.02	.00
	BLEED	-.60	.72	.66	-.01	-.67	-1.73	2.52	.02	.00
	POWER	1.84	7.49	3.31	-.00	2.09	5.34	2.07	-.03	.00
2.50	14.9	20.88	12223	1958	1095	24500	8820	1.39	327	.0
	RAM	1.16	1.14	-.01	.00	1.28	1.49	-.39	.01	.00
	BLEED	-.64	.70	.60	-.00	-.71	-1.99	2.77	.01	.00
	POWER	1.57	6.72	2.82	.00	1.78	4.97	1.68	-.02	.00
2.70	19.8	24.33	13287	1960	1095	29000	9250	1.44	300	.0
	RAM	1.19	1.17	-.00	.00	1.31	1.56	-.37	.01	.00
	BLEED	-.69	.66	.53	.00	-.75	-2.36	3.14	.01	.00
	POWER	1.41	6.33	2.50	-.02	1.57	4.95	1.31	-.02	.00
3.00	29.9	30.01	14162	1941	1095	36500	9210	1.54	263	.0
	RAM	1.25	1.25	-.00	.00	1.36	1.70	-.42	.01	.00
	BLEED	-.69	.80	.49	-.02	-.76	-3.06	4.05	.02	.00
	POWER	1.14	5.93	2.03	-.02	1.26	5.06	.82	-.02	.00

# CONFIDENTIAL

GEI 67870

**CONFIDENTIAL**

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY PRESSURE ALTITUDE 65000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
1.50	NR =	.971	3.56	3820	3410	1.25	1094	21.2	85	1532
	P2 =	2.92	RAM	1.07	1.44	-.47	-.01	1.05	1.07	-.03
	T2 =	566	BLEED	.02	-1.27	2.28	-.09	-.57	.02	.88
	ERI =	0	POWER	-.12	10.94	5.31	.44	3.63	-.12	8.08
1.80	NR =	.945	5.43	6120	4330	1.30	1185	28.8	113	1595
	P2 =	4.44	RAM	1.09	1.55	-.54	-.00	1.08	1.09	-.01
	T2 =	643	BLEED	.03	-1.48	2.58	-.10	-.58	.03	.85
	ERI =	0	POWER	-.10	9.54	3.38	.35	2.73	-.10	6.06
2.00	NR =	.925	7.24	8140	4930	1.34	1251	34.9	135	1632
	P2 =	5.92	RAM	1.10	1.48	-.46	-.01	1.10	1.10	-.02
	T2 =	702	BLEED	.03	-1.64	2.77	-.11	-.60	.03	.80
	ERI =	0	POWER	-.07	8.28	2.84	.32	2.27	-.07	4.96
2.30	NR =	.893	11.2	12200	5890	1.41	1361	46.1	176	1690
	P2 =	9.14	RAM	1.14	1.57	-.52	-.00	1.13	1.14	-.01
	T2 =	802	BLEED	.02	-2.04	3.19	-.13	-.64	.02	.72
	ERI =	0	POWER	-.04	7.32	1.87	.28	1.77	-.04	3.79
2.50	NR =	.870	14.9	15700	6330	1.48	1437	54.9	209	1718
	P2 =	12.18	RAM	1.16	1.55	-.48	-.00	1.16	1.16	-.02
	T2 =	876	BLEED	.01	-2.20	3.56	-.11	-.62	.01	.75
	ERI =	0	POWER	-.02	6.93	1.35	.23	1.51	-.02	3.20
2.70	NR =	.846	19.8	19800	6260	1.59	1510	64.0	243	1719
	P2 =	16.16	RAM	1.19	1.57	-.41	-.00	1.19	1.19	-.02
	T2 =	955	BLEED	.01	-3.01	4.31	-.15	-.69	.01	.59
	ERI =	0	POWER	-.02	6.90	.89	.20	1.30	-.02	2.73
3.00	NR =	.809	29.9	27300	5190	1.90	1620	78.7	302	1690
	P2 =	24.43	RAM	1.25	1.83	-.54	.00	1.25	1.25	.00
	T2 =	1083	BLEED	.01	-4.35	6.43	-.13	-.68	.01	.61
	ERI =	0	POWER	-.02	9.26	-.64	.20	1.17	-.02	2.44

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 65000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
1.50	3.56	6.43	4253	1532	1257	7310	3490	1.22	445	10.2
	RAM	1.05	1.01	-.03	-.00	1.27	1.49	-.52	.04	.00
	BLEED	-.50	.97	.88	.01	-.60	-1.28	2.29	.02	.00
	POWER	4.28	16.43	8.08	.06	5.21	11.04	5.22	-.12	.00
1.80	5.43	8.77	5632	1595	1257	10600	4450	1.27	416	2.9
	RAM	1.08	1.05	-.01	.00	1.26	1.50	-.49	.03	.00
	BLEED	-.51	1.04	.85	.00	-.59	-1.44	2.54	.03	.00
	POWER	3.41	13.05	6.06	-.14	3.84	9.26	3.65	-.10	.00
2.00	7.24	10.63	6622	1632	1257	13200	5070	1.31	391	2.9
	RAM	1.09	1.06	-.02	.00	1.26	1.51	-.49	.02	.00
	BLEED	-.53	1.06	.80	.00	-.61	-1.63	2.75	.03	.00
	POWER	2.69	11.24	4.96	-.00	3.11	8.21	2.91	-.07	.00
2.30	11.2	14.09	8294	1690	1257	18200	6020	1.38	352	.0
	RAM	1.13	1.10	-.01	.00	1.28	1.56	-.50	.02	.00
	BLEED	-.57	1.05	.72	-.01	-.65	-2.01	3.16	.02	.00
	POWER	2.04	9.29	3.79	.03	2.36	7.22	1.97	-.04	.00
2.50	14.9	16.81	9366	1718	1258	22200	6530	1.43	327	.0
	RAM	1.14	1.10	-.02	.01	1.29	1.58	-.52	.01	.00
	BLEED	-.56	1.25	.75	-.01	-.63	-2.17	3.54	.01	.00
	POWER	1.78	8.35	3.20	-.02	1.99	6.84	1.43	-.02	.00
2.70	19.8	19.60	9943	1719	1256	26300	6580	1.51	300	.0
	RAM	1.17	1.13	-.02	.02	1.31	1.68	-.50	.01	.00
	BLEED	-.71	1.10	.59	.06	-.73	-2.96	4.25	.01	.00
	POWER	1.43	7.85	2.73	.07	1.68	6.81	.98	-.02	.00
3.00	29.9	24.07	9853	1690	1257	33100	5760	1.71	263	.0
	RAM	1.25	1.23	.00	-.00	1.38	1.98	-.68	.01	.00
	BLEED	-.65	1.66	.61	.01	-.70	-4.08	6.12	.01	.00
	POWER	1.35	8.55	2.44	-.01	1.50	8.70	-.14	-.02	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.12.4

JANUARY 1964

STANDARD DAY                  PRESSURE ALTITUDE    65000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
1.50	NR =	.971	3.56	3820	2770	1.34	1090	20.6	85	1412
	P2 =	2.92	RAM	1.07	1.50	-.54	-.01	1.05	1.07	-.03
	T2 =	566	BLEED	.03	-1.43	2.55	-.10	-.58	.03	.86
	ERI =	0	POWER	-.12	11.90	4.94	.44	3.51	-.12	7.85
1.80	NR =	.945	5.43	6130	3530	1.38	1180	28.0	113	1467
	P2 =	4.44	RAM	1.09	1.67	-.69	-.00	1.08	1.09	-.02
	T2 =	643	BLEED	.03	-1.81	3.00	-.11	-.60	.03	.80
	ERI =	0	POWER	-.10	10.36	2.96	.34	2.59	-.10	5.78
2.00	NR =	.925	7.24	8150	3960	1.42	1246	33.8	135	1498
	P2 =	5.92	RAM	1.10	1.66	-.66	-.01	1.10	1.10	-.01
	T2 =	702	BLEED	.03	-2.10	3.35	-.12	-.62	.03	.75
	ERI =	0	POWER	-.08	10.23	2.06	.33	2.29	-.08	5.09
2.30	NR =	.893	11.2	12200	4590	1.51	1354	44.6	176	1551
	P2 =	9.14	RAM	1.14	1.69	-.65	-.00	1.13	1.14	-.01
	T2 =	802	BLEED	.02	-2.13	3.86	-.09	-.57	.02	.88
	ERI =	0	POWER	-.04	8.76	1.36	.19	1.74	-.04	3.80
2.50	NR =	.870	14.9	15700	4790	1.62	1431	53.2	209	1579
	P2 =	12.18	RAM	1.16	1.70	-.63	-.00	1.16	1.16	-.01
	T2 =	876	BLEED	.01	-2.62	4.41	-.12	-.61	.01	.79
	ERI =	0	POWER	-.03	8.65	.81	.21	1.53	-.03	3.28
2.70	NR =	.846	19.8	19800	4390	1.81	1501	61.7	243	1572
	P2 =	16.16	RAM	1.19	1.77	-.57	-.00	1.19	1.19	-.00
	T2 =	955	BLEED	.01	-3.75	5.68	-.15	-.67	.01	.66
	ERI =	0	POWER	-.02	10.08	-.27	.22	1.42	-.02	3.01
3.00	NR =	.809	29.9	27300	2860	2.61	1612	76.0	303	1546
	P2 =	24.43	RAM	1.25	2.22	-.92	-.00	1.25	1.25	-.00
	T2 =	1083	BLEED	.01	-6.95	10.49	-.13	-.66	.01	.67
	ERI =	0	POWER	-.02	15.21	-4.23	.15	1.14	-.02	2.41

