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# STRUCTURAL FLIGHT LOADS DATA FROM C-130E AIRCRAFT

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TECHNOLOGY INCORPORATED

TECHNICAL REPORT SEG-TR-85-34

OCTOBER 1985

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## FOREWORD

Under Contract No. AF 33(657)-9845, Technology Incorporated, Dayton, Ohio, instrumented thirty-five C-130E aircraft to collect flight loads data. The analysis and presentation of the processed data were to be governed by what was, in effect, two statements of work; actually, the original statement of work was expanded by a second research directive. The original statement of work, dated 13 August 1963, was termed "Structural Flight Loads Recording Program on C-130E Aircraft." The later directive was entitled "Turbulence Probability Study on C-130E Aircraft for Selected Air Routes" and dated 28 May 1964. Since the program began 12 November 1963, the request for the turbulence study came in the midst of the data collecting and processing. However, no disruption of nor modification to the data collection phase ensued; for the same data intended for the typical flight loads program was to be used for the turbulence study. Although the flight loads and turbulence studies include the same derived gust velocity data, the latter study grouped the data by season for each MATS route to determine the effects of seasonal and geographical variations. Because of the distinct aspects and bulk of data of the respective studies, the flight loads program as such appears in the report proper and the turbulence study in a supplement to the report.

The flight loads program was initiated by the Structures Division, Directorate of Airframe and Subsystems Engineering, Systems Engineering Group, Research and Technology Division, Wright-Patterson Air Force Base, Ohio. Lt. Joseph Madden, of the C-130 Systems Program Office, Aeronautical Systems Division, was the Air Force project monitor and Lts. Ned H. Sandlin and Raymond J. Veldman, both of the Structures Division, provided engineering support. Request for the expansion of the original statement of work to include the special turbulence study originated from Mr. Lloyd V. Mitchell, chief of Special Studies Branch, AWSAE/PSO, Headquarters Air Weather Service, Scott Air Force Base, Illinois. The collection of data ended 12 October 1964.

The key personnel of Technology Incorporated involved in this program were Mr. Joseph F. Braun, project engineer; Mr. Cyril G. Peckham, director of the Data Processing Division; Mr. John F. Nash, supervisor of the Data Reduction Section; and Mr. Kenneth L. Rickey, director of the Systems and Electronics Division.

The authors gratefully acknowledge the assistance given by personnel of the United States Air Force and of Technology Incorporated, particularly Dr. Alan P. Berens and Messrs. William E. Morrin and John R. Mitchell.

This report was submitted by the authors on 15 April 1965.

## ABSTRACT

To provide information for the derivation of the operational loads spectrum of C-130E aircraft, this report presents the 6317 hours of in-flight data processed during a C-130E structural loads program. Of the thirty-five C-130E's instrumented to collect the data, 20 were based at Charleston Air Force Base to fly MATS EASTAF transatlantic routes and 15 at Travis Air Force Base to fly MATS WESTAF transpacific routes. Four parameters basic to flight loads studies were recorded: time, airspeed, altitude, and normal acceleration at the aircraft center of gravity. Included among the variables derived from the basic parameters are equivalent maneuver load factor and derived gust velocity. Techniques used to process and analyze the data are discussed. A supplement to this report presents the derived gust velocities by season and MATS routes. None of the loads sustained by these aircraft exceeded the design limits.

## PUBLICATION REVIEW

This technical report has been reviewed and is approved.



WILLIAM B. MILLER  
Chief, Structures Division

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## SECTION I

### INTRODUCTION

To acquire structural flight loads data on C-130E aircraft, Technology Incorporated instrumented 35 of these aircraft; of these C-130E's, 20 were stationed at Charleston Air Force Base, South Carolina, and 15 at Travis Air Force Base, California. An in-flight view of a C-130E is shown in Figure 1. Presented in tabular and graphic form, the processed data will be used to derive the operational loads spectrum and possibly to revise the predicted loads spectra and fatigue analyses.

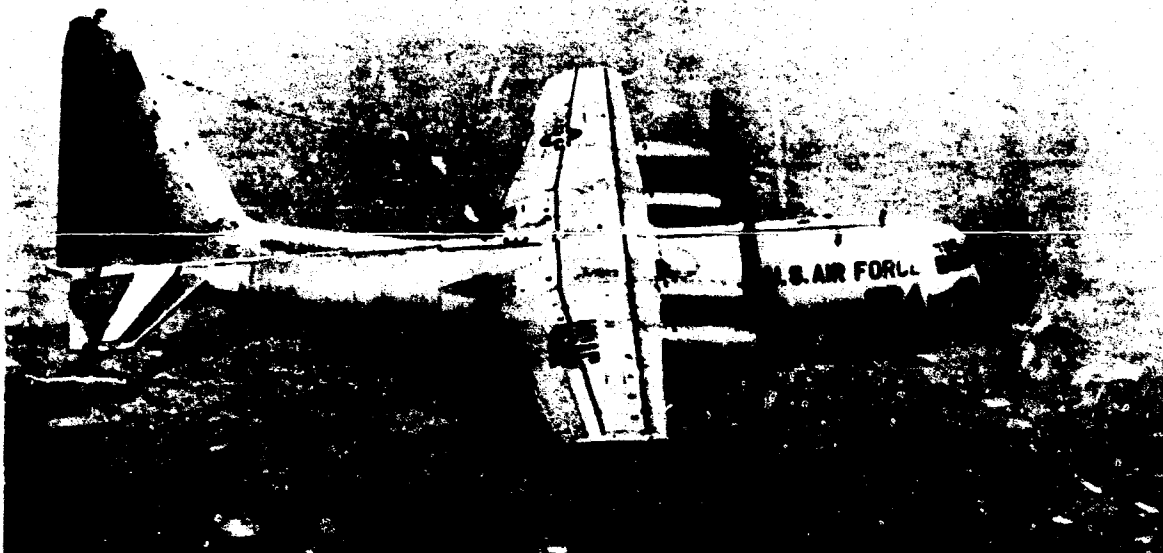


Figure 1. View of C-130E Aircraft.

Four in-flight parameters were recorded: normal acceleration at the aircraft center of gravity, airspeed, altitude, and time. As discussed later, the acceleration trace was measured whenever it peaked beyond prescribed thresholds. To permit the breakdown of the flight loads according to air base, mission type, route flown by season, and ranges of aircraft gross weight, as well as ranges of airspeed and altitude, supplemental data were extracted from various logs. These data included such items as air base, flight date, mission type, air base barometric pressure, route, and gross weight and time at takeoff and landing.

Presented in the following sections are a history of the data recording phase of the program; techniques for data recording, processing, and analysis; a discussion of the data; and an interpretative review of the processed data.

## SECTION II

### DISCUSSION

#### A. Data Recording Program History

The data presented in this report were acquired from 35 fully instrumented C-130E aircraft. Of these, 20 based at Charleston Air Force Base, South Carolina, flew MATS EASTAF transatlantic routes, and 15 based at Travis Air Force Base, California, flew MATS WESTAF transpacific routes.

Installation of the recording systems was started on 12 November 1963 and completed by 12 December 1963. Data were recorded between 12 December 1963 and 12 September 1964. All recording systems were removed by 12 October 1964. A total of 6317 flight hours of recorded data were processed and analyzed.

#### B. Data Recording, Processing, and Analysis Techniques

##### 1. Data Recording System

The VGH data recording system consisted of a Century Model 409 oscillograph, a bridge control unit, and strain gage type transducers. The oscillograph, bridge control unit, and pressure transducers for each of the aircraft at Charleston Air Force Base were installed in the cargo compartment near fuselage station 245, and like instruments for each of the aircraft at Travis Air Force Base were installed in the crew compartment near fuselage station 220. In each instrumented aircraft, an accelerometer was mounted on a bracket attached to the forward end of the wing box beam at fuselage station 517 and left buttock line 5. Detailed instrumentation and installation descriptions are given in Reference 1.

Each parameter was traced on a 3-5/8-inch-wide oscillogram by a reflected beam of light whose projection onto the photosensitive paper varied with the rotation of a galvanometer mirror in the oscillograph. Set to run at a constant speed of eight inches per minute, the oscillogram could record approximately 3-1/2 hours of in-flight data. Recordings at this speed precluded visually distinguishing acceleration peaks whose frequencies exceeded eight cycles per second. However, this limitation affected only high-frequency or fine-scale turbulence data whose acceleration values were normally within the reading threshold.

##### 2. Data Processing

This program required deriving the following primary parameters:



$n_z$  (maneuver load factor),  $n_{ze}$  (equivalent maneuver load factor),  $\Delta n_z$  (incremental load factor caused by gust), and  $U_{de}$  (derived gust velocity). In addition, each of the primary parameter values was registered with the corresponding values of equivalent airspeed, altitude, gross weight, mission type, air base, aircraft tail number, season of the year, and MATS route.

Each section comprising the Data Reduction Department was responsible for the accuracy of a specific phase of the data reduction process. When checking data, personnel compared the reduced data with the original source, that is, the oscillogram and its corresponding supplemental data; also these personnel were particularly cognizant of the types of error revealed through experience. These types included misidentification of traces after crossovers and malfunction of the semiautomatic oscillogram reader.

Before the data were extracted from the oscillograms, the Editing Section reviewed each oscillogram to perform the following tasks: (1) on the basis of the data validity evidenced, determining whether an oscillogram should be accepted or rejected; (2) marking the points at which the acceleration, airspeed, and altitude traces must be measured; (3) determining the normal deflections of the traces; (4) measuring the preflight calibration deflections, and (5) transcribing the supplemental data. Oscillograms whose traces displayed evidence of instrument malfunctioning were removed from further processing, and the instrumentation engineer was informed of the apparent malfunction. The primary peak method was employed to identify and select the peaks to be marked for reading. Consequently, the maximum deflection of the acceleration trace between crossings of the 1.0-g line was marked whenever the peak went beyond a reading threshold. Whether or not such a point was actually beyond the prescribed thresholds of 1.1 and 0.9 g was determined by the computer. To ensure that valid peaks close to the thresholds would not be lost, the Editing Section used reading thresholds which were always less than the prescribed threshold. The reading threshold used was determined by the instrument whose calibration curve had the largest slope. Although some points below the prescribed threshold were consequently read, the computer did not interpret them as peaks.

The Editing Section marked the airspeed and altitude traces to permit the reproduction of their time histories. The traces were marked at time intervals which varied from 6 seconds during maneuvering to 2 minutes during cruise and at points where either trace changed direction. The Editing Section also measured the normal or zero position and the preflight calibration of each trace. These measurements were later sorted by instrument. To check for consistency, the Editing Section compared the measurements from each instrument with other current and past values from the same instrument. A history of these measurements was maintained. This procedure ensured accuracy and uniformity in determining the normal or zero deflections, since data from oscillograms generated by the same recording systems should show only slight variations.

After acceleration peaks had been selected for reading, the Editing Section separated them into two categories: maneuver and gust induced peaks. Separation was based on the following characteristics indicative of a gust occurrence: (1) a jagged pattern in the airspeed trace, (2) frequent and random sharply pointed acceleration peaks with exponential decays, and (3) peak durations generally less than 2 seconds.

Four types of missions were established as being representative of normal C-130E flight operation. These missions are identified as follows:

Mission I	Long Range Logistics
Mission II	Short Range Logistics
Mission III	Training
Mission IV	Aerial Delivery

Alike inasmuch as they normally carried cargo and took off and landed at different bases, Mission I (Long Range Logistics) and Mission II (Short Range Logistics) flights were distinguished by flight duration: such flights greater than 5 hours were denoted Mission I; those less than 5 hours, Mission II. Normally involving local flying, Mission III (Training) flights consisted of transition, navigation, instrument, touch-and-go landing, and other flights having related maneuvers. Mission IV (Aerial Delivery) flights included actual and practice troop and cargo drops and ground-proximity cargo extractions.

After the Editing Section had readied the oscillograms for data extraction, they were forwarded to the Data Digitization Section which used Benson-Lehner semiautomatic readers in conjunction with IBM key punches. Experienced operators set the controls, aligned the oscillograms, and actuated the reader-key punch combination which automatically measured the deflections and transcribed the measurements onto punch cards. After printing out the digitized data, this section checked the conformity of the printout arrangement with the established format and compared the printout information with the oscillogram to ensure that the extracted data adequately reflected the trace delineations. Extreme acceleration values were checked by precise manual measurements of the corresponding peaks on the oscillogram; also the number of printed acceleration values had to correspond to the number of acceleration peaks marked on the oscillogram.

When the machine-measured data were checked out favorably by the Data Digitization Section, the printout together with the corresponding oscillogram was forwarded to the Quality Control Section, where the values on the printout were compared with the corresponding points on the oscillogram. The criteria for the Quality Control rejection of a record were twofold: (1) two discrepancies plotted outside the limits of the corresponding control chart and (2) continuance of discrepancies found to be either all positive or all negative, even though their plots were within the control limits. With the

initial detection of all positive or all negative discrepancies, the sample size was increased. Either cause for record rejection required return of the printout and corresponding oscillogram, along with the reason for rejection, to the supervisor of the Data Digitization Section. After informing the responsible machine operators of the type of error made, he determined the remedial action to be taken. In this manner, a uniformity in interpreting the trace deflections and in measuring the points was established and ensured maximum attainment of the accuracy capability of the system. From the 6317 hours of flight data, the Quality Control Section obtained, for all reading errors, a mean value of .0009 g and a standard deviation of .01 g. Consequently, 95 percent of the acceleration data should contain a reading error of less than .02 g; and 99.7 percent, an error less than .03 g. The standard deviation for airspeed was found to be 1.7 knots at 200 knots and that for altitude was 175 feet at 20,000 feet. Therefore, for the above conditions, the 95-percent confidence limits are 3.4 knots and 350 feet, and the values for a 99.7-percent accuracy are 5.1 knots and 525 feet.

After the Quality Control Section had found the accuracy of the digitized data acceptable, the data were processed on the IBM 7094 computer facility at Wright-Patterson Air Force Base. In addition to performing the calculations prescribed, the computer checked all data against theoretical values extracted from Reference 2, as well as against the normal operational ranges. Whenever an airspeed or altitude range was not represented by a measured data point, the computer interpolated a value and made a note of the interpolation in a comments column on the computer printout. In addition, a comment was made for any single value and combination of values of airspeed, altitude, fuel weight, and gross weight which fell outside the normal operational ranges.

Upon receiving the computer printout, the Data Output Section checked all the significantly high and low values of each of the VGH parameters, as well as each of the comments, against the corresponding oscillograms. Correlations of these high and low values on the printout with those on the oscillogram served to check the normal values, the calibration values, and the computer operation. In addition to the above checks, this section compared the distributions of all the parameter values with those expected. If the Data Output Section detected any errors in a printout, the errors were corrected and the data of the entire flight was reprocessed through the computer.

If the Data Output Section found the computer printout satisfactory, the data for each recorded flight was then integrated with the data from other flights.

### 3. Data Analysis Techniques

Exceedance curves, defined as the number of flight hours required to reach or exceed given peak values of the maneuver load factors, were

prepared for each of the four mission types and for each of the two bases. In addition, data from each mission type were combined to prepare composite exceedance curves which would be indicative of the load spectrum to be expected during normal aircraft operations. However, combining the data required using special weighting factors since the distribution of the recorded flight time among the four mission types differed from the distribution of the average time of the two wings in these mission types.

The following equation was used to calculate the derived gust velocity ( $U_{de}$ ) for each gust-induced acceleration:

$$U_{de} = \frac{1.1850 \cdot W \cdot \Delta n_z}{m \cdot \rho_0 \cdot S \cdot V_e \cdot K_g}$$

where

$U_{de}$  = derived gust velocity in ft/sec

$W$  = gross weight in pounds

$\Delta n_z$  = incremental gust load factor =  $n_z - 1.0$

$m$  = lift curve slope (per radian)

$\rho_0$  = sea level density = .0023779 slugs/ft<sup>3</sup>

$S$  = wing area = 1745 ft<sup>2</sup>

$V_e$  = equivalent airspeed in knots

$K_g$  = gust factor, defined as follows

$$K_g = \frac{0.88\mu_g}{5.3 + \mu_g}$$

and

$$\mu_g = \frac{2W/\rho_0}{m \cdot \sigma \cdot \bar{c} \cdot S \cdot g}$$

where

$g$  = acceleration of gravity = 32.174 ft/sec<sup>2</sup>

$\sigma$  = density ratio  $\rho/\rho_0$

$\bar{c}$  = mean aerodynamic chord = 13.7 ft.

$\rho$  = density, slugs/ft<sup>3</sup>

Substitution of the constant values into the equation for  $U_{de}$  yields

$$U_{de} = \left[ 1573 \sigma + 0.3248 \frac{W}{m} \right] \frac{\Delta n_z}{V_e}$$

where the lift-curve slope  $m$  for the C-130 is defined for  $V_e$  as follows:

$V_e \geq 150$  knots

$1/m = 0.1460$

and

$V_e < 150$  knots

$1/m = 0.1160 + (9 \times 10^{-7})h + 0.016(0.01V_e - 1)(4 - 0.0001h)$

$h$  = pressure altitude in feet

These equations for lift-curve slope  $m$  are curve-fits of the aerodynamic data presented in Reference 3. Although Reference 3 pertains to the C-130B, the similarity of this aircraft with the C-130E permits using the C-130B aerodynamic data to compute the lift-curve slope for the C-130E.

The following relationship was used to calculate the equivalent maneuver load factor,  $n_{ze}$ , for each maneuver induced acceleration:

$$n_{ze} = \frac{W_i}{W_d} \cdot n_z$$

where

$n_z$  = maneuver load factor

$W_i$  = instantaneous gross weight

$W_d$  = design gross weight = 108,000 lbs.

Rather than using  $n_{ze}$  as such in the development of the exceedance curves, the percent design limit load, PDLL, defined as follows, was used as the descriptive parameter:

$$PDLL = \frac{W_i \cdot n_z}{W_d \cdot n_{zd}} \times 100,$$

or in terms of  $n_{ze}$ ,

$$PDLL = \frac{n_{ze}}{n_{zd}} \times 100$$

where  $n_{zd}$  = design limit load factor = 3.00.

### SECTION III

#### DATA SUMMARY

The in-flight loads sustained by an aircraft are a function of both the type of mission it flies and the air base from which it operates. To derive an accurate single composite, or summary, of the data representative of aircraft of the same type flying various types of missions and operating from different air bases, the recorded time must be distributed by mission type and air base in the same proportion as the total wing time. Wing time, as considered here, is the total time flown by all C-130E aircraft assigned to a specific wing. Consequently, the percentage of recorded time for each mission type and air base combination should be identical to the percentage of total wing time. But, since not all the aircraft at a base were instrumented for this flight loads program, the recorded times were not so distributed, as evidenced in Table 1. To have attempted to acquire such a distribution during the data collection period would have required an unduly excessive effort. Consequently, it was decided to adjust, or "weight," the recordings during the data analysis to derive equivalent data properly related to the wing flight time.

Table 1

Percentage of Total Flight Time by Mission Type and Base

Mission	Charleston AFB		Travis AFB		All Bases	
	Recorded Time	Wing Time	Recorded Time	Wing Time	Recorded Time	Wing Time
I	24.42	36.41	34.53	24.58	58.95	60.99
II	14.22	19.03	2.41	2.81	16.63	21.84
III	9.97	8.57	10.74	5.64	20.71	14.21
IV	.88	1.03	2.83	1.93	3.71	2.96
All Missions	49.49	65.04	50.51	34.96	100	100

In the computation of the weighted composite tables, the number of peaks in each data block from each mission type and air base was multiplied by the corresponding ratio of wing time to recorded time. Then the products for each data block were summed over all mission type and air base combinations to yield the weighted composites. Since the ratios used were not integers, the accumulated load factors in the weighted composites contain decimals.

With the exception of the weighted composite tables, all load factor distribution tables presented in this report are photographic reproductions of the computer printout. Since during the printout the computer rounded off to the nearest tenth of a minute the times for the individual airspeed ranges, the sum of these times does not always equal the total given in the table.

The derived gust velocity,  $U_{de}$ , was computed for each measurement of the incremental gust load factor,  $\Delta n_z$ . Because of the relationship between  $U_{de}$  and  $\Delta n_z$ , the  $\Delta n_z$  threshold of 0.1 g imposed a corresponding but much more complex threshold on  $U_{de}$ . Investigation showed that all potential  $U_{de}$ 's above 5 feet per second were computed whenever the airspeed exceeded 150 knots and all those above 10 feet per second were computed without exception. The  $U_{de}$ 's between 5 and 10 feet per second which were not computed corresponded to  $\Delta n_z$ 's below 0.1 g with heavy gross weights and airspeeds less than 150 knots. However, about 25 to 30 percent of the  $\Delta n_z$ 's below 0.1 g were measured since the threshold actually used in the data reduction was less than 0.1 g. Although the computer discarded the  $\Delta n_z$ 's less than 0.1 g, it retained the corresponding  $U_{de}$ 's which equalled or exceeded 5 feet per second. Nevertheless, some bias obviously remains in the  $U_{de}$  data in the range of 5 to 10 feet per second.

Figure 2 shows a V-n diagram of  $n_z$  data along with a tabulation of this information. The symbols in this figure denote the number of maneuver load factors in combinations of airspeed and load factor ranges. Taken from Reference 2, the envelope shown on the V-n diagram indicates the design operating limits for a C-130E flying at 108,000-pound gross weight and under sea-level conditions. As evidenced by the diagram and its accompanying tabulation, the design limit load factor of 3.0 g was not exceeded in the data acquired during this program. Tables 2 and 3 present, respectively, tabulations of  $n_{ze}$  and  $\Delta n_z$  data.

Figures 3 and 4 represent the average duration of flights for each mission type and each base and indicate that the flights of WESTAF are longer in duration than those of EASTAF. Figure 5 shows this information for both bases combined.

Presented in Table 4 is a composite tabulation of flight times recorded at various airspeeds and altitudes.

Figures 6 through 13 show in histogram form the percentages of the time that was recorded for each of the four mission types in various altitude ranges

for each base, and Figures 36 through 39 are composite histograms to include the data of both bases. To facilitate comparison of the time recorded by the four mission types at various altitudes, Figures 14 and 15 present the percentages of time that the aircraft spent below given altitudes for each mission type and each base; and Figure 40 gives a composite of these percentages to include the data of both bases. Mission I (Long Range Logistics) and Mission II (Short Range Logistics) flights spent the most time at high altitudes, generally between 20,000 and 25,000 feet, because they were normally transoceanic or cross-country flights. Mission III (Training) and Mission IV (Aerial Delivery) flights spent the most time at low altitudes since the former were normally local training flights including touch-and-go landings and the latter made low-level troop and cargo drops and ground-proximity cargo extractions.

Figures 16 through 23 show in histogram form the percentages of the time that was recorded for each of the four mission types in various airspeed ranges for each base, and Figures 42 through 45 are composite histograms to include the data of both bases. Giving the percentages of time that the aircraft spent below given airspeeds for each mission type, Figures 24 and 25 for each base and Figure 41, a composite to include both bases, indicate that the four mission types varied little in overall airspeed performance.

Figures 26 through 33 show in histogram form the percentages of the time that was recorded for each of the four mission types in various gross weight ranges for each base, and Figures 47 through 50 are composite histograms to include both bases. Figures 34 and 35 present the percentages of time that the aircraft spent below given gross weight ranges for each mission type and each base and Figure 46 gives a composite of these percentages to include both bases. Mission I (Long Range Logistics) and Mission II (Short Range Logistics) flights flew the most at heavy gross weights since they were loaded with cargo for transoceanic or cross-country delivery. Mission III (Training) flights normally carried no cargo, and Mission IV (Aerial Delivery) flights frequently used light-weight bean bags to simulate heavy cargo drops.

Tables 5 through 12 show the flight times recorded in combinations of equivalent airspeed, altitude, mission type, and base.

Maneuver load factor exceedance curves depicting the time required to reach or exceed given maneuver load factors are presented in Figures 51 through 54 for each mission type and air base. The exceedance values of Mission III (Training) data for the EASTAF flights are slightly more severe than those for the WESTAF flights. The values of Mission I (Long Range Logistics), Mission II (Short Range Logistics), and Mission IV (Aerial Delivery) data for the EASTAF and WESTAF flights are about the same. A comparison of the maneuver load factor exceedance curves in the C-130E data with those in the C-130A and C-130B data (see Reference 5) indicates that the curves in the corresponding missions are quite similar. Figure 55 presents a weighted exceedance curve which is a composite of the maneuver and gust load factors



for all missions and bases. This figure indicates that the maneuver load factor data is more severe than the gust load factor data. Figures 56 through 59 show incremental gust load factor exceedance curves for each mission type and base. It is apparent from these curves that the EASTAF flights in all mission types incurred gust loads of greater severity than those encountered in the WESTAF flights. The gust loads in the C-130E missions are less severe than those in the corresponding C-130A and C-130B missions. The lesser severity of the former was due to the C-130E aircraft flying at higher altitudes. Similar curves for percent design limit load (PDLL) are given in Figures 60 through 64. The weighted composite PDLL curve in Figure 64 indicates that the C-130E aircraft did not exceed the design limit load during the recorded flights.

The distances in nautical miles required to reach or exceed given derived gust velocity values are given for selected altitude ranges in Figures 65 through 67. The  $U_{de}$ 's encountered by the EASTAF flights were more severe than those experienced in the WESTAF flights. Taken from Reference 4, the standard gust spectrum in Figure 68 provides a basis of comparison for the C-130E gust spectrum shown in Figures 65 through 67. The frequencies of  $U_{de}$  values as a function of altitude with the nautical miles flown in each altitude range are given in Tables 13 through 15.

Table 16 shows the equivalent maneuver load factors by aircraft serial number. The in-flight hours recorded and the airframe hours logged during the instrumentation period are also given for each aircraft.

Tables 17 through 24, 25 through 32, and 33 through 40 present, respectively, for mission type and each base, tabulations of maneuver load factors versus equivalent airspeed, equivalent maneuver load factors versus equivalent airspeed, and incremental gust load factors versus equivalent airspeed.

Tables 41 through 67 and 72 through 97 present, respectively, for each mission type and by gross weight and altitude breakdown, tabulations of maneuver load factors versus equivalent airspeed and incremental gust load factors versus equivalent airspeed. Tables 68 through 71 present tabulations of equivalent maneuver load factors versus equivalent airspeed by altitude for each mission type.

## SECTION IV

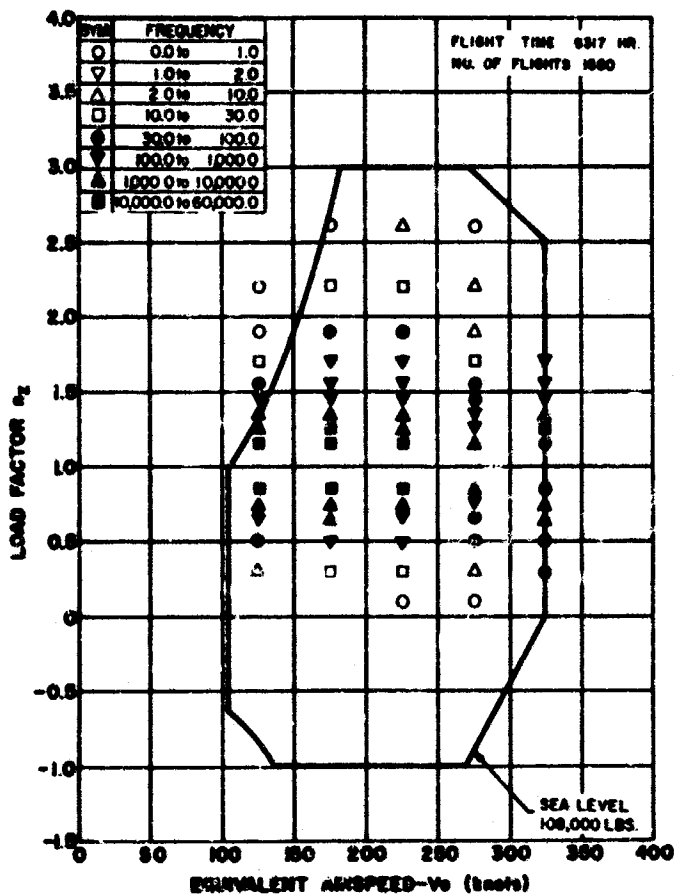
### CONCLUSIONS

1. None of the C-130E aircraft instrumented during this program recorded any maneuvers or gusts whose load factors exceeded the 3.0-g design limit. The maximum and minimum load factors were 2.72 and -0.04 g produced, respectively, by a maneuver and a gust.
2. The gust spectrum for all C-130E data is less severe in each altitude range than the standard gust spectrum taken from Reference 2. The C-130E gust spectrum is bias-free for all values of  $U_{de}$  above 10 feet per second at all airspeeds and above 5 feet per second at airspeeds of 150 knots and more.
3. The four missions arranged in the order of most to least severe exceedance curves are as follows: Aerial Delivery, Training, Short Range Logistics, and Long Range Logistics.
4. The maneuver load factors in the C-130E data equal the magnitude of those in the C-130A and C-130B data (see Reference 5), but have a slightly lower frequency.
5. For all C-130E load factor ranges, the maneuver load factors occurred more frequently than the gust load factors. As indicated in Reference 5, the converse exists in the C-130A and C-130B data for the load factors of 1.6 and below. This reversal is ascribed to the C-130A and C-130B aircraft having 50 percent of their flight time below 5000 feet, where most gusts are encountered, and the C-130E's having only 20 percent below this altitude.

## SECTION V

### RECOMMENDATIONS

Because of the large amount of gust data accumulated during the last six years from this and other flight loads programs and the better homogeneity of these data due to improved instrumentation and recording methods, these data should be used to re-evaluate the gust spectrum defined in Reference 2.