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.12.4

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE    65000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
1.50	3.56	5.31	3715	1412	1450	6710	2890	1.29	445	10.2
	RAM	1.05	1.00	-.03	.00	1.30	1.60	-.66	.04	.00
	BLEED	-.45	1.07	.86	-.06	-.61	-1.46	2.58	.03	.00
	POWER	4.19	17.02	7.85	.01	5.15	12.12	4.72	-.12	.00
1.80	5.43	7.23	4851	1467	1450	9760	3640	1.33	417	2.9
	RAM	1.06	1.03	-.02	.02	1.28	1.60	-.61	.03	.00
	BLEED	-.53	1.11	.80	.00	-.64	-1.76	2.94	.03	.00
	POWER	3.15	13.45	5.78	-.06	3.68	10.05	3.26	-.10	.00
2.00	7.24	8.75	5634	1498	1450	12200	4080	1.38	391	.0
	RAM	1.10	1.05	-.01	-.00	1.28	1.63	-.63	.02	.00
	BLEED	-.56	1.14	.75	-.00	-.65	-2.01	3.25	.03	.00
	POWER	2.84	12.40	5.09	-.10	3.22	9.80	2.48	-.08	.00
2.30	11.2	11.60	6947	1551	1450	16900	4730	1.47	353	.0
	RAM	1.14	1.09	-.01	-.01	1.29	1.70	-.66	.02	.00
	BLEED	-.52	1.61	.88	.02	-.57	-2.09	3.82	.02	.00
	POWER	2.11	10.21	3.80	-.04	2.38	8.62	1.50	-.04	.00
2.50	14.9	13.85	7753	1579	1450	20700	5000	1.55	327	.0
	RAM	1.16	1.12	-.01	.00	1.31	1.76	-.70	.01	.00
	BLEED	-.52	1.61	.79	-.03	-.61	-2.58	4.37	.01	.00
	POWER	1.76	9.52	3.28	.03	2.04	8.52	.93	-.03	.00
2.70	19.8	16.08	7953	1572	1450	24500	4730	1.68	300	.0
	RAM	1.19	1.15	-.00	.00	1.34	1.94	-.72	.01	.00
	BLEED	-.59	1.61	.66	-.03	-.69	-3.63	5.54	.01	.00
	POWER	1.64	9.78	3.01	.01	1.87	9.74	.03	-.02	.00
3.00	29.9	19.78	7454	1546	1450	30900	3520	2.11	263	.0
	RAM	1.25	1.20	-.00	.00	1.39	2.43	-1.10	.01	.00
	BLEED	-.59	2.45	.67	-.02	-.67	-5.99	9.27	.01	.00
	POWER	1.31	10.22	2.41	.01	1.48	13.07	-2.47	-.02	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY + 40 F      PRESSURE ALTITUDE 65000 FEET

M0		P2/PO	FD	FN	SFC	TE	PE	W2	TC	
1.50	NR =	.971	3.57	3590	7300	2.02	1188	21.3	76	2067
	P2 =	2.92	RAM	1.07	1.36	-.38	-.01	1.06	1.07	-.00
	T2 =	624	BLEED	.06	-1.92	1.22	-.24	-.91	.06	.00
	ERI =	19	POWER	-.03	-3.11	4.39	.11	.50	-.03	.00
2.00	NR =	.925	7.25	7510	10800	2.03	1348	33.5	119	2067
	P2 =	5.93	RAM	1.11	1.35	-.30	-.00	1.11	1.11	-.00
	T2 =	774	BLEED	.03	-2.10	1.38	-.24	-.94	.03	.00
	ERI =	0	POWER	-.01	-4.35	.54	.08	.33	-.01	.00
2.50	NR =	.870	14.9	14300	14300	2.09	1534	50.8	180	2067
	P2 =	12.20	RAM	1.17	1.36	-.25	-.00	1.17	1.17	.00
	T2 =	963	BLEED	.02	-3.10	1.15	-.20	-.95	.02	.00
	ERI =	7	POWER	-.00	-6.17	-1.23	.04	.25	-.00	.00
2.80	NR =	.834	22.8	20000	17100	2.20	1651	63.7	226	2098
	P2 =	18.64	RAM	1.21	1.36	-.17	-.00	1.21	1.21	.00
	T2 =	1095	BLEED	.02	-2.51	1.81	-.20	-.95	.02	-.01
	ERI =	0	POWER	-.00	-2.81	.81	.03	.18	-.00	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 65000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
1.50	3.57	8.42	14731	3427	1369	11000	7400	1.99	418	2.9
	RAM	1.08	1.01	-.00	-.02	1.26	1.35	-.36	.04	.00
	BLEED	-1.42	-.73	-.12	.42	-1.26	-1.89	1.19	.06	.00
	POWER	-6.88	1.24	-1.39	6.04	-1.97	-2.92	4.20	-.03	.00
2.00	7.25	12.66	21847	3461	1431	18500	11000	1.99	360	.0
	RAM	1.11	1.07	.02	.01	1.28	1.39	-.35	.03	.00
	BLEED	-1.44	-.76	-.13	.40	-1.24	-2.10	1.39	.03	.00
	POWER	-4.67	-3.83	-2.97	2.72	-2.53	-4.25	.43	-.01	.00
2.50	14.9	18.73	29876	3425	1450	29200	15000	1.99	296	.0
	RAM	1.17	1.12	.02	.00	1.31	1.45	-.35	.02	.00
	BLEED	-1.44	-2.01	-.74	.00	-1.60	-3.15	1.20	.02	.00
	POWER	-2.90	-7.35	-4.56	-.00	-3.21	-6.27	-1.14	-.00	.00
2.80	22.8	24.18	37530	3539	1432	38300	18400	2.04	258	.0
	RAM	1.22	1.18	-.01	-.01	1.34	1.47	-.27	.01	.00
	BLEED	-1.44	-.76	-.07	.42	-1.16	-2.44	1.74	.02	.00
	POWER	-2.43	-2.03	-1.60	1.40	-1.25	-2.60	.59	-.00	.00

13-21

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 65000 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC	
1.50	NR =	.971	3.57	3590	6760	1.84	1188	21.3	76	2067
	P2 =	2.92	RAM	1.07	1.35	-.38	-.01	1.06	1.07	-.00
	T2 =	624	BLEED	.06	-1.90	1.23	-.24	-.91	.06	.00
	ERI =	19	POWER	-.03	-2.40	3.81	.11	.50	-.03	-.00
2.00	NR =	.925	7.25	7510	9800	1.86	1349	33.5	119	2067
	P2 =	5.93	RAM	1.11	1.35	-.31	-.00	1.11	1.11	-.00
	T2 =	774	BLEED	.03	-2.11	1.43	-.24	-.94	.03	.00
	ERI =	0	POWER	-.01	-1.74	2.68	.07	.32	-.01	-.03
2.50	NR =	.870	14.9	14300	13000	1.96	1534	50.8	180	2067
	P2 =	12.20	RAM	1.17	1.36	-.26	-.00	1.17	1.17	.00
	T2 =	963	BLEED	.02	-2.46	1.79	-.20	-.95	.02	-.01
	ERI =	0	POWER	-.00	-1.48	2.20	.04	.25	-.00	.00
2.8J	NR =	.834	22.8	20000	15000	2.04	1652	63.8	226	2098
	P2 =	18.64	RAM	1.21	1.37	-.18	-.00	1.21	1.21	.00
	T2 =	1095	BLEED	.02	-2.63	1.99	-.20	-.95	.02	.00
	ERI =	0	POWER	-.00	-1.09	1.68	.03	.18	-.00	.00

13-22

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 65000 FEET

M0	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
1.50	3.57	8.48	12413	3173	1293	10500	6870	1.81	418	2.9
	RAM	1.08	1.00	-.03	-.03	1.24	1.33	-.36	.04	.00
	BLEED	-1.42	-.70	-.06	.45	-1.22	-1.89	1.22	.06	.00
	POWER	-6.82	1.38	-.99	6.23	-1.74	-2.63	4.04	-.03	.00
2.00	7.25	12.76	18197	3158	1341	17500	9950	1.83	360	.0
	RAM	1.11	1.06	-.01	-.01	1.26	1.38	-.34	.03	.00
	BLEED	-1.42	-.73	-.07	.42	-1.20	-2.13	1.45	.03	.00
	POWER	-4.82	.92	-.76	4.39	-1.07	-1.88	2.83	-.01	.00
2.50	14.9	18.88	25468	3156	1369	27800	13500	1.88	296	.0
	RAM	1.17	1.13	.00	-.01	1.30	1.44	-.34	.02	.00
	BLEED	-1.50	-.73	-.09	.48	-1.19	-2.47	1.81	.02	.00
	POWER	-3.20	.70	-.48	2.92	-.61	-1.25	1.96	-.00	.00
2.80	22.8	24.40	30582	3194	1332	35900	16000	1.92	258	.0
	RAM	1.22	1.17	-.01	-.01	1.33	1.48	-.29	.01	.00
	BLEED	-1.42	-.71	-.05	.42	-1.14	-2.60	1.96	.02	.00
	POWER	-2.49	.57	-.32	2.31	-.42	-.93	1.52	-.00	.00