MANEUVER LOAD FACTOR ( $n_z$ )	EQUIVALENT AIRSPEED - $V_e$ (KNOTS)					TOTAL NO. $n_z$
	BELOW 100	100 TO 200	200 TO 250	250 TO 300	300 TO 350	
3.00 ABOVE						
2.0 TO 2.99		.86	3.10	.86		4.82
1.0 TO 1.99	.86	15.63	16.26	1.44		34.19
0.0 TO 0.99	.86	32.97	33.20	4.06		71.09
0.0 TO 0.99	16.95	75.45	123.86	12.89	1.72	330.87
0.0 TO 0.99	85.85	338.79	187.90	31.68	1.72	648.96
0.0 TO 0.99	414.11	923.52	488.17	70.27	1.24	1997.31
0.0 TO 0.99	2071.25	3812.14	1682.77	235.20	1.82	7801.18
0.0 TO 0.99	9277.46	16915.26	6561.85	916.92	10.74	33826.23
0.0 TO 0.99	41282.74	81288.52	28851.93	4197.84	41.90	122754.93
0.0 TO 0.99	176612.98	32422.47	10742.11	1264.57	22.28	57064.41
0.0 TO 0.99	6178.22	6317.89	3249.91	260.13	2.24	14828.39
0.0 TO 0.99	592.70	1822.01	810.86	24.92	2.24	2709.73
0.0 TO 0.99	10.74	248.80	27.73	2.11	.86	372.24
0.0 TO 0.99	2.58	19.79	1.17	1.59	.86	45.89
0.0 TO 0.99			.86	.53		1.39
BELOW 0.0						
TOTAL NO. $n_z$	87148.97	121748.31	41150.40	4789.81	89.62	274961.19

Figure 2. Diagram and Tabulation of Maneuver Load Factors versus Equivalent Airspeed—Weighted Composite for All Missions and Bases

Table 2

Equivalent Maneuver Load Factors versus Equivalent Airspeed -- Weighted Composite for All Missions and Bases

MANEUVER LOAD FACTOR (n <sub>z</sub> )	EQUIVALENT AIRSPEED - V <sub>e</sub> (KNOTS)						TOTAL NO. n <sub>z</sub>
	BELOW 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 & ABOVE	
2.0 & ABOVE			1.49				1.49
2.4 TO 2.0			.86				.86
2.0 TO 2.4		11.33	9.93	3.29			24.55
1.8 TO 2.0	9.43	99.06	42.36	16.00	.71		167.56
1.6 TO 1.8	288.15	1138.53	416.90	87.23	2.14		1932.95
1.5 TO 1.6	824.91	2901.22	1250.07	132.81	2.43		5111.44
1.4 TO 1.5	1419.88	5709.42	3130.92	204.90	2.81		10467.93
1.3 TO 1.4	2436.27	9195.90	6100.58	452.08	8.23		18193.06
1.2 TO 1.3	7012.82	17605.03	9455.28	862.15	12.17		34947.45
1.1 TO 1.2	18104.40	39395.88	17875.29	1524.99	33.19		67924.95
0.8 TO 0.9	23626.99	29491.76	15230.57	1013.48	21.06		69383.86
0.7 TO 0.8	18101.28	18205.93	8086.84	477.11	4.63		44875.79
0.6 TO 0.7	3049.22	3566.70	1685.55	115.90	2.24		8419.61
0.4 TO 0.6	379.97	672.77	501.32	50.15	.86		1605.07
0.2 TO 0.4	7.37	21.66	24.19	3.82	1.72		58.76
0.0 TO 0.2			.86	.53			1.39
BELOW 0.0							
TOTAL NO. n <sub>z</sub>	75260.69	119014.39	63813.01	4944.44	94.19		263126.72

Table 3

Incremental Gust Load Factors versus Equivalent Airspeed -- Weighted Composite for All Missions and Bases

INCREMENTAL GUST LOAD FACTOR (Δn <sub>z</sub> )	EQUIVALENT AIRSPEED - V <sub>e</sub> (KNOTS)						TOTAL NO. Δn <sub>z</sub>
	BELOW 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 & ABOVE	
1.0 & ABOVE							
1.4 TO 1.0							
1.0 TO 1.4							
0.8 TO 1.0	.59	1.17	2.68				4.53
0.6 TO 0.8	1.71	25.24	48.87	5.22			56.94
0.4 TO 0.6	26.18	76.33	172.75	18.43	1.72		395.41
0.2 TO 0.4	91.88	254.78	472.81	88.74	1.57		1892.98
0.0 TO 0.2	823.88	1776.11	2061.84	286.23	6.42		7952.58
0.2 TO 0.3	2516.54	2838.81	12392.88	747.74	26.54		27392.51
0.1 TO 0.2	8877.28	48188.87	68286.88	1987.84	181.83		187918.73
0.1 TO 0.1	10011.22	27466.48	17631.82	3782.21	91.88		169322.31
0.1 TO 0.0	3523.64	2422.43	11276.78	731.74	16.12		26754.61
0.0 TO 0.0	218.43	1689.77	2662.98	218.62	2.83		4772.63
0.0 TO 0.0	78.72	242.73	772.18	68.81	.56		1892.98
0.0 TO 0.0	1.72	18.47	41.88	4.97	.84		68.86
0.0 TO 0.0	1.72	4.86	5.88	1.24			12.92
BELOW 0.0			1.34				1.34
TOTAL NO. Δn <sub>z</sub>	78292.71	120393.18	240463.61	10133.49	246.18		347629.01

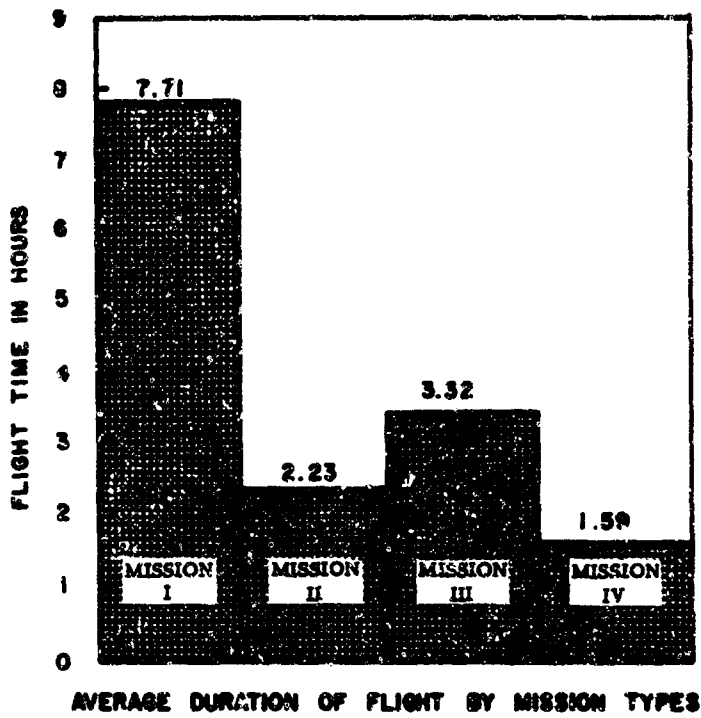


Figure 3. Average Duration of Flights by Mission Types for EASTAF

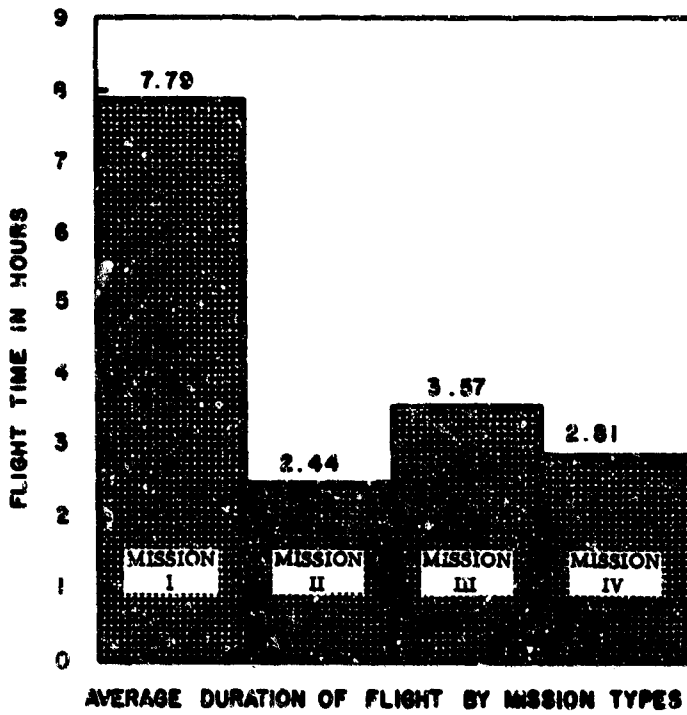


Figure 4. Average Duration of Flights by Mission Types for WESTAF

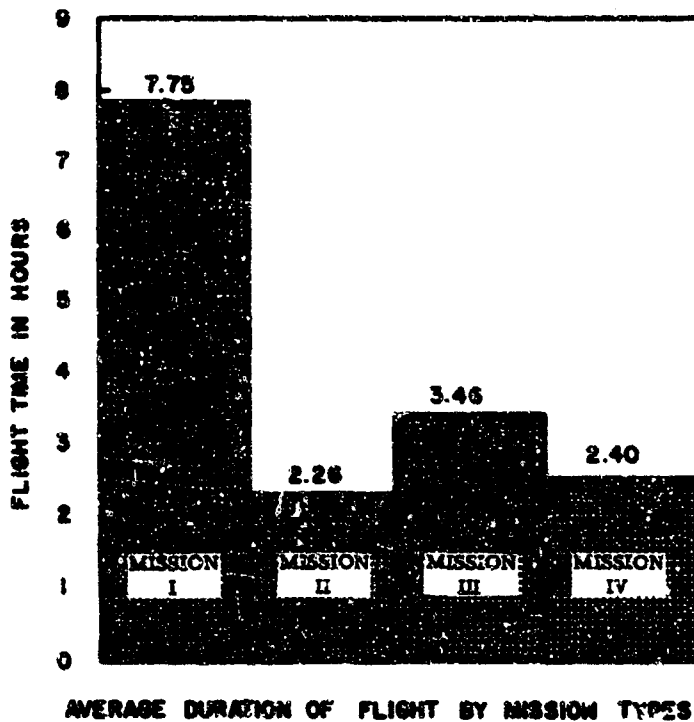


Figure 5. Average Duration of Flights by Mission Types for All Bases

Table 4

Flight Time Spent in Simultaneous Ranges of Airspeed and Altitude — Composite for All Missions and Bases

PRESSURE ALTITUDE (FEET)	EQUIVALENT AIRSPEED - $V_0$ (KNOTS)						TOTAL TIME (MIN.)
	BELOW 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 & ABOVE	
0- 2,000	19115.9	13837.9	6281.8	291.1	2.9		39529.7
2,000- 5,000	7300.7	20347.4	10347.6	782.8	18.9		38797.4
5,000- 10,000	966.5	11885.1	6472.4	1059.9	38.5		20422.4
10,000- 15,000	528.1	9527.7	5610.8	815.2	15.0		16496.8
15,000- 20,000	423.7	17243.7	35224.7	1942.8	8.9		54843.7
20,000- 25,000	410.2	78628.2	63107.3	1060.8			143206.5
25,000- 30,000	185.2	49108.2	9636.6	4.2			58934.2
30,000 & ABOVE	42.8	6175.3	576.0				6794.1
TOTAL TIME (MIN.)	28973.0	206753.5	137257.3	5956.8	84.2		379024.8

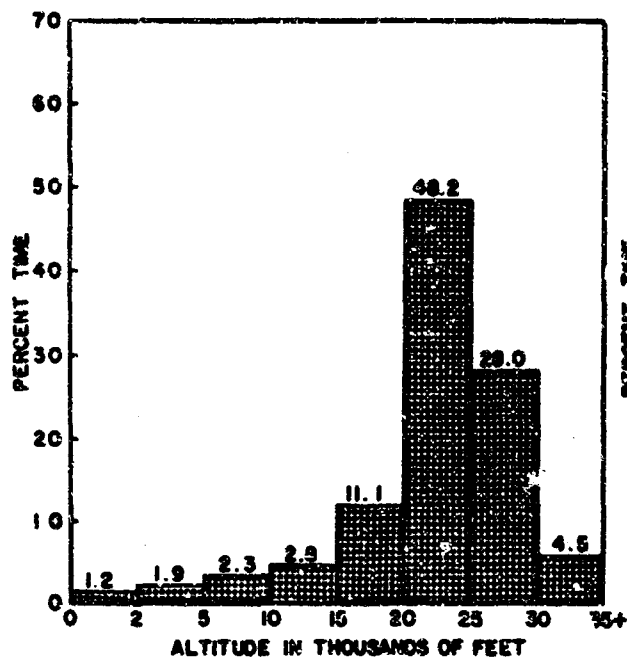


Figure 6

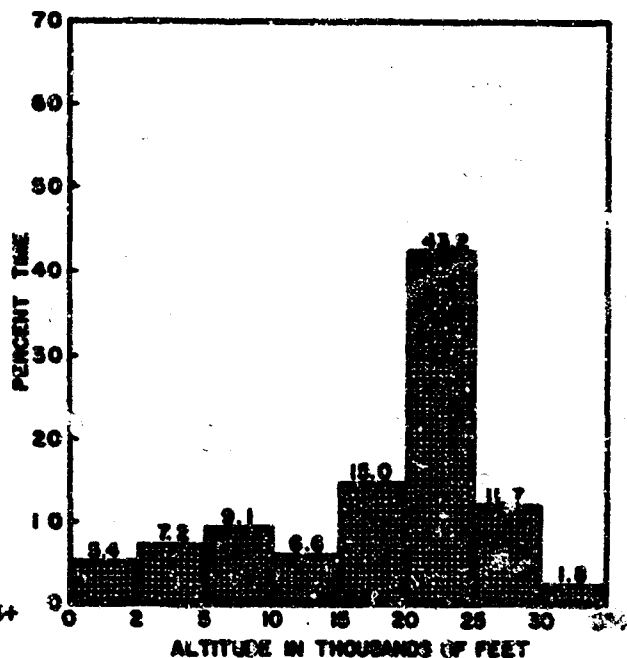


Figure 7

Percentages of Total Flight Time Spent at Selected Altitudes—EASTAF Mission I (Long Range Logistics)

Percentages of Total Flight Time Spent at Selected Altitudes—EASTAF Mission II (Short Range Logistics)

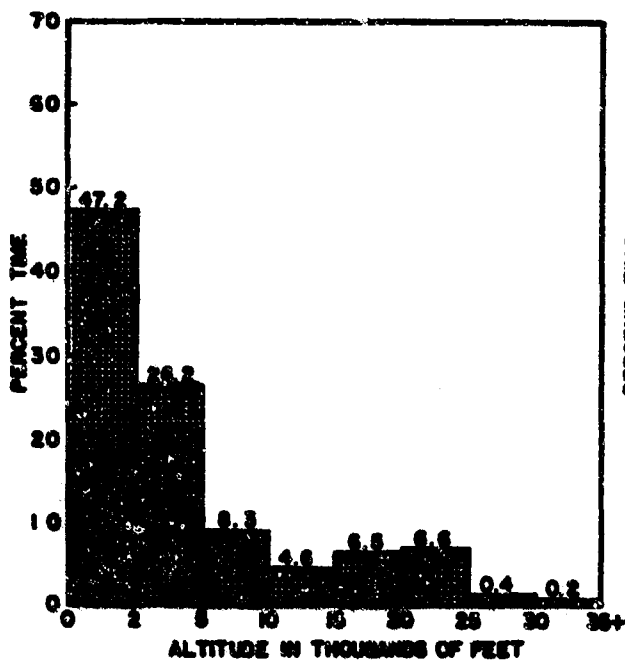


Figure 8

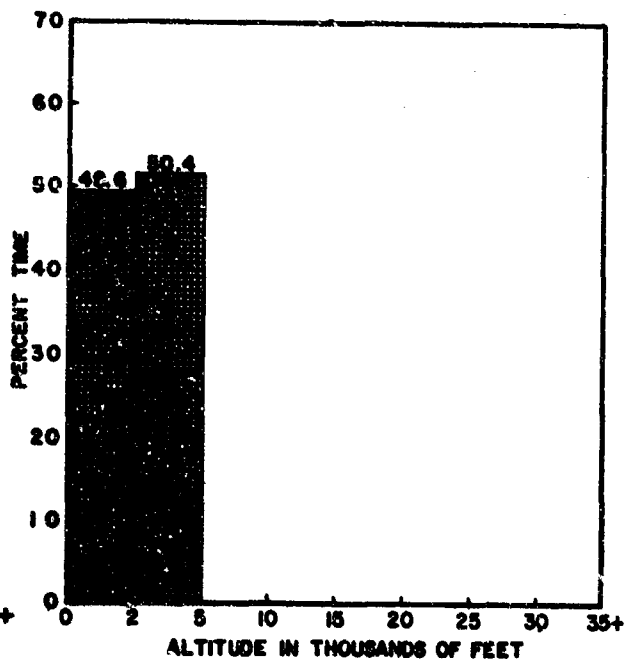


Figure 9

Percentages of Total Flight Time Spent at Selected Altitudes—EASTAF Mission III (Training)

Percentages of Total Flight Time Spent at Selected Altitudes—EASTAF Mission IV (Aerial Delivery)

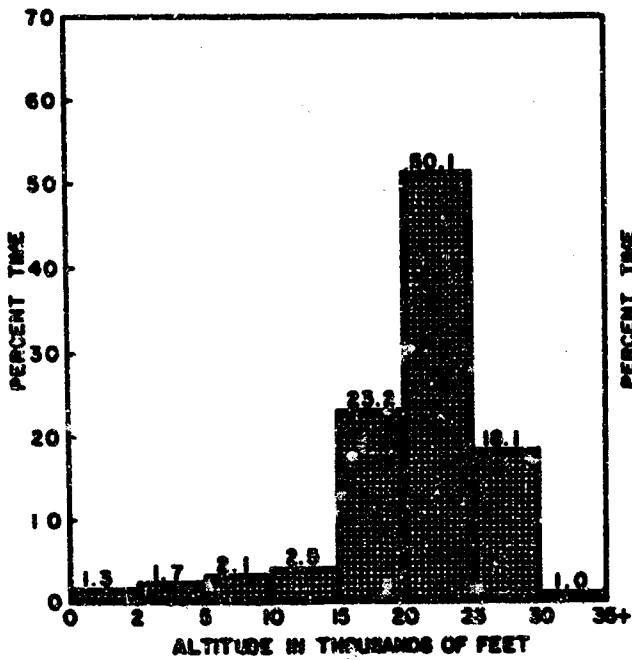


Figure 10

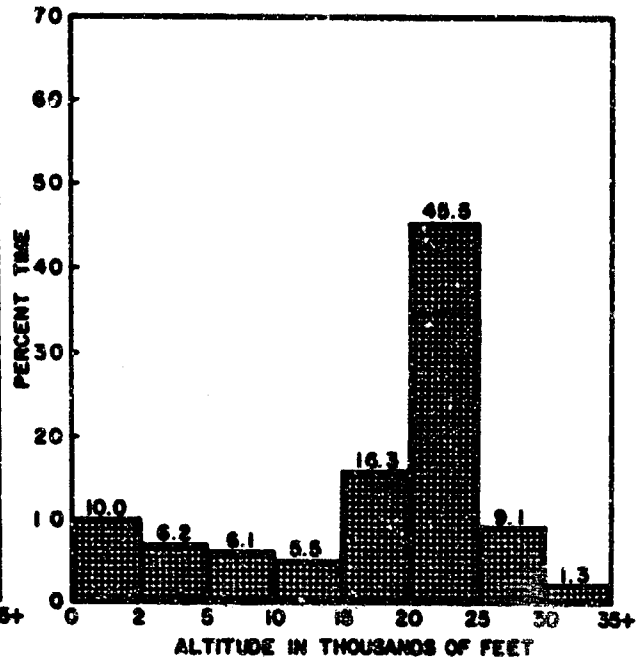


Figure 11

Percentages of Total Flight Time Spent at Selected Altitudes—WESTAF Mission I (Long Range Logistics)

Percentages of Total Flight Time Spent at Selected Altitudes—WESTAF Mission II (Short Range Logistics)

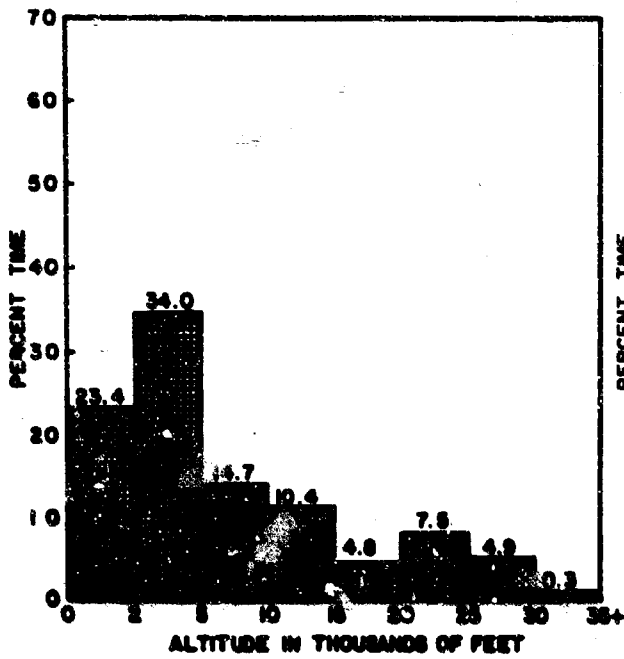


Figure 12

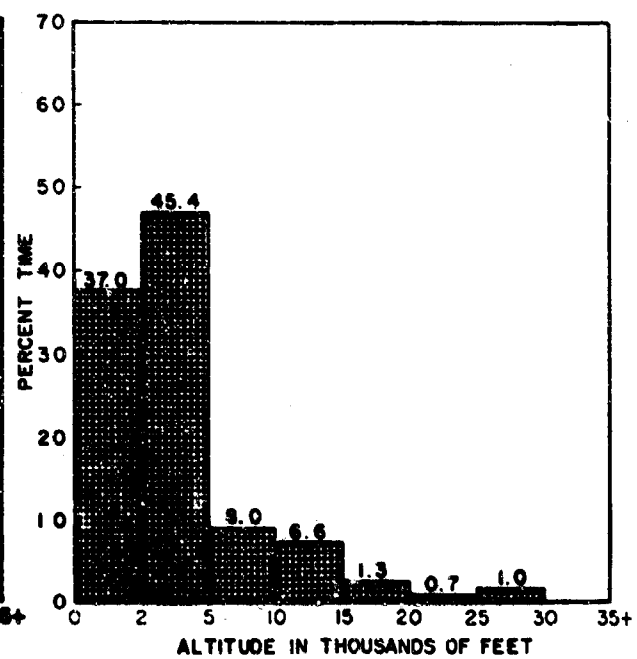


Figure 13

Percentages of Total Flight Time Spent at Selected Altitudes—WESTAF Mission III (Training)

Percentages of Total Flight Time Spent at Selected Altitudes—WESTAF Mission IV (Aerial Delivery)



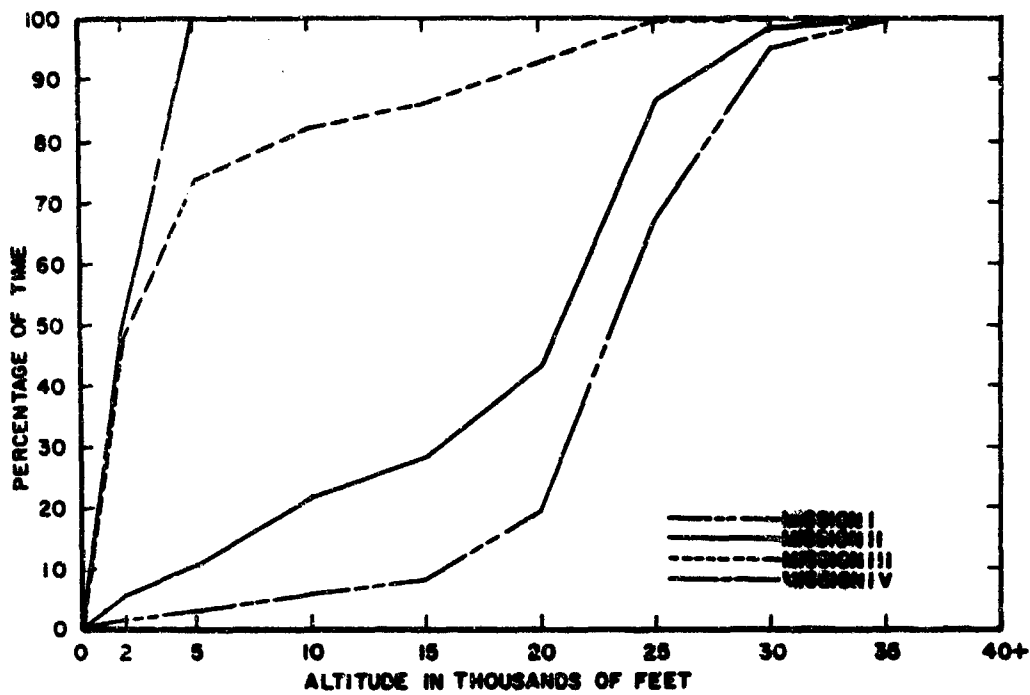


Figure 14. Percentages of Total Flight Time Spent Below Given Altitudes for Each EASTAF Mission Type

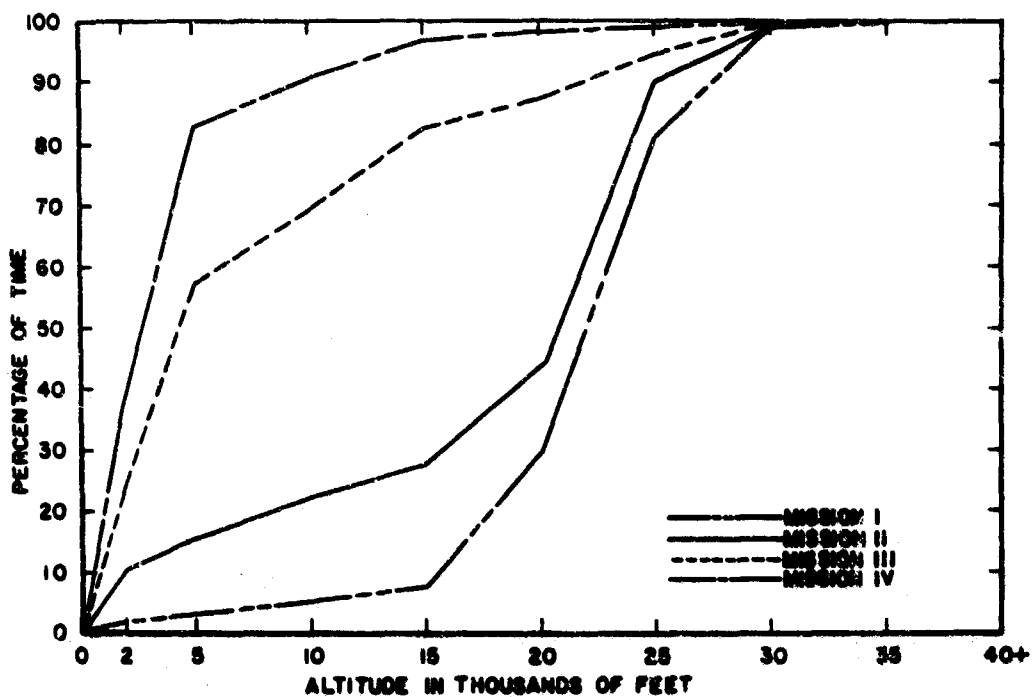


Figure 15. Percentages of Total Flight Time Spent Below Given Altitudes for Each WESTAF Mission Type

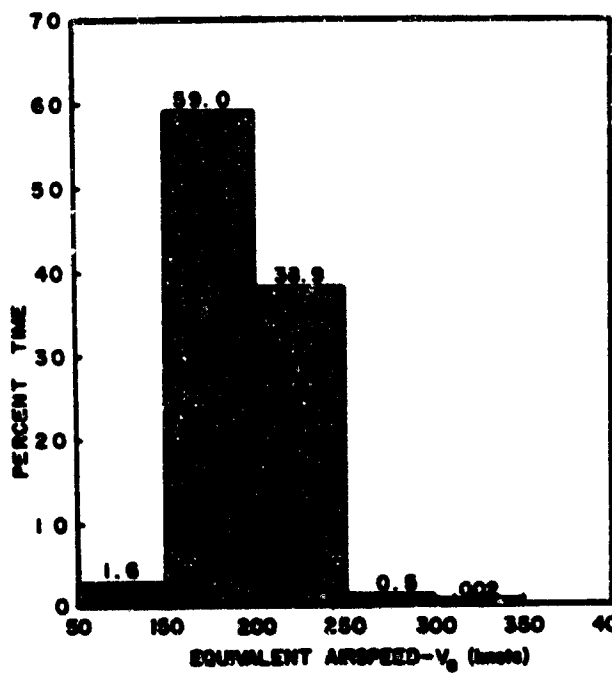


Figure 16

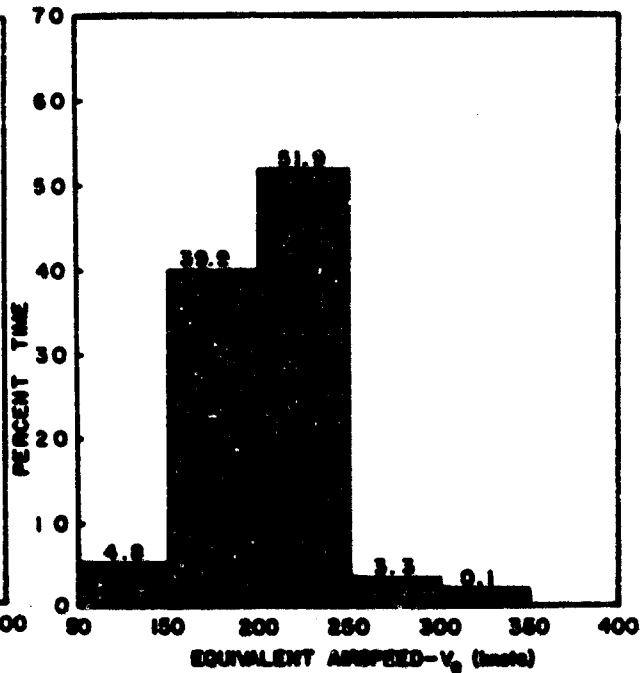


Figure 17

Percentages of Total Flight Time Spent at Selected Airspeeds—EASTAF Mission I (Long Range Logistics)

Percentages of Total Flight Time Spent at Selected Airspeeds—EASTAF Mission II (Short Range Logistics)

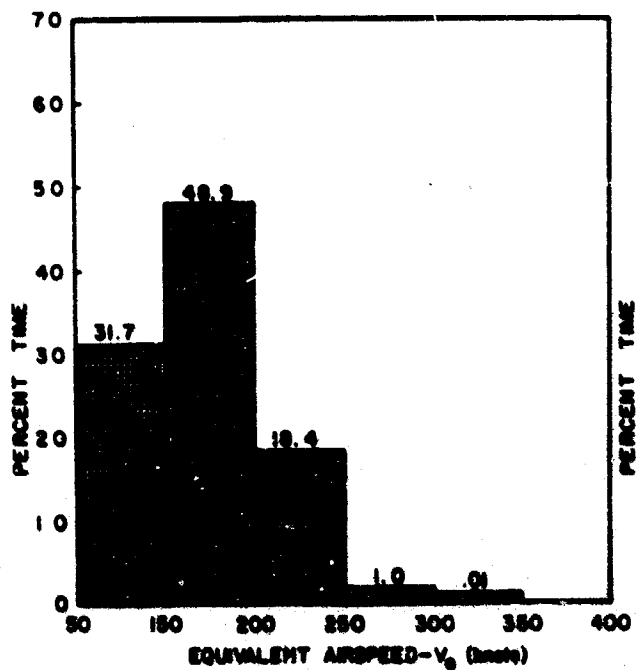


Figure 18

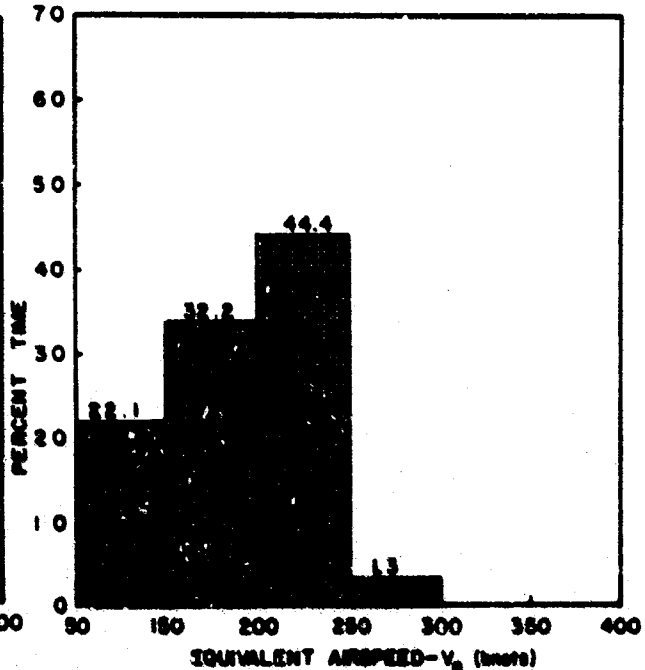


Figure 19

Percentages of Total Flight Time Spent at Selected Airspeeds—EASTAF Mission III (Training)

Percentages of Total Flight Time Spent at Selected Airspeeds—EASTAF Mission IV (Aerial Delivery)

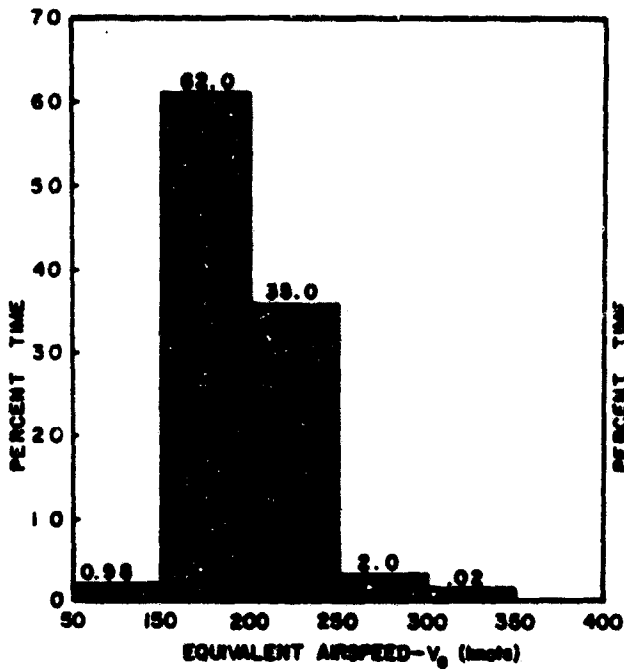


Figure 20

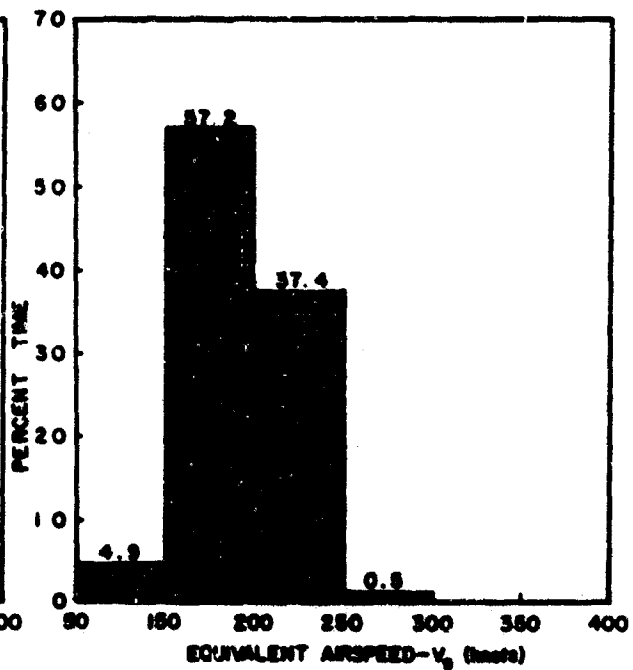


Figure 21

Percentages of Total Flight Time Spent at Selected Airspeeds—WESTAF Mission I (Long Range Logistics)

Percentages of Total Flight Time Spent at Selected Airspeeds—WESTAF Mission II (Short Range Logistics)

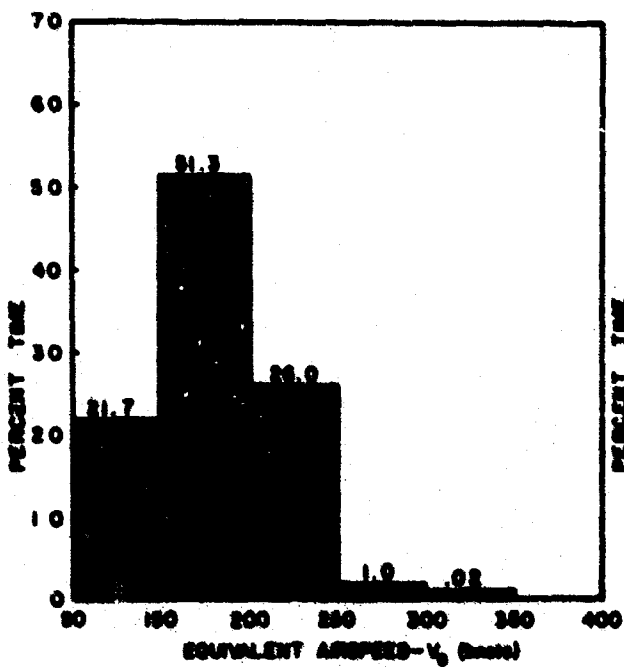


Figure 22

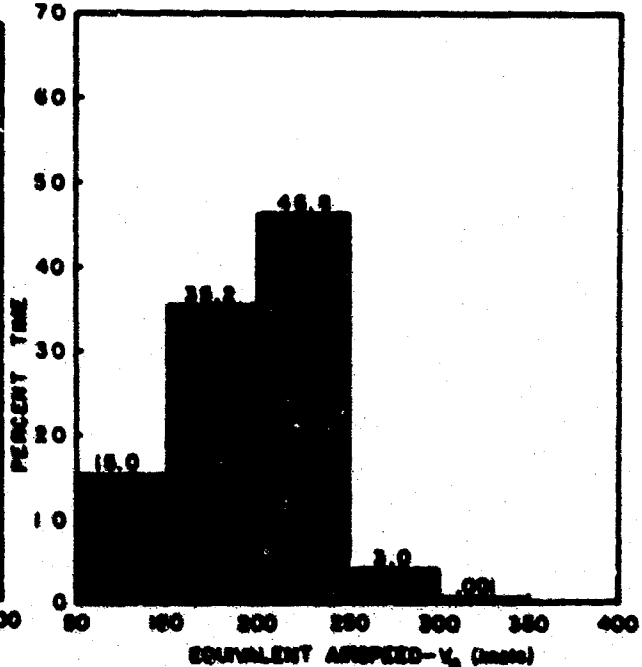


Figure 23

Percentages of Total Flight Time Spent at Selected Airspeeds—WESTAF Mission III (Training)

Percentages of Total Flight Time Spent at Selected Airspeeds—WESTAF Mission IV (Aerial Delivery)