13-23

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 65000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
1.50	NR =	.971	3.57	3590	6030	1.67	1188	21.3	76	2067
	P2 =	2.92	RAM	1.07	1.37	-.41	-.01	1.06	1.07	-.00
	T2 =	624	BLEED	.06	-1.94	1.34	-.24	-.91	.06	.00
	ERI =	19	POWER	-.03	-2.06	3.67	.11	.50	-.03	.00
2.00	NR =	.925	7.25	7510	8540	1.70	1349	33.5	119	2067
	P2 =	5.93	RAM	1.11	1.37	-.35	-.00	1.11	1.11	-.00
	T2 =	774	BLEED	.03	-2.19	1.58	-.25	-.94	.03	.00
	ERI =	0	POWER	-.01	-1.55	2.64	.07	.32	-.01	-.03
2.50	NR =	.870	14.9	14300	11000	1.80	1535	50.9	180	2067
	P2 =	12.20	RAM	1.17	1.39	-.30	-.00	1.17	1.17	.00
	T2 =	963	BLEED	.02	-2.68	2.10	-.20	-.95	.02	-.01
	ERI =	0	POWER	-.00	-1.38	2.23	.04	.25	-.00	.00
2.80	NR =	.834	22.8	20000	12500	1.89	1652	63.8	226	2098
	P2 =	18.64	RAM	1.21	1.38	-.20	-.00	1.21	1.21	.00
	T2 =	1095	BLEED	.02	-2.89	2.32	-.20	-.95	.02	-.01
	ERI =	0	POWER	-.00	-.91	1.61	.03	.18	-.00	.00

13-24

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 65000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
1.50	3.57	8.55	10090	2817	1197	9750	6170	1.64	418	2.9
	RAM	1.08	.98	-.04	-.04	1.23	1.33	-.37	.04	.00
	BLEED	-1.41	-.65	-.02	.46	-1.20	-1.93	1.32	.06	.00
	POWER	-6.73	1.58	-.73	6.19	-1.57	-2.46	4.07	-.03	.00
2.00	7.25	12.89	14541	2783	1235	16200	8690	1.67	360	.0
	RAM	1.11	1.05	-.02	-.02	1.25	1.37	-.35	.03	.00
	BLEED	-1.40	-.67	-.03	.41	-1.17	-2.22	1.60	.03	.00
	POWER	-4.75	1.08	-.55	4.42	-.94	-1.75	2.85	-.01	.00
2.50	14.9	19.08	19922	2767	1256	25700	11400	1.74	296	.0
	RAM	1.17	1.11	-.01	-.01	1.29	1.45	-.37	.02	.00
	BLEED	-1.49	-.66	-.06	.48	-1.18	-2.66	2.08	.02	.00
	POWER	-3.14	.83	-.36	2.95	-.53	-1.20	2.04	-.00	.00
2.80	22.8	24.65	23620	2798	1223	33200	13200	1.79	258	.0
	RAM	1.22	1.16	-.02	-.01	1.33	1.50	-.32	.01	.00
	BLEED	-1.44	-.66	-.04	.43	-1.14	-2.89	2.33	.02	.00
	POWER	-2.46	.69	-.24	2.30	-.36	-.90	1.61	-.00	.00

13-25

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 65000 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC	
1.50	NR =	.971	3.57	3580	5210	1.51	1188	21.3	76	2067
	P2 =	2.92	RAM	1.07	1.20	-.44	-.01	1.06	1.07	-.00
	T2 =	624	BLEED	.06	-1.95	1.56	-.24	-.91	.06	.00
	ERI =	19	POWER	-.03	-2.81	4.66	.11	.50	-.03	.00
2.00	NR =	.925	7.25	7510	7020	1.55	1349	33.6	119	2067
	P2 =	5.93	RAM	1.11	1.41	-.41	-.00	1.11	1.11	-.00
	T2 =	774	BLEED	.03	-2.45	1.95	-.25	-.94	.03	.00
	ERI =	0	POWER	-.01	-1.82	3.18	.07	.32	-.01	-.02
2.50	NR =	.870	14.9	14300	8830	1.63	1535	50.9	180	2067
	P2 =	12.20	RAM	1.17	1.47	-.40	-.00	1.17	1.17	.00
	T2 =	963	BLEED	.02	-3.02	2.58	-.20	-.95	.02	-.01
	ERI =	0	POWER	-.00	-1.24	2.31	.04	.25	-.00	.00
2.80	NR =	.834	22.8	20000	9680	1.72	1652	63.9	226	2098
	P2 =	18.64	RAM	1.21	1.46	-.29	-.00	1.21	1.21	.00
	T2 =	1095	BLEED	.02	-3.39	3.02	-.20	-.95	.02	-.01
	ERI =	0	POWER	-.00	-.89	1.81	.03	.18	-.00	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY + 40 F      PRESSURE ALTITUDE 65000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
1.50	3.57	8.64	7876	2401	1084	8900	5310	1.48	418	10.2
	RAM	1.09	.79	-.18	-.12	1.16	1.22	-.46	.04	.00
	BLEED	-1.41	-.43	.10	.52	-1.13	-1.92	1.54	.06	.00
	POWER	-6.61	1.81	-.59	6.16	-1.45	-2.42	4.26	-.03	.00
2.00	7.25	13.03	10878	2353	1112	14700	7180	1.51	360	2.9
	RAM	1.11	1.02	-.01	-.01	1.25	1.41	-.41	.03	.00
	BLEED	-1.39	-.58	-.03	.40	-1.17	-2.42	1.91	.03	.00
	POWER	-4.66	1.33	-.44	4.36	-.86	-1.74	3.10	-.01	.00
2.50	14.9	19.30	14366	2339	1130	23300	9010	1.59	296	.0
	RAM	1.17	1.09	-.01	-.01	1.29	1.49	-.42	.02	.00
	BLEED	-1.48	-.55	-.03	.48	-1.16	-3.01	2.58	.02	.00
	POWER	-3.09	1.05	-.21	2.93	-.44	-1.13	2.20	-.00	.00
2.80	22.8	24.92	16645	2365	1101	30000	10100	1.66	258	.0
	RAM	1.22	1.14	-.02	-.02	1.32	1.54	-.37	.01	.00
	BLEED	-1.42	-.53	-.01	.43	-1.11	-3.37	2.99	.02	.00
	POWER	-2.41	.90	-.11	2.32	-.29	-.85	1.76	-.00	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 65000 FEET

M0		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
1.50	NR =	.971	3.57	3580	4510	1.30	1190	21.4	76	2067
	P2 =	2.92	RAM	1.06	1.39	-.35	-.01	1.06	1.06	.00
	T2 =	624	BLEED	.06	-2.12	1.60	-.24	-.90	.06	.00
	ERI =	0	POWER	-.04	-2.06	4.44	.12	.47	-.04	-.04
2.00	NR =	.925	7.25	7510	5970	1.40	1351	33.7	119	2067
	P2 =	5.93	RAM	1.11	1.48	-.41	-.00	1.11	1.11	.00
	T2 =	774	BLEED	.03	-2.64	2.19	-.25	-.93	.03	.01
	ERI =	0	POWER	-.01	-1.28	3.01	.07	.33	-.01	.00
2.50	NR =	.870	14.9	14300	7260	1.51	1536	51.1	180	2067
	P2 =	12.20	RAM	1.17	1.55	-.43	-.00	1.17	1.17	.00
	T2 =	963	BLEED	.02	-3.40	3.06	-.20	-.94	.02	-.01
	ERI =	0	POWER	-.00	-.94	2.27	.04	.24	-.00	.00
2.80	NR =	.834	22.8	20000	7760	1.62	1653	64.1	226	2098
	P2 =	18.64	RAM	1.21	1.55	-.34	-.00	1.21	1.21	-.00
	T2 =	1095	BLEED	.02	-3.98	3.76	-.19	-.94	.02	-.01
	ERI =	0	POWER	-.00	-.82	1.98	.03	.18	-.00	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 65000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
1.50	3.57	8.75	5889	2067	987	8170	4590	1.28	418	10.2
	RAM	1.07	1.06	.00	-.01	1.25	1.39	-.35	.04	.00
	BLEED	-1.38	-.57	.00	.44	-1.17	-2.13	1.61	.06	.00
	POWER	-6.61	2.35	-.04	6.42	-1.16	-2.03	4.41	-.04	.00
2.00	7.25	13.18	8372	2067	1024	13600	6140	1.36	360	2.9
	RAM	1.11	1.10	.00	-.00	1.26	1.44	-.36	.03	.00
	BLEED	-1.37	-.54	.01	.40	-1.14	-2.58	2.12	.03	.00
	POWER	-4.57	1.71	.00	4.47	-.60	-1.33	3.06	-.01	.00
2.50	14.9	19.54	10967	2067	1045	21700	7430	1.48	296	.0
	RAM	1.17	1.15	.00	-.01	1.29	1.54	-.42	.02	.00
	BLEED	-1.47	-.49	-.01	.48	-1.14	-3.36	3.02	.02	.00
	POWER	-3.04	1.31	.00	2.98	-.32	-.93	2.26	-.00	.00
2.80	22.8	25.21	12575	2098	1020	28000	8060	1.56	258	.0
	RAM	1.21	1.19	-.00	.00	1.33	1.63	-.41	.01	.00
	BLEED	-1.41	-.45	-.01	.42	-1.11	-3.91	3.69	.02	.00
	POWER	-2.38	1.15	.00	2.33	-.22	-.75	1.91	-.00	.00