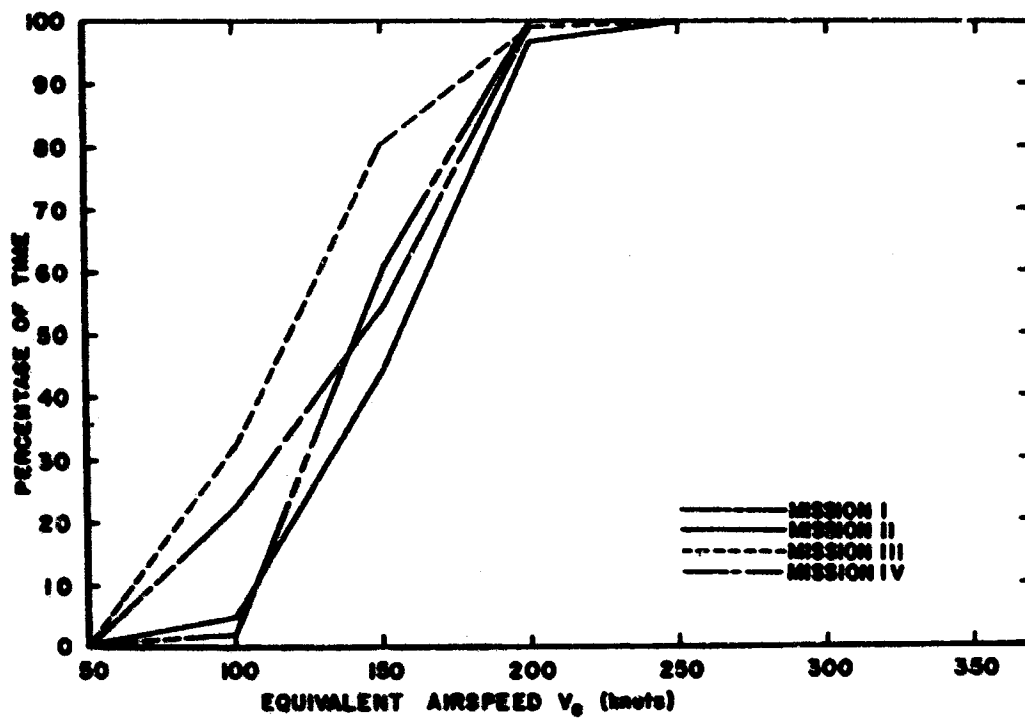


Figure 24. Percentages of Total Flight Time Spent Below Given Airspeeds for Each EASTAF Mission Type

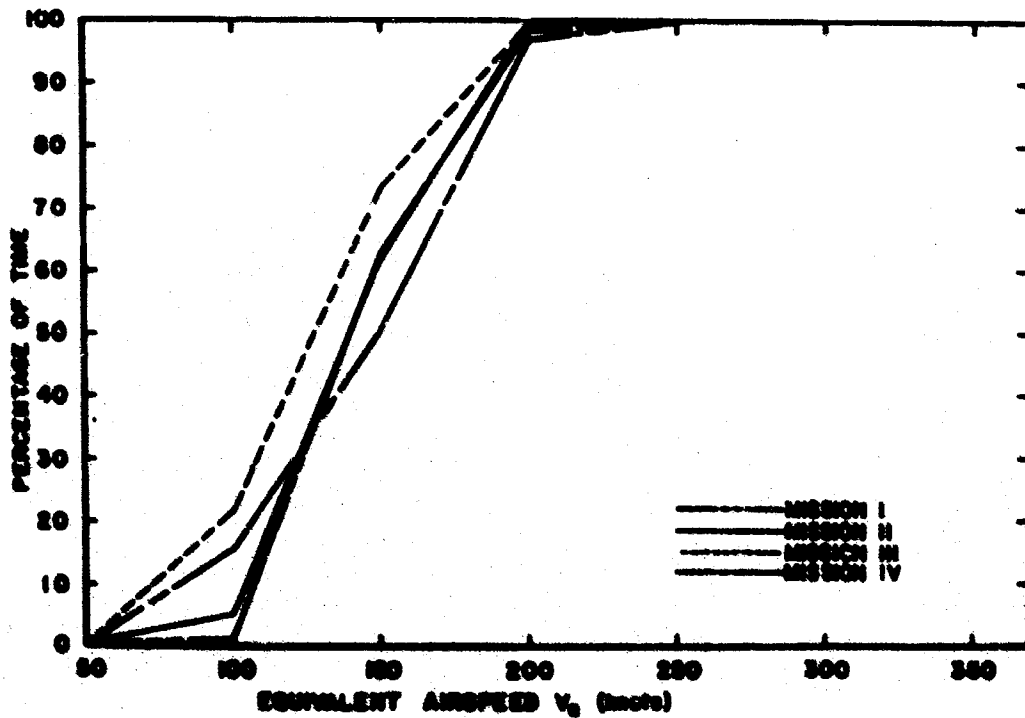


Figure 25. Percentages of Total Flight Time Spent Below Given Airspeeds for Each WESTAF Mission Type

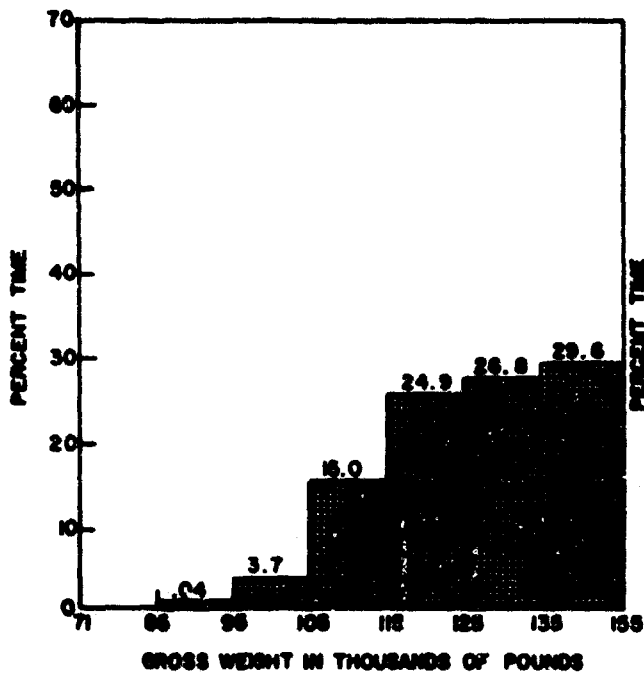


Figure 25

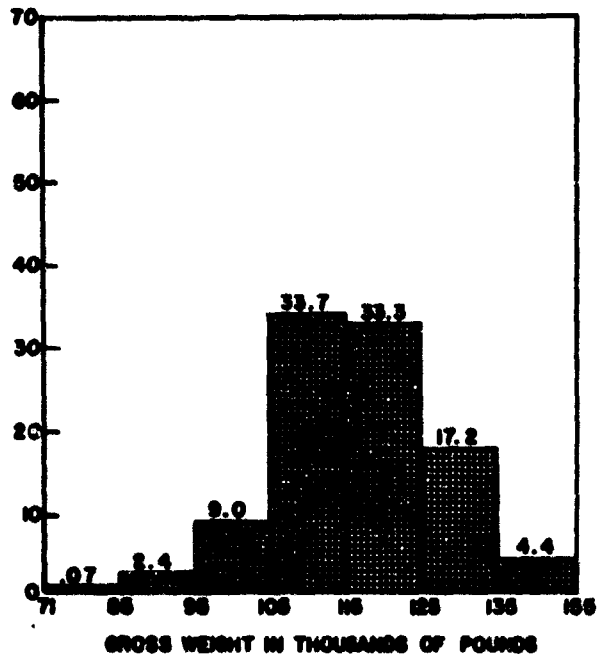


Figure 27

Percentages of Total Flight Time Spent in Selected Gross Weight Ranges  
EASTAF Mission I (Long Range Logistics)

Percentages of Total Flight Time Spent in Selected Gross Weight Ranges  
EASTAF Mission II (Short Range Logistics)

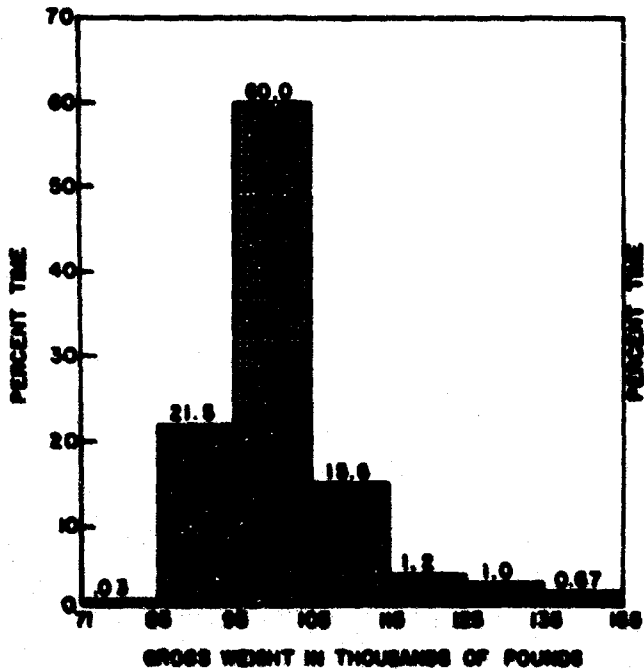


Figure 28

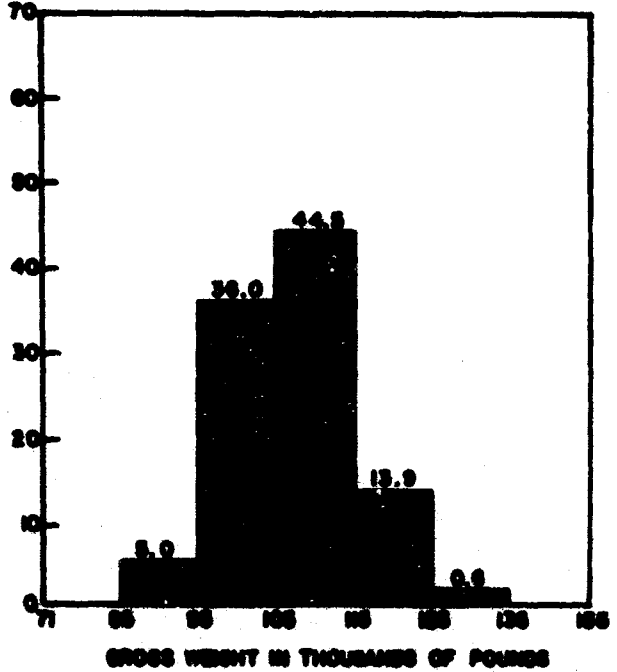


Figure 29

Percentages of Total Flight Time Spent in Selected Gross Weight Ranges  
EASTAF Mission III (Training)

Percentages of Total Flight Time Spent in Selected Gross Weight Ranges  
EASTAF Mission IV (Aerial Delivery)

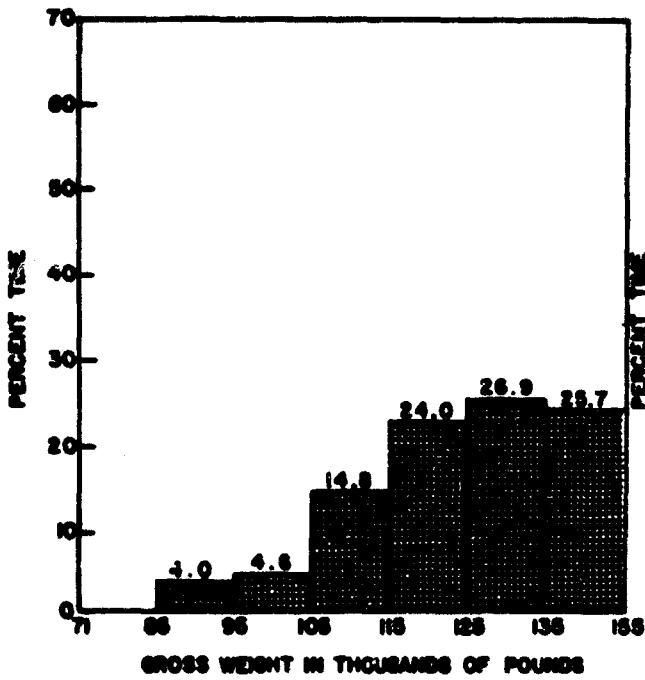


Figure 30

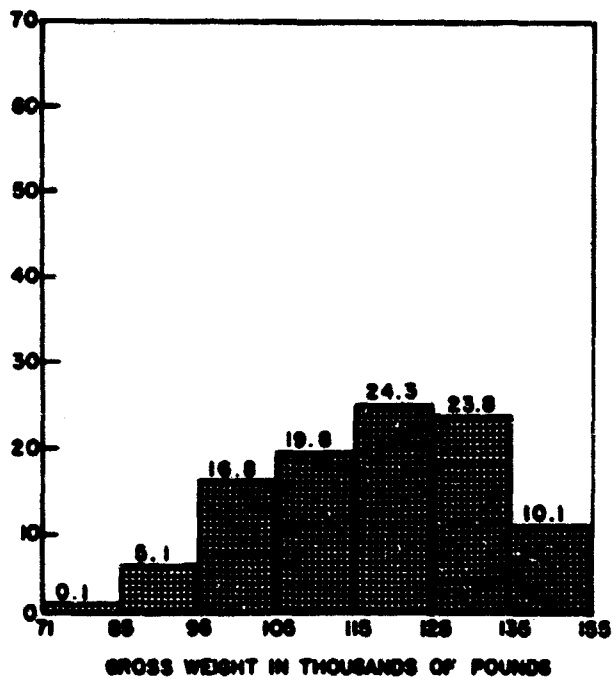


Figure 31

Percentages of Total Flight Time Spent in Selected Gross Weight Ranges  
WESTAF Mission I (Long Range Logistics)

Percentages of Total Flight Time Spent in Selected Gross Weight Ranges  
WESTAF Mission II (Short Range Logistics)

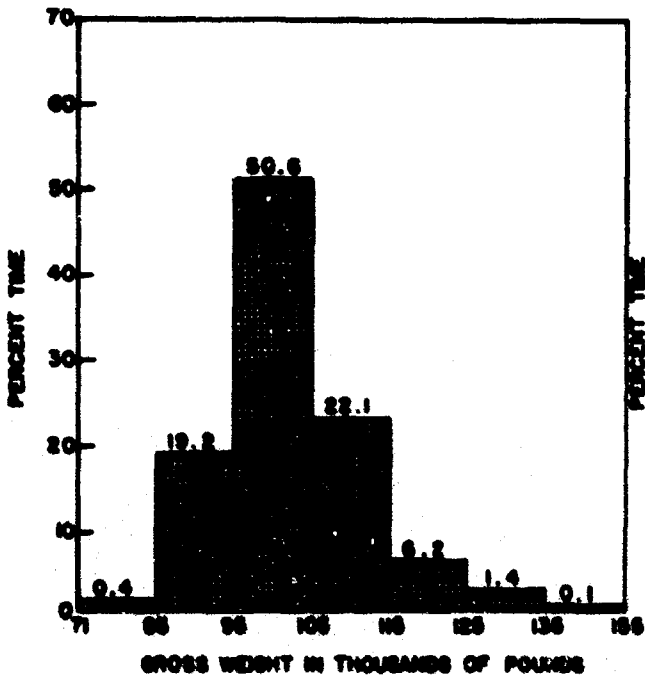


Figure 32

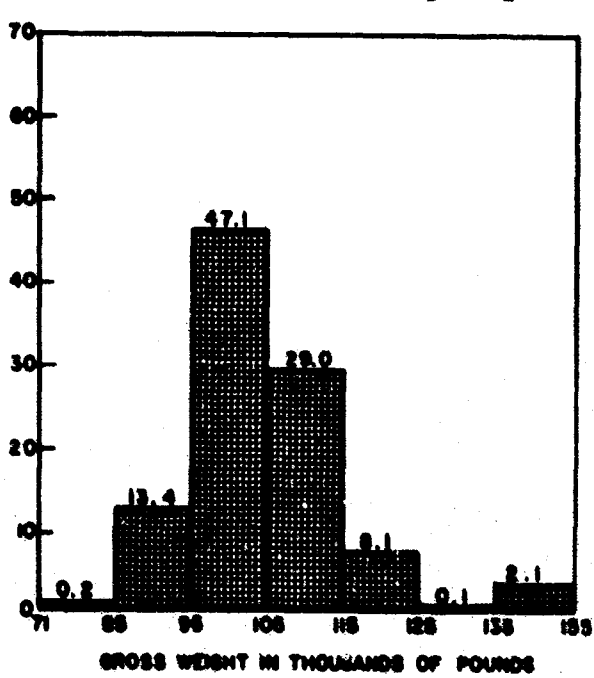


Figure 33

Percentages of Total Flight Time Spent in Selected Gross Weight Ranges  
WESTAF Mission III (Training)

Percentages of Total Flight Time Spent in Selected Gross Weight Ranges  
WESTAF Mission IV (Aerial Delivery)

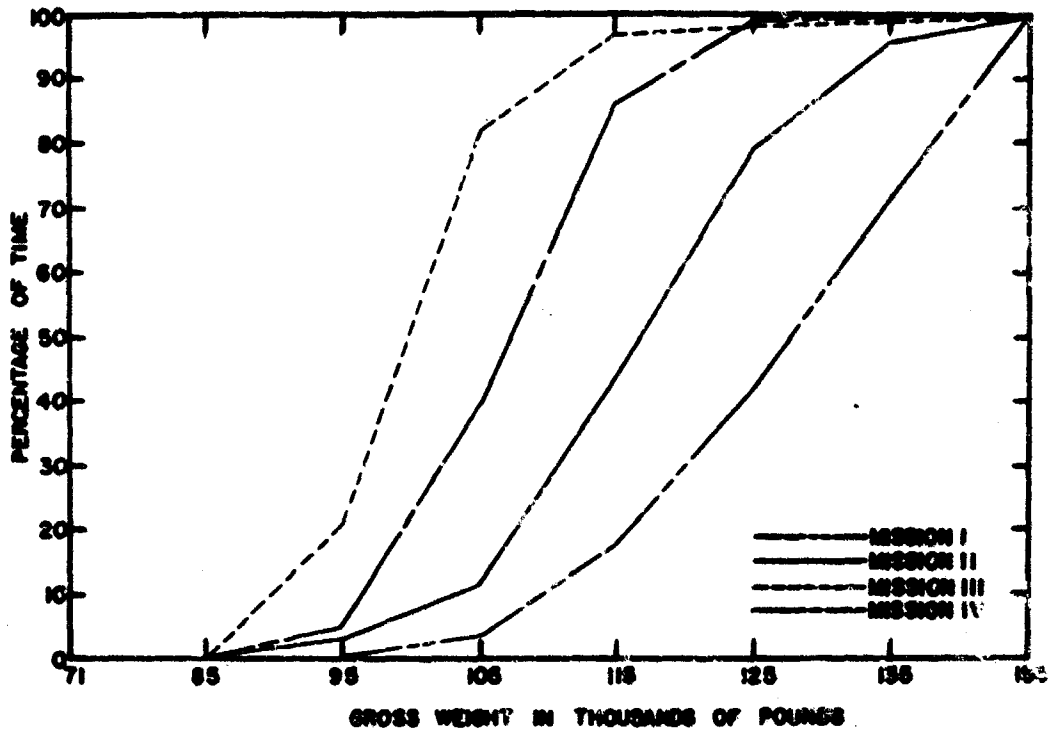


Figure 34. Percentages of Total Flight Time Spent Below Given Gross Weight Ranges for Each EASTAF Mission Type

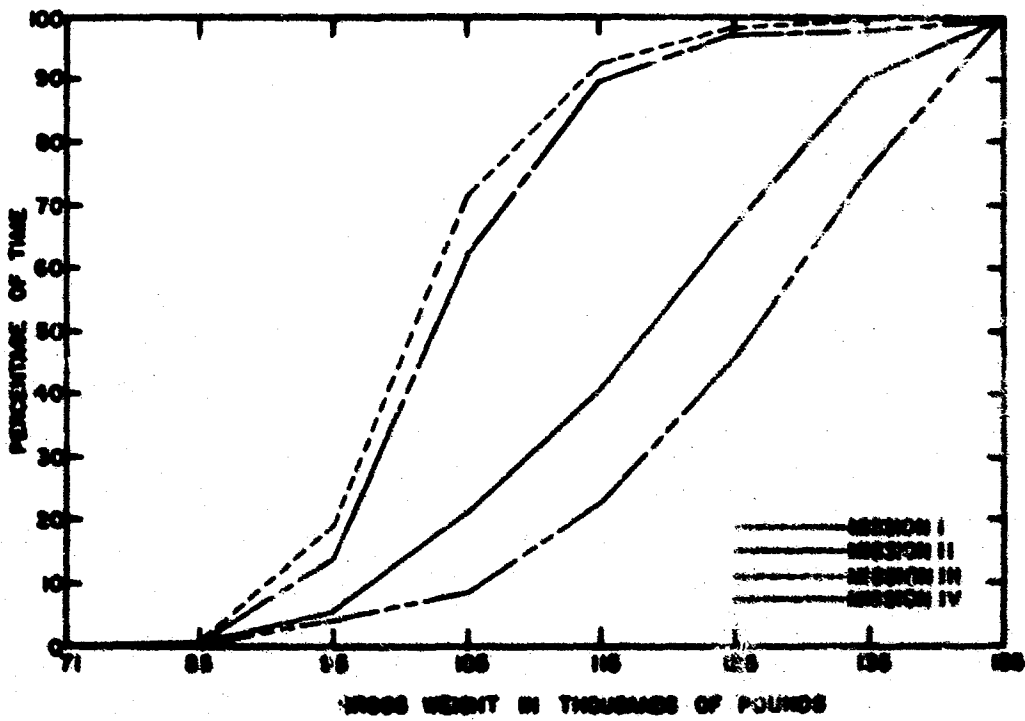


Figure 35. Percentages of Total Flight Time Spent Below Given Gross Weight Ranges for Each WESTAF Mission Type

Table 5

Flight Time Spent in Simultaneous Ranges of Airspeed and  
Altitude — EASTAF Mission I (Long Range Logistics)

PRESSURE ALTITUDE (FEET)	EQUIVALENT AIRSPEED - $V_0$ (KNOTS)						TOTAL TIME (MIN.)
	BELOW 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 & ABOVE	
0- 2,000	631.8	430.5	22.8	1.0			1086.2
2,000- 5,000	426.4	1068.2	254.7	35.2	0.2		1784.7
5,000- 10,000	39.5	1412.5	618.0	88.5	1.1		2159.6
10,000- 15,000	37.0	1660.1	652.6	190.3	0.3		2540.4
15,000- 20,000	108.0	3496.7	6561.9	111.7			10278.4
20,000- 25,000	142.7	21510.9	22926.3	37.8			44617.8
25,000- 30,000	90.7	21370.5	4412.7	1.7			25875.6
30,000 & ABOVE	9.5	3651.8	543.6				4204.9
TOTAL TIME (MIN.)	1485.7	54601.3	35992.8	466.3	1.6		92547.6

Table 6

Flight Time Spent in Simultaneous Ranges of Airspeed and  
Altitude — WESTAF Mission I (Long Range Logistics)

PRESSURE ALTITUDE (FEET)	EQUIVALENT AIRSPEED - $V_0$ (KNOTS)						TOTAL TIME (MIN.)
	BELOW 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 & ABOVE	
0- 2,000	770.2	775.0	103.3	11.7	0.4		1660.7
2,000- 5,000	319.4	1326.6	553.5	64.5	3.8		2267.7
5,000- 10,000	22.9	1761.8	904.0	91.6	11.0		2791.3
10,000- 15,000	1.8	2264.6	849.5	84.6	7.6		3208.1
15,000- 20,000	57.8	8504.4	20386.9	1457.4	6.1		30412.6
20,000- 25,000	80.5	43368.9	21242.8	841.4			65533.5
25,000- 30,000	23.3	21844.9	1790.3	2.0			23660.5
30,000 & ABOVE	5.0	1311.4					1319.4
TOTAL TIME (MIN.)	1283.9	91157.6	45830.2	2553.1	28.9		130853.8



Table 7

Flight Time Spent in Simultaneous Ranges of Airspeed and Altitude — EASTAF Mission II (Short Range Logistics)

PRESSURE ALTITUDE (FEET)	EQUIVALENT AIRSPEED - $V_0$ (KNOTS)						TOTAL TIME (MIN.)
	BELOW 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 & ABOVE	
0- 2,000	162.0	1023.7	233.2	39.4	2.2		2919.5
2,000- 5,000	671.7	1492.6	1009.6	297.1	10.9		3882.0
5,000- 10,000	49.7	1775.2	2439.6	637.8	23.1		4925.5
10,000- 15,000	53.0	1714.4	1339.4	433.5	3.2		3543.5
15,000-20,000	85.2	2346.7	5347.5	312.3	1.3		8092.9
20,000-25,000	85.9	8422.6	14739.2	29.4			23277.1
25,000-30,000	26.5	3423.0	2844.2	0.5			6294.2
30,000& ABOVE	1.5	920.7	30.4				952.6
TOTAL TIME (MIN.)	2594.6	21518.8	27983.1	1750.0	40.7		53887.3

Table 8

Flight Time Spent in Simultaneous Ranges of Airspeed and Altitude — WESTAF Mission II (Short Range Logistics)

PRESSURE ALTITUDE (FEET)	EQUIVALENT AIRSPEED - $V_0$ (KNOTS)						TOTAL TIME (MIN.)
	BELOW 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 & ABOVE	
0- 2,000	211.1	215.0	488.2	2.8			917.1
2,000- 5,000	120.7	278.8	159.3	8.0			566.9
5,000- 10,000	54.8	551.5	141.5	7.8			555.6
10,000- 15,000	0.6	316.3	168.4	13.7			498.9
15,000-20,000	7.9	641.0	833.9	13.0			1495.8
20,000-25,000	11.9	2521.7	1625.7	2.1			4161.4
25,000-30,000	27.3	800.5	4.4				832.1
30,000& ABOVE	8.9	105.1	2.0				116.0
TOTAL TIME (MIN.)	443.2	5230.0	3423.2	47.4			9143.8

Table 9

Flight Time Spent in Simultaneous Ranges of Air-  
speed and Altitude — EASTAF Mission III (Training)

PRESSURE ALTITUDE (FEET)	EQUIVALENT AIRSPEED - $V_0$ (KNOTS)						TOTAL TIME (MIN.)
	BELOW 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 & ABOVE	
0- 2,000	9410.5	6611.9	1707.6	69.9	0.3		17800.1
2,000- 5,000	2003.1	5330.3	1956.1	100.8	2.0		9892.3
5,000- 10,000	289.0	1894.1	854.4	111.2	0.1		3148.7
10,000- 15,000	145.4	1171.9	396.2	41.9			1755.4
15,000- 20,000	79.5	1420.6	912.8	39.0			2451.9
20,000- 25,000	46.6	1376.3	1074.4	4.0			2501.6
25,000- 30,000	5.4	114.3	43.2				162.8
30,000& ABOVE	14.7	77.3					92.0
TOTAL TIME (MIN.)	11994.2	18496.6	6945.0	366.7	2.4		37804.8

Table 10

Flight Time Spent in Simultaneous Ranges of Air-  
speed and Altitude — WESTAF Mission III (Training)

PRESSURE ALTITUDE (FEET)	EQUIVALENT AIRSPEED - $V_0$ (KNOTS)						TOTAL TIME (MIN.)
	BELOW 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 & ABOVE	
0- 2,000	5054.8	3326.8	1077.9	52.4			9512.0
2,000- 5,000	2839.7	7559.2	3346.6	87.6	1.9		13835.0
5,000- 10,000	500.7	4180.7	1220.1	78.7	3.3		5983.4
10,000- 15,000	287.9	2041.9	1874.4	36.0	3.9		4244.1
15,000- 20,000	84.2	811.0	1065.8	8.8	1.5		1971.3
20,000- 25,000	42.5	1415.9	1440.4	146.2			3045.0
25,000- 30,000	10.0	1450.3	540.0				2000.3
30,000& ABOVE	0.2	109.1					109.3
TOTAL TIME (MIN.)	8819.9	20894.8	10565.3	409.8	10.5		40700.4

Table 11

Flight Time Spent in Simultaneous Ranges of Airspeed  
and Altitude — EASTAF Mission IV (Aerial Delivery)

PRESSURE ALTITUDE (FEET)	EQUIVALENT AIRSPEED - $V_0$ (KNOTS)						TOTAL TIME (MIN.)
	BELOW 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 & ABOVE	
0- 2,000	416.7	461.9	742.5	38.7			1659.8
2,000- 5,000	323.0	618.0	742.6	5.6			1689.2
5,000- 10,000							
10,000- 15,000							
15,000- 20,000							
20,000- 25,000							
25,000- 30,000							
30,000& ABOVE							
TOTAL TIME (MIN)	739.7	1079.8	1485.1	44.4			3349.0

Table 12

Flight Time Spent in Simultaneous Ranges of Airspeed  
and Altitude — WESTAF Mission IV (Aerial Delivery)

PRESSURE ALTITUDE (FEET)	EQUIVALENT AIRSPEED - $V_0$ (KNOTS)						TOTAL TIME (MIN.)
	BELOW 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 & ABOVE	
0- 2,000	999.7	993.1	1906.3	75.1			3974.3
2,000- 5,000	596.5	1773.8	2325.3	183.9	0.1		4879.6
5,000- 10,000	9.9	509.2	294.8	44.3			858.3
10,000- 15,000	2.3	358.6	330.3	15.2			706.5
15,000- 20,000	1.2	23.2	115.8	0.6			140.8
20,000- 25,000		11.9	58.1				70.1
25,000- 30,000	2.0	104.7	2.0				108.7
30,000& ABOVE							
TOTAL TIME (MIN)	1611.7	3774.7	5032.6	319.2	0.1		10738.3

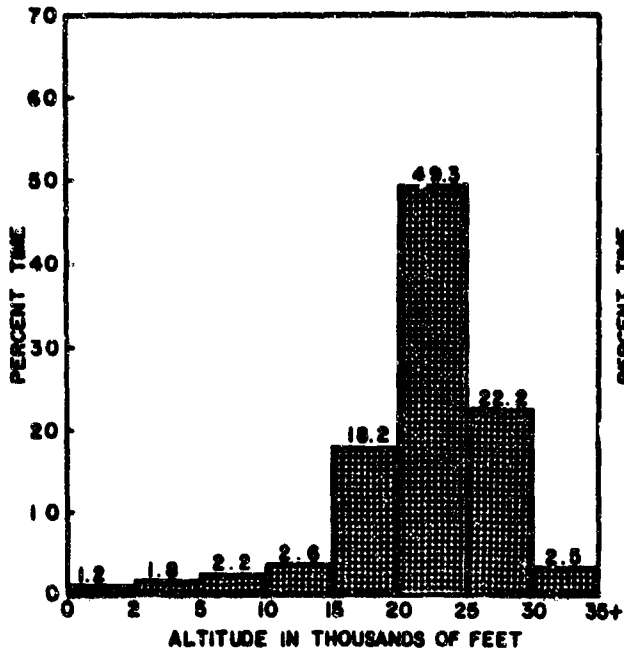


Figure 36

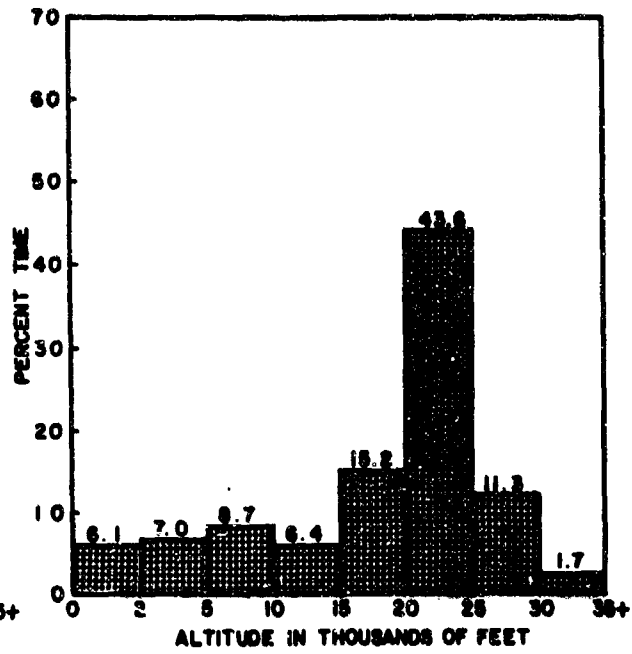


Figure 37

Percentages of Total Flight Time Spent at Selected Altitudes—EASTAF and WESTAF Mission I (Long Range Logistics)

Percentages of Total Flight Time Spent at Selected Altitudes—EASTAF and WESTAF Mission II (Short Range Logistics)

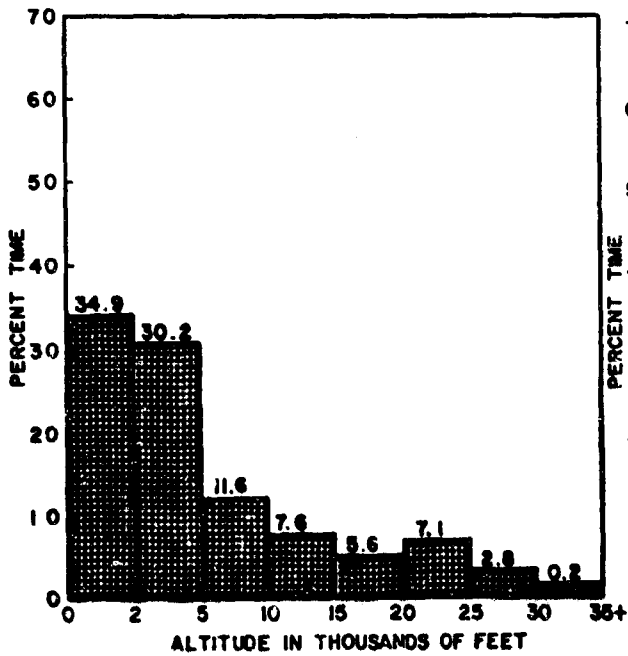


Figure 38

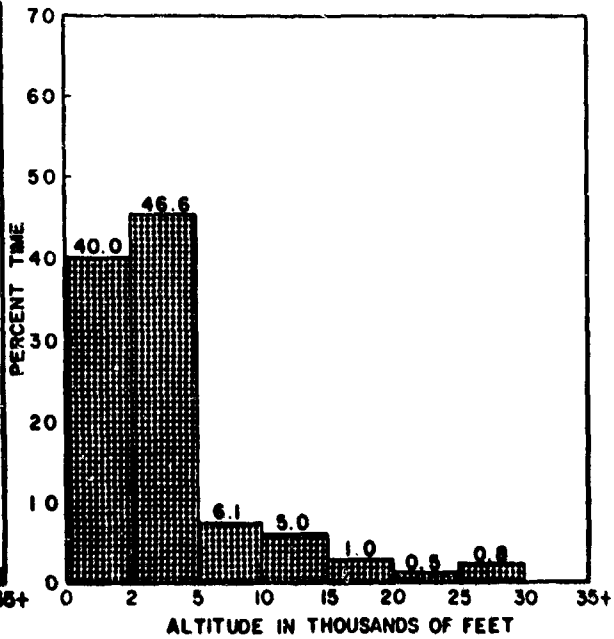


Figure 39

Percentages of Total Flight Time Spent at Selected Altitudes—EASTAF and WESTAF Mission III (Training)

Percentages of Total Flight Time Spent at Selected Altitudes—EASTAF and WESTAF Mission IV (Aerial Delivery)

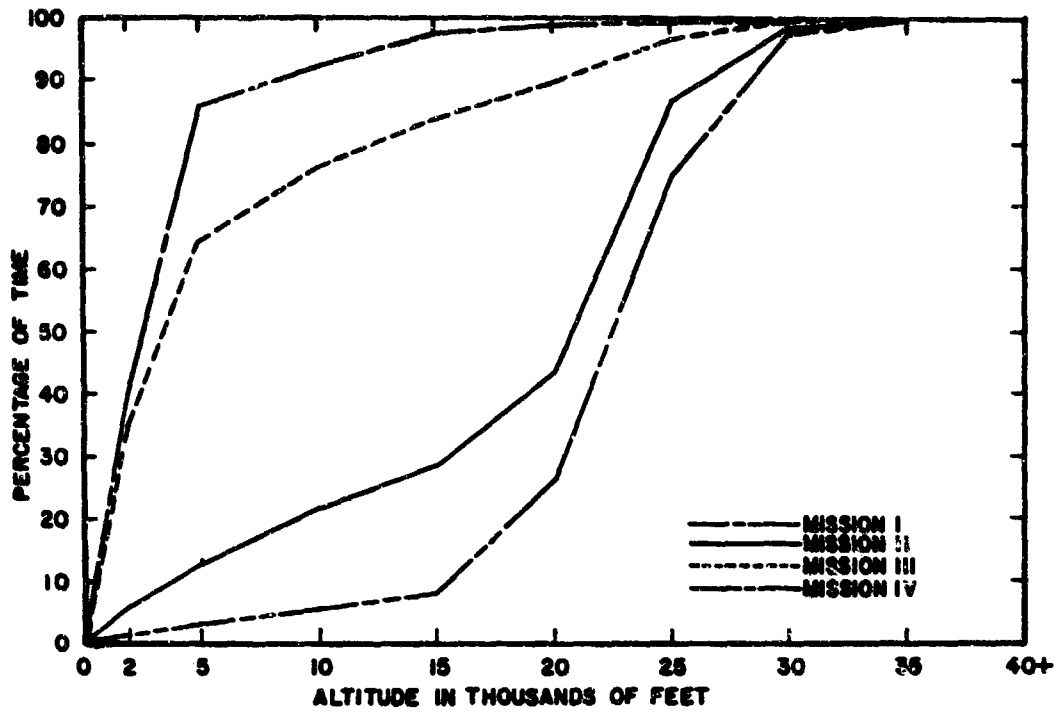


Figure 40. Percentages of Total Flight Time Spent Below Given Altitudes for Each EASTAF and WESTAF Mission Type

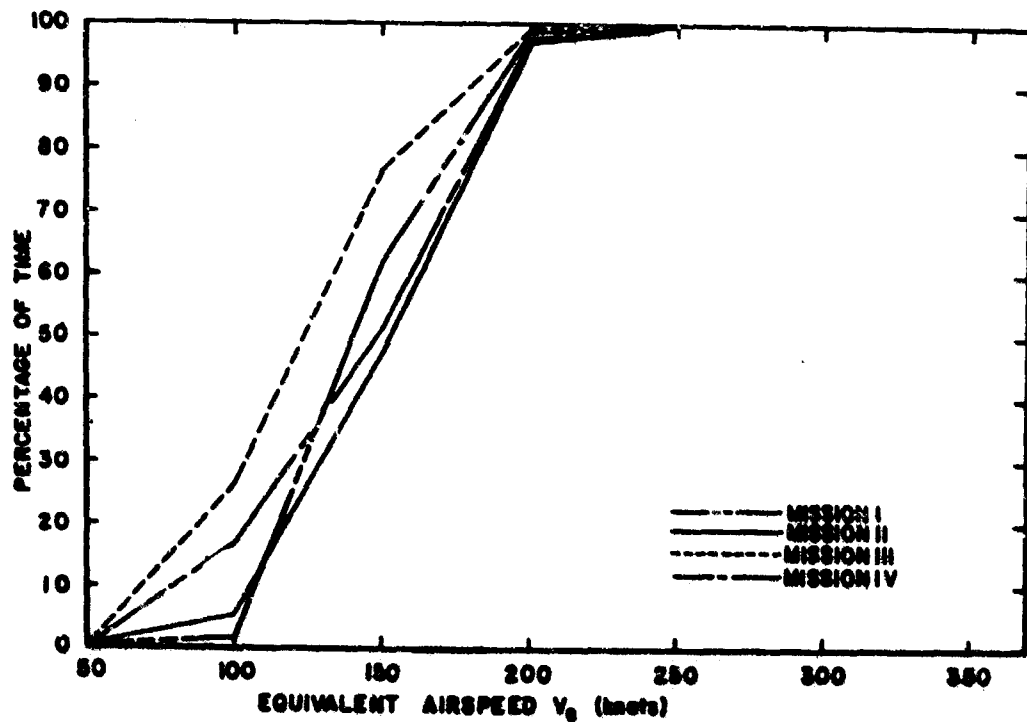


Figure 41. Percentages of Total Flight Time Spent Below Given Airspeeds for Each EASTAF and WESTAF Mission Type

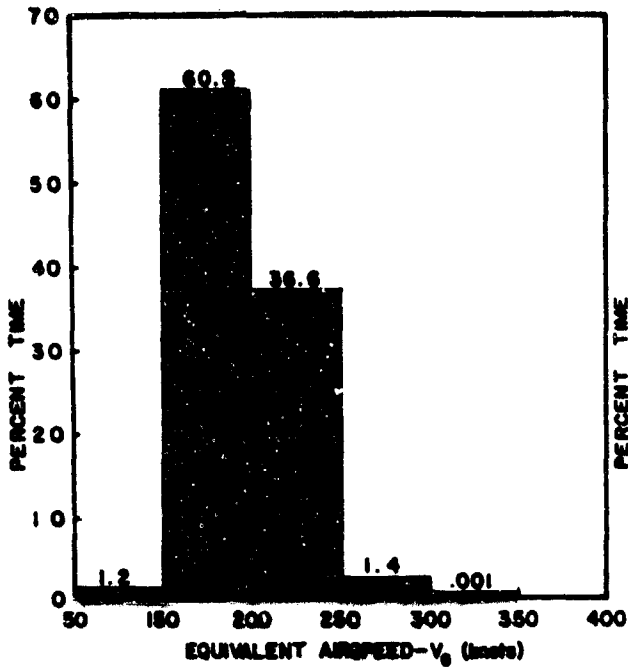


Figure 42

Percentages of Total Flight Time Spent at Selected Airspeeds-EASTAF and WESTAF Mission I (Long Range Logistics)

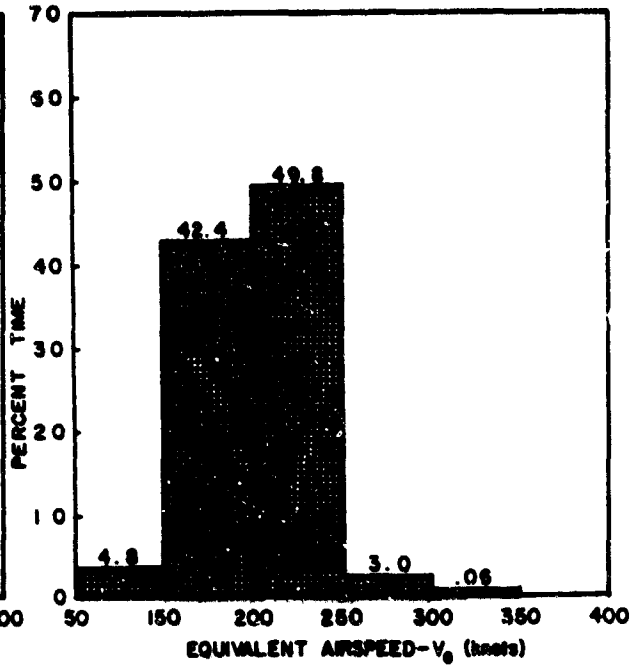


Figure 43

Percentages of Total Flight Time Spent at Selected Airspeeds-EASTAF and WESTAF Mission II (Short Range Logistics)

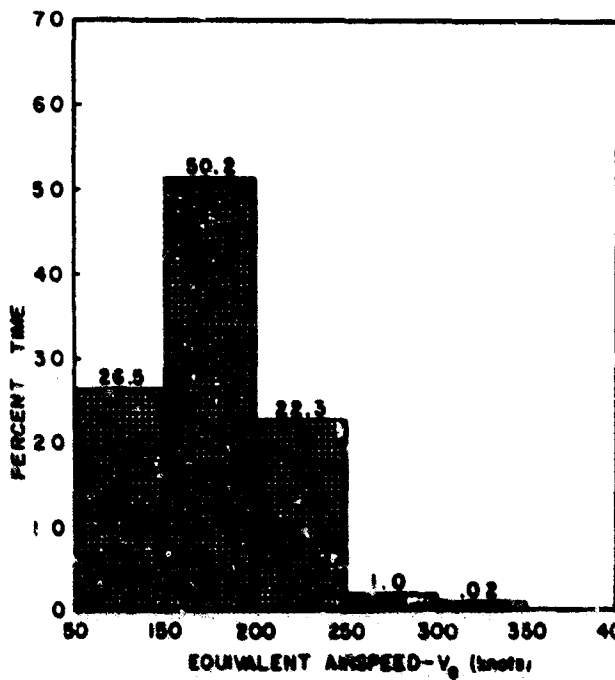


Figure 44

Percentages of Total Flight Time Spent at Selected Airspeeds-EASTAF and WESTAF Mission III (Training)

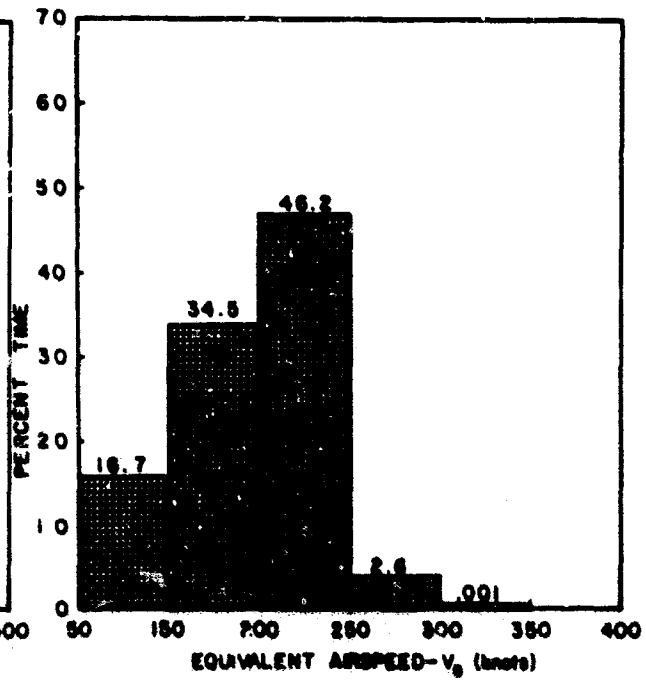


Figure 45

Percentages of Total Flight Time Spent at Selected Airspeeds-EASTAF and WESTAF Mission IV (Aerial Delivery)

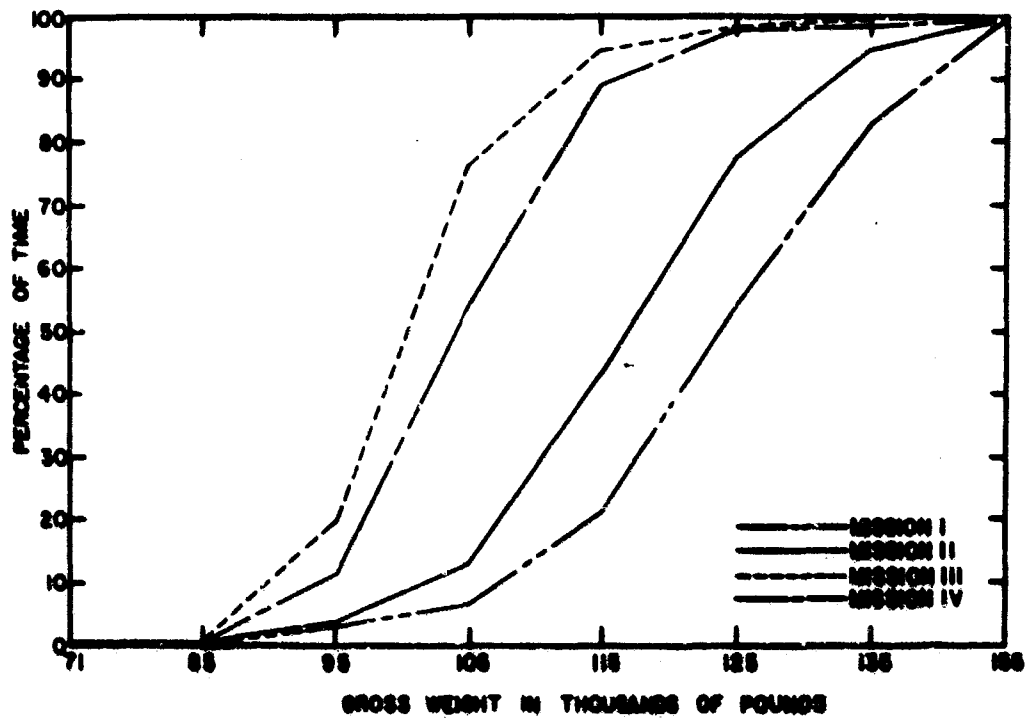


Figure 46. Percentages of Total Flight Time Spent Below Given Gross Weight Ranges for Each EASTAF and WESTAF Mission Type

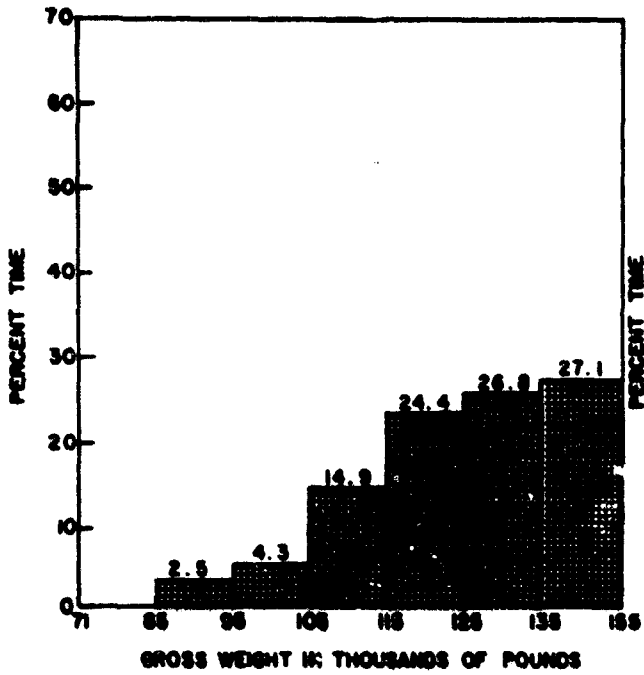


Figure 47

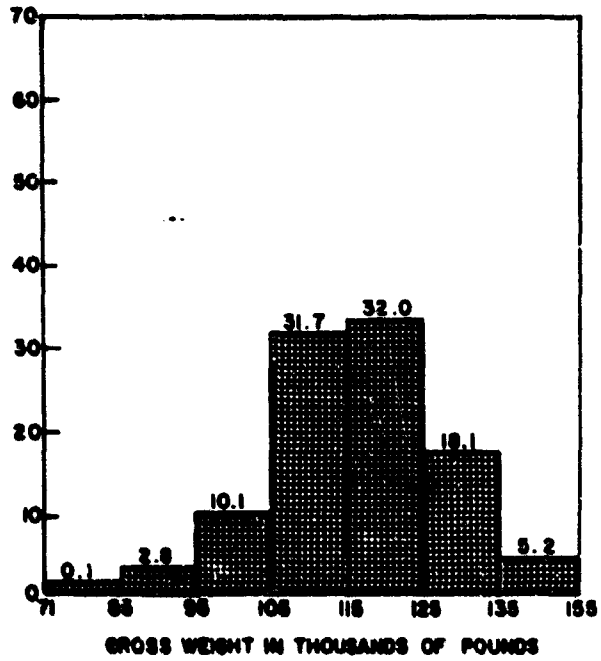


Figure 48

Percentages of Total Flight Time Spent in Selected Gross Weight Ranges—EASTAF-WESTAF Mission I (Long Range Logistics)

Percentages of Total Flight Time Spent in Selected Gross Weight Ranges—EASTAF-WESTAF Mission II (Short Range Logistics)

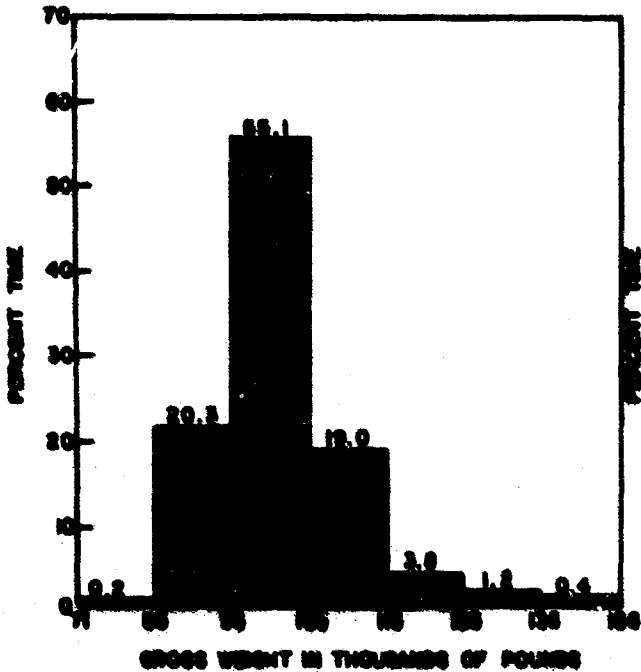


Figure 49

Percentages of Total Flight Time Spent in Selected Gross Weight Ranges—EASTAF-WESTAF Mission III (Training)

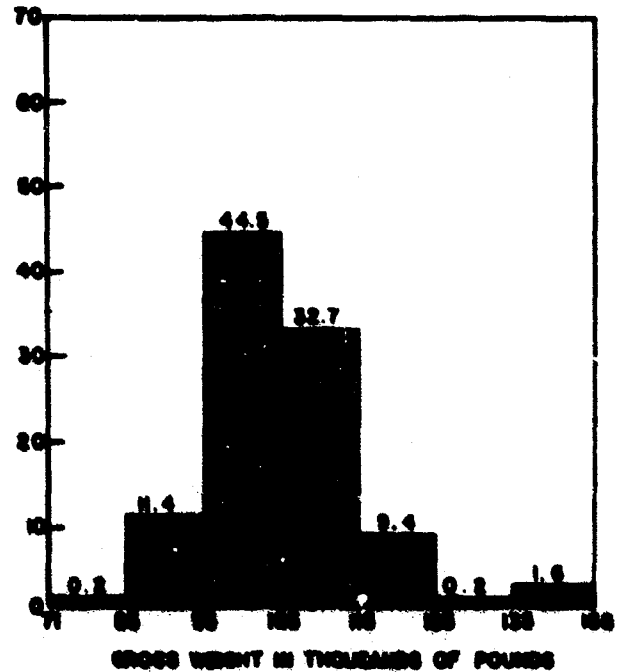


Figure 50

Percentages of Total Flight Time Spent in Selected Gross Weight Ranges—EASTAF-WESTAF Mission IV (Aerial Delivery)



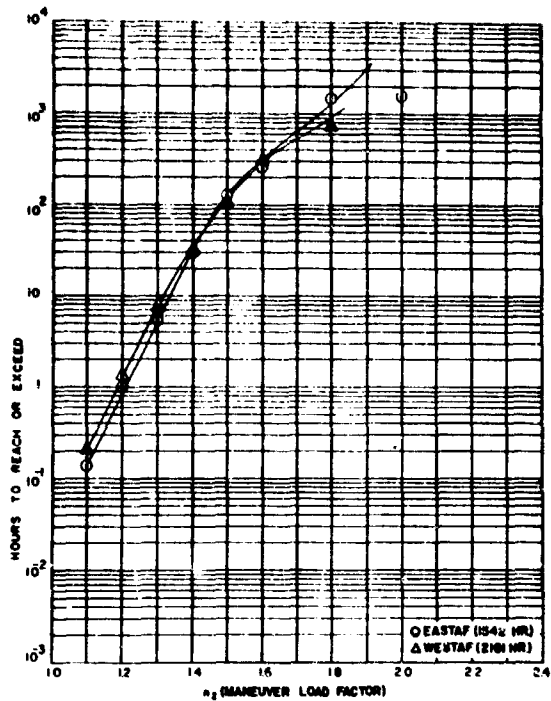


Figure 51

Maneuver Load Factor Exceedance Curves for Each Base—  
Mission I (Long Range Logistics)

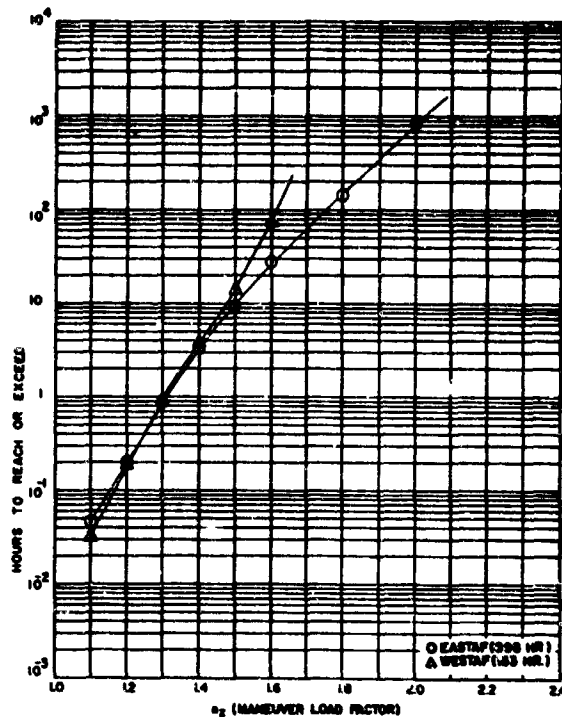


Figure 52

Maneuver Load Factor Exceedance Curves for Each Base—  
Mission II (Short Range Logistics)

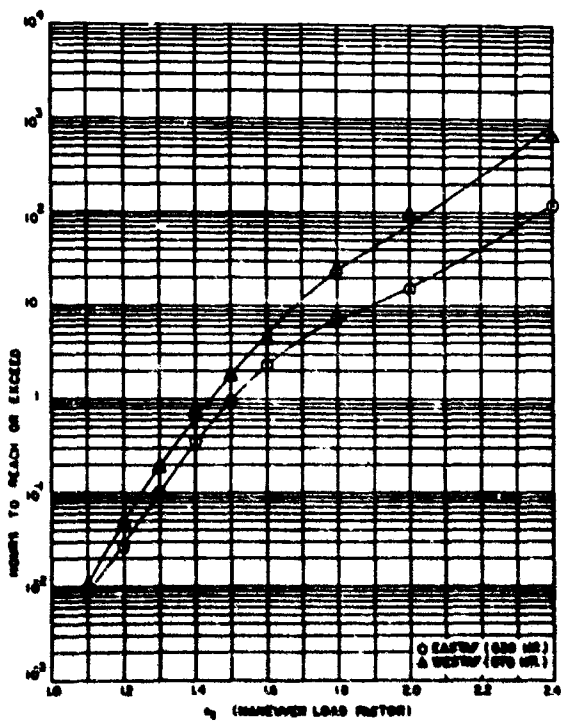


Figure 53

Maneuver Load Factor Exceedance Curves for Each Base—  
Mission III (Training)

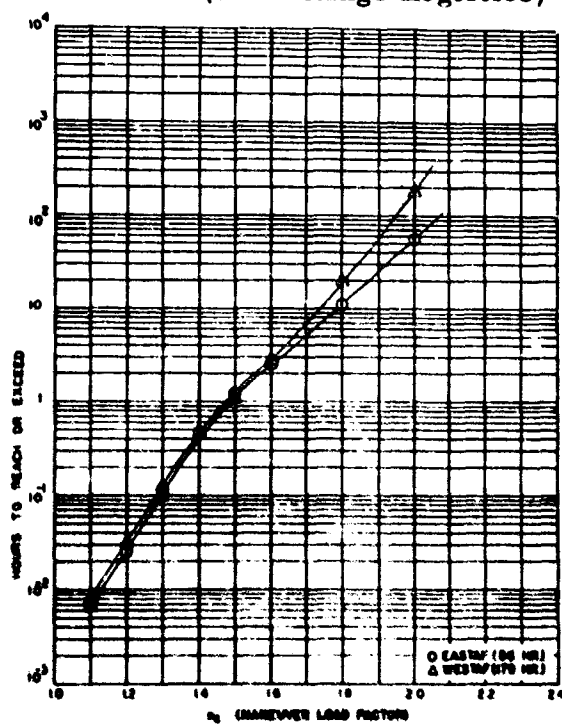


Figure 54

Maneuver Load Factor Exceedance Curves for Each Base—  
Mission IV (Aerial Delivery)

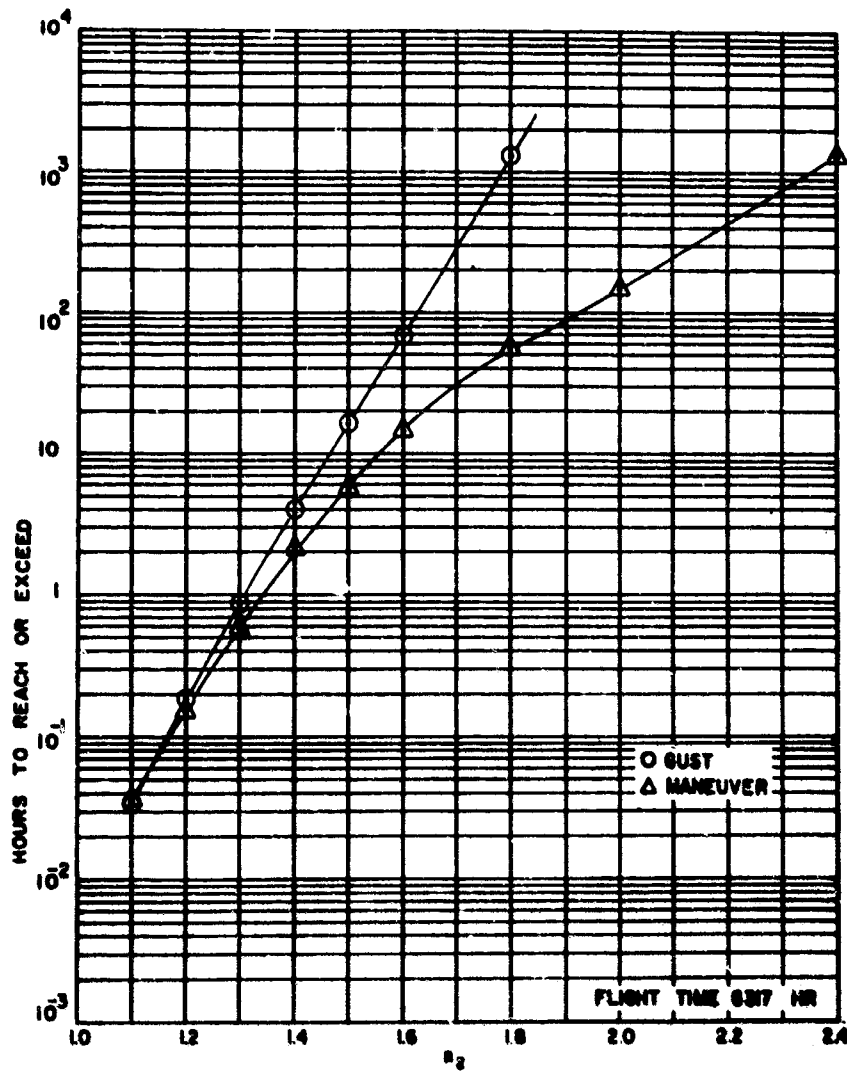


Figure 55. Maneuver and Gust Load Factor Exceedance Curves—  
Weighted Composites for All Missions and Bases

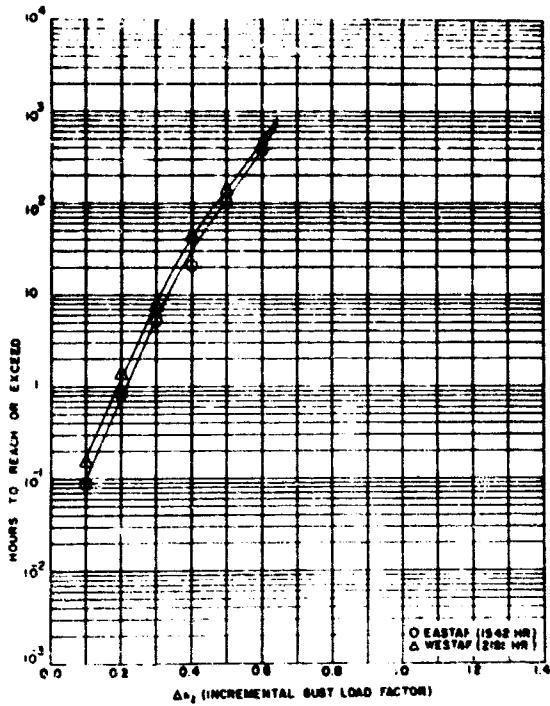


Figure 56  
Incremental Gust Load Factor Exceedance Curves for Each Base Mission I (Long Range Logistics)

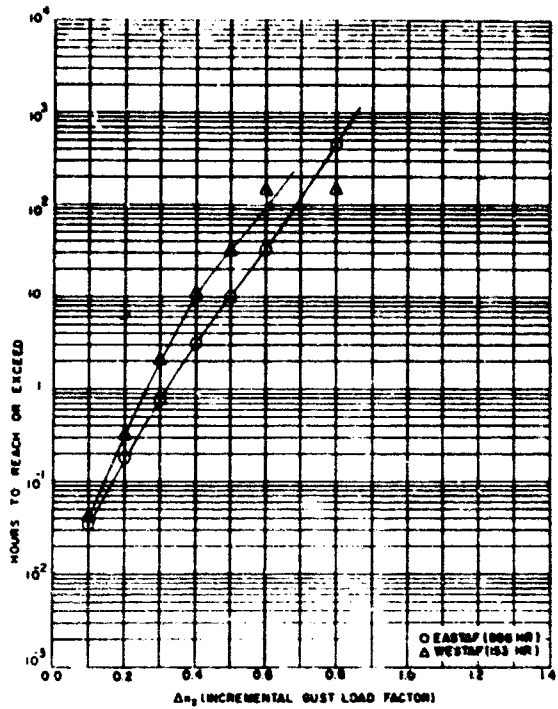


Figure 57  
Incremental Gust Load Factor Exceedance Curves for Each Base Mission II (Short Range Logistics)

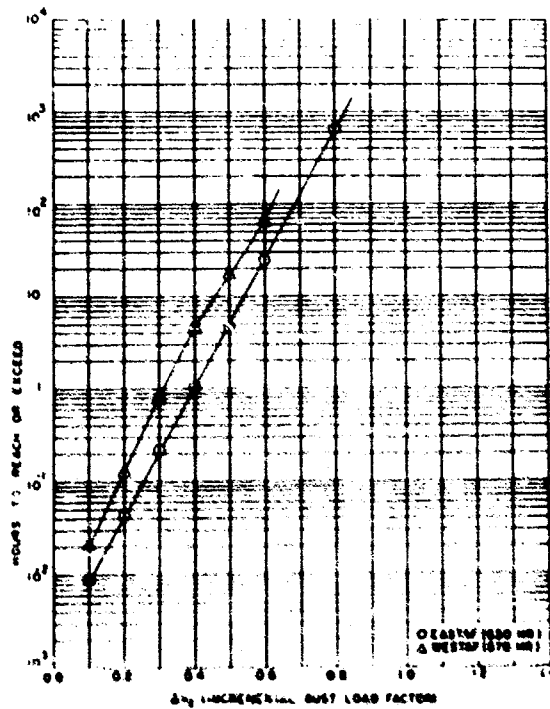


Figure 58  
Incremental Gust Load Factor Exceedance Curves for Each Base Mission III (Training)

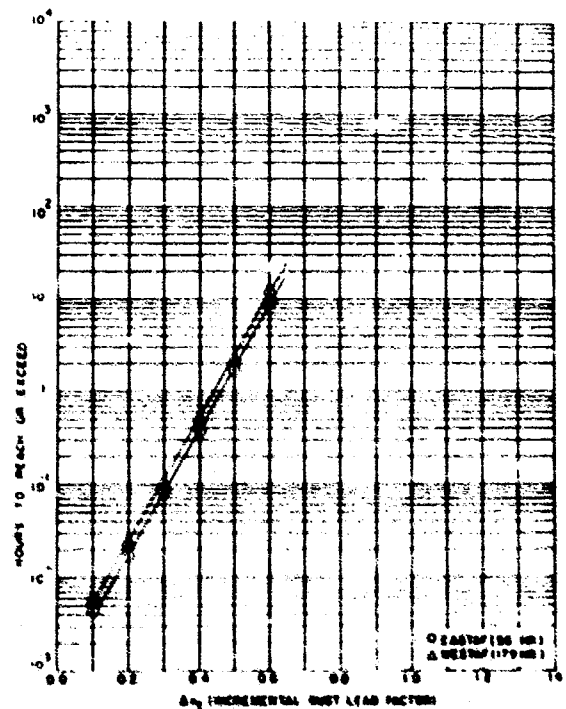


Figure 59  
Incremental Gust Load Factor Exceedance Curves for Each Base Mission IV (Aerial Delivery)