13-29

# CONFIDENTIAL

GEI 67870

**CONFIDENTIAL**

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 65000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
1.50	NR =	.971	3.57	3590	3720	1.29	1176	20.4	76	1818
	P2 =	2.92	RAM	1.07	1.43	-.41	-.01	1.06	1.07	-.01
	T2 =	624	BLEED	.04	-1.46	1.95	-.19	-.67	-.04	.62
	ERI =	0	POWER	-.19	11.96	5.91	.96	4.27	-.19	9.47
2.00	NR =	.925	7.25	7520	5210	1.40	1342	32.7	119	1914
	P2 =	5.93	RAM	1.11	1.53	-.48	-.00	1.11	1.11	-.01
	T2 =	774	BLEED	.02	-1.65	2.46	-.12	-.65	.02	.71
	ERI =	0	POWER	-.06	8.51	2.75	.41	2.39	-.06	5.28
2.50	NR =	.870	14.9	14300	6460	1.53	1531	50.1	180	1963
	P2 =	12.20	RAM	1.17	1.60	-.50	-.00	1.16	1.17	-.00
	T2 =	963	BLEED	.01	-2.43	3.24	-.15	-.72	.01	.54
	ERI =	0	POWER	-.02	6.82	1.59	.27	1.57	-.02	3.35
2.80	NR =	.834	22.8	20000	6220	1.68	1645	62.1	226	1937
	P2 =	18.64	RAM	1.21	1.63	-.42	-.00	1.21	1.21	-.00
	T2 =	1095	BLEED	.01	-3.38	4.29	-.17	-.77	.01	.44
	ERI =	0	POWER	-.02	7.10	.78	.21	1.28	-.02	2.72

13-30

**CONFIDENTIAL**

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 65000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
1.50	3.57	7.32	4807	1818	1095	7380	3790	1.27	419	10.2
	RAM	1.06	1.04	-.01	-.00	1.26	1.45	-.44	.04	.00
	BLEED	-.61	.45	.62	-.00	-.73	-1.46	1.96	.04	.00
	POWER	5.05	18.08	9.47	-.04	6.07	12.01	5.87	-.19	.00
2.00	7.25	11.77	7313	1914	1096	12900	5360	1.37	360	2.9
	RAM	1.10	1.08	-.01	.00	1.26	1.47	-.42	.03	.00
	BLEED	-.54	.75	.71	-.04	-.65	-1.60	2.41	.02	.00
	POWER	3.15	11.37	5.28	-.24	3.39	8.24	3.01	-.06	.00
2.50	14.9	18.07	9861	1963	1095	20900	6610	1.49	296	.0
	RAM	1.16	1.14	-.00	-.00	1.30	1.57	-.47	.02	.00
	BLEED	-.69	.69	.54	.01	-.75	-2.40	3.20	.01	.00
	POWER	1.86	8.49	3.35	.00	2.12	6.74	1.67	-.02	.00
2.80	22.8	22.40	10445	1937	1095	26500	6490	1.61	259	.0
	RAM	1.21	1.18	-.00	-.00	1.34	1.73	-.50	.01	.00
	BLEED	-.74	.70	.44	.01	-.81	-3.33	4.24	.01	.00
	POWER	1.51	7.93	2.72	-.00	1.70	7.00	.87	-.02	.00

13-31

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY + 40 F PRESSURE ALTITUDE 65000 FEET

M0		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
1.50	NR =	.971	3.57	3600	2920	1.33	1167	19.4	76	1593
	P2 =	2.92	RAM	1.07	1.52	-.55	-.01	1.06	1.07	-.02
	T2 =	624	BLEED	.03	-1.41	2.43	-.10	-.58	.03	.84
	ERI =	0	POWER	-.16	12.80	5.36	.51	3.96	-.16	8.79
2.00	NR =	.925	7.25	7530	3950	1.46	1332	31.1	119	1681
	P2 =	5.93	RAM	1.11	1.63	-.60	-.00	1.11	1.11	-.01
	T2 =	774	BLEED	.02	-1.93	3.07	-.13	-.62	.02	.75
	ERI =	0	POWER	-.07	10.53	2.65	.40	2.60	-.07	5.62
2.50	NR =	.870	14.9	14300	4470	1.65	1518	47.5	181	1720
	P2 =	12.20	RAM	1.17	1.75	-.69	-.00	1.16	1.17	-.01
	T2 =	963	BLEED	.01	-3.02	4.42	-.14	-.68	.01	.63
	ERI =	0	POWER	-.03	9.96	.84	.28	1.79	-.03	3.76
2.80	NR =	.834	22.8	20000	3670	1.97	1629	58.7	226	1685
	P2 =	18.64	RAM	1.21	1.90	-.68	-.00	1.21	1.21	-.01
	T2 =	1095	BLEED	.01	-4.50	6.71	-.13	-.67	.01	.63
	ERI =	0	POWER	-.02	12.56	-1.06	.23	1.53	-.02	3.17

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY + 40 F      PRESSURE ALTITUDE    65000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
1.50	3.57	5.90	3876	1593	1257	6580	2980	1.30	420	10.2
	RAM	1.06	1.01	-.02	-.01	1.29	1.55	-.58	.04	.00
	BLEED	-.52	.97	.84	.02	-.62	-1.41	2.43	.03	.00
	POWER	4.68	18.35	8.79	.03	5.72	12.82	5.34	-.16	.00
2.00	7.25	9.50	5757	1681	1257	11600	4080	1.41	360	2.9
	RAM	1.11	1.08	-.01	-.00	1.28	1.60	-.57	.03	.00
	BLEED	-.54	1.05	.75	-.02	-.65	-1.89	3.02	.02	.00
	POWER	3.06	13.32	5.62	-.01	3.57	10.28	2.90	-.07	.00
2.50	14.9	14.54	7368	1720	1257	18900	4620	1.60	296	.0
	RAM	1.16	1.12	-.01	.00	1.31	1.74	-.68	.02	.00
	BLEED	-.63	1.20	.63	-.01	-.71	-2.95	4.34	.01	.00
	POWER	2.06	10.86	3.76	.01	2.36	9.74	1.05	-.03	.00
2.80	22.8	17.95	7222	1685	1257	23900	3910	1.85	259	.0
	RAM	1.21	1.16	-.01	.00	1.35	2.05	-.81	.01	.00
	BLEED	-.63	1.76	.63	.00	-.70	-4.35	6.54	.01	.00
	POWER	1.75	11.38	3.17	-.00	1.97	12.16	-.70	-.02	.00

14. 75000 FEET

PREVIOUS PAGE WAS BLANK, THEREFORE WAS NOT FILLED

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY PRESSURE ALTITUDE 75000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
2.30	NR = .893	11.2	7400	9530	2.04	1389	29.9	106	2067
	P2 = 5.67	RAM	1.15	1.33	-.24	-.00	1.15	1.15	.00
	T2 = 813	BLEED	.02	-2.54	1.05	-.17	-.93	.02	.01
	ERI = 0	POWER	-.01	-7.66	-2.60	.06	.38	-.01	.01
2.50	NR = .870	14.9	9540	10600	2.06	1465	35.5	126	2067
	P2 = 7.55	RAM	1.17	1.38	-.20	-.00	1.17	1.17	.00
	T2 = 887	BLEED	.02	-3.18	.84	-.19	-.94	.02	.00
	ERI = 7	POWER	-.01	-8.65	-2.50	.06	.35	-.01	.00
2.70	NR = .846	19.8	12000	11600	2.10	1538	41.3	147	2067
	P2 = 10.02	RAM	1.20	1.35	-.18	-.00	1.20	1.20	.00
	T2 = 967	BLEED	.02	-3.16	1.17	-.20	-.95	.02	-.01
	ERI = 7	POWER	-.00	-7.63	-1.41	.05	.30	-.00	.00
3.00	NR = .809	29.9	16600	13800	2.21	1653	51.5	182	2098
	P2 = 15.16	RAM	1.25	1.39	-.17	-.00	1.25	1.25	-.00
	T2 = 1097	BLEED	.02	-2.53	1.84	-.20	-.95	.02	-.00
	ERI = 0	POWER	-.00	-3.62	1.01	.04	.21	-.00	-.02

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 1.0

JANUARY 1964

STANDARD DAY PRESSURE ALTITUDE 75000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	WZK	BTANG
2.30	11.2	18.05	19412	3454	1444	17300	9920	1.96	344	.0
	RAM	1.15	1.10	.02	.00	1.30	1.40	-.33	.03	.00
	BLEED	-1.58	-1.53	-.48	.30	-1.46	-2.57	1.07	.02	.00
	POWER	-4.97	-10.17	-5.89	1.05	-4.42	-7.72	-2.53	-.01	.00
2.50	14.9	21.06	21693	3411	1451	20700	11200	1.94	320	.0
	RAM	1.18	1.19	.05	.02	1.33	1.46	-.29	.02	.00
	BLEED	-1.51	-2.39	-.93	-.06	-1.73	-3.22	.88	.02	.00
	POWER	-4.12	-11.04	-6.68	-.17	-4.73	-8.76	-2.39	-.01	.00
2.70	19.8	24.57	24450	3418	1450	24500	12500	1.95	294	.0
	RAM	1.20	1.17	.01	-.00	1.34	1.47	-.28	.02	.00
	BLEED	-1.46	-2.05	-.77	.00	-1.61	-3.18	1.18	.02	.00
	POWER	-3.57	-8.98	-5.60	-.00	-3.92	-7.68	-1.36	-.00	.00
3.00	29.9	31.53	30516	3538	1432	31900	15300	2.00	257	.0
	RAM	1.25	1.21	.03	.01	1.39	1.53	-.30	.02	.00
	BLEED	-1.43	-.76	-.12	.39	-1.16	-2.45	1.75	.02	.00
	POWER	-3.02	-2.64	-2.11	1.66	-1.60	-3.33	.71	-.00	.00

14-3

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 7500 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
2.30	NR =	.893	11.2	7400	8660	1.87	1389	29.9	106	2067
	P2 =	5.67	RAM	1.15	1.32	-.25	-.00	1.15	1.15	.00
	T2 =	813	BLEED	.02	-2.21	1.54	-.17	-.93	.02	.01
	ERI =	0	POWER	-.01	-1.99	3.09	.06	.38	-.01	.01
2.50	NR =	.870	14.9	9540	9670	1.92	1465	35.5	126	2067
	P2 =	7.55	RAM	1.17	1.34	-.24	-.00	1.17	1.17	.00
	T2 =	887	BLEED	.02	-2.34	1.69	-.19	-.94	.02	.00
	ERI =	0	POWER	-.01	-2.11	3.10	.06	.35	-.01	.00
2.70	NR =	.846	19.8	12000	10600	1.97	1538	41.4	147	2067
	P2 =	10.02	RAM	1.20	1.35	-.19	-.00	1.20	1.20	.00
	T2 =	967	BLEED	.02	-2.47	1.82	-.20	-.95	.02	-.01
	ERI =	0	POWER	-.00	-1.93	2.81	.05	.30	-.00	.00
3.00	NR =	.809	29.9	16600	12100	2.06	1653	51.6	182	2098
	P2 =	15.16	RAM	1.25	1.37	-.16	-.00	1.25	1.25	-.00
	T2 =	1097	BLEED	.02	-2.64	2.00	-.20	-.95	.02	-.00
	ERI =	0	POWER	-.00	-1.37	2.08	.04	.21	-.00	-.02

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 2.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 7500 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFC8	W2K	BTANG
2.30	11.2	18.20	16150	3157	1353	16300	8950	1.80	344	.0
	RAM	1.16	1.09	-.01	-.01	1.28	1.39	-.32	.03	.00
	BLEED	-1.61	-.71	-.09	.58	-1.21	-2.23	1.57	.02	.00
	POWER	-5.31	1.07	-.83	4.83	-1.05	-1.90	3.00	-.01	.00
2.50	14.9	21.23	18538	3149	1371	19700	10100	1.83	320	.0
	RAM	1.18	1.12	-.00	-.02	1.30	1.42	-.32	.02	.00
	BLEED	-1.56	-.71	-.09	.54	-1.19	-2.34	1.68	.02	.00
	POWER	-4.56	.96	-.71	4.15	-.86	-1.66	2.64	-.01	.00
2.70	19.8	24.76	20881	3156	1370	23300	11300	1.85	294	.0
	RAM	1.21	1.15	.00	-.01	1.33	1.46	-.29	.02	.00
	BLEED	-1.50	-.72	-.10	.47	-1.18	-2.46	1.80	.02	.00
	POWER	-3.93	.85	-.64	3.56	-.73	-1.49	2.36	-.00	.00
3.00	29.9	31.81	24897	3200	1334	29900	13300	1.87	257	.0
	RAM	1.25	1.20	.00	-.00	1.37	1.52	-.29	.02	.00
	BLEED	-1.42	-.72	-.08	.41	-1.14	-2.59	1.95	.02	.00
	POWER	-3.11	.68	-.47	2.84	-.52	-1.16	1.86	-.00	.00

14-5

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE

75000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC
2.30	NR = .893	11.2	7400	7560	1.70	1389	30.0	106	2067
	P2 = 5.67	RAM	1.15	1.33	-.27	-.00	1.15	1.15	.00
	T2 = 813	BLEED	.02	-2.33	1.73	-.17	-.93	.02	.01
	ERI = 0	POWER	-.01	-1.97	3.24	.06	.38	-.01	.01
2.50	NR = .870	14.9	9540	8350	1.76	1465	35.5	126	2067
	P2 = 7.55	RAM	1.17	1.35	-.26	-.00	1.17	1.17	.00
	T2 = 887	BLEED	.02	-2.52	1.92	-.19	-.94	.02	-.01
	ERI = 0	POWER	-.01	-1.88	3.02	.06	.35	-.01	.00
2.70	NR = .846	19.8	12000	9030	1.81	1539	41.4	147	2067
	P2 = 10.02	RAM	1.20	1.35	-.20	-.00	1.20	1.20	.00
	T2 = 967	BLEED	.02	-2.65	2.07	-.20	-.95	.02	-.01
	ERI = 0	POWER	-.00	-1.66	2.68	.05	.30	-.00	.00
3.00	NR = .809	29.9	16600	10100	1.91	1654	51.6	182	2097
	P2 = 15.16	RAM	1.25	1.37	-.17	-.00	1.25	1.25	.00
	T2 = 1097	BLEED	.02	-2.87	2.34	-.20	-.94	.02	.00
	ERI = 0	POWER	-.00	-1.18	2.04	.04	.22	-.00	.00

14-6

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 3.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 75000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
2.30	11.2	18.39	12882	2788	1247	15200	7770	1.66	344	.0
	RAM	1.16	1.08	-.03	-.03	1.27	1.38	-.33	.03	.00
	BLEED	-1.60	-.66	-.05	.60	-1.18	-2.32	1.73	.02	.00
	POWER	-5.23	1.25	-.60	4.90	-.90	-1.76	3.03	-.01	.00
2.50	14.9	21.45	14662	2774	1262	18200	8700	1.69	320	.0
	RAM	1.18	1.10	-.02	-.03	1.29	1.41	-.33	.02	.00
	BLEED	-1.57	-.66	-.06	.56	-1.18	-2.48	1.89	.02	.00
	POWER	-4.49	1.12	-.52	4.20	-.74	-1.55	2.69	-.01	.00
2.70	19.8	25.02	16366	2772	1259	21600	9550	1.71	294	.0
	RAM	1.21	1.13	-.01	-.01	1.32	1.47	-.31	.02	.00
	BLEED	-1.49	-.66	-.06	.48	-1.16	-2.63	2.05	.02	.00
	POWER	-3.87	1.00	-.47	3.61	-.62	-1.39	2.41	-.00	.00
3.00	29.9	32.13	19265	2806	1225	27600	11000	1.75	257	.0
	RAM	1.26	1.19	-.01	-.01	1.36	1.53	-.32	.02	.00
	BLEED	-1.40	-.64	-.04	.40	-1.12	-2.84	2.30	.02	.00
	POWER	-3.04	.84	-.34	2.82	-.44	-1.09	1.95	-.00	.00