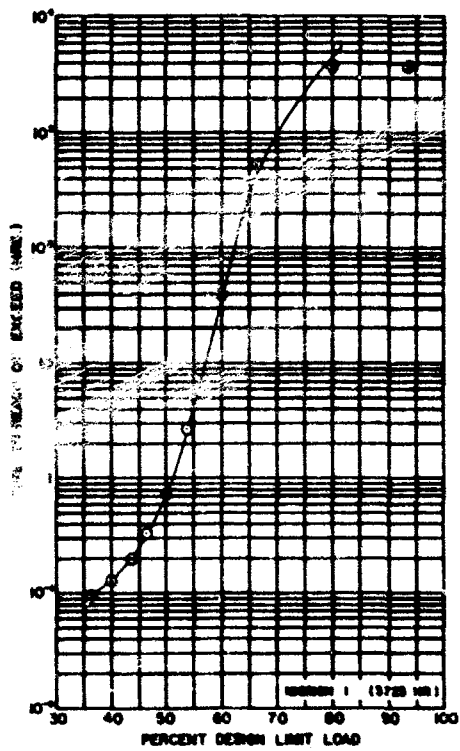


Figure 60

Percent Design Limit Load Exceedance Curve for All Bases Mission I (Long Range Logistics)

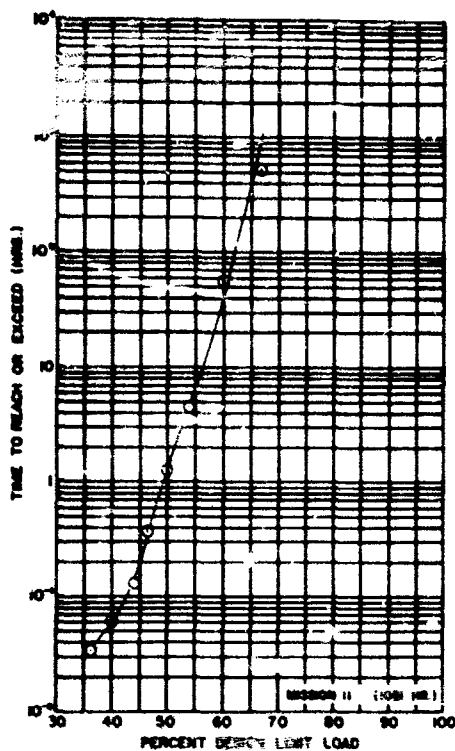


Figure 61

Percent Design Limit Load Exceedance Curve for All Bases Mission II (Short Range Logistics)

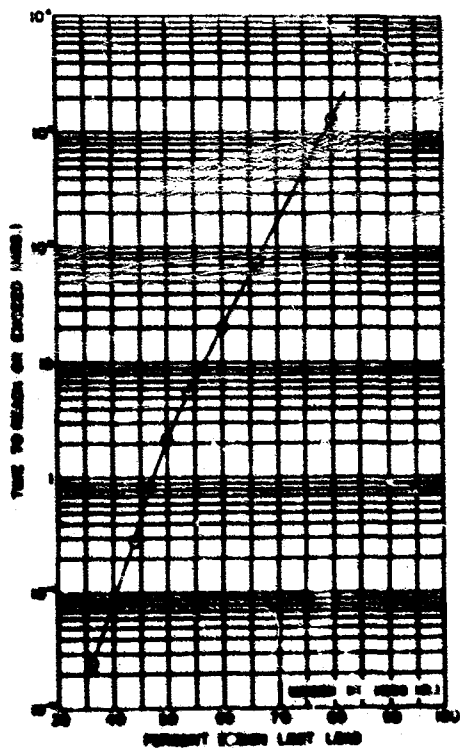


Figure 62

Percent Design Limit Load Exceedance Curve for All Bases Mission III (Training)

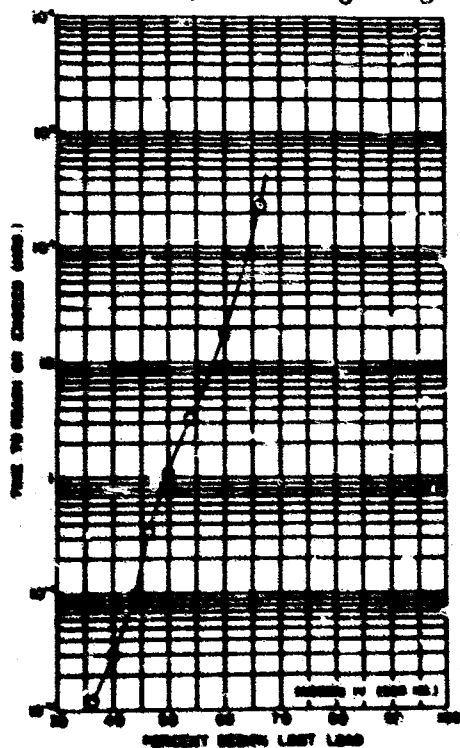


Figure 63

Percent Design Limit Load Exceedance Curve for All Bases Mission IV (Aerial Delivery)

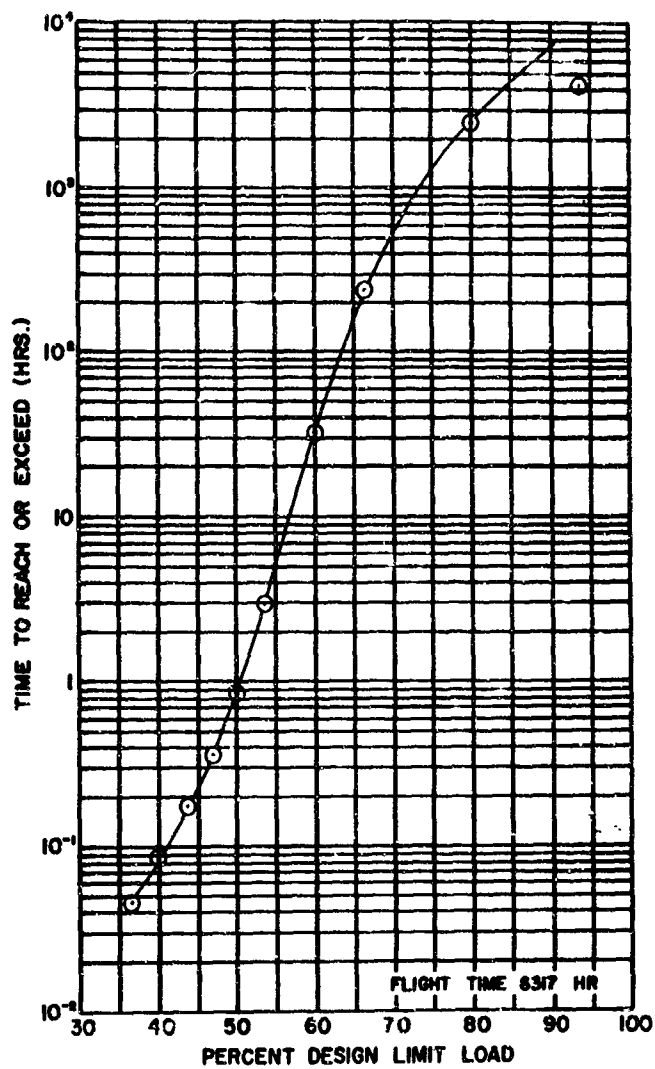


Figure 64. Percent Design Limit Load Exceedance Curve—  
Weighted Composite for All Missions and Bases

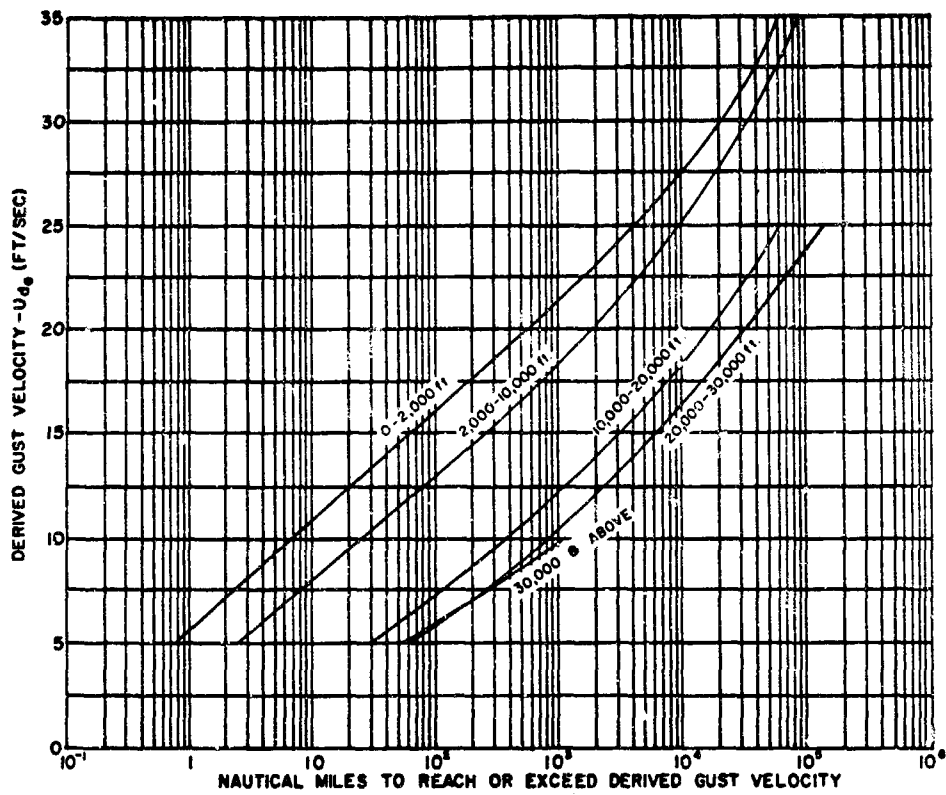


Figure 65. Gust Spectrum Based on Data from EASTAF

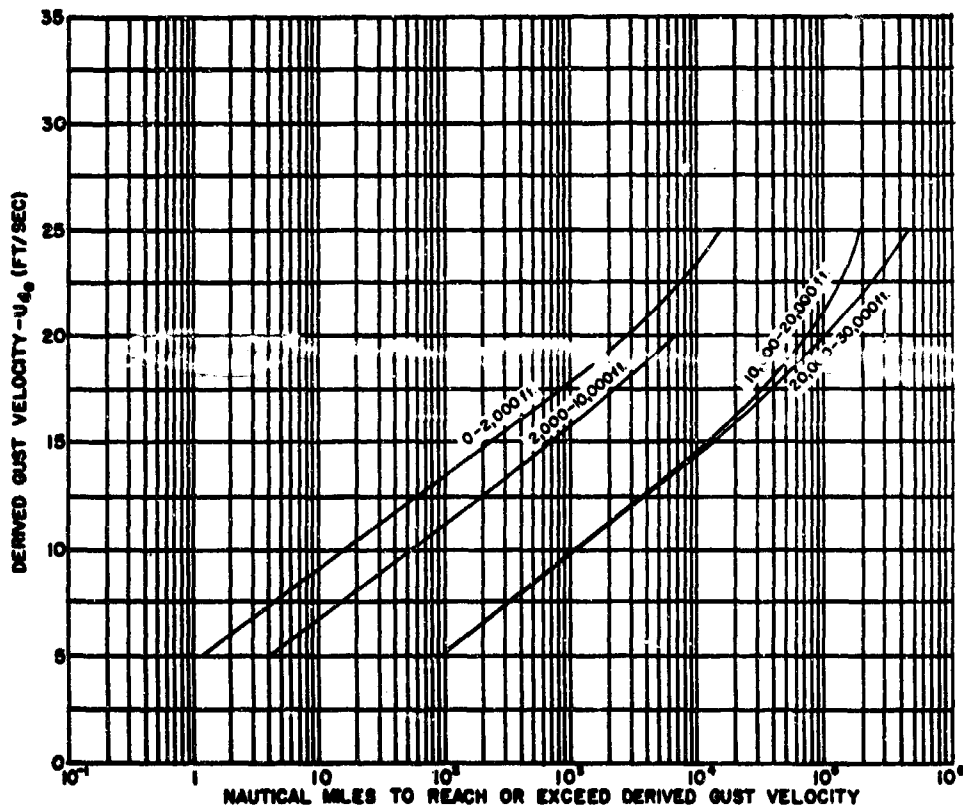


Figure 66. Gust Spectrum Based on Data from WESTAF

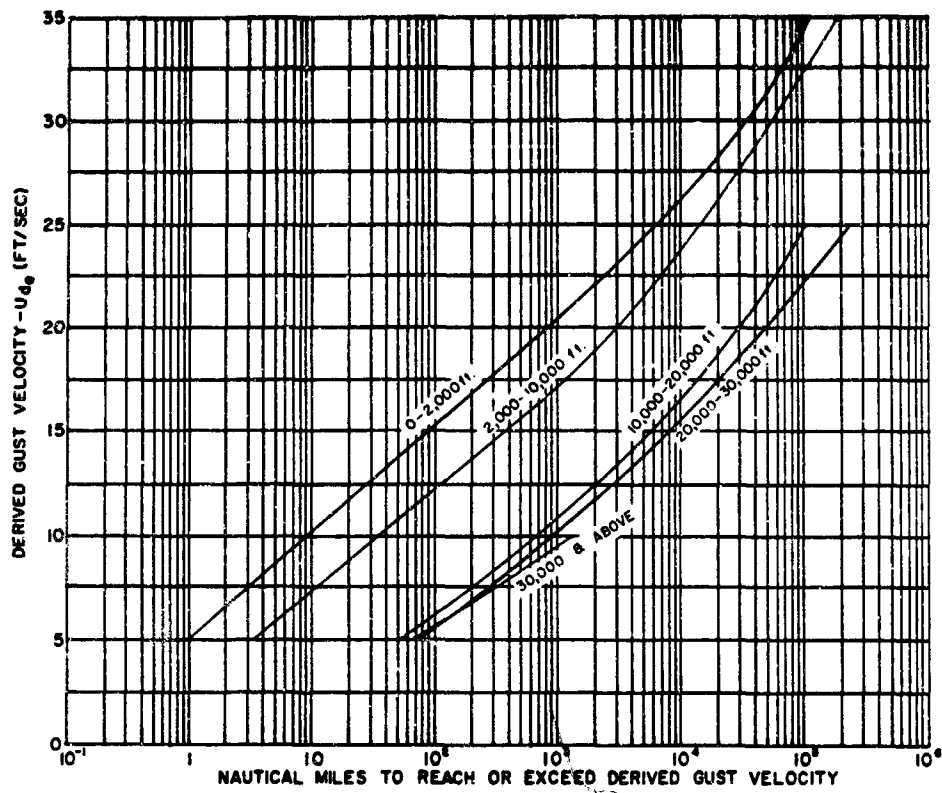


Figure 67. Gust Spectrum Based on Data from EASTAF and WESTAF

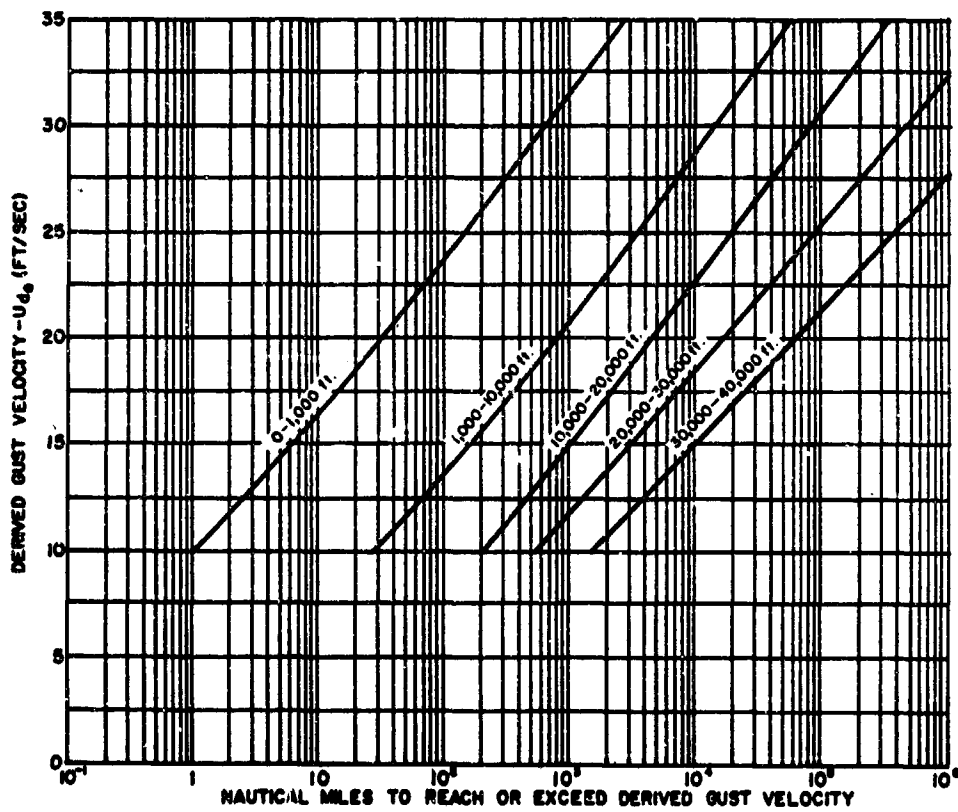


Figure 68. Standard Gust Spectrum (Reference 2)

Table 13

## Derived Gust Velocity by Altitude — EASTAF

PRESSURE ALTITUDE (FEET)	DERIVED GUST VELOCITY - $U_{d_0}$ (FT/SEC)														DISTANCE FLOWN (NAUTICAL MILES)
	-40 TO -35	-35 TO -30	-30 TO -25	-25 TO -20	-20 TO -15	-15 TO -10	-10 TO -5	5 TO 10	10 TO 15	15 TO 20	20 TO 25	25 TO 30	30 TO 35	35 TO 40	
0-2,000	1	2	5	32	321	3509	33871	35928	4292	480	68	6			62215.4
2,000-5,000		1	3	17	110	1235	13581	14545	1376	127	11	4	1	1	33677.6
5,000-10,000			2	4	27	206	1984	2180	202	50	1				38455.0
10,000-15,000			1	1	10	57	640	620	61	10	3				31125.0
15,000-20,000			1	1	8	73	1235	1324	104	7					33134.2
20,000-25,000			2	4	33	172	2542	2661	141	29	6				336714.1
25,000-30,000			1	1	11	60	1144	1054	54	7	2				160143.1
30,000 & ABOVE						15	274	220	11						27971.0
TOTALS	1	4	15	60	520	5327	55271	58532	6242	690	91	10	1	1	803435.4

Flight Time: 3126 Hours

No. Of Flights: 967

Table 14

## Derived Gust Velocity by Altitude — WESTAF

PRESSURE ALTITUDE (FEET)	DERIVED GUST VELOCITY - $U_{d_0}$ (FT/SEC)														DISTANCE FLOWN (NAUTICAL MILES)
	-40 TO -35	-35 TO -30	-30 TO -25	-25 TO -20	-20 TO -15	-15 TO -10	-10 TO -5	5 TO 10	10 TO 15	15 TO 20	20 TO 25	25 TO 30	30 TO 35	35 TO 40	
0-2,000			2	4	84	1307	16590	17831	1520	101	8	1			45399.2
2,000-5,000				9	59	851	11127	11621	853	72	4				68429.7
5,000-10,000					4	36	517	561	43	6	2				35438.9
10,000-15,000					1	14	171	178	8						33495.1
15,000-20,000					5	59	756	783	60	11	1	1			153888.8
20,000-25,000				1	9	119	1761	1825	133	13	1	1			343853.9
25,000-30,000				1	2	49	570	602	51	6	1				128515.2
30,000 & ABOVE							1								7604.8
TOTALS			2	15	164	2435	31493	33401	2668	209	17	3			816625.5

Flight Time: 3191 Hours

No. Of Flights: 713

Table 15

## Derived Gust Velocity by Altitude — Composite for EASTAF and WESTAF

PRESSURE ALTITUDE (FEET)	DERIVED GUST VELOCITY - $U_{d_0}$ (FT/SEC)														DISTANCE FLOWN (NAUTICAL MILES)
	-40 TO -35	-35 TO -30	-30 TO -25	-25 TO -20	-20 TO -15	-15 TO -10	-10 TO -5	5 TO 10	10 TO 15	15 TO 20	20 TO 25	25 TO 30	30 TO 35	35 TO 40	
0-2,000	1	2	7	36	405	4816	50461	53759	5813	581	76	7			107614.6
2,000-5,000		1	3	26	169	2086	24708	26166	2229	199	15	4	1	1	122107.2
5,000-10,000			2	4	31	242	2501	2741	245	36	1				73891.9
10,000-15,000			1	1	11	71	811	798	69	10	3				64620.1
15,000-20,000			1	1	13	132	1991	2107	164	18	1	1			247021.0
20,000-25,000			2	5	42	291	4303	4486	274	42	7	1			680567.9
25,000-30,000			1	2	13	109	1714	1656	105	13	3				288658.4
30,000 & ABOVE						15	275	220	11						35575.8
TOTALS	1	4	17	75	684	7762	86764	91933	8910	899	108	13	1	1	1620060.9

Total Flight Time: 6317 Hours

Total No. Of Flights: 1680



Table 16  
Equivalent Maneuver Load Factors by Aircraft  
Serial Number — Composite for All Missions

Aircraft Serial Number	Equivalent Maneuver Load Factor $n_z$																Total $n_z$	Recorded Hours	Average Hours		
	Below 0.0	0.0 to 0.2	0.2 to 0.4	0.4 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.1	1.1 to 1.2	1.2 to 1.3	1.3 to 1.4	1.4 to 1.5	1.5 to 1.6	1.6 to 1.8	1.8 to 2.0	2.0 to 2.4				2.4 to 2.8	2.8 and Above
61-2369			5	73	256	985	1016		1196	513	237	116	49	15	3				4504	110.49	944.9
61-2370			1	46	290	1507	1827		1894	788	388	133	97	26	9	3			7009	161.55	961.5
61-2371			5	55	285	975	1100		1461	895	472	238	93	40	3				5620	139.60	888.1
61-2372			1	26	256	1697	2106		1770	851	373	155	45	9	2				7291	85.10	937.7
62-1784				34	270	1589	1804		1634	831	293	161	136	70	6				6828	186.28	1241.4
63-7784			1	19	151	1668	3049		251	1479	233	414	128	35	3	1			11102	240.62	1277.4
62-1785		1	6	138	701	2661	2785		2760	1241	705	352	204	84	8	5	1		11657	158.36	965.6
62-1786			2	119	390	1377	1689		1287	542	244	119	54	35	6				5864	131.59	1000.7
62-1787				32	114	714	1443		1487	1127	552	343	249	84	7	1			6153	203.51	1459.6
63-7787			3	59	233	1461	2898		2111	957	463	303	197	68	4				8837	191.33	1083.1
62-1788			1	48	268	1726	2456		1572	648	210	102	61	19	1				7112	130.16	1091.6
63-7788			1	68	341	1855	2804		2305	1173	603	345	190	74	6				9765	267.12	1345.7
62-1789				25	182	1049	1610		1906	1053	850	558	184	57	3	4	1		7481	142.57	1190.8
62-1790			6	82	454	2599	3966		3379	1525	808	389	140	79	12	2			13445	249.93	1281.1
62-1791				84	518	2933	4541		4338	2160	954	451	180	91	5				16255	248.83	1168.8
62-1794			1	7	84	544	1226		1566	937	339	196	77	42	6	3			5028	88.14	685.5
62-1795			2	13	25	99	223		650	424	146	52	27	8		1			1670	68.97	1084.8
62-1797			1	54	262	921	1062		1533	805	614	318	104	46	4				5724	193.83	1146.8
62-1799			4	73	527	3012	3847		3825	1372	575	240	98	31	8	1			13605	281.73	1149.8
62-1805			4	60	240	969	1617		2297	1231	776	413	209	67	4				7887	183.86	1204.6
62-1807			1	47	422	2310	2816		2722	1367	532	321	224	100	8				10869	199.82	1350.8
62-1820			8	114	613	3407	5138		3286	1422	494	204	100	27	2				14915	222.84	1335.4
62-1821		1	5	89	223	959	2018		2127	1016	336	263	170	57	3	1			7268	172.19	1243.8
62-1822			1	41	239	1852	3744		1956	1132	426	553	287	181	5				10339	251.94	1288.5
62-1827			2	116	401	1493	2142		2286	784	404	254	114	50	3				8149	283.85	1281.6
62-1829				37	160	746	1382		2024	887	355	289	128	51	3	1			6863	132.97	1161.6
62-1830				37	188	848	1471		1496	390	440	287	76	28	5				5499	118.79	1188.5
62-1837			1	62	346	2399	4182		3212	1785	659	432	221	105	10	1			13345	287.21	1275.1
62-1838			2	91	579	2546	4644		2670	1132	481	282	188	84	4				12564	178.48	1125.4
62-1839				2	38	164	218		116	70	33	17	22	6	2				682	35.88	1248.9
62-1840			2	88	551	3118	4815		2875	872	262	276	148	58	1				12388	262.88	1266.1
62-1847			1	17	174	1909	2788		1496	613	447	477	283	89	9				8183	181.45	1264.8
62-1848			1	31	307	2361	3725		2178	632	253	148	103	38	2	1			9976	215.27	1264.4
62-1849			2	26	224	1806	3078		1986	459	218	288	187	61		1			7678	281.47	1158.8
62-1850			7	176	786	4527	6733		4116	1638	751	319	137	64	6				19212	288.74	1246.8

Table 17

**Maneuver Load Factors by Equivalent Airspeed  
EASTAF Mission I (Long Range Logistics)**

LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.8							
2.4 TO 2.8							
2.0 TO 2.4			1				1
1.8 TO 2.0							
1.6 TO 1.8	1	2	1	1			5
1.5 TO 1.6		2	1	3			6
1.4 TO 1.5	4	17	11	7			39
1.3 TO 1.4	40	108	53	20			221
1.2 TO 1.3	233	647	267	54	1		1202
1.1 TO 1.2	1723	4218	2254	177	1		8273
0.8 TO 0.9	1089	2818	1347	95			5349
0.7 TO 0.8	99	219	122	10			450
0.6 TO 0.7	13	28	19	3			63
0.4 TO 0.6	3	13	5				21
0.2 TO 0.4		1					1
0. TO 0.2							
BELOW 0.							
TIME (MIN)	1485.7	54601.2	35992.8	466.3	1.6		92547.7
NAUT MILES	3979.3	250579.9	177078.0	2422.3	8.8		434268.2

No. Of Flights: 270

Table 18

**Maneuver Load Factors by Equivalent Airspeed  
WESTAF Mission I (Long Range Logistics)**

LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.8							
2.4 TO 2.8							
2.0 TO 2.4							
1.8 TO 2.0			2	1			3
1.6 TO 1.8		1	3				4
1.5 TO 1.6	1	5	6				12
1.4 TO 1.5	2	22	20		1		51
1.3 TO 1.4	20	112	76	15	1		224
1.2 TO 1.3	206	756	355	53	3		1373
1.1 TO 1.2	1641	4431	2486	176	16		8750
0.8 TO 0.9	1043	2980	1497	101	10		5631
0.7 TO 0.8	97	316	161	21			595
0.6 TO 0.7	2	53	22	9			86
0.4 TO 0.6	3	11	13	3			30
0.2 TO 0.4		2	1				3
0. TO 0.2							
BELOW 0.							
TIME (MIN)	1283.9	81157.6	45830.2	2553.1	28.9		130853.8
NAUT MILES	3251.7	365393.0	219626.5	14504.6	165.2		602739.0

No. Of Flights: 352

Table 19

Maneuver Load Factors by Equivalent Airspeed  
EASTAF Mission II (Short Range Logistics)

LOAD FACTOR -NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.8							
2.4 TO 2.8			1				1
2.0 TO 2.4			2	3			5
1.8 TO 2.0		1	13	9	2		25
1.6 TO 1.8		6	35	18	5		64
1.5 TO 1.6		18	89	66	10		183
1.4 TO 1.5		114	400	188	47		749
1.3 TO 1.4		816	1552	873	134		3375
1.2 TO 1.3		4426	6041	3894	597	11	14969
0.8 TO 0.9	2882	4165	2431	293	6		9777
0.7 TO 0.8	327	669	319	31			1346
0.6 TO 0.7	36	130	46	11			223
0.4 TO 0.6	5	23	21	1			50
0.2 TO 0.4		3					3
0. TC 0.2							
BELOW 0.							
TIME (MIN)	2594.6	21518.8	27983.1	1750.0	40.7		53887.1
NAUT MILES	6258.3	90233.2	135664.8	8739.7	230.6		241126.6

No. Of Flights: 450

Table 20

Maneuver Load Factors by Equivalent Airspeed  
WESTAF Mission II (Short Range Logistics)

LOAD FACTOR -NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.8							
2.4 TO 2.8							
2.0 TO 2.4							
1.8 TO 2.0							
1.6 TO 1.8		1	1				2
1.5 TO 1.6		3	6				9
1.4 TO 1.5		17	12	1			30
1.3 TO 1.4	19	65	39	2			125
1.2 TO 1.3	118	265	212	5			604
1.1 TO 1.2	799	1386	1579	32			3796
0.8 TO 0.9	492	882	1048	13			2441
0.7 TO 0.8	67	126	103	2			298
0.6 TO 0.7	5	23	13				41
0.4 TO 0.6		1	2				3
0.2 TO 0.4		1					1
0. TC 0.2							
BELOW 0.							
TIME (MIN)	443.2	5230.0	3423.2	47.4			9143.7
NAUT MILES	1126.8	22091.0	15550.2	228.8			38996.8

No. Of Flights: 76

Table 21

Maneuver Load Factors by Equivalent Airspeed  
EASTAF Mission III (Training)

LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.8							
2.4 TO 2.8		1	3	1			5
2.0 TO 2.4	1	15	13	4			33
1.8 TO 2.0	1	24	21	5			51
1.6 TO 1.8	16	109	63	8	2		198
1.5 TO 1.6	67	190	92	15	2		366
1.4 TO 1.5	366	559	196	26			1147
1.3 TO 1.4	1565	2220	553	54	3		4395
1.2 TO 1.3	6471	7566	1580	117	4		15738
1.1 TO 1.2	21555	21169	5236	297	3		48260
0.8 TO 0.9	15500	14794	3589	183	2		34068
0.7 TO 0.8	2665	3047	798	49	2		6556
0.6 TO 0.7	440	627	245	23	2		1337
0.4 TO 0.6	62	161	84	9	1		317
0.2 TO 0.4	3	12	10	2	1		28
0. TO 0.2			1				1
BELOW 0.							
TIME (MIN)	11994.2	18496.6	6945.0	366.7	2.4		37804.8
NAUT MILES	28261.9	58526.3	28867.1	1734.2	12.4		117401.9

No. Of Flights: 210

Table 22

Maneuver Load Factors by Equivalent Airspeed  
WESTAF Mission III (Training)

LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.8							
2.4 TO 2.8			1				1
2.0 TO 2.4		3	3				6
1.8 TO 2.0		11	8	2			21
1.6 TO 1.8	1	73	53	2			129
1.5 TO 1.6	15	140	58	11			224
1.4 TO 1.5	98	327	122	25	1		573
1.3 TO 1.4	662	1315	397	105	1		2480
1.2 TO 1.3	3416	5355	1676	243	7		10697
1.1 TO 1.2	15904	21559	9341	533	21		47258
0.8 TO 0.9	11199	15387	6227	387	9		33209
0.7 TO 0.8	1357	2095	780	172	1		4405
0.6 TO 0.7	168	359	154	71	1		753
0.4 TO 0.6	23	60	54	35			172
0.2 TO 0.4		3	2	3			8
0. TO 0.2				1			1
BELOW 0.							
TIME (MIN)	8819.9	20894.8	10365.3	409.8	10.5		40700.4
NAUT MILES	20798.8	70607.6	44501.0	2105.1	61.9		130074.0

No. Of Flights: 213

Table 23

Maneuver Load Factors by Equivalent Airspeed  
EASTAF Mission IV (Aerial Delivery)

LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.8							
2.4 TO 2.8							1
2.0 TO 2.4		1					4
1.8 TO 2.0		1	3				16
1.6 TO 1.8	1	11	4				25
1.5 TO 1.6	4	13	7	1			77
1.4 TO 1.5	9	30	35	3			358
1.3 TO 1.4	57	123	171	7			1639
1.2 TO 1.3	288	656	682	13			5873
1.1 TO 1.2	1367	2406	2071	31			
0.8 TO 0.9	941	1729	1311	12			3993
0.7 TO 0.8	150	414	391	2			957
0.6 TO 0.7	16	64	98				178
0.4 TO 0.6	4	10	35				49
0.2 TO 0.4							
0. TO 0.2							
BELOW 0.							
TIME (MIN)		739.7	1079.8	1485.1	44.4		3349.0
NAUT MILES	1676.3	3397.7	5570.7	193.7			10838.4

No. Of Flights: 37

Table 24

Maneuver Load Factors by Equivalent Airspeed  
WESTAF Mission IV (Aerial Delivery)

LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.8							
2.4 TO 2.8							1
2.0 TO 2.4			1				8
1.8 TO 2.0		4	4				55
1.6 TO 1.8	1	27	27				97
1.5 TO 1.6	3	44	49	1			233
1.4 TO 1.5	12	83	135	3			1016
1.3 TO 1.4	123	321	543	29			4354
1.2 TO 1.3	710	1392	2149	103			16706
1.1 TO 1.2	3223	5829	7124	529	1		
0.8 TO 0.9	2230	3939	4862	395	1		11427
0.7 TO 0.8	394	775	1389	76			2834
0.6 TO 0.7	58	176	418	18			670
0.4 TO 0.6	8	41	137	4			190
0.2 TO 0.4			10				10
0. TO 0.2							
BELOW 0.							
TIME (MIN)	1611.7	3776.7	5032.6	319.2	0.1		10738.2
NAUT MILES	3706.6	12338.9	19306.6	1462.9	0.7		36819.3

No. Of Flights: 72

Table 25

Equivalent Maneuver Load Factors by Equivalent  
Airspeed — EASTAF Mission I (Long Range Logistics)

LOAD FACTOR NZE	LOAD FACTOR NZE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZE
		LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.8				1				1
2.4 TO 2.8			2	1				3
2.0 TO 2.4								
1.8 TO 2.0		3	34	7	6			50
1.6 TO 1.8		124	426	125	24			599
1.5 TO 1.6		298	1056	390	38			1782
1.4 TO 1.5		364	1583	919	32			2998
1.3 TO 1.4		312	1451	1325	40	1		3629
1.2 TO 1.3		789	2889	1284	93			5055
1.1 TO 1.2		1064	3248	1539	119	1		6091
0.8 TO 0.9		623	743	487	56			1909
0.7 TO 0.8		149	152	104	12			417
0.6 TO 0.7		24	22	15	2			63
0.4 TO 0.6			9	1				10
0.2 TO 0.4								
BELOW 0.								
TIME (MIN)		1495.7	54601.2	35992.8	466.3	1.6		92547.7
NAUT MILES		3979.3	250579.9	177078.0	2422.3	8.8		434068.2
								No. Of Flights: 270