14-7

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY          PRESSURE ALTITUDE 75000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
2.30	NR =	.893	11.2	7400	6230	1.54	1389	30.0	106	2067
	P2 =	5.67	RAM	1.15	1.39	-.37	-.00	1.15	1.15	.00
	T2 =	813	BLEED	.02	-2.55	2.07	-.17	-.93	.02	.01
	ERI =	0	POWER	-.01	-1.70	3.26	.06	.38	-.01	.01
2.50	NR =	.870	14.9	9540	6810	1.58	1466	35.6	126	2067
	P2 =	7.55	RAM	1.17	1.40	-.34	-.00	1.17	1.17	.00
	T2 =	887	BLEED	.02	-2.77	2.30	-.19	-.94	.02	-.01
	ERI =	0	POWER	-.01	-1.67	3.08	.06	.35	-.01	.00
2.70	NR =	.846	19.8	12000	7230	1.64	1539	41.4	147	2067
	P2 =	10.02	RAM	1.20	1.42	-.30	-.00	1.20	1.20	.00
	T2 =	967	BLEED	.02	-2.99	2.56	-.20	-.95	.02	-.01
	ERI =	0	POWER	-.00	-1.47	2.76	.05	.30	-.00	.00
3.00	NR =	.809	29.9	16600	7890	1.73	1654	51.7	182	2097
	P2 =	15.16	RAM	1.25	1.50	-.31	-.00	1.25	1.25	.00
	T2 =	1097	BLEED	.02	-3.42	3.07	-.20	-.94	.02	.00
	ERI =	0	POWER	-.00	-1.27	2.39	.04	.22	-.00	.00

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 4.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 75000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FG8	FNB	SFCB	W2K	BTANG
2.30	11.2	18.60	9609	2353	1121	13700	6340	1.52	344	.0
	RAM	1.16	1.05	-.02	-.02	1.27	1.41	-.39	.03	.00
	BLEED	-1.59	-.56	-.03	.59	-1.17	-2.56	2.07	.02	.00
	POWER	-5.13	1.54	-.44	4.82	-.80	-1.72	3.28	-.01	.00
2.50	14.9	21.70	10779	2347	1136	16500	6980	1.54	320	.0
	RAM	1.18	1.08	-.01	-.02	1.29	1.45	-.40	.02	.00
	BLEED	-1.56	-.56	-.05	.55	-1.16	-2.77	2.30	.02	.00
	POWER	-4.41	1.39	-.37	4.15	-.64	-1.50	2.92	-.01	.00
2.70	19.8	25.31	11842	2341	1132	19500	7500	1.58	294	.0
	RAM	1.21	1.11	-.01	-.01	1.32	1.50	-.37	.02	.00
	BLEED	-1.47	-.55	-.04	.47	-1.14	-2.98	2.55	.02	.00
	POWER	-3.80	1.26	-.29	3.59	-.51	-1.31	2.60	-.00	.00
3.00	29.9	32.48	13625	2373	1103	25000	8370	1.63	257	.0
	RAM	1.26	1.16	-.01	-.01	1.36	1.58	-.38	.02	.00
	BLEED	-1.40	-.51	-.02	.41	-1.10	-3.33	2.97	.02	.00
	POWER	-2.99	1.10	-.20	2.84	-.35	-1.05	2.16	-.00	.00

14-9

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE      75000 FEET

M0		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
1.80	NR =	.945	5.43	3690	3930	1.32	1222	19.2	68	2067
	P2 =	2.75	RAM	1.11	1.46	-.38	-.01	1.11	1.11	.00
	T2 =	652	BLEED	.05	-2.25	1.73	-.24	-.91	.05	-.00
	ERI =	0	POWER	-.03	-1.67	4.46	.13	.56	-.03	.01
2.00	NR =	.925	7.24	4910	4430	1.35	1285	23.0	81	2067
	P2 =	3.67	RAM	1.12	1.42	-.33	-.01	1.12	1.12	.00
	T2 =	712	BLEED	.04	-2.42	1.92	-.25	-.92	.04	.00
	ERI =	0	POWER	-.02	-1.69	4.08	.11	.47	-.02	.01
2.30	NR =	.893	11.2	7400	5250	1.39	1390	30.1	106	2067
	P2 =	5.67	RAM	1.15	1.47	-.35	-.00	1.15	1.15	.00
	T2 =	813	BLEED	.02	-2.77	2.32	-.17	-.93	.02	.00
	ERI =	0	POWER	-.01	-1.11	3.08	.06	.37	-.01	.00
2.50	NR =	.870	14.9	9540	5680	1.44	1467	35.7	126	2067
	P2 =	7.55	RAM	1.17	1.45	-.31	-.00	1.17	1.17	.00
	T2 =	887	BLEED	.02	-3.03	2.62	-.19	-.94	.02	-.01
	ERI =	0	POWER	-.01	-1.12	2.89	.06	.34	-.01	.00
2.70	NR =	.846	19.8	12000	5940	1.50	1540	41.6	147	2067
	P2 =	10.02	RAM	1.20	1.48	-.28	-.00	1.20	1.20	.00
	T2 =	967	BLEED	.02	-3.37	3.02	-.20	-.94	.02	-.01
	ERI =	0	POWER	-.00	-1.13	2.75	.05	.30	-.00	-.00
3.00	NR =	.809	29.9	16600	6270	1.62	1655	51.8	182	2097
	P2 =	15.16	RAM	1.25	1.56	-.31	-.00	1.25	1.25	.00
	T2 =	1097	BLEED	.02	-3.97	3.77	-.19	-.94	.02	.01
	ERI =	0	POWER	-.00	-1.01	2.44	.04	.22	-.00	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 5.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 75000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
1.80	5.43	12.47	5178	2067	997	7720	4040	1.28	404	2.9
	RAM	1.12	1.10	.00	-.01	1.26	1.41	-.32	.05	.00
	BLEED	-1.39	-.58	-.00	.44	-1.13	-2.22	1.70	.05	.00
	POWER	-7.56	2.77	.01	7.40	-1.03	-1.95	4.75	-.03	.00
2.00	7.24	14.73	5967	2067	1010	9460	4550	1.31	380	2.9
	RAM	1.13	1.11	.00	-.01	1.26	1.42	-.33	.04	.00
	BLEED	-1.39	-.57	.00	.43	-1.13	-2.39	1.89	.04	.00
	POWER	-6.63	2.36	.01	6.49	-.83	-1.70	4.08	-.02	.00
2.30	11.2	18.84	7287	2067	1032	12700	5350	1.36	344	.0
	RAM	1.16	1.14	.00	-.01	1.28	1.46	-.34	.03	.00
	BLEED	-1.58	-.54	.00	.59	-1.15	-2.76	2.31	.02	.00
	POWER	-5.07	1.95	.00	4.96	-.54	-1.29	3.25	-.01	.00
2.50	14.9	21.98	8170	2067	1047	15400	5820	1.40	320	.0
	RAM	1.18	1.16	.00	-.01	1.29	1.49	-.34	.02	.00
	BLEED	-1.54	-.53	-.01	.55	-1.14	-3.03	2.62	.02	.00
	POWER	-4.34	1.75	.00	4.25	-.43	-1.12	2.89	-.01	.00
2.70	19.8	25.62	8929	2067	1046	18200	6150	1.45	294	.0
	RAM	1.21	1.18	.00	-.00	1.32	1.55	-.35	.02	.00
	BLEED	-1.46	-.49	-.01	.47	-1.12	-3.34	2.99	.02	.00
	POWER	-3.74	1.60	-.00	3.67	-.34	-1.00	2.62	-.00	.00
3.00	29.9	32.86	10184	2097	1021	23200	6640	1.53	257	.0
	RAM	1.26	1.23	.00	-.00	1.36	1.64	-.38	.02	.00
	BLEED	-1.39	-.43	.01	.41	-1.09	-3.85	3.63	.02	.00
	POWER	-2.95	1.41	.00	2.89	-.24	-.82	2.25	-.00	.00

# CONFIDENTIAL

**CONFIDENTIAL**

GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 7.0

JANUARY 1964

STANDARD DAY                      PRESSURE ALTITUDE    75000 FEET

		P2/PO	FD	FN	SFC	TE	PE	W2	TC	
	NR =	.945	5.43	3690	3600	1.31	1216	18.7	68	1951
	P2 =	2.75	RAM	1.11	1.42	-.36	-.01	1.10	1.11	-.01
	T2 =	652	BLEED	.04	-1.58	1.95	-.19	-.71	.04	.55
	ERI =	0	POWER	-.21	12.49	5.48	.94	4.18	-.21	9.44
2.00	NR =	.925	7.24	4910	4160	1.34	1281	22.6	81	1984
	P2 =	3.67	RAM	1.12	1.42	-.36	-.01	1.11	1.12	-.01
	T2 =	712	BLEED	.03	-1.67	2.04	-.20	-.72	.03	.53
	ERI =	0	POWER	-.13	10.87	4.69	.81	3.56	-.13	7.88
2.30	NR =	.893	11.2	7400	5110	1.39	1389	29.9	106	2037
	P2 =	5.67	RAM	1.15	1.47	-.36	-.00	1.15	1.15	-.01
	T2 =	813	BLEED	.02	-1.61	2.35	-.13	-.66	.02	.70
	ERI =	0	POWER	-.03	4.88	3.16	.27	1.73	-.03	3.42
2.50	NR =	.870	14.9	9540	5680	1.44	1467	35.7	126	2067
	P2 =	7.55	RAM	1.17	1.46	-.31	-.03	1.17	1.17	.00
	T2 =	887	BLEED	.02	-3.04	2.62	-.19	-.94	.02	-.01
	ERI =	0	POWER	-.00	-1.19	2.89	.05	.33	-.00	-.04
2.70	NR =	.846	19.8	12000	5940	1.50	1540	41.6	147	2067
	P2 =	10.02	RAM	1.20	1.48	-.28	-.00	1.20	1.20	-.00
	T2 =	967	BLEED	.02	-3.37	3.02	-.20	-.94	.02	-.01
	ERI =	0	POWER	-.00	-1.18	2.75	.05	.29	-.00	-.02
3.00	NR =	.809	29.9	16600	5830	1.64	1652	51.3	182	2040
	P2 =	15.16	RAM	1.25	1.58	-.33	-.00	1.25	1.25	-.00
	T2 =	1097	BLEED	.02	-2.92	3.77	-.16	-.75	.02	.48
	ERI =	0	POWER	-.03	8.22	1.14	.27	1.63	-.03	3.45

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 7.0

JANUARY 1964

STANDARD DAY                  PRESSURE ALTITUDE    75000 FEET

MO	P2/P0	P8/P0	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
1.80	5.43	11.50	4721	1951	1045	7400	3710	1.27	405	2.9
	RAM	1.10	1.08	-.01	-.00	1.26	1.41	-.35	.05	-50.34
	BLEED	-.65	.32	.55	.00	-.74	-1.52	1.88	.04	.00
	POWER	5.12	18.16	9.44	-.02	5.91	12.01	5.96	-.21	.00
2.00	7.24	13.90	5575	1984	1045	9180	4260	1.31	380	2.9
	RAM	1.11	1.09	-.01	-.00	1.26	1.41	-.35	.04	.00
	BLEED	-.66	.32	.53	-.01	-.75	-1.66	2.03	.03	.00
	POWER	4.27	15.73	7.88	.04	4.94	10.78	4.78	-.13	.00
2.30	11.2	18.43	7099	2037	1045	12600	5210	1.36	344	.0
	RAM	1.15	1.13	-.01	-.00	1.28	1.45	-.35	.03	.00
	BLEED	-.56	.69	.70	-.03	-.65	-1.59	2.33	.02	.00
	POWER	-.08	8.11	3.42	1.90	1.95	4.77	3.27	-.03	.00
2.50	14.9	21.98	8172	2067	1047	15400	5820	1.40	320	.0
	RAM	1.19	1.17	.00	-.01	1.30	1.50	-.36	.02	.00
	BLEED	-1.55	-.54	-.01	.56	-1.14	-3.04	2.62	.02	.00
	POWER	-4.40	1.68	-.04	4.29	-.46	-1.20	2.89	-.00	.00
2.70	19.8	25.62	8929	2067	1046	18200	6150	1.45	294	.0
	RAM	1.20	1.18	-.00	-.00	1.32	1.55	-.35	.02	.00
	BLEED	-1.46	-.50	-.01	.47	-1.12	-3.34	2.99	.02	.00
	POWER	-3.78	1.55	-.02	3.69	-.36	-1.05	2.62	-.00	.00
3.00	29.9	31.56	9564	2040	1045	22800	6190	1.54	257	.0
	RAM	1.25	1.22	-.00	.00	1.36	1.66	-.41	.02	.00
	BLEED	-.70	.68	.48	-.01	-.76	-2.85	3.68	.02	.00
	POWER	1.95	9.43	3.45	-.03	2.15	8.00	1.35	-.03	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY      PRESSURE ALTITUDE      75000 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC	
1.80	NR =	.945	5.43	3690	3300	1.31	1210	18.3	68	1844
	P2 =	2.75	RAM	1.11	1.48	-.43	-.01	1.10	1.11	-.01
	T2 =	652	BLEED	.03	-1.59	2.08	-.19	-.68	.03	.60
	ERI =	0	POWER	-.19	14.72	5.75	1.09	4.81	-.19	10.74
2.00	NR =	.925	7.24	4920	3800	1.34	1274	22.1	81	1879
	P2 =	3.67	RAM	1.12	1.45	-.39	-.01	1.11	1.12	-.02
	T2 =	712	BLEED	.03	-1.59	2.26	-.14	-.65	.03	.68
	ERI =	0	POWER	-.13	12.04	4.63	.86	3.75	-.13	8.30
2.30	NR =	.893	11.2	7400	4650	1.39	1385	29.4	106	1938
	P2 =	5.67	RAM	1.15	1.53	-.44	-.00	1.15	1.15	-.01
	T2 =	813	BLEED	.02	-1.79	2.55	-.13	-.67	.02	.66
	ERI =	0	POWER	-.05	9.23	2.87	.40	2.54	-.05	5.52
2.50	NR =	.870	14.9	9540	5150	1.45	1462	35.0	126	1968
	P2 =	7.55	RAM	1.17	1.48	-.37	-.00	1.17	1.17	-.01
	T2 =	887	BLEED	.01	-2.02	2.76	-.15	-.70	.01	.60
	ERI =	0	POWER	-.03	8.31	2.53	.36	2.18	-.03	4.67
2.70	NR =	.846	19.8	12000	5290	1.52	1535	40.8	147	1964
	P2 =	10.02	RAM	1.20	1.50	-.31	-.00	1.20	1.20	-.00
	T2 =	967	BLEED	.02	-2.33	3.20	-.14	-.71	.02	.58
	ERI =	0	POWER	-.03	8.40	1.95	.34	1.94	-.03	4.15
3.00	NR =	.809	29.9	16600	5010	1.69	1646	50.2	182	1936
	P2 =	15.16	RAM	1.25	1.61	-.37	-.00	1.25	1.25	-.00
	T2 =	1097	BLEED	.01	-3.35	4.30	-.17	-.77	.01	.45
	ERI =	0	POWER	-.02	8.95	-.88	.27	1.60	-.02	3.39

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S. 9.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 75000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	WZK	BTANG
1.80	5.43	10.63	4312	1844	1095	7090	3390	1.27	405	2.9
	RAM	1.10	1.08	-.01	-.00	1.27	1.44	-.39	.05	.00
	BLEED	-.64	.43	.60	.01	-.72	-1.55	2.03	.03	.00
	POWER	5.74	20.69	10.74	.06	6.74	14.28	6.18	-.19	.00
2.00	7.24	12.86	5088	1879	1094	8810	3900	1.31	380	2.9
	RAM	1.11	1.08	-.02	-.00	1.26	1.44	-.38	.04	.00
	BLEED	-.65	.62	.68	.06	-.68	-1.56	2.23	.03	.00
	POWER	4.27	16.85	8.30	.23	5.17	11.85	4.82	-.13	.00
2.30	11.2	17.07	6490	1938	1095	12200	4750	1.37	345	.0
	RAM	1.15	1.13	-.01	-.00	1.28	1.48	-.38	.03	.00
	BLEED	-.59	.69	.66	-.02	-.67	-1.75	2.50	.02	.00
	POWER	3.09	12.22	5.52	-.03	3.48	8.99	3.11	-.05	.00
2.50	14.9	20.40	7445	1968	1095	14800	5270	1.41	320	.0
	RAM	1.17	1.14	-.01	-.00	1.29	1.51	-.40	.02	.00
	BLEED	-.64	.66	.60	-.01	-.71	-2.02	2.76	.01	.00
	POWER	2.59	10.95	4.67	.00	2.94	8.32	2.52	-.03	.00
2.70	19.8	23.73	8046	1964	1095	17500	5490	1.46	294	.0
	RAM	1.20	1.17	-.00	.00	1.32	1.58	-.39	.02	.00
	BLEED	-.66	.75	.58	-.00	-.72	-2.32	3.18	.02	.00
	POWER	2.32	10.45	4.15	-.01	2.60	8.35	1.99	-.03	.00
3.00	29.9	29.19	8466	1936	1095	22000	5370	1.58	257	.0
	RAM	1.25	1.21	-.00	.00	1.37	1.71	-.46	.02	.00
	BLEED	-.72	.73	.45	-.01	-.79	-3.26	4.20	.01	.00
	POWER	1.89	9.89	3.39	-.01	2.11	8.70	1.12	-.02	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE 75000 FEET