Table 26

Equivalent Maneuver Load Factors by Equivalent  
Airspeed — WESTAF Mission I (Long Range Logistics)

LOAD FACTOR NZE	LOAD FACTOR NZE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZE
		LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.4								
2.4 TO 2.8								
2.0 TO 2.4				2	1			3
1.8 TO 2.0				6	2	1		36
1.6 TO 1.8		36	364	121	34	3		608
1.5 TO 1.6		302	1057	508	46	1		1926
1.4 TO 1.5		461	1803	1241	50	2		3357
1.3 TO 1.4		369	1757	1247	26			3339
1.2 TO 1.3		472	2531	1454	68	3		4528
1.1 TO 1.2		1005	3441	1798	117	28		6389
0.8 TO 0.9		628	930	488	56	5		2087
0.7 TO 0.8		267	377	223	26			993
0.6 TO 0.7		36	55	31	4			130
0.4 TO 0.6		1	12	17				30
0.2 TO 0.4			2	1				3
BELOW 0.								
TIME (MIN)		1283.9	81157.6	45810.2	2552.1	28.9		130853.8
NAUT MILES		3251.7	365393.0	219424.5	14504.6	185.2		602739.0
								No. Of Flights: 352

Table 27

Equivalent Maneuver Load Factors by Equivalent  
Airspeed — EASTAF Mission II (Short Range Logistics)

LOAD FACTOR NZE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZE
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.8							1
2.4 TC 2.8							13
2.0 TC 2.4			1				176
1.8 TO 2.0	1	6	5	1			427
1.6 TO 1.8	14	99	50	13			1461
1.5 TC 1.6	64	235	109	19			3820
1.4 TO 1.5	237	816	352	56			7238
1.3 TO 1.4	681	1969	980	186	4		11047
1.2 TO 1.3	1646	3338	2005	245	4		
1.1 TC 1.2	3025	4302	3270	447	3		
0.8 TC 0.9	2149	2202	1687	220	8		6266
0.7 TO 0.8	652	776	445	58	1		1932
0.6 TC 0.7	77	155	89	9			330
0.4 TC 0.6	9	30	21	4			64
0.2 TO 0.4		2					2
0. TO 0.2 BELOW 0.							
TIME (MIN)	2594.6	21518.8	27983.1	1750.0	40.7		53887.1
NAUT MILES	6258.3	90233.2	135664.8	8739.7	230.6		241126.6

No. Of Flights: 450

Table 28

Equivalent Maneuver Load Factors by Equivalent  
Airspeed — WESTAF Mission II (Short Range Logistics)

LOAD FACTOR NZE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZE
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.8							1
2.4 TC 2.8							4
2.0 TO 2.4		1					44
1.8 TO 2.0		1	3				126
1.6 TC 1.8	9	22	13				501
1.5 TO 1.6	37	61	26	2			1393
1.4 TC 1.5	88	235	175	3			1881
1.3 TO 1.4	221	496	667	9			2482
1.2 TO 1.3	436	736	682	27			
1.1 TO 1.2	485	868	1113	16			
0.8 TO 0.9	256	545	699	10			1510
0.7 TC 0.8	83	151	112	2			348
0.6 TO 0.7	11	24	12	1			48
0.4 TO 0.6	1	2	2				5
0.2 TO 0.4		1					1
0. TO 0.2 BELOW 0.							
TIME (MIN)	445.2	5230.0	3423.2	47.4			9143.7
NAUT MILES	1126.8	22091.0	15550.2	228.8			39996.8

No. Of Flights: 76

Table 29

Equivalent Maneuver Load Factors by Equivalent  
Airspeed — EASTAF Mission III (Training)

LOAD FACTOR NZE	LESS THAN 150	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL NZE
		150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.8							1
2.4 TO 2.8			1				16
2.0 TO 2.4			5		3		36
1.8 TO 2.0	1	18	12	5			98
1.6 TO 1.8	4	41	44	9			179
1.5 TO 1.6	17	84	63	13	2		500
1.4 TO 1.5	55	263	150	31	1		1649
1.3 TO 1.4	367	863	370	48	1		5453
1.2 TO 1.3	1630	2917	832	71	3		19964
1.1 TO 1.2	7606	9587	2587	182	2		
0.8 TO 0.9	12271	13084	3149	156	1		28661
0.7 TO 0.8	12461	10525	2389	21	2		25498
0.6 TO 0.7	2289	2373	614	28	2		5306
0.4 TO 0.6	315	460	72	17	1		965
0.2 TO 0.4	6	1	12	-	2		36
0. TO 0.2			1				1
BELOW 0.							
TIME (MIN)	11994.2	18496.6	6945.0	366.7	2.4		37804.8
NAUT MILES	28261.9	58526.3	28867.1	1734.2	12.4		117401.9

No. Of Flights: 210

Table 30

Equivalent Maneuver Load Factors by Equivalent  
Airspeed — WESTAF Mission III (Training)

LOAD FACTOR NZE	LESS THAN 150	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL NZE
		150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.8							1
2.4 TO 2.8			1				10
2.0 TO 2.4			4				74
1.8 TO 2.0	1	42	27	4			174
1.6 TO 1.8	5	101	63	5			416
1.4 TO 1.6	31	243	122	19	1		1435
1.3 TO 1.4	178	800	370	86	1		5303
1.2 TO 1.3	1128	2614	1199	358	4		17536
1.1 TO 1.2	4711	8657	3767	387	14		
0.8 TO 0.9	11828	17395	8009	352	10		37594
0.7 TO 0.8	9073	10151	4250	253	3		23732
0.6 TO 0.7	1324	1509	477	101	1		3412
0.4 TO 0.6	126	223	123	51			523
0.2 TO 0.4	2	7	6	4			19
0. TO 0.2				1			1
BELOW 0.							
TIME (MIN)	8819.9	20894.8	10565.3	409.8	10.9		40700.4
NAUT MILES	20798.8	70607.6	44501.0	2105.1	61.9		138075.0

No. Of Flights: 213



Table 31

Equivalent Maneuver Load Factors by Equivalent  
Airspeed — EASTAF Mission IV (Aerial Delivery)

LOAD FACTOR NZE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZE
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.8							
2.4 TO 2.8							1
2.0 TO 2.4		1					2
1.8 TO 2.0			2				9
1.6 TO 1.8		6	3				45
1.5 TO 1.6	1	22	21	1			194
1.4 TO 1.5	20	91	78	5			760
1.3 TO 1.4	70	343	337	10			2138
1.2 TO 1.3	338	1123	669	8			3695
1.1 TO 1.2	859	1460	1352	24			
0.8 TO 0.9	898	1260	1086	7			3251
0.7 TO 0.8	322	535	563	4			1424
0.6 TO 0.7	32	77	132				241
0.4 TO 0.6	4	11	36				51
0.2 TO 0.4	1		1				2
0. TO 0.2							
BELOW 0.							
TIME (MIN)	739.7	1079.8	1485.1	44.4			3340.0
NAUT MILES	1676.3	3397.7	5570.7	193.7			10838.4
							No. Of Flights: 37

Table 32

Equivalent Maneuver Load Factors by Equivalent  
Airspeed — WESTAF Mission IV (Aerial Delivery)

LOAD FACTOR NZE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZE
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.8							
2.4 TO 2.8							10
2.0 TO 2.4							55
1.8 TO 2.0	3	3	4				101
1.6 TO 1.8	13	32	10				285
1.5 TO 1.6	27	45	28	1			898
1.4 TO 1.5	67	133	89	1			3443
1.3 TO 1.4	134	363	357	24			8746
1.2 TO 1.3	590	1443	1326	84			
1.1 TO 1.2	1685	2713	3966	381	1		
0.8 TO 0.9	1871	3368	4290	377	1		9907
0.7 TO 0.8	1280	2198	3093	175			6746
0.6 TO 0.7	253	692	846	29			1620
0.4 TO 0.6	36	122	298	5			451
0.2 TO 0.4		1	13				14
0. TO 0.2							
BELOW 0.							
TIME (MIN)	1611.7	3774.7	5032.6	319.2	0.1		10736.2
NAUT MILES	3706.6	12338.9	19306.4	1462.9	0.7		36819.9
							No. Of Flights: 72

Table 33

Incremental Gust Load Factors by Equivalent Airspeed  
EASTAF Mission I (Long Range Logistics)

LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL DELTA NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 1.0							4
1.4 TO 1.0							10
1.0 TO 1.4							58
0.8 TO 1.0							214
0.6 TO 0.8		1	3				1574
0.5 TO 0.6		3	6	1			15428
0.4 TO 0.5	3	18	34	3			
0.3 TO 0.4	18	69	112	13	2		
0.2 TO 0.3	139	641	767	23	4		
0.1 TO 0.2	1130	7144	6983	199	12		
-0.2 TO -0.1	1006	7123	6338	134	4		14605
-0.3 TO -0.2	106	574	683	16			1379
-0.4 TO -0.3	10	90	104	7			211
-0.6 TO -0.4	4	22	42	1			69
-0.8 TO -0.6		1	1				2
-1.0 TO -0.8							
BELOW -1.0							
TIME (MIN)	1485.7	54601.2	35992.8	466.3	1.6		92547.7
NAUT MILES	3979.3	250579.9	177078.0	2422.3	8.8		434068.2

No. Of Flights: 270

Table 34

Incremental Gust Load Factors by Equivalent Airspeed  
WESTAF Mission I (Long Range Logistics)

LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL DELTA NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 1.0							5
1.4 TO 1.0							10
1.0 TO 1.4							35
0.8 TO 1.0							227
0.6 TO 0.8		3	2				1355
0.5 TO 0.6		3	6	1			11805
0.4 TO 0.5	1	22	10	1	1		
0.3 TO 0.4	10	119	88	10			
0.2 TO 0.3	67	701	545	40	2		
0.1 TO 0.2	825	6222	4590	198	10		
-0.2 TO -0.1	694	5932	3995	156	10		10787
-0.3 TO -0.2	47	535	394	33	4		1013
-0.4 TO -0.3	9	92	73	9	1		184
-0.6 TO -0.4	3	21	13				37
-0.8 TO -0.6		1	1				2
-1.0 TO -0.8							
BELOW -1.0							
TIME (MIN)	1283.9	81157.6	45830.2	2553.1	28.9		130853.8
NAUT MILES	3251.7	365393.0	219424.5	14504.6	165.2		602739.0

No. Of Flights: 352

Table 35

Incremental Gust Load Factors by Equivalent Airspeed  
EASTAF Mission II (Short Range Logistics)

LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL DELTA NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 1.8							
1.4 TO 1.8							
1.0 TO 1.4							
0.8 TO 1.0			2				2
0.6 TO 0.8		7	14	5			26
0.5 TO 0.6	3	10	41	7			61
0.4 TO 0.5	4	50	127	28			209
0.3 TO 0.4	49	226	505	77			857
0.2 TO 0.3	422	1192	1747	305	6		3672
0.1 TO 0.2	3036	6956	9778	1436	41		21247
-0.2 TO -0.1	2727	6402	9107	1311	42		19589
-0.3 TO -0.2	316	991	1675	258	2		3242
-0.4 TO -0.3	46	203	381	59			689
-0.6 TO -0.4	5	70	142	25			242
-0.8 TO -0.6		8	13	2			23
-1.0 TO -0.8		3	2	1			6
BELOW -1.0			1				1
TIME (MIN)	2594.6	21518.8	27983.1	1750.0	40.7		53887.1
NAUT MILES	6258.3	90233.2	135664.8	8739.7	230.6		241126.6

No. Of Flights: 450

Table 36

Incremental Gust Load Factors by Equivalent Airspeed  
WESTAF Mission II (Short Range Logistics)

LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL DELTA NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 1.8							
1.4 TO 1.8							
1.0 TO 1.4							
0.8 TO 1.0		1					1
0.6 TO 0.8							
0.5 TO 0.6		3	1				4
0.4 TO 0.5		5	3				8
0.3 TO 0.4	5	30	28				63
0.2 TO 0.3	28	174	190				392
0.1 TO 0.2	321	1312	1625	14			3272
-0.2 TO -0.1	299	1209	1581	7			3096
-0.3 TO -0.2	25	143	171	1			340
-0.4 TO -0.3	1	39	26				66
-0.6 TO -0.4		4	8				12
-0.8 TO -0.6							
-1.0 TO -0.8							
BELOW -1.0							
TIME (MIN)	443.2	5230.0	3423.2	47.4			9143.7
NAUT MILES	1126.8	22091.0	15550.2	228.8			38996.8

No. Of Flights: 76

Table 37

**Incremental Gust Load Factors by Equivalent Airspeed  
EASTAF Mission III (Training)**

LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL DELTA NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 1.8							1
1.4 TC 1.8							25
1.0 TO 1.4							109
0.8 TO 1.0	1						485
0.6 TO 0.8	2	12	8	3			2327
0.5 TO 0.6	25	32	38	6	2		11462
0.4 TO 0.5	88	195	180	21	1		55211
0.3 TC 0.4	553	1021	678	71	4		
0.2 TO 0.3	3465	5026	2757	204	10		
0.1 TO 0.2	20070	23829	10708	583	21		
-0.2 TO -0.1	20525	24201	10560	565	19		55870
-0.3 TO -0.2	3087	4431	2486	159	10		10173
-0.4 TO -0.3	427	861	580	60	2		1930
-0.6 TO -0.4	61	156	188	28	1		434
-0.8 TC -0.6	2	5	15	2	1		25
-1.0 TO -0.8	2	1					3
BELOW -1.0							
TIME (MIN)	11994.2	18496.6	6945.0	366.7	2.4		37804.8
NAUT MILES	28261.9	50526.3	28867.1	1734.2	12.4		117401.9

No. Of Flights: 210

Table 38

**Incremental Gust Load Factors by Equivalent Airspeed  
WESTAF Mission III (Training)**

LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL DELTA NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 1.8							10
1.4 TO 1.8							30
1.0 TO 1.4							111
0.8 TC 1.0							692
0.6 TO 0.8		8	2				4430
0.5 TO 0.6		15	14	1			27896
0.4 TO 0.5	6	44	98	3			
0.3 TC 0.4	87	306	277	22			
0.2 TO 0.3	911	1911	1912	95	1		
0.1 TO 0.2	8289	11203	7896	501	7		
-0.2 TC -0.1	8012	11483	7570	412	12		27489
-0.3 TC -0.2	831	1753	1400	88			4072
-0.4 TO -0.3	91	245	246	10			592
-0.6 TO -0.4	11	44	70	1			126
-0.8 TC -0.6		1	1	1			3
-1.0 TO -0.8			1				1
BELOW -1.0							
TIME (MIN)	8819.9	20894.8	10565.3	409.8	10.5		40700.4
NAUT MILES	20798.8	70607.6	44501.0	2105.1	61.5		138074.0

No. Of Flights: 213

Table 39

Incremental Gust Load Factors by Equivalent Airspeed  
EASTAF Mission IV (Aerial Delivery)

LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL DELTA NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 1.8							
1.4 TO 1.8							6
1.0 TO 1.4							24
0.8 TO 1.0							6
0.6 TO 0.8			1	5			24
0.5 TO 0.6			3	20	1		118
0.4 TO 0.5	2	24	82	10			508
0.3 TO 0.4	15	94	346	53			2472
0.2 TO 0.3	98	550	1681	143			9645
0.1 TO 0.2	927	2601	5692	425			
-0.2 TO -0.1	956	2623	5603	489			9671
-0.3 TO -0.2	105	499	1447	128			2179
-0.4 TO -0.3	2	82	295	37			416
-0.6 TO -0.4		21	85	17			123
-0.8 TO -0.6			1				1
-1.0 TO -0.8			1				1
BELOW -1.0							
TIME (MIN)	739.7	1079.8	1485.1	44.4			3349.0
NAUT MILES	1676.3	3397.7	5570.7	193.7			10838.4
							No. Of Flights: 37

Table 40

Incremental Gust Load Factors by Equivalent Airspeed  
WESTAF Mission IV (Aerial Delivery)

LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL DELTA NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 1.8							
1.4 TO 1.8							13
1.0 TO 1.4							70
0.8 TO 1.0							279
0.6 TO 0.8			1	11	1		1360
0.5 TO 0.6	1	10	59				5881
0.4 TO 0.5	2	31	236	10			23415
0.3 TO 0.4	14	152	1164	30			
0.2 TO 0.3	179	909	4668	125			
0.1 TO 0.2	1446	4215	17107	647			
-0.2 TO -0.1	1616	4091	17226	529			23462
-0.3 TO -0.2	143	864	4377	100			5484
-0.4 TO -0.3	21	176	1064	22			1283
-0.6 TO -0.4	4	50	299	11			364
-0.8 TO -0.6		1	11	3			19
-1.0 TO -0.8			1				1
BELOW -1.0							
TIME (MIN)	1611.7	3774.7	5032.6	319.2	0.1		10738.2
NAUT MILES	3706.6	12338.9	19306.4	1462.9	0.7		36819.9
							No. Of Flights: 72

**Table 41**  
**Maneuver Load Factors by Equivalent Airspeed and Altitude**  
**Mission I (Long Range Logistics)**  
**Gross Weight Range: 85,000 to 95,000 lb.**

ALTITUDE - C TO 2,000 FEET								ALTITUDE - 2,000 TO 5,000 FEET							
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0							1							1	
2.4 TO 2.0															
2.0 TO 2.4															
1.8 TO 2.0				1			1							1	
1.6 TO 1.8															
1.5 TO 1.6															
1.4 TO 1.5															
1.3 TO 1.4															
1.2 TO 1.3	4	2	1	1			8							11	
1.1 TO 1.2	17	6	5				28	13	14	14				41	
	106	30	4	1			143	75	91	40				210	
0.9 TO 0.9															
0.7 TO 0.9	47	13	2	1			63	75	60	25				160	
0.6 TO 0.7	12	3	1	1			17	1	11	12				24	
0.4 TO 0.6															
0.2 TO 0.4															
0. TO 0.2															
BELOW 0.															
TIME (MIN)	55.7	13.2	3.3	0.1			72.4	78.2	79.5	41.4				199.1	
NAUT MILES	110.2	36.9	11.0	0.3			162.6	162.8	235.5	148.8				567.2	

ALTITUDE - 5,000 TO 10,000 FEET								ALTITUDE - 10,000 TO 15,000 FEET							
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0															
2.4 TO 2.0															
2.0 TO 2.4															
1.8 TO 2.0															
1.6 TO 1.8															
1.5 TO 1.6															
1.4 TO 1.5															
1.3 TO 1.4															
1.2 TO 1.3															
1.1 TO 1.2															
0.9 TO 0.9															
0.7 TO 0.9															
0.6 TO 0.7															
0.4 TO 0.6															
0.2 TO 0.4															
0. TO 0.2															
BELOW 0.															
TIME (MIN)	29.8	91.2	0.7				126.7	3.3	62.8	6.9				73.0	
NAUT MILES	128.6	366.7	46.3				541.6	12.7	298.4	35.7				338.7	

ALTITUDE - 15,000 TO 20,000 FEET								ALTITUDE - 20,000 TO 25,000 FEET							
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0															
2.4 TO 2.0															
2.0 TO 2.4															
1.8 TO 2.0															
1.6 TO 1.8															
1.5 TO 1.6															
1.4 TO 1.5															
1.3 TO 1.4															
1.2 TO 1.3															
1.1 TO 1.2															
0.9 TO 0.9															
0.7 TO 0.9															
0.6 TO 0.7															
0.4 TO 0.6															
0.2 TO 0.4															
0. TO 0.2															
BELOW 0.															
TIME (MIN)	9.0	45.0	0.5				54.5	111.7	27.1	4.1				142.9	
NAUT MILES	21.4	204.9	25.8				252.1	276.4	339.8	22.4				1108.0	

ALTITUDE - 25,000 TO 30,000 FEET								ALTITUDE - 30,000 TO ABOVE FEET							
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0															
2.4 TO 2.0															
2.0 TO 2.4															
1.8 TO 2.0															
1.6 TO 1.8															
1.5 TO 1.6															
1.4 TO 1.5															
1.3 TO 1.4															
1.2 TO 1.3															
1.1 TO 1.2															
0.9 TO 0.9															
0.7 TO 0.9															
0.6 TO 0.7															
0.4 TO 0.6															
0.2 TO 0.4															
0. TO 0.2															
BELOW 0.															
TIME (MIN)	799.0	114.7					913.7	207.4						1121.1	
NAUT MILES	3750.8	684.4					4435.2	1196.7						5631.9	

Table 42  
Maneuver Load Factors by Equivalent Airspeed and Altitude  
Mission I (Long Range Logistics)  
Gross Weight Range: 95,000 to 105,000 lb.

ALTITUDE - 0 TO 2,000 FEET								ALTITUDE - 2,000 TO 5,000 FEET							
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0							0	ABOVE 2.0							
2.4 TO 2.0							0	2.4 TO 2.0							
2.0 TO 2.4							0	2.0 TO 2.4							
1.8 TO 2.0							0	1.8 TO 2.0							
1.6 TO 1.8							0	1.6 TO 1.8							
1.5 TO 1.6							0	1.5 TO 1.6							
1.4 TO 1.5							0	1.4 TO 1.5							
1.3 TO 1.4	3	5					8	1.3 TO 1.4	1	1	1	2	2	4	
1.2 TO 1.3	24	37	1				62	1.2 TO 1.3	24	32	17	2	2	11	
1.1 TO 1.2	246	113	7				366	1.1 TO 1.2	216	240	70	4	4	95	
0.8 TO 0.9	178	85	1				264	0.8 TO 0.9	145	174	50	2	2	371	
0.7 TO 0.8	10	16					26	0.7 TO 0.8	10	23	3			36	
0.6 TO 0.7		1					1	0.6 TO 0.7		3	2			5	
0.4 TO 0.6								0.4 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0. TO 0.2								0. TO 0.2							
BELOW 0.								BELOW 0.							
TIME (MIN)	150.5	53.9	2.0				215.2	TIME (MIN)	198.6	211.6	78.1	1.5		489.7	
NAUT MILES	332.7	143.1	9.2				485.1	NAUT MILES	461.2	461.0	291.3	6.5		1389.0	
ALTITUDE - 5,000 TO 10,000 FEET								ALTITUDE - 10,000 TO 15,000 FEET							
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0							0	ABOVE 2.0							
2.4 TO 2.0							0	2.4 TO 2.0							
2.0 TO 2.4							0	2.0 TO 2.4							
1.8 TO 2.0							0	1.8 TO 2.0							
1.6 TO 1.8							0	1.6 TO 1.8							
1.5 TO 1.6							0	1.5 TO 1.6							
1.4 TO 1.5							0	1.4 TO 1.5							
1.3 TO 1.4		1	1	1			3	1.3 TO 1.4		1	1			1	
1.2 TO 1.3		12	21	5			38	1.2 TO 1.3		1	4	1		6	
1.1 TO 1.2	4	72	155	23			254	1.1 TO 1.2		15	33	7		55	
0.8 TO 0.9	2	38	76	9			123	0.8 TO 0.9		4	23	4		31	
0.7 TO 0.8	1	4	4	3			12	0.7 TO 0.8		2	3	1		6	
0.6 TO 0.7		1					1	0.6 TO 0.7							
0.4 TO 0.6								0.4 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0. TO 0.2								0. TO 0.2							
BELOW 0.								BELOW 0.							
TIME (MIN)	1.4	91.7	220.1	26.8			343.0	TIME (MIN)	24.4	254.7	36.9			316.0	
NAUT MILES	3.5	365.2	936.9	97.2			1343.9	NAUT MILES	111.3	1172.9	159.3			1443.7	
ALTITUDE - 15,000 TO 20,000 FEET								ALTITUDE - 20,000 TO 25,000 FEET							
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0							0	ABOVE 2.0							
2.4 TO 2.0							0	2.4 TO 2.0							
2.0 TO 2.4							0	2.0 TO 2.4							
1.8 TO 2.0							0	1.8 TO 2.0							
1.6 TO 1.8							0	1.6 TO 1.8							
1.5 TO 1.6							0	1.5 TO 1.6							
1.4 TO 1.5							0	1.4 TO 1.5							
1.3 TO 1.4			1				1	1.3 TO 1.4		2	2			4	
1.2 TO 1.3			9	2			11	1.2 TO 1.3		3	0			3	
1.1 TO 1.2	3	35	5				43	1.1 TO 1.2	33	48	3			84	
0.8 TO 0.9							0	0.8 TO 0.9		27	17	1		45	
0.7 TO 0.8							0	0.7 TO 0.8		3	2			5	
0.6 TO 0.7							0	0.6 TO 0.7							
0.4 TO 0.6							0	0.4 TO 0.6							
0.2 TO 0.4							0	0.2 TO 0.4							
0. TO 0.2							0	0. TO 0.2							
BELOW 0.							0	BELOW 0.							
TIME (MIN)	200.0	400.3	12.1				612.3	TIME (MIN)	1642.0	1894.1	3.1			2539.0	
NAUT MILES	654.0	1000.0	71.7				2000.7	NAUT MILES	6595.6	5995.9	16.6			12117.7	
ALTITUDE - 25,000 TO 30,000 FEET								ALTITUDE - 30,000 TO ABOVE FEET							
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0							0	ABOVE 2.0							
2.4 TO 2.0							0	2.4 TO 2.0							
2.0 TO 2.4							0	2.0 TO 2.4							
1.8 TO 2.0							0	1.8 TO 2.0							
1.6 TO 1.8							0	1.6 TO 1.8							
1.5 TO 1.6							0	1.5 TO 1.6							
1.4 TO 1.5							0	1.4 TO 1.5							
1.3 TO 1.4							0	1.3 TO 1.4							
1.2 TO 1.3							0	1.2 TO 1.3							
1.1 TO 1.2							0	1.1 TO 1.2							
0.8 TO 0.9							0	0.8 TO 0.9							
0.7 TO 0.8							0	0.7 TO 0.8							
0.6 TO 0.7							0	0.6 TO 0.7							
0.4 TO 0.6							0	0.4 TO 0.6							
0.2 TO 0.4							0	0.2 TO 0.4							
0. TO 0.2							0	0. TO 0.2							
BELOW 0.							0	BELOW 0.							
TIME (MIN)	0.4	204.0	346.4				693.8	TIME (MIN)	0.0	1000.4	17.0			1127.9	
NAUT MILES	1.0	1700.0	1019.4				1900.0	NAUT MILES	0.0	5400.7	96.9			5418.9	

Table 43

Maneuver Load Factors by Equivalent Airspeed and Altitude  
 Mission I (long Range Logistics)  
 Gross Weight Range: 105,000 to 115,000 lb.

ALTITUDE - 0 TO 7,000 FEET							ALTITUDE - 2,000 TO 7,000 FEET						
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350 AND ABOVE	
ABOVE 2.0							ABOVE 2.0						
2.0 TO 2.4							2.0 TO 2.4						
1.8 TO 2.0							1.8 TO 2.0						
1.6 TO 1.8							1.6 TO 1.8						
1.5 TO 1.6	1	1				2	1.5 TO 1.6			1			1
1.4 TO 1.5	1	1				2	1.4 TO 1.5	1	2	2	1		6
1.3 TO 1.4	9	11	2	1		23	1.3 TO 1.4	15	25	9	1		50
1.2 TO 1.3	96	320	69	3		488	1.2 TO 1.3	61	136	51	13		261
1.1 TO 1.2	691	320	69	7		1079	1.1 TO 1.2	131	590	212	35	2	1170
0.8 TO 0.9	497	219	21	7		744	0.8 TO 0.9	109	142	110	19	3	483
0.7 TO 0.8	26	20	4			50	0.7 TO 0.8	22	26	12	5		65
0.6 TO 0.7	1	2				3	0.6 TO 0.7	2	4	1			7
0.4 TO 0.6							0.4 TO 0.6		3				3
0.2 TO 0.4							0.2 TO 0.4						
0 TO 0.2							0 TO 0.2						
BELOW 0							BELOW 0						
TIME (MIN)	405.3	200.0	23.3	2.3		701.6	300.4	267.0	210.0	10.0	2.2	1114.3	
NAUT MILES	1075.0	643.3	79.0	9.4		1806.0	732.2	1014.0	794.0	95.0	11.0	3237.7	

ALTITUDE - 9,000 TO 10,000 FEET							ALTITUDE - 10,000 TO 15,000 FEET						
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350 AND ABOVE	
ABOVE 2.0							ABOVE 2.0						
2.4 TO 2.6							2.4 TO 2.6						
2.0 TO 2.4							2.0 TO 2.4						
1.8 TO 2.0							1.8 TO 2.0						
1.6 TO 1.8		1	1			2	1.6 TO 1.8						
1.5 TO 1.6		1				1	1.5 TO 1.6						
1.4 TO 1.5		2	3	4		9	1.4 TO 1.5			1			1
1.3 TO 1.4		4	5	4		13	1.3 TO 1.4		4	4	2		12
1.2 TO 1.3	3	32	36	10	1	82	1.2 TO 1.3		12	23	7		42
1.1 TO 1.2	16	105	231	64	10	440	1.1 TO 1.2	1	35	90	29	1	162
0.8 TO 0.9	23	110	124	20	4	290	0.8 TO 0.9	9	27	60	20		116
0.7 TO 0.8	2	13	11	2		28	0.7 TO 0.8		0	4	1		5
0.6 TO 0.7		1	1	1		3	0.6 TO 0.7		1	2			3
0.4 TO 0.6							0.4 TO 0.6						
0.2 TO 0.4							0.2 TO 0.4						
0 TO 0.2							0 TO 0.2						
BELOW 0							BELOW 0						
TIME (MIN)	34.0	320.0	400.7	92.9	0.0	847.6	4.3	130.0	447.0	94.1	7.0	687.6	
NAUT MILES	90.7	1094.1	2095.3	413.2	40.7	3662.3	12.0	300.4	2022.1	500.0	47.1	3006.3	

ALTITUDE - 15,000 TO 20,000 FEET							ALTITUDE - 20,000 TO 24,000 FEET						
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350 AND ABOVE	
ABOVE 2.0							ABOVE 2.0						
2.4 TO 2.6							2.4 TO 2.6						
2.0 TO 2.4							2.0 TO 2.4						
1.8 TO 2.0							1.8 TO 2.0						
1.6 TO 1.8							1.6 TO 1.8						
1.5 TO 1.6							1.5 TO 1.6						
1.4 TO 1.5							1.4 TO 1.5						
1.3 TO 1.4			4	1		5	1.3 TO 1.4						
1.2 TO 1.3			10	1		11	1.2 TO 1.3						
1.1 TO 1.2			11	10	1	22	1.1 TO 1.2						
0.8 TO 0.9			31	12		43	0.8 TO 0.9						
0.7 TO 0.8			27	5	1	33	0.7 TO 0.8						
0.6 TO 0.7			7			7	0.6 TO 0.7						
0.4 TO 0.6							0.4 TO 0.6						
0.2 TO 0.4							0.2 TO 0.4						
0 TO 0.2							0 TO 0.2						
BELOW 0							BELOW 0						
TIME (MIN)	4.1	114.0	200.0	100.0	0.0	218.1	10.7	2000.0	507.2	54.0		1140.7	
NAUT MILES	13.1	274.4	1000.0	175.0	30.0	1302.5	41.2	3707.2	1260.1	50.0		5028.4	

ALTITUDE - 25,000 TO 30,000 FEET							ALTITUDE - 30,000 TO ABOVE FEET						
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350 AND ABOVE	
ABOVE 2.0							ABOVE 2.0						
2.4 TO 2.6							2.4 TO 2.6						
2.0 TO 2.4							2.0 TO 2.4						
1.8 TO 2.0							1.8 TO 2.0						
1.6 TO 1.8							1.6 TO 1.8						
1.5 TO 1.6							1.5 TO 1.6						
1.4 TO 1.5							1.4 TO 1.5						
1.3 TO 1.4							1.3 TO 1.4						
1.2 TO 1.3							1.2 TO 1.3						
1.1 TO 1.2							1.1 TO 1.2						
0.8 TO 0.9							0.8 TO 0.9						
0.7 TO 0.8							0.7 TO 0.8						
0.6 TO 0.7							0.6 TO 0.7						
0.4 TO 0.6							0.4 TO 0.6						
0.2 TO 0.4							0.2 TO 0.4						
0 TO 0.2							0 TO 0.2						
BELOW 0							BELOW 0						
TIME (MIN)	20.0	1270.0	1207.0	2.7		1500.7	0.2	1000.0	112.1			1000.0	
NAUT MILES	100.0	1700.0	1000.0	0.7		2600.7	0.0	0770.0	082.1			0800.0	



**Table 44**  
**Maneuver Load Factors by Equivalent Airspeed and Altitude**  
**Mission I (Long Range Logistics)**  
**Gross Weight Range: 115,000 to 125,000 lb.**

ALTITUDE - 0 TO 2,000 FEET							ALTITUDE - 2,000 TO 5,000 FEET						
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 2.0							ABOVE 2.0						
2.4 TO 2.0							2.4 TO 2.0						
2.0 TO 2.4							2.0 TO 2.4						
1.8 TO 2.0							1.8 TO 2.0						
1.5 TO 1.8							1.5 TO 1.8						
1.4 TO 1.5							1.4 TO 1.5						
1.3 TO 1.4							1.3 TO 1.4						
1.2 TO 1.3							1.2 TO 1.3						
1.1 TO 1.2							1.1 TO 1.2						
0.9 TO 0.9							0.9 TO 0.9						
0.7 TO 0.9							0.7 TO 0.9						
0.6 TO 0.7							0.6 TO 0.7						
0.4 TO 0.6							0.4 TO 0.6						
0.2 TO 0.4							0.2 TO 0.4						
0. TO 0.2							0. TO 0.2						
BELOW 0.							BELOW 0.						
TIME (HOURS)	497.2	101.4	15.2	0.6		624.4	129.5	200.1	09.3	0.5	0.2	542.7	
NAUT MILES	472.3	207.0	59.0	2.5		621.7	116.0	331.1	310.2	4.2	1.0	1514.2	

ALTITUDE - 5,000 TO 10,000 FEET							ALTITUDE - 10,000 TO 15,000 FEET						
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 2.0							ABOVE 2.0						
2.4 TO 2.0							2.4 TO 2.0						
2.0 TO 2.4							2.0 TO 2.4						
1.8 TO 2.0							1.8 TO 2.0						
1.5 TO 1.8							1.5 TO 1.8						
1.4 TO 1.5							1.4 TO 1.5						
1.3 TO 1.4							1.3 TO 1.4						
1.2 TO 1.3							1.2 TO 1.3						
1.1 TO 1.2							1.1 TO 1.2						
0.9 TO 0.9							0.9 TO 0.9						
0.7 TO 0.9							0.7 TO 0.9						
0.6 TO 0.7							0.6 TO 0.7						
0.4 TO 0.6							0.4 TO 0.6						
0.2 TO 0.4							0.2 TO 0.4						
0. TO 0.2							0. TO 0.2						
BELOW 0.							BELOW 0.						
TIME (HOURS)	10.7	21.0	270.5	22.1	2.3	306.6	7.0	21.3	22.7	72.3	123.3		
NAUT MILES	03.4	20.3	972.5	100.5	17.4	2043.4	21.0	1102.0	027.0	100.7	1244.7		

ALTITUDE - 15,000 TO 20,000 FEET							ALTITUDE - 20,000 TO 25,000 FEET						
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 2.0							ABOVE 2.0						
2.4 TO 2.0							2.4 TO 2.0						
2.0 TO 2.4							2.0 TO 2.4						
1.8 TO 2.0							1.8 TO 2.0						
1.5 TO 1.8							1.5 TO 1.8						
1.4 TO 1.5							1.4 TO 1.5						
1.3 TO 1.4							1.3 TO 1.4						
1.2 TO 1.3							1.2 TO 1.3						
1.1 TO 1.2							1.1 TO 1.2						
0.9 TO 0.9							0.9 TO 0.9						
0.7 TO 0.9							0.7 TO 0.9						
0.6 TO 0.7							0.6 TO 0.7						
0.4 TO 0.6							0.4 TO 0.6						
0.2 TO 0.4							0.2 TO 0.4						
0. TO 0.2							0. TO 0.2						
BELOW 0.							BELOW 0.						
TIME (HOURS)	20.1	1000.4	2770.0	100.1	1.2	3992.8	02.0	2000.1	0004.0	100.7	2026.8		
NAUT MILES	02.0	1000.0	1000.0	100.0	1.2	2000.2	20.0	0270.0	0100.0	100.0	3900.0		

ALTITUDE - 25,000 TO 30,000 FEET							ALTITUDE - 30,000 TO ABOVE FEET						
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 2.0							ABOVE 2.0						
2.4 TO 2.0							2.4 TO 2.0						
2.0 TO 2.4							2.0 TO 2.4						
1.8 TO 2.0							1.8 TO 2.0						
1.5 TO 1.8							1.5 TO 1.8						
1.4 TO 1.5							1.4 TO 1.5						
1.3 TO 1.4							1.3 TO 1.4						
1.2 TO 1.3							1.2 TO 1.3						
1.1 TO 1.2							1.1 TO 1.2						
0.9 TO 0.9							0.9 TO 0.9						
0.7 TO 0.9							0.7 TO 0.9						
0.6 TO 0.7							0.6 TO 0.7						
0.4 TO 0.6							0.4 TO 0.6						
0.2 TO 0.4							0.2 TO 0.4						
0. TO 0.2							0. TO 0.2						
BELOW 0.							BELOW 0.						
TIME (HOURS)	00.1	1000.0	000.0			1000.0	00.0	000.0	000.0			000.0	
NAUT MILES	00.0	1000.0	000.0			1000.0	00.0	000.0	000.0			000.0	

Table 45  
 Maneuver Load Factors by Equivalent Airspeed and Altitude  
 Mission I (Long Range Logistics)  
 Gross Weight Range: 125,000 to 135,000 lb.