MO		P2/PO	FD	FN	SFC	TE	PE	W2	TC	
1.80	NR =	.945	5.43	3700	2600	1.33	1200	17.4	68	1618
	P2 =	2.75	RAM	1.11	1.56	-.56	-.01	1.10	1.11	-.03
	T2 =	652	BLEED	.03	-1.52	2.54	-.10	-.58	.03	.83
	ERI =	0	POWER	-.16	15.44	5.03	.59	4.44	-.16	9.79
2.00	NR =	.925	7.24	4930	2950	1.38	1265	21.1	81	1649
	P2 =	3.67	RAM	1.12	1.52	-.50	-.01	1.11	1.12	-.03
	T2 =	712	BLEED	.03	-1.69	2.75	-.12	-.60	.03	.78
	ERI =	0	POWER	-.12	13.78	4.24	.54	3.74	-.12	8.19
2.30	NR =	.893	11.2	7410	3510	1.44	1374	27.9	106	1701
	P2 =	5.67	RAM	1.15	1.63	-.56	-.00	1.15	1.15	-.01
	T2 =	813	BLEED	.02	-2.03	3.21	-.12	-.63	.02	.74
	ERI =	0	POWER	-.06	12.35	2.83	.47	2.95	-.06	6.29
2.50	NR =	.870	14.9	9550	3780	1.52	1450	33.3	126	1729
	P2 =	7.55	RAM	1.17	1.58	-.50	-.01	1.16	1.17	-.02
	T2 =	887	BLEED	.01	-2.25	3.59	-.12	-.63	.01	.74
	ERI =	0	POWER	-.04	11.22	2.05	.33	2.42	-.04	5.11
2.70	NR =	.846	19.8	12000	3690	1.63	1522	38.7	147	1722
	P2 =	10.02	RAM	1.20	1.63	-.44	-.00	1.20	1.20	-.01
	T2 =	967	BLEED	.01	-2.85	4.30	-.14	-.67	.01	.66
	ERI =	0	POWER	-.03	12.14	1.15	.35	2.21	-.03	4.65
3.00	NR =	.809	29.9	16600	2960	1.98	1631	47.4	183	1685
	P2 =	15.16	RAM	1.25	1.93	-.61	-.00	1.26	1.25	.01
	T2 =	1097	BLEED	.01	-4.48	6.72	-.13	-.67	.01	.64
	ERI =	0	POWER	-.03	15.64	-1.51	.27	1.87	-.03	3.88

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.11.0

JANUARY 1964

STANDARD DAY                  PRESSURE ALTITUDE    75000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
1.80	5.43	8.57	3474	1618	1257	6380	2680	1.30	406	2.9
	RAM	1.09	1.05	-.03	-.00	1.28	1.52	-.51	.05	.00
	BLEED	-.53	.96	.83	.01	-.60	-1.48	2.49	.03	.00
	POWER	5.27	20.67	9.79	.00	6.19	14.97	5.48	-.16	.00
2.00	7.24	10.36	4058	1649	1257	7960	3030	1.34	381	2.9
	RAM	1.11	1.05	-.03	-.00	1.27	1.52	-.51	.04	.00
	BLEED	-.55	.99	.78	.01	-.62	-1.68	2.73	.03	.00
	POWER	4.41	18.21	8.19	.01	5.13	13.67	4.35	-.12	.00
2.30	11.2	13.76	5072	1701	1257	11000	3600	1.41	345	.0
	RAM	1.15	1.12	-.01	.00	1.29	1.59	-.52	.03	.00
	BLEED	-.58	1.09	.74	.01	-.64	-2.00	3.18	.02	.00
	POWER	3.42	15.33	6.29	.02	3.94	12.17	3.01	-.06	.00
2.50	14.9	16.44	5729	1729	1257	13400	3900	1.47	321	.0
	RAM	1.16	1.12	-.02	.00	1.30	1.61	-.54	.02	.00
	BLEED	-.57	1.22	.74	-.01	-.64	-2.23	3.56	.01	.00
	POWER	2.79	13.39	5.11	.01	3.19	11.09	2.17	-.04	.00
2.70	19.8	19.10	6019	1722	1258	15900	3870	1.56	294	.0
	RAM	1.20	1.15	-.01	.00	1.33	1.74	-.54	.02	.00
	BLEED	-.57	1.27	.66	-.05	-.68	-2.81	4.27	.01	.00
	POWER	2.57	13.38	4.65	-.01	2.89	11.96	1.32	-.03	.00
3.00	29.9	23.40	5855	1685	1258	19900	3280	1.78	257	.0
	RAM	1.28	1.26	.01	-.02	1.39	2.08	-.75	.02	.00
	BLEED	-.61	1.78	.64	-.02	-.68	-4.21	6.39	.01	.00
	POWER	2.19	13.96	3.88	-.05	2.40	14.65	-.62	-.03	.00

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.12.4

JANUARY 1964

STANDARD DAY                      PRESSURE ALTITUDE 75000 FEET

MO		P2/P0	FD	FN	SFC	TE	PE	W2	TC	
1.80	NR =	.945	5.43	3710	2110	1.42	1195	16.9	68	1487
	P2 =	2.75	RAM	1.11	1.73	-.76	-.01	1.09	1.11	-.03
	T2 =	652	BLEED	.03	-1.82	2.98	-.10	-.59	.03	.81
	ERI =	0	POWER	-.17	17.67	4.26	.59	4.38	-.17	9.78
2.00	NR =	.925	7.24	4930	2350	1.47	1259	20.4	81	1512
	P2 =	3.67	RAM	1.12	1.66	-.67	-.01	1.11	1.12	-.02
	T2 =	712	BLEED	.03	-1.64	3.25	-.06	-.53	.03	.97
	ERI =	0	POWER	-.13	17.56	3.11	.58	3.94	-.13	8.76
2.30	NR =	.893	11.2	7410	2740	1.56	1368	27.0	106	1565
	P2 =	5.67	RAM	1.15	1.72	-.67	-.00	1.14	1.15	-.01
	T2 =	813	BLEED	.02	-2.18	3.86	-.09	-.58	.02	.86
	ERI =	0	POWER	-.06	14.55	1.96	.33	2.87	-.06	6.23
2.50	NR =	.870	14.9	9550	2840	1.67	1444	32.2	126	1588
	P2 =	7.55	RAM	1.17	1.72	-.68	-.01	1.16	1.17	-.02
	T2 =	887	BLEED	.01	-2.81	4.52	-.12	-.63	.01	.75
	ERI =	0	POWER	-.04	14.67	1.01	.35	2.55	-.04	5.45
2.70	NR =	.846	19.8	12000	2560	1.88	1514	37.3	147	1575
	P2 =	10.02	RAM	1.20	1.80	-.60	-.00	1.20	1.20	-.01
	T2 =	967	BLEED	.01	-4.00	5.93	-.14	-.68	.01	.64
	ERI =	0	POWER	-.03	17.21	-.85	.38	2.35	-.03	4.98
3.00	NR =	.809	29.9	16600	1550	2.83	1623	45.8	183	1542
	P2 =	15.16	RAM	1.25	2.27	-.96	-.00	1.25	1.25	-.00
	T2 =	1097	BLEED	.01	-7.96	11.77	-.13	-.68	.01	.63
	ERI =	0	POWER	-.03	28.94	-9.18	.27	1.95	-.03	4.11

# CONFIDENTIAL

# CONFIDENTIAL

GEI 67870

## GENERAL ELECTRIC GE4/J4C ESTIMATED PERFORMANCE

P.S.12.4

JANUARY 1964

STANDARD DAY

PRESSURE ALTITUDE

75000 FEET

MO	P2/PO	P8/PO	WFT	T8	A8	FGB	FNB	SFCB	W2K	BTANG
1.80	5.43	7.06	2997	1487	1450	5880	2180	1.38	406	2.9
	RAM	1.09	1.04	-.03	.00	1.30	1.63	-.65	.05	.00
	BLEED	-.54	1.08	.81	.01	-.63	-1.76	2.92	.03	.00
	POWER	5.29	22.12	9.78	-.06	6.24	17.13	4.77	-.17	.00
2.00	7.24	8.52	3455	1512	1450	7360	2420	1.43	381	2.9
	RAM	1.11	1.05	-.02	-.01	1.30	1.66	-.66	.04	.00
	BLEED	-.41	1.53	.97	-.03	-.51	-1.61	3.22	.03	.00
	POWER	4.91	20.84	8.76	-.19	5.55	17.11	3.54	-.1-319	.35
2.30	11.2	11.34	4270	1565	1450	10200	2820	1.51	345	.0
	RAM	1.15	1.11	-.01	-.01	1.31	1.73	-.68	.03	.00
	BLEED	-.50	1.56	.86	-.01	-.58	-2.14	3.82	.02	.00
	POWER	3.36	16.63	6.23	.03	3.90	14.31	2.18	-.06	.00
2.50	14.9	13.54	4739	1588	1450	12500	2970	1.60	321	.0
	RAM	1.16	1.10	-.02	.00	1.31	1.77	-.73	.02	.00
	BLEED	-.57	1.52	.75	-.01	-.65	-2.76	4.46	.01	.00
	POWER	2.94	15.76	5.45	.04	3.40	14.47	1.20	-.04	.00
2.70	19.8	15.70	4813	1575	1449	14800	2760	1.75	294	.0
	RAM	1.19	1.15	-.01	.00	1.34	1.97	-.75	.02	.00
	BLEED	-.65	1.58	.64	.02	-.71	-3.86	5.77	.01	.00
	POWER	2.63	16.28	4.98	.09	3.08	16.65	-.33	-.03	.00
3.00	29.9	19.22	4393	1542	1450	18500	1930	2.28	258	.0
	RAM	1.25	1.20	-.00	-.00	1.39	2.56	-1.21	.02	.00
	BLEED	-.58	2.41	.63	-.05	-.70	-6.79	10.24	.01	.00
	POWER	2.40	17.88	4.11	-.15	2.54	24.62	-5.74	-.03	.00

14-19

# CONFIDENTIAL