ALTITUDE - 0 TO 2,000 FEET								ALTITUDE - 2,000 TO 5,000 FEET									
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)							TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)							TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 TO 400	400 ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 TO 400	400 ABOVE	
ABOVE 2.0									ABOVE 2.0								
2.4 TO 2.0									2.4 TO 2.0								
2.0 TO 2.4									2.0 TO 2.4								
1.8 TO 2.0									1.8 TO 2.0								
1.6 TO 1.8									1.6 TO 1.8								
1.4 TO 1.6									1.4 TO 1.6								
1.3 TO 1.4									1.3 TO 1.4								
1.2 TO 1.3									1.2 TO 1.3								
1.1 TO 1.2									1.1 TO 1.2								
0.8 TO 0.9									0.8 TO 0.9								
0.7 TO 0.8									0.7 TO 0.8								
0.6 TO 0.7									0.6 TO 0.7								
0.5 TO 0.6									0.5 TO 0.6								
0.2 TO 0.4									0.2 TO 0.4								
0.1 TO 0.2									0.1 TO 0.2								
BELOW 0.1									BELOW 0.1								
TIME (MIN)	82.0	122.2	14.9		0.5		220.5		TIME (MIN)	9.4	208.5	53.9		0.5		270.5	
NAUT MILES	117.0	373.4	59.0		1.0		649.5		NAUT MILES	22.4	681.2	211.2		26.5		923.5	

ALTITUDE - 5,000 TO 10,000 FEET								ALTITUDE - 10,000 TO 15,000 FEET									
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)							TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)							TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 TO 400	400 ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 TO 400	400 ABOVE	
ABOVE 2.0									ABOVE 2.0								
2.4 TO 2.0									2.4 TO 2.0								
2.0 TO 2.4									2.0 TO 2.4								
1.8 TO 2.0									1.8 TO 2.0								
1.6 TO 1.8									1.6 TO 1.8								
1.4 TO 1.6									1.4 TO 1.6								
1.3 TO 1.4									1.3 TO 1.4								
1.2 TO 1.3									1.2 TO 1.3								
1.1 TO 1.2									1.1 TO 1.2								
0.8 TO 0.9									0.8 TO 0.9								
0.7 TO 0.8									0.7 TO 0.8								
0.6 TO 0.7									0.6 TO 0.7								
0.5 TO 0.6									0.5 TO 0.6								
0.2 TO 0.4									0.2 TO 0.4								
0.1 TO 0.2									0.1 TO 0.2								
BELOW 0.1									BELOW 0.1								
TIME (MIN)		432.0	100.0		1.0		560.0		TIME (MIN)	1.0	278.1	41.3		0.7		320.5	
NAUT MILES		1041.2	100.0		0.0		1093.5		NAUT MILES	2.0	290.2	43.0		33.5		366.5	

ALTITUDE - 15,000 TO 20,000 FEET								ALTITUDE - 20,000 TO 25,000 FEET									
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)							TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)							TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 TO 400	400 ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 TO 400	400 ABOVE	
ABOVE 2.0									ABOVE 2.0								
2.4 TO 2.0									2.4 TO 2.0								
2.0 TO 2.4									2.0 TO 2.4								
1.8 TO 2.0									1.8 TO 2.0								
1.6 TO 1.8									1.6 TO 1.8								
1.4 TO 1.6									1.4 TO 1.6								
1.3 TO 1.4									1.3 TO 1.4								
1.2 TO 1.3									1.2 TO 1.3								
1.1 TO 1.2									1.1 TO 1.2								
0.8 TO 0.9									0.8 TO 0.9								
0.7 TO 0.8									0.7 TO 0.8								
0.6 TO 0.7									0.6 TO 0.7								
0.5 TO 0.6									0.5 TO 0.6								
0.2 TO 0.4									0.2 TO 0.4								
0.1 TO 0.2									0.1 TO 0.2								
BELOW 0.1									BELOW 0.1								
TIME (MIN)		7.0	3170.0	600.1		376.0	4150.0		TIME (MIN)	30.0	2300.0	1000.2		100.0		4600.0	
NAUT MILES		26.5	1024.1	3219.5		1076.7	4146.0		NAUT MILES	117.0	10700.0	3382.0		1700.0		15870.0	

ALTITUDE - 25,000 TO 30,000 FEET								ALTITUDE - 30,000 TO 35,000 FEET									
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)							TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)							TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 TO 400	400 ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 TO 400	400 ABOVE	
ABOVE 2.0									ABOVE 2.0								
2.4 TO 2.0									2.4 TO 2.0								
2.0 TO 2.4									2.0 TO 2.4								
1.8 TO 2.0									1.8 TO 2.0								
1.6 TO 1.8									1.6 TO 1.8								
1.4 TO 1.6									1.4 TO 1.6								
1.3 TO 1.4									1.3 TO 1.4								
1.2 TO 1.3									1.2 TO 1.3								
1.1 TO 1.2									1.1 TO 1.2								
0.8 TO 0.9									0.8 TO 0.9								
0.7 TO 0.8									0.7 TO 0.8								
0.6 TO 0.7									0.6 TO 0.7								
0.5 TO 0.6									0.5 TO 0.6								
0.2 TO 0.4									0.2 TO 0.4								
0.1 TO 0.2									0.1 TO 0.2								
BELOW 0.1									BELOW 0.1								
TIME (MIN)		15.7	800.2	1071.0			1886.5		TIME (MIN)	130.0	170.1					300.0	
NAUT MILES		54.4	3000.0	3020.0			6574.0		NAUT MILES	2700.0	1700.0					4400.0	

**Table 46**  
**Maneuver Load Factors by Equivalent Airspeed and Altitude**  
**Mission I (Long Range Logistics)**  
**Gross Weight Range: 135,000 lb. and Above**

ALTITUDE - 0 TO 2,000 FEET							ALTITUDE - 2,000 TO 5,000 FEET								
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0															
2.0 TO 2.4							1								
2.4 TO 2.8							1								
1.8 TO 2.0							1								
1.6 TO 1.8							1								
1.5 TO 1.6							1								
1.4 TO 1.5							10								
1.3 TO 1.4	1	7	1	1			90								
1.2 TO 1.3	9	55	19	7			92								
1.1 TO 1.2	94	389	34	24			521								
	831	1270	127	19	2		1250								
0.8 TO 0.9	402	687	81	14			1188								
0.7 TO 0.8	43	57	15	10			125								
0.6 TO 0.7	3	11	1	2			20								
0.4 TO 0.6		1					3								
0.2 TO 0.4															
0.1 TO 0.2															
BELOW 0.1															
TIME (MIN)	402.5	673.9	66.6	9.3	0.4		1152.7	20.8	1040.2	332.5	63.3	1.5	1428.3		
NAUT MILES	1077.2	2092.0	252.6	41.9	2.1		3465.9	58.4	3358.2	1516.8	295.9	7.7	5237.0		

ALTITUDE - 5,000 TO 10,000 FEET							ALTITUDE - 10,000 TO 15,000 FEET								
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0															
2.0 TO 2.4															
2.4 TO 2.8															
1.8 TO 2.0															
1.6 TO 1.8															
1.5 TO 1.6															
1.4 TO 1.5							3								
1.3 TO 1.4							20								
1.2 TO 1.3							384								
1.1 TO 1.2	1	230	133	12			364								
0.8 TO 0.9	2	142	57	7			208								
0.7 TO 0.8		20	3				23								
0.6 TO 0.7		6	2				8								
0.4 TO 0.6															
0.2 TO 0.4															
0.1 TO 0.2															
BELOW 0.1															
TIME (MIN)	9.5	2037.7	343.9	20.4			2427.6	25.7	2760.2	433.1	59.1		3278.1		
NAUT MILES	27.3	6831.8	174.1	97.4			8430.6	75.5	6400.6	1967.4	328.8		11972.4		

ALTITUDE - 15,000 TO 20,000 FEET							ALTITUDE - 20,000 TO 25,000 FEET								
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0															
2.0 TO 2.4															
2.4 TO 2.8															
1.8 TO 2.0															
1.6 TO 1.8															
1.5 TO 1.6															
1.4 TO 1.5							3								
1.3 TO 1.4							5								
1.2 TO 1.3	4	18	40				72								
1.1 TO 1.2	9	350	477	2			838								
0.8 TO 0.9	13	263	290	1			572								
0.7 TO 0.8	3	13	30				46								
0.6 TO 0.7	2		4				6								
0.4 TO 0.6		1	2				3								
0.2 TO 0.4															
0.1 TO 0.2															
BELOW 0.1															
TIME (MIN)	126.1	6279.1	14982.8	947.5			22325.4	116.8	10540.3	15978.8	113.2		27376.7		
NAUT MILES	420.1	24811.3	69515.3	4632.4			100399.3	419.3	50647.5	78218.4	1830.7		130527.6		

ALTITUDE - 25,000 TO 30,000 FEET							ALTITUDE - 30,000 TO ABOVE FEET								
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0															
2.0 TO 2.4															
2.4 TO 2.8															
1.8 TO 2.0															
1.6 TO 1.8															
1.5 TO 1.6															
1.4 TO 1.5															
1.3 TO 1.4															
1.2 TO 1.3															
1.1 TO 1.2															
0.8 TO 0.9															
0.7 TO 0.8															
0.6 TO 0.7															
0.4 TO 0.6															
0.2 TO 0.4															
0.1 TO 0.2															
BELOW 0.1															
TIME (MIN)	0.3	2620.3	711.4				3410.0	101.2	100.2				209.4		
NAUT MILES	11.8	18714.0	6884.1				16791.9	523.3	611.8				1179.0		

Table 47  
 Maneuver Load Factors by Equivalent Airspeed and Altitude  
 Mission II (Short Range Logistics)  
 Gross Weight Range: Below 85,000 lb.

ALTITUDE - 0 TO 2,000 FEET								ALTITUDE - 2,000 TO 4,000 FEET							
LOAD FACTOR Nz	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL Nz	LOAD FACTOR Nz	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL Nz
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.4							1	ABOVE 2.8							1
2.4 TO 2.6								2.4 TO 2.6							
2.0 TO 2.4								2.0 TO 2.4							
1.8 TO 2.0								1.8 TO 2.0							
1.6 TO 1.8								1.6 TO 1.8							
1.5 TO 1.6			1				1	1.5 TO 1.6							
1.4 TO 1.5								1.4 TO 1.5							
1.3 TO 1.4		1	3	1			5	1.3 TO 1.4							
1.2 TO 1.3		1	4	2			7	1.2 TO 1.3							
1.1 TO 1.2		11	9	2			22	1.1 TO 1.2			1				1
0.8 TO 0.9		8	8	2			18	0.8 TO 0.9			1				1
0.7 TO 0.8		3	6				9	0.7 TO 0.8							
0.6 TO 0.7			1	2			3	0.6 TO 0.7							
0.4 TO 0.6								0.4 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0.1 TO 0.2								0.1 TO 0.2							
BELOW 0.1								BELOW 0.1							
TIME (MIN)	9.9	4.2	1.3				17.4	TIME (MIN)							3.8
NAUT MILES	21.2	17.7	4.5				43.4	NAUT MILES	2.1	1.7					12.8

ALTITUDE - 10,000 TO 14,000 FEET								ALTITUDE - 15,000 TO 20,000 FEET							
LOAD FACTOR Nz	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL Nz	LOAD FACTOR Nz	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL Nz
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.8								ABOVE 2.8							
2.4 TO 2.8								2.4 TO 2.8							
2.0 TO 2.4								2.0 TO 2.4							
1.8 TO 2.0								1.8 TO 2.0							
1.6 TO 1.8								1.6 TO 1.8							
1.5 TO 1.6								1.5 TO 1.6							
1.4 TO 1.5								1.4 TO 1.5							
1.3 TO 1.4								1.3 TO 1.4							
1.2 TO 1.3								1.2 TO 1.3							
1.1 TO 1.2								1.1 TO 1.2							
0.8 TO 0.9								0.8 TO 0.9							
0.7 TO 0.8								0.7 TO 0.8							
0.6 TO 0.7								0.6 TO 0.7							
0.4 TO 0.6								0.4 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0.1 TO 0.2								0.1 TO 0.2							
BELOW 0.1								BELOW 0.1							
TIME (MIN)			2.9				2.9	TIME (MIN)							100.0
NAUT MILES			11.1				11.1	NAUT MILES			20.0				100.0

**Table 48**  
**Maneuver Load Factors by Equivalent Airspeed and Altitude**  
**Mission II (Short Range Logistics)**  
**Gross Weight Range: 85,000 to 95,000 lb.**

ALTITUDE - C TO 2,000 FEET							ALTITUDE - 2,000 TO 5,000 FEET						
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL
NE	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	NE	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE
ABOVE 2.0							ABOVE 2.0						
2.4 TO 2.0							2.4 TO 2.0						
2.0 TO 2.4							2.0 TO 2.4						
1.8 TO 2.0							1.8 TO 2.0						
1.6 TO 1.8							1.6 TO 1.8						
1.5 TO 1.6							1.5 TO 1.6						
1.4 TO 1.5							1.4 TO 1.5						
1.3 TO 1.4							1.3 TO 1.4						
1.2 TO 1.3							1.2 TO 1.3						
1.1 TO 1.2							1.1 TO 1.2						
0.8 TO 0.9							0.8 TO 0.9						
0.7 TO 0.8							0.7 TO 0.8						
0.6 TO 0.7							0.6 TO 0.7						
0.4 TO 0.6							0.4 TO 0.6						
0.2 TO 0.4							0.2 TO 0.4						
0. TO 0.2							0. TO 0.2						
BELOW 0.							BELOW 0.						
TIME (MIN)	93.3	43.1	5.2	1.4		143.1	14.1	77.8	44.0	10.1	0.7		146.7
NAUT MILES	202.8	119.2	10.2	4.1		346.3	34.6	239.5	146.0	45.6	3.8		487.6

ALTITUDE - 5,000 TO 10,000 FEET							ALTITUDE - 10,000 TO 15,000 FEET						
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL
NE	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	NE	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE
ABOVE 2.0							ABOVE 2.0						
2.4 TO 2.0							2.4 TO 2.0						
2.0 TO 2.4							2.0 TO 2.4						
1.8 TO 2.0							1.8 TO 2.0						
1.6 TO 1.8							1.6 TO 1.8						
1.5 TO 1.6							1.5 TO 1.6						
1.4 TO 1.5							1.4 TO 1.5						
1.3 TO 1.4							1.3 TO 1.4						
1.2 TO 1.3							1.2 TO 1.3						
1.1 TO 1.2							1.1 TO 1.2						
0.8 TO 0.9							0.8 TO 0.9						
0.7 TO 0.8							0.7 TO 0.8						
0.6 TO 0.7							0.6 TO 0.7						
0.4 TO 0.6							0.4 TO 0.6						
0.2 TO 0.4							0.2 TO 0.4						
0. TO 0.2							0. TO 0.2						
BELOW 0.							BELOW 0.						
TIME (MIN)	6.0	50.7	102.0	50.1	1.5	206.0	14.2	131.7	21.0	1.3			168.0
NAUT MILES	2.4	163.0	426.7	236.6	8.6	837.3	50.8	604.2	109.4	7.7			772.0

ALTITUDE - 15,000 TO 20,000 FEET							ALTITUDE - 20,000 TO 25,000 FEET						
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL
NE	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	NE	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE
ABOVE 2.0							ABOVE 2.0						
2.4 TO 2.0							2.4 TO 2.0						
2.0 TO 2.4							2.0 TO 2.4						
1.8 TO 2.0							1.8 TO 2.0						
1.6 TO 1.8							1.6 TO 1.8						
1.5 TO 1.6							1.5 TO 1.6						
1.4 TO 1.5							1.4 TO 1.5						
1.3 TO 1.4							1.3 TO 1.4						
1.2 TO 1.3							1.2 TO 1.3						
1.1 TO 1.2							1.1 TO 1.2						
0.8 TO 0.9							0.8 TO 0.9						
0.7 TO 0.8							0.7 TO 0.8						
0.6 TO 0.7							0.6 TO 0.7						
0.4 TO 0.6							0.4 TO 0.6						
0.2 TO 0.4							0.2 TO 0.4						
0. TO 0.2							0. TO 0.2						
BELOW 0.							BELOW 0.						
TIME (MIN)	10.2	152.3	17.3	1.3		197.2	239.1	364.9	3.0				607.0
NAUT MILES	65.5	709.1	95.0	6.4		872.0	1129.9	1839.2	16.5				2485.6

ALTITUDE - 25,000 TO 30,000 FEET							ALTITUDE - 30,000 TO ABOVE FEET						
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL
NE	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	NE	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE
ABOVE 2.0							ABOVE 2.0						
2.4 TO 2.0							2.4 TO 2.0						
2.0 TO 2.4							2.0 TO 2.4						
1.8 TO 2.0							1.8 TO 2.0						
1.6 TO 1.8							1.6 TO 1.8						
1.5 TO 1.6							1.5 TO 1.6						
1.4 TO 1.5							1.4 TO 1.5						
1.3 TO 1.4							1.3 TO 1.4						
1.2 TO 1.3							1.2 TO 1.3						
1.1 TO 1.2							1.1 TO 1.2						
0.8 TO 0.9							0.8 TO 0.9						
0.7 TO 0.8							0.7 TO 0.8						
0.6 TO 0.7							0.6 TO 0.7						
0.4 TO 0.6							0.4 TO 0.6						
0.2 TO 0.4							0.2 TO 0.4						
0. TO 0.2							0. TO 0.2						
BELOW 0.							BELOW 0.						
TIME (MIN)	66.8	66.0				132.8	6.0	301.1	2.0				312.0
NAUT MILES	406.3	303.2				709.5	41.2	947.5	12.0				959.6

**Table 49**  
**Maneuver Load Factors by Equivalent Airspeed and Altitude**  
**Mission II (Short Range Logistics)**  
**Gross Weight Range: 95,000 to 105,000 lb.**

ALTITUDE - 0 TO 7,000 FEET								ALTITUDE - 8,000 TO 15,000 FEET							
LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ	LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0							1	2.4 TO 2.0							2
2.0 TO 2.4							1	2.0 TO 2.4							0
1.8 TO 2.0							1	1.8 TO 2.0							0
1.6 TO 1.8	1						1	1.6 TO 1.8							0
1.5 TO 1.6	1	3					1	1.5 TO 1.6							21
1.4 TO 1.5	3	8					13	1.4 TO 1.5							21
1.3 TO 1.4	24	27					51	1.3 TO 1.4							74
1.2 TO 1.3	172	108	42				322	1.2 TO 1.3	11	41	19				248
1.1 TO 1.2	800	304	315	10			1429	1.1 TO 1.2	98	117	69				304
0.8 TO 0.9	972	193	134				999	0.8 TO 0.9	178	272	139	14			603
0.7 TO 0.8	86	35	24				125	0.7 TO 0.8	24	66	24	3			117
0.6 TO 0.7	4	2	1				7	0.6 TO 0.7	2	10	3	2			17
0.4 TO 0.6	1						1	0.4 TO 0.6	1	3	3				7
0.2 TO 0.4								0.2 TO 0.4							
0. TO 0.2								0. TO 0.2							
BELOW 0.								BELOW 0.							
TIME (MIN)	334.9	154.0	138.0	2.4			630.1	TIME (MIN)	221.0	271.7	173.9	26.4	9.5		600.7
NAUT MILES	739.0	438.4	528.2	10.9			1715.5	NAUT MILES	290.1	819.9	686.8	126.9	31.3		1933.0

ALTITUDE - 9,000 TO 17,000 FEET								ALTITUDE - 18,000 TO 25,000 FEET							
LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ	LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0							3	2.4 TO 2.0							2
2.0 TO 2.4							7	2.0 TO 2.4							10
1.8 TO 2.0							7	1.8 TO 2.0							3
1.6 TO 1.8							14	1.6 TO 1.8							1
1.5 TO 1.6							25	1.5 TO 1.6							21
1.4 TO 1.5	1						1	1.4 TO 1.5							14
1.3 TO 1.4	2	42	41	9			94	1.3 TO 1.4							2
1.2 TO 1.3	4	145	160	37	1		347	1.2 TO 1.3							21
1.1 TO 1.2								1.1 TO 1.2							14
0.8 TO 0.9	4	119	109	25	2		259	0.8 TO 0.9	1	35	39	8			83
0.7 TO 0.8	2	24	12	2			40	0.7 TO 0.8							10
0.6 TO 0.7	1	9	1	1			11	0.6 TO 0.7							3
0.4 TO 0.6	1	1	3				5	0.4 TO 0.6							1
0.2 TO 0.4								0.2 TO 0.4							
0. TO 0.2								0. TO 0.2							
BELOW 0.								BELOW 0.							
TIME (MIN)	3.1	213.0	420.3	126.3	14.0		776.9	TIME (MIN)	1.4	133.5	270.3	68.9			474.0
NAUT MILES	8.7	712.9	1004.2	612.9	80.2		3210.9	NAUT MILES	4.4	473.2	1264.2	394.2			2095.9

ALTITUDE - 18,000 TO 25,000 FEET								ALTITUDE - 26,000 TO 30,000 FEET							
LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ	LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0							1	2.4 TO 2.0							2
2.0 TO 2.4							1	2.0 TO 2.4							10
1.8 TO 2.0							3	1.8 TO 2.0							73
1.6 TO 1.8							7	1.6 TO 1.8							2
1.5 TO 1.6							11	1.5 TO 1.6							6
1.4 TO 1.5							1	1.4 TO 1.5							
1.3 TO 1.4							3	1.3 TO 1.4							
1.2 TO 1.3							57	1.2 TO 1.3							
1.1 TO 1.2								1.1 TO 1.2							
0.8 TO 0.9							94	0.8 TO 0.9							82
0.7 TO 0.8							4	0.7 TO 0.8							6
0.6 TO 0.7								0.6 TO 0.7							
0.4 TO 0.6								0.4 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0. TO 0.2								0. TO 0.2							
BELOW 0.								BELOW 0.							
TIME (MIN)	1.7	130.1	606.4	23.6			859.8	TIME (MIN)	0.6	596.3	1355.0	2.5			1962.4
NAUT MILES	7.1	532.2	1377.4	124.2			2049.9	NAUT MILES	32.7	2756.0	6796.5	14.3			9571.5

ALTITUDE - 25,000 TO 30,000 FEET							
LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0							
2.4 TO 2.0							1
2.0 TO 2.4							1
1.8 TO 2.0							94
1.6 TO 1.8							48
1.5 TO 1.6							94
1.4 TO 1.5							1
1.3 TO 1.4							1
1.2 TO 1.3							1
1.1 TO 1.2							1
0.8 TO 0.9							1
0.7 TO 0.8							1
0.6 TO 0.7							1
0.4 TO 0.6							1
0.2 TO 0.4							1
0. TO 0.2							1
BELOW 0.							1
TIME (MIN)	26.0	796.1	297.1				1099.2
NAUT MILES	66.3	3763.8	1549.8				5989.9

**Table 50**  
**Maneuver Load Factors by Equivalent Airspeed and Altitude**  
**Mission II (Short Range Logistics)**  
**Gross Weight Range: 105,000 to 115,000 lb.**

ALTITUDE - 0 TO 2,000 FEET							ALTITUDE - 2,000 TO 4,000 FEET						
LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL NE	LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL NE
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 2.0							ABOVE 2.0						
2.4 TO 2.0							2.4 TO 2.0						
2.0 TO 2.4							2.0 TO 2.4						
1.8 TO 2.0							1.8 TO 2.0						
1.6 TO 1.8							1.6 TO 1.8						
1.5 TO 1.6							1.5 TO 1.6						
1.4 TO 1.5							1.4 TO 1.5						
1.3 TO 1.4							1.3 TO 1.4						
1.2 TO 1.3							1.2 TO 1.3						
1.1 TO 1.2							1.1 TO 1.2						
0.8 TO 0.9							0.8 TO 0.9						
0.7 TO 0.8							0.7 TO 0.8						
0.6 TO 0.7							0.6 TO 0.7						
0.4 TO 0.6							0.4 TO 0.6						
0.2 TO 0.4							0.2 TO 0.4						
0. TO 0.2							0. TO 0.2						
BELOW 0.							BELOW 0.						
TIME (MIN)							TIME (MIN)						
NAUT MILES							NAUT MILES						
450.5	483.7	272.3	2.0		1000.0	360.1	694.0	331.0	84.7		1898.6		
1083.2	1383.6	1038.4	8.7		4313.9	413.5	2670.0	2023.4	386.8		5995.3		

ALTITUDE - 5,000 TO 10,000 FEET							ALTITUDE - 10,000 TO 15,000 FEET						
LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL NE	LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL NE
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 2.0							ABOVE 2.0						
2.4 TO 2.0							2.4 TO 2.0						
2.0 TO 2.4							2.0 TO 2.4						
1.8 TO 2.0							1.8 TO 2.0						
1.6 TO 1.8							1.6 TO 1.8						
1.5 TO 1.6							1.5 TO 1.6						
1.4 TO 1.5							1.4 TO 1.5						
1.3 TO 1.4							1.3 TO 1.4						
1.2 TO 1.3							1.2 TO 1.3						
1.1 TO 1.2							1.1 TO 1.2						
0.8 TO 0.9							0.8 TO 0.9						
0.7 TO 0.8							0.7 TO 0.8						
0.6 TO 0.7							0.6 TO 0.7						
0.4 TO 0.6							0.4 TO 0.6						
0.2 TO 0.4							0.2 TO 0.4						
0. TO 0.2							0. TO 0.2						
BELOW 0.							BELOW 0.						
TIME (MIN)							TIME (MIN)						
NAUT MILES							NAUT MILES						
36.7	370.0	1039.4	294.9	7.6	1949.3	17.0	474.0	975.7	222.4	1.9	1291.6		
94.1	1904.1	4398.4	1409.0	43.0	7849.6	52.3	1684.5	2680.6	1136.7	11.2	5545.2		

ALTITUDE - 15,000 TO 20,000 FEET							ALTITUDE - 20,000 TO 25,000 FEET						
LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL NE	LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL NE
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 2.0							ABOVE 2.0						
2.4 TO 2.0							2.4 TO 2.0						
2.0 TO 2.4							2.0 TO 2.4						
1.8 TO 2.0							1.8 TO 2.0						
1.6 TO 1.8							1.6 TO 1.8						
1.5 TO 1.6							1.5 TO 1.6						
1.4 TO 1.5							1.4 TO 1.5						
1.3 TO 1.4							1.3 TO 1.4						
1.2 TO 1.3							1.2 TO 1.3						
1.1 TO 1.2							1.1 TO 1.2						
0.8 TO 0.9							0.8 TO 0.9						
0.7 TO 0.8							0.7 TO 0.8						
0.6 TO 0.7							0.6 TO 0.7						
0.4 TO 0.6							0.4 TO 0.6						
0.2 TO 0.4							0.2 TO 0.4						
0. TO 0.2							0. TO 0.2						
BELOW 0.							BELOW 0.						
TIME (MIN)							TIME (MIN)						
NAUT MILES							NAUT MILES						
42.4	600.0	2687.7	197.5		3339.7	14.5	2493.3	3083.3	10.4		7506.9		
31.6	2350.3	12957.1	1009.0		16336.0	70.0	11466.7	28203.9	60.2		36002.6		

ALTITUDE - 25,000 TO 30,000 FEET							ALTITUDE - 30,000 TO ABOVE FEET						
LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL NE	LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL NE
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 2.0							ABOVE 2.0						
2.4 TO 2.0							2.4 TO 2.0						
2.0 TO 2.4							2.0 TO 2.4						
1.8 TO 2.0							1.8 TO 2.0						
1.6 TO 1.8							1.6 TO 1.8						
1.5 TO 1.6							1.5 TO 1.6						
1.4 TO 1.5							1.4 TO 1.5						
1.3 TO 1.4							1.3 TO 1.4						
1.2 TO 1.3							1.2 TO 1.3						
1.1 TO 1.2							1.1 TO 1.2						
0.8 TO 0.9							0.8 TO 0.9						
0.7 TO 0.8							0.7 TO 0.8						
0.6 TO 0.7							0.6 TO 0.7						
0.4 TO 0.6							0.4 TO 0.6						
0.2 TO 0.4							0.2 TO 0.4						
0. TO 0.2							0. TO 0.2						
BELOW 0.							BELOW 0.						
TIME (MIN)							TIME (MIN)						
NAUT MILES							NAUT MILES						
0.4	1107.1	700.1			1804.0	199.4	3.1			200.5			
10.4	3726.0	3700.0			7000.1	1110.0	10.9			1120.9			

**Table 51**  
**Maneuver Load Factors by Equivalent Airspeed and Altitude**  
**Mission II (Short Range Logistics)**  
**Gross Weight Range: 115,000 to 125,000 lb.**

ALTITUDE - 0 TO 2,000 FEET							ALTITUDE - 2,000 TO 5,000 FEET								
LOAD FACTOR Nz	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL Nz	LOAD FACTOR Nz	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL Nz
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.0 TO 2.4								2.0 TO 2.4							
1.0 TO 1.0								1.0 TO 1.0							
1.5 TO 1.0								1.5 TO 1.0							
1.4 TO 1.3								1.4 TO 1.3							
1.3 TO 1.2								1.3 TO 1.2							
1.2 TO 1.1								1.2 TO 1.1							
0.0 TO 0.9								0.0 TO 0.9							
0.7 TO 0.6								0.7 TO 0.6							
0.6 TO 0.7								0.6 TO 0.7							
0.4 TO 0.6								0.4 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0.0 TO 0.2								0.0 TO 0.2							
BELOW 0.0								BELOW 0.0							
TIME (MIN)	325.0	271.0	134.5	22.3		753.0		TIME (MIN)	216.4	329.0	227.4	110.4	1.0	1085.7	
NAUT MILES	761.1	802.7	507.5	105.0		2175.0		NAUT MILES	517.5	1022.0	804.4	57.5	0.3	3730.5	

ALTITUDE - 5,000 TO 10,000 FEET							ALTITUDE - 10,000 TO 15,000 FEET								
LOAD FACTOR Nz	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL Nz	LOAD FACTOR Nz	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL Nz
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.0 TO 2.4								2.0 TO 2.4							
1.0 TO 1.0								1.0 TO 1.0							
1.5 TO 1.0								1.5 TO 1.0							
1.4 TO 1.3								1.4 TO 1.3							
1.3 TO 1.2								1.3 TO 1.2							
1.2 TO 1.1								1.2 TO 1.1							
0.0 TO 0.9								0.0 TO 0.9							
0.7 TO 0.6								0.7 TO 0.6							
0.6 TO 0.7								0.6 TO 0.7							
0.4 TO 0.6								0.4 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0.0 TO 0.2								0.0 TO 0.2							
BELOW 0.0								BELOW 0.0							
TIME (MIN)	49.6	639.6	605.0	124.7		1300.3		TIME (MIN)	12.3	649.5	309.7	107.4		1070.1	
NAUT MILES	126.0	2130.7	2097.3	632.5		5795.2		NAUT MILES	36.7	2302.0	1422.0	557.1		4517.0	

ALTITUDE - 15,000 TO 20,000 FEET							ALTITUDE - 20,000 TO 25,000 FEET								
LOAD FACTOR Nz	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL Nz	LOAD FACTOR Nz	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL Nz
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.0 TO 2.4								2.0 TO 2.4							
1.0 TO 1.0								1.0 TO 1.0							
1.5 TO 1.0								1.5 TO 1.0							
1.4 TO 1.3								1.4 TO 1.3							
1.3 TO 1.2								1.3 TO 1.2							
1.2 TO 1.1								1.2 TO 1.1							
0.0 TO 0.9								0.0 TO 0.9							
0.7 TO 0.6								0.7 TO 0.6							
0.6 TO 0.7								0.6 TO 0.7							
0.4 TO 0.6								0.4 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0.0 TO 0.2								0.0 TO 0.2							
BELOW 0.0								BELOW 0.0							
TIME (MIN)	10.0	1948.0	1376.0	44.2		2400.0		TIME (MIN)	30.1	4302.5	1427.5	18.2		6039.7	
NAUT MILES	47.3	4125.4	6071.9	266.0		11090.5		NAUT MILES	129.5	20047.0	26026.7	71.4		47077.4	

ALTITUDE - 25,000 TO 30,000 FEET							ALTITUDE - 30,000 TO ABOVE FEET								
LOAD FACTOR Nz	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL Nz	LOAD FACTOR Nz	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL Nz
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.0 TO 2.4								2.0 TO 2.4							
1.0 TO 1.0								1.0 TO 1.0							
1.5 TO 1.0								1.5 TO 1.0							
1.4 TO 1.3								1.4 TO 1.3							
1.3 TO 1.2								1.3 TO 1.2							
1.2 TO 1.1								1.2 TO 1.1							
0.0 TO 0.9								0.0 TO 0.9							
0.7 TO 0.6								0.7 TO 0.6							
0.6 TO 0.7								0.6 TO 0.7							
0.4 TO 0.6								0.4 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0.0 TO 0.2								0.0 TO 0.2							
BELOW 0.0								BELOW 0.0							
TIME (MIN)	13.0	1009.2	1221.0	0.2		2000.4		TIME (MIN)	1.5	304.0	27.3			573.3	
NAUT MILES	44.0	7750.3	2010.0	3.2		10700.1		NAUT MILES	7.2	2000.0	194.0			2150.0	



**Table 52**  
**Maneuver Load Factors by Equivalent Airspeed and Altitude**  
**Mission II (Short Range Logistics)**  
**Gross Weight Range: 125,000 to 135,000 lb.**

ALTITUDE - 0 TO 7,000 FEET							ALTITUDE - 7,000 TO 10,000 FEET								
LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ	LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0								2.4 TO 2.0							
2.0 TO 2.4								2.0 TO 2.4							
1.8 TO 2.0								1.8 TO 2.0							
1.6 TO 1.8			1				1	1.6 TO 1.8			1	1	1		3
1.5 TO 1.6			1				1	1.5 TO 1.6			1	1	1		3
1.4 TO 1.5			4				4	1.4 TO 1.5			1	1	1		3
1.3 TO 1.4		0	23	5			27	1.3 TO 1.4		11	7	6			24
1.2 TO 1.3		36	119	25	3		163	1.2 TO 1.3		50	49	8			117
1.1 TO 1.2		339	421	214	13	2	1089	1.1 TO 1.2		87	311	175	62	3	638
0.8 TO 0.9		194	222	189	4	1	610	0.8 TO 0.9		34	214	88	22	1	379
0.7 TO 0.8		21	30	11			62	0.7 TO 0.8		7	22	12	5		41
0.6 TO 0.7		1	1	2			4	0.6 TO 0.7			1	2			3
0.4 TO 0.6								0.4 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0. TO 0.2								0. TO 0.2							
BELOW 0.								BELOW 0.							
TIME (MIN)	151.2	190.8	156.1	12.4	2.2		522.6	TIME (MIN)	41.3	275.4	140.2	66.3	3.1	526.3	
NAUT MILES	399.5	577.8	599.3	34.1	11.3		1641.0	NAUT MILES	101.8	960.1	347.1	312.1	16.9	1698.0	

ALTITUDE - 10,000 TO 15,000 FEET							ALTITUDE - 15,000 TO 20,000 FEET								
LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ	LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0								2.4 TO 2.0							
2.0 TO 2.4								2.0 TO 2.4							
1.8 TO 2.0								1.8 TO 2.0							
1.6 TO 1.8				2			2	1.6 TO 1.8							
1.5 TO 1.6				2			2	1.5 TO 1.6							
1.4 TO 1.5			3	5	1		9	1.4 TO 1.5							
1.3 TO 1.4			8	31	4		39	1.3 TO 1.4			1	1			2
1.2 TO 1.3			40	136	110	21	315	1.2 TO 1.3			10	9	1		20
1.1 TO 1.2								1.1 TO 1.2			59	58	5		122
0.8 TO 0.9			15	105	63	3	186	0.8 TO 0.9			41	26	1		68
0.7 TO 0.8			6	12	12		30	0.7 TO 0.8			9	4	1		14
0.6 TO 0.7				2	1		3	0.6 TO 0.7			3				3
0.4 TO 0.6					3		3	0.4 TO 0.6			1				1
0.2 TO 0.4								0.2 TO 0.4							
0. TO 0.2								0. TO 0.2							
BELOW 0.								BELOW 0.							
TIME (MIN)	18.1	431.8	274.5	37.8			790.6	TIME (MIN)	8.1	484.4	136.7	19.3		658.7	
NAUT MILES	47.9	1455.7	1172.7	176.4			2853.0	NAUT MILES	24.5	1735.4	682.8	97.8		2650.9	

ALTITUDE - 20,000 TO 25,000 FEET							ALTITUDE - 25,000 TO 30,000 FEET								
LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ	LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0								2.4 TO 2.0							
2.0 TO 2.4								2.0 TO 2.4							
1.8 TO 2.0								1.8 TO 2.0							
1.6 TO 1.8								1.6 TO 1.8							
1.5 TO 1.6								1.5 TO 1.6							
1.4 TO 1.5								1.4 TO 1.5							
1.3 TO 1.4								1.3 TO 1.4							
1.2 TO 1.3								1.2 TO 1.3							
1.1 TO 1.2								1.1 TO 1.2							
0.8 TO 0.9								0.8 TO 0.9							
0.7 TO 0.8								0.7 TO 0.8							
0.6 TO 0.7								0.6 TO 0.7							
0.4 TO 0.6								0.4 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0. TO 0.2								0. TO 0.2							
BELOW 0.								BELOW 0.							
TIME (MIN)	15.7	882.9	827.8	32.3			1679.0	TIME (MIN)	23.7	2718.8	3441.9	3.4		6584.0	
NAUT MILES	37.6	3045.3	4011.3	176.8			7297.2	NAUT MILES	64.4	12543.3	16889.3	19.6		29582.6	

ALTITUDE - 30,000 TO 35,000 FEET							ALTITUDE - 35,000 TO ABOVE FEET								
LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ	LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0								2.4 TO 2.0							
2.0 TO 2.4								2.0 TO 2.4							
1.8 TO 2.0								1.8 TO 2.0							
1.6 TO 1.8								1.6 TO 1.8							
1.5 TO 1.6								1.5 TO 1.6							
1.4 TO 1.5								1.4 TO 1.5							
1.3 TO 1.4								1.3 TO 1.4							
1.2 TO 1.3								1.2 TO 1.3							
1.1 TO 1.2								1.1 TO 1.2							
0.8 TO 0.9								0.8 TO 0.9							
0.7 TO 0.8								0.7 TO 0.8							
0.6 TO 0.7								0.6 TO 0.7							
0.4 TO 0.6								0.4 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0. TO 0.2								0. TO 0.2							
BELOW 0.								BELOW 0.							
TIME (MIN)	11.8	447.3	475.9				1055.0	TIME (MIN)	174.8						174.8
NAUT MILES	48.2	2297.1	2486.2				4741.4	NAUT MILES	494.1						494.1

**Table 53**  
**Maneuver Load Factors by Equivalent Airspeed and Altitude**  
**Mission II (Short Range Logistics)**  
**Gross Weight Range: 135,000 lb. and Above**

ALTITUDE - 0 TO 2,000 FEET								ALTITUDE - 2,000 TO 4,000 FEET							
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0								2.4 TO 2.0							
2.0 TO 2.4								2.0 TO 2.4							
1.8 TO 2.0								1.8 TO 2.0							
1.6 TO 1.8								1.6 TO 1.8							
1.5 TO 1.6								1.5 TO 1.6							
1.4 TO 1.5								1.4 TO 1.5							
1.3 TO 1.4								1.3 TO 1.4							
1.2 TO 1.3								1.2 TO 1.3							
1.1 TO 1.2								1.1 TO 1.2							
0.8 TO 0.9								0.8 TO 0.9							
0.7 TO 0.8								0.7 TO 0.8							
0.6 TO 0.7								0.6 TO 0.7							
0.4 TO 0.6								0.4 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0. TO 0.2								0. TO 0.2							
BELOW 0.								BELOW 0.							
TIME (MIN)	57.3	90.2	13.3	0.5			161.3	11.5	122.6	49.0	5.0			100.0	
NAUT MILES	151.4	272.2	47.6	2.0		473.2		27.1	397.6	194.3	22.0			646.3	

ALTITUDE - 5,000 TO 10,000 FEET								ALTITUDE - 10,000 TO 15,000 FEET							
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0								2.4 TO 2.0							
2.0 TO 2.4								2.0 TO 2.4							
1.8 TO 2.0								1.8 TO 2.0							
1.6 TO 1.8								1.6 TO 1.8							
1.5 TO 1.6								1.5 TO 1.6							
1.4 TO 1.5								1.4 TO 1.5							
1.3 TO 1.4								1.3 TO 1.4							
1.2 TO 1.3								1.2 TO 1.3							
1.1 TO 1.2								1.1 TO 1.2							
0.8 TO 0.9								0.8 TO 0.9							
0.7 TO 0.8								0.7 TO 0.8							
0.6 TO 0.7								0.6 TO 0.7							
0.4 TO 0.6								0.4 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0. TO 0.2								0. TO 0.2							
BELOW 0.								BELOW 0.							
TIME (MIN)	221.3	56.4	8.7				286.4	14.6	270.6	81.1	7.4			372.7	
NAUT MILES	741.0	230.1	17.0			978.0		42.7	936.2	381.5	36.8			1371.2	

ALTITUDE - 15,000 TO 20,000 FEET								ALTITUDE - 20,000 TO 25,000 FEET							
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0								2.4 TO 2.0							
2.0 TO 2.4								2.0 TO 2.4							
1.8 TO 2.0								1.8 TO 2.0							
1.6 TO 1.8								1.6 TO 1.8							
1.5 TO 1.6								1.5 TO 1.6							
1.4 TO 1.5								1.4 TO 1.5							
1.3 TO 1.4								1.3 TO 1.4							
1.2 TO 1.3								1.2 TO 1.3							
1.1 TO 1.2								1.1 TO 1.2							
0.8 TO 0.9								0.8 TO 0.9							
0.7 TO 0.8								0.7 TO 0.8							
0.6 TO 0.7								0.6 TO 0.7							
0.4 TO 0.6								0.4 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0. TO 0.2								0. TO 0.2							
BELOW 0.								BELOW 0.							
TIME (MIN)	19.1	372.6	407.6	1.3			890.6	6.0	837.4	712.2				1655.6	
NAUT MILES	61.7	1418.4	1304.2	24.5		2000.0		32.1	2414.7	3472.3				5949.3	

ALTITUDE - 25,000 TO 30,000 FEET							
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0							
2.4 TO 2.0							
2.0 TO 2.4							
1.8 TO 2.0							
1.6 TO 1.8							
1.5 TO 1.6							
1.4 TO 1.5							
1.3 TO 1.4							
1.2 TO 1.3							
1.1 TO 1.2							
0.8 TO 0.9							
0.7 TO 0.8							
0.6 TO 0.7							
0.4 TO 0.6							
0.2 TO 0.4							
0. TO 0.2							
BELOW 0.							
TIME (MIN)	124.0	110.4					234.4
NAUT MILES	606.3	613.0					1219.3

**Table 54**  
**Maneuver Load Factors by Equivalent Airspeed and Altitude**  
**Mission III (Training)**  
**Gross Weight Range: Below 35,000 lb.**

LOAD FACTOR NE	ALTITUDE - 0 TO 2,000 FEET						TOTAL NE	LOAD FACTOR NE	ALTITUDE - 2,000 TO 4,000 FEET						TOTAL NE
	EQUIVALENT AIRSPEED - VE (KNOTS)								EQUIVALENT AIRSPEED - VE (KNOTS)						
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0								2.4 TO 2.0							
2.0 TO 2.4				2			2	2.0 TO 2.4							
1.8 TO 2.0								1.8 TO 2.0							
1.6 TO 1.8								1.6 TO 1.8							
1.5 TO 1.6								1.5 TO 1.6							
1.4 TO 1.5								1.4 TO 1.5							
1.3 TO 1.4								1.3 TO 1.4							
1.2 TO 1.3	8	0	0	1			20	1.2 TO 1.3	2	0	2			2	
1.1 TO 1.2	27	20	7	1			63	1.1 TO 1.2	6	31	1			37	
	121	63	9	1			194							64	
0.9 TO 0.9	92	32	8				132	0.9 TO 0.9	8	21				29	
0.7 TO 0.9	17	6	2	1			26	0.7 TO 0.9	4	3				7	
0.6 TO 0.7	1	2	1				4	0.6 TO 0.7	1					1	
0.4 TO 0.6	1	1					2	0.4 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0. TO 0.2								0. TO 0.2							
BELOW 0.								BELOW 0.							
TIME (MIN)	39.8	34.5	10.3	0.3			105.2	TIME (MIN)	16.2	16.9	7.9			39.0	
NAUT MILES	124.3	92.7	30.0	2.0			261.0	NAUT MILES	31.5	47.0	30.6			109.0	

LOAD FACTOR NE	ALTITUDE - 5,000 TO 10,000 FEET						TOTAL NE	LOAD FACTOR NE	ALTITUDE - 10,000 TO 17,000 FEET						TOTAL NE
	EQUIVALENT AIRSPEED - VE (KNOTS)								EQUIVALENT AIRSPEED - VE (KNOTS)						
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE		
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0								2.4 TO 2.0							
2.0 TO 2.4								2.0 TO 2.4							
1.8 TO 2.0								1.8 TO 2.0							
1.6 TO 1.8								1.6 TO 1.8							
1.5 TO 1.6								1.5 TO 1.6							
1.4 TO 1.5								1.4 TO 1.5							
1.3 TO 1.4								1.3 TO 1.4							
1.2 TO 1.3								1.2 TO 1.3							
1.1 TO 1.2	1	4	2				7	1.1 TO 1.2	1	1				2	
0.9 TO 0.9	3		1				4	0.9 TO 0.9						3	
0.7 TO 0.9								0.7 TO 0.9							
0.6 TO 0.7								0.6 TO 0.7							
0.4 TO 0.6								0.4 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0. TO 0.2								0. TO 0.2							
BELOW 0.								BELOW 0.							
TIME (MIN)	9.0	1.7	1.0				9.1	TIME (MIN)	1.4	1.2	1.5			4.1	
NAUT MILES	11.3	3.3	7.3				24.3	NAUT MILES	4.2	3.0	7.0			14.0	

LOAD FACTOR NE	ALTITUDE - 15,000 TO 21,000 FEET						TOTAL NE	LOAD FACTOR NE	ALTITUDE - 20,000 TO 24,000 FEET						TOTAL NE
	EQUIVALENT AIRSPEED - VE (KNOTS)								EQUIVALENT AIRSPEED - VE (KNOTS)						
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE		
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0								2.4 TO 2.0							
2.0 TO 2.4								2.0 TO 2.4							
1.8 TO 2.0								1.8 TO 2.0							
1.6 TO 1.8								1.6 TO 1.8							
1.5 TO 1.6								1.5 TO 1.6							
1.4 TO 1.5								1.4 TO 1.5							
1.3 TO 1.4								1.3 TO 1.4							
1.2 TO 1.3								1.2 TO 1.3							
1.1 TO 1.2	1						1	1.1 TO 1.2						1	
0.9 TO 0.9								0.9 TO 0.9							
0.7 TO 0.9								0.7 TO 0.9							
0.6 TO 0.7								0.6 TO 0.7							
0.4 TO 0.6								0.4 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0. TO 0.2								0. TO 0.2							
BELOW 0.								BELOW 0.							
TIME (MIN)	6.6	0.9	0.9				9.4	TIME (MIN)	6.6					6.6	
NAUT MILES	13.4	2.2	2.3				17.9	NAUT MILES	16.0					16.0	

**Table 55**  
**Maneuver Load Factors by Equivalent Airspeed and Altitude**  
**Mission III (Training)**  
**Gross Weight Range: 85,000 to 95,000 lb.**

LOAD FACTOR	ALTITUDE - 0 TO 7,000 FEET						TOTAL	LOAD FACTOR	ALTITUDE - 7,000 TO 14,000 FEET						TOTAL
	EQUIVALENT AIRSPEED - VE (KNOTS)								EQUIVALENT AIRSPEED - VE (KNOTS)						
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0															
2.0 TO 2.0							4							4	
2.0 TO 2.0							5							5	
1.0 TO 1.0							41							41	
1.0 TO 1.0	5	25	11				70							70	
1.0 TO 1.0	20	50	9				301							301	
1.0 TO 1.0	122	169	14				1366							1366	
1.0 TO 1.0	900	732	60				4793							4793	
1.0 TO 1.0	2050	1945	190				17977							17977	
1.0 TO 1.0	9026	6427	623												
0.0 TO 0.0	6170	3127	604				9701							9701	
0.7 TO 0.0	1000	904	73				1904							1904	
0.6 TO 0.7	140	160	11				327							327	
0.4 TO 0.6	16	33	4				53							53	
0.2 TO 0.4		2					2							2	
0.0 TO 0.2															
BELOW 0															
TIME (MIN)	4407.0	2701.0	366.5	4.0			7643.3	1516.5	3329.0	1672.0	14.0	0.1		6352.1	
NAUT MILES	10113.4	7409.5	1290.0	10.9			10030.6	3721.0	9095.0	3505.1	130.5	0.5		10333.6	

LOAD FACTOR	ALTITUDE - 9,000 TO 10,000 FEET						TOTAL	LOAD FACTOR	ALTITUDE - 10,000 TO 14,000 FEET						TOTAL
	EQUIVALENT AIRSPEED - VE (KNOTS)								EQUIVALENT AIRSPEED - VE (KNOTS)						
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0															
2.0 TO 2.0							1							1	
2.0 TO 2.0							1							1	
1.0 TO 1.0							1							1	
1.0 TO 1.0	4	4	1				10							10	
1.0 TO 1.0	5	3	2				17							17	
1.0 TO 1.0	6	10	16				62							62	
1.0 TO 1.0	20	100	65				130							130	
1.0 TO 1.0	64	471	304				650							650	
0.0 TO 0.0	37	317	271				690							690	
0.7 TO 0.0	7	29	53				90							90	
0.6 TO 0.7		19	6				17							17	
0.4 TO 0.6			3				4							4	
0.2 TO 0.4							1							1	
0.0 TO 0.2															
BELOW 0															
TIME (MIN)	100.7	503.5	207.4	60.4	1.1		1076.2	96.1	295.5	122.2	4.5	1.3		606.6	
NAUT MILES	271.5	1900.2	1155.2	100.0	5.0		2530.0	250.0	680.2	300.5	64.5	0.0		1745.0	

LOAD FACTOR	ALTITUDE - 15,000 TO 20,000 FEET						TOTAL	LOAD FACTOR	ALTITUDE - 20,000 TO 24,000 FEET						TOTAL
	EQUIVALENT AIRSPEED - VE (KNOTS)								EQUIVALENT AIRSPEED - VE (KNOTS)						
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0															
2.0 TO 2.0							1							1	
2.0 TO 2.0							1							1	
1.0 TO 1.0							1							1	
1.0 TO 1.0							1							1	
1.0 TO 1.0							1							1	
1.0 TO 1.0							1							1	
1.0 TO 1.0							1							1	
1.0 TO 1.0	6	65	10				90							90	
0.0 TO 0.0	6	50	17				63							63	
0.7 TO 0.0			6				12							12	
0.6 TO 0.7	1	5					6							6	
0.4 TO 0.6			1				2							2	
0.2 TO 0.4															
0.0 TO 0.2															
BELOW 0															
TIME (MIN)	0.2	96.3	36.4	2.1			139.2	0.7	105.7	51.0				262.4	
NAUT MILES	73.0	591.0	175.0	12.3			904.0	7.0	600.0	612.0				1086.1	

LOAD FACTOR	ALTITUDE - 25,000 TO 27,000 FEET						TOTAL
	EQUIVALENT AIRSPEED - VE (KNOTS)						
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0							
2.0 TO 2.0							
2.0 TO 2.0							
1.0 TO 1.0							
1.0 TO 1.0							
1.0 TO 1.0							
1.0 TO 1.0							
1.0 TO 1.0							
1.0 TO 1.0							
1.0 TO 1.0							
0.0 TO 0.0							
0.7 TO 0.0							
0.6 TO 0.7							
0.4 TO 0.6							
0.2 TO 0.4							
0.0 TO 0.2							
BELOW 0							
TIME (MIN)	42.2	85.0					129.7
NAUT MILES	260.1	390.0					650.0



**Table 57**  
**Maneuver Load Factors by Equivalent Airspeed and Altitude**  
**Mission III (Training)**  
**Gross Weight Range: 105,000 to 115,000 lb.**

ALTITUDE - 0 TO 2,000 FEET								ALTITUDE - 2,000 TO 4,000 FEET							
LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NE	LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NE
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0							3	2.4 TO 2.0							3
2.0 TO 2.4		2					2	2.0 TO 2.4		2	1				3
1.8 TO 2.0		1					1	1.8 TO 2.0		2	1				3
1.6 TO 1.8		1					1	1.6 TO 1.8		1	1				2
1.5 TO 1.6		1					1	1.5 TO 1.6		1	1				2
1.4 TO 1.5		2	4				6	1.4 TO 1.5		2	5				7
1.3 TO 1.4		26	49	27			102	1.3 TO 1.4		30	17	10			67
1.2 TO 1.3		140	234	54	24		454	1.2 TO 1.3		22	150	64	34	1	261
1.2 TO 1.2		727	1032	215	29		2003	1.2 TO 1.2		90	475	360	67	3	1229
1.1 TO 1.2		3220	2900	1123	38		7281	1.1 TO 1.2		326	3006	1903	153	6	5670
0.9 TO 0.9		1082	1723	667	63		4535	0.9 TO 0.9		353	1848	1110	110	6	3427
0.7 TO 0.9		250	304	189	17		760	0.7 TO 0.9		52	268	162	67		549
0.6 TO 0.7		37	69	23	12		141	0.6 TO 0.7		6	64	29	15	1	95
0.4 TO 0.6		1	16	7	7		31	0.4 TO 0.6		1	7	7	7		26
0.2 TO 0.4							1	0.2 TO 0.4							1
0.1 TO 0.2								0.1 TO 0.2							
BELOW 0								BELOW 0							
TIME (MIN)	1495.3	1619.3	832.9	67.4			3094.7	TIME (MIN)	369.1	2495.1	1000.1	72.6	1.4		4023.4
NAUT MILES	3319.0	4082.7	3066.7	200.3			11682.7	NAUT MILES	900.9	7718.8	4179.9	333.3	7.7		13096.5
ALTITUDE - 5,000 TO 10,000 FEET								ALTITUDE - 10,000 TO 15,000 FEET							
LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NE	LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NE
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0							3	2.4 TO 2.0							2
2.0 TO 2.4		2					2	2.0 TO 2.4		1	1				2
1.8 TO 2.0		1					1	1.8 TO 2.0		1	1				2
1.6 TO 1.8		1					1	1.6 TO 1.8		2	1				3
1.5 TO 1.6		2	11				13	1.5 TO 1.6		7	7				14
1.4 TO 1.5		1	24	5			30	1.4 TO 1.5		6	3				9
1.3 TO 1.4		3	41	18	4		66	1.3 TO 1.4		2	5	2			9
1.2 TO 1.3		20	150	54	5		227	1.2 TO 1.3		14	35	32	1		82
1.2 TO 1.2		102	775	291	15		1193	1.2 TO 1.2		33	203	196	13		447
0.9 TO 0.9		90	340	147	7		704	0.9 TO 0.9		26	146	131	12		315
0.7 TO 0.9		2	46	19			67	0.7 TO 0.9		5	11	1			27
0.6 TO 0.7		1	5				6	0.6 TO 0.7		1	1				2
0.4 TO 0.6							1	0.4 TO 0.6							1
0.2 TO 0.4								0.2 TO 0.4							
0.1 TO 0.2								0.1 TO 0.2							
BELOW 0								BELOW 0							
TIME (MIN)	112.1	1434.0	446.5	26.5			2025.1	TIME (MIN)	50.7	500.5	446.4	16.6	0.6		1118.4
NAUT MILES	297.5	4766.7	1706.7	125.3			6884.7	NAUT MILES	141.9	2008.5	2425.2	77.6	2.3		4326.4
ALTITUDE - 15,000 TO 20,000 FEET								ALTITUDE - 20,000 TO 24,000 FEET							
LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NE	LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NE
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0								2.4 TO 2.0							
2.0 TO 2.4								2.0 TO 2.4							
1.8 TO 2.0								1.8 TO 2.0							
1.6 TO 1.8								1.6 TO 1.8							
1.5 TO 1.6		2					2	1.5 TO 1.6		1					1
1.4 TO 1.5		1					1	1.4 TO 1.5		1	1				2
1.3 TO 1.4		1	6				7	1.3 TO 1.4		1	1				2
1.2 TO 1.3		3	30	13			46	1.2 TO 1.3		2	30	9			41
1.2 TO 1.2		25	270	304	13		606	1.2 TO 1.2		14	345	62			441
0.9 TO 0.9		13	234	107	10		434	0.9 TO 0.9		10	230	42	2		294
0.7 TO 0.9		1	12	6	1		20	0.7 TO 0.9		1	1	1			4
0.6 TO 0.7			2				2	0.6 TO 0.7							1
0.4 TO 0.6								0.4 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0.1 TO 0.2								0.1 TO 0.2							
BELOW 0								BELOW 0							
TIME (MIN)	24.1	770.6	694.1	24.9	1.1		1427.8	TIME (MIN)	26.3	770.0	497.6	5.7			1503.4
NAUT MILES	187.2	3092.7	3027.2	64.4	2.7		4394.2	NAUT MILES	110.0	2448.4	3476.7	35.1			7110.0
ALTITUDE - 25,000 TO 29,000 FEET								ALTITUDE - 30,000 TO ABOVE FEET							
LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NE	LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NE
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0								2.4 TO 2.0							
2.0 TO 2.4								2.0 TO 2.4							
1.8 TO 2.0								1.8 TO 2.0							
1.6 TO 1.8								1.6 TO 1.8							
1.5 TO 1.6								1.5 TO 1.6							
1.4 TO 1.5								1.4 TO 1.5							
1.3 TO 1.4								1.3 TO 1.4							
1.2 TO 1.3								1.2 TO 1.3							
1.2 TO 1.2								1.2 TO 1.2							
0.9 TO 0.9								0.9 TO 0.9							
0.7 TO 0.9								0.7 TO 0.9							
0.6 TO 0.7								0.6 TO 0.7							
0.4 TO 0.6								0.4 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0.1 TO 0.2								0.1 TO 0.2							
BELOW 0								BELOW 0							
TIME (MIN)	2.1	683.9	704.9				1390.9	TIME (MIN)	0.2	111.1					111.3
NAUT MILES	0.3	2482.3	3074.9				3557.5	NAUT MILES	0.0	441.0					441.0

**Table 58**  
**Maneuver Load Factors by Equivalent Airspeed and Altitude**  
**Mission III (Training)**  
**Gross Weight Range: 115,000 to 125,000 lb.**

ALTITUDE - 0 TO 2,000 FEET								ALTITUDE - 2,000 TO 5,000 FEET							
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0															
2.4 TO 2.0															
2.0 TO 2.4															
1.8 TO 2.0															
1.6 TO 1.8															
1.4 TO 1.6															
1.3 TO 1.4															
1.2 TO 1.3	23	32	1				96	16	134	37				167	
1.1 TO 1.2	100	66	10				176	267	455	91	0			821	
0.8 TO 0.9	50	42	4				106	261	300	65	2			700	
0.7 TO 0.8	7	5					12	14	94	16				124	
0.6 TO 0.7	1						1	2	12	7				21	
0.4 TO 0.6															
0.2 TO 0.4															
0. TO 0.2															
BELOW 0.															
TIME (MIN)	35.6	28.0	2.9				66.7	102.7	234.2	62.2	3.3			402.3	
NAUT MILES	83.8	87.2	10.6				181.6	246.9	732.6	291.6	14.3			1229.3	

ALTITUDE - 5,000 TO 10,000 FEET								ALTITUDE - 10,000 TO 15,000 FEET							
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0															
2.4 TO 2.0															
2.0 TO 2.4															
1.8 TO 2.0															
1.6 TO 1.8															
1.4 TO 1.6															
1.3 TO 1.4															
1.2 TO 1.3															
1.1 TO 1.2															
0.8 TO 0.9															
0.7 TO 0.8															
0.6 TO 0.7															
0.4 TO 0.6															
0.2 TO 0.4															
0. TO 0.2															
BELOW 0.															
TIME (MIN)	76.6	37.0	7.5				121.1	92.0	42.2	8.1				142.3	
NAUT MILES	292.2	148.0	34.9				443.2	322.4	101.6	39.9				563.7	

ALTITUDE - 15,000 TO 20,000 FEET								ALTITUDE - 20,000 TO 25,000 FEET							
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL	LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0															
2.4 TO 2.0															
2.0 TO 2.4															
1.8 TO 2.0															
1.6 TO 1.8															
1.4 TO 1.6															
1.3 TO 1.4															
1.2 TO 1.3															
1.1 TO 1.2															
0.8 TO 0.9															
0.7 TO 0.8															
0.6 TO 0.7															
0.4 TO 0.6															
0.2 TO 0.4															
0. TO 0.2															
BELOW 0.															
TIME (MIN)	6.7	128.6	244.1				387.2	4.4	417.1	710.3	109.6			1227.1	
NAUT MILES	22.3	502.2	1164.9				1784.3	13.8	1699.6	3482.3	636.1			6026.8	

ALTITUDE - 25,000 TO 30,000 FEET							
LOAD FACTOR	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0							
2.4 TO 2.0							
2.0 TO 2.4							
1.8 TO 2.0							
1.6 TO 1.8							
1.4 TO 1.6							
1.3 TO 1.4							
1.2 TO 1.3							
1.1 TO 1.2							
0.8 TO 0.9							
0.7 TO 0.8							
0.6 TO 0.7							
0.4 TO 0.6							
0.2 TO 0.4							
0. TO 0.2							
BELOW 0.							
TIME (MIN)	5.3	394.1					399.4
NAUT MILES	20.8	2483.6					2504.4

**Table 59**  
**Maneuver Load Factors by Equivalent Airspeed and Altitude**  
**Mission III (Training)**  
**Gross Weight Range: 125,000 to 135,000 lb.**

ALTITUDE - C TO 7,000 FEET								ALTITUDE - 2,000 TO 1,000 FEET							
LOAD FACTOR Gz	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL Gz	LOAD FACTOR Gz	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL Gz
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0							ABOVE 2.0								
2.4 TO 2.0							2.4 TO 2.0								
2.0 TO 2.4							2.0 TO 2.4								
1.8 TO 2.0							1.8 TO 2.0								
1.6 TO 1.8							1.6 TO 1.8								
1.5 TO 1.6							1.5 TO 1.6								
1.4 TO 1.5							1.4 TO 1.5								
1.3 TO 1.4							1.3 TO 1.4								
1.2 TO 1.3	1	0	1			2	1.2 TO 1.3								
1.1 TO 1.2	19	29	4			52	1.1 TO 1.2	4	150	77	2		233		
0.9 TO 0.9	12	17				29	0.9 TO 0.9	7	101	100			208		
0.7 TO 0.9	5	2				7	0.7 TO 0.9		24	25			49		
0.6 TO 0.7							0.6 TO 0.7		0	4			4		
0.4 TO 0.6			1			1	0.4 TO 0.6		5	2			7		
0.2 TO 0.4							0.2 TO 0.4		2	2			4		
0. TO 0.2							0. TO 0.2								
BELOW 0.							BELOW 0.								
TIME (MIN)	7.1	13.2	3.1	3.0		26.4	TIME (MIN)	7.4	90.0	73.9	4.7		176.0		
NAUT MILES	10.6	41.7	12.6	13.2		88.1	NAUT MILES	7.4	201.6	270.1	21.0		500.1		
ALTITUDE - 9,000 TO 10,000 FEET								ALTITUDE - 10,000 TO 11,000 FEET							
LOAD FACTOR Gz	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL Gz	LOAD FACTOR Gz	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL Gz
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0							ABOVE 2.0								
2.4 TO 2.0							2.4 TO 2.0								
2.0 TO 2.4							2.0 TO 2.4								
1.8 TO 2.0							1.8 TO 2.0								
1.6 TO 1.8							1.6 TO 1.8								
1.5 TO 1.6							1.5 TO 1.6								
1.4 TO 1.5				1		1	1.4 TO 1.5								
1.3 TO 1.4							1.3 TO 1.4								
1.2 TO 1.3							1.2 TO 1.3								
1.1 TO 1.2			2	3	3	8	1.1 TO 1.2								
0.9 TO 0.9			7	9	3	19	0.9 TO 0.9			2	4		6		
0.7 TO 0.9				1		1	0.7 TO 0.9			3	2		5		
0.6 TO 0.7				1	1	2	0.6 TO 0.7								
0.4 TO 0.6							0.4 TO 0.6								
0.2 TO 0.4							0.2 TO 0.4								
0. TO 0.2							0. TO 0.2								
BELOW 0.							BELOW 0.								
TIME (MIN)		30.3	23.2	3.2		66.7	TIME (MIN)		59.1	12.1	2.0		73.2		
NAUT MILES		117.0	75.5	14.0		206.5	NAUT MILES		207.5	53.4	10.3		271.2		
ALTITUDE - 19,000 TO 20,000 FEET								ALTITUDE - 20,000 TO 15,000 FEET							
LOAD FACTOR Gz	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL Gz	LOAD FACTOR Gz	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL Gz
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0							ABOVE 2.0								
2.4 TO 2.0							2.4 TO 2.0								
2.0 TO 2.4							2.0 TO 2.4								
1.8 TO 2.0							1.8 TO 2.0								
1.6 TO 1.8							1.6 TO 1.8								
1.5 TO 1.6							1.5 TO 1.6								
1.4 TO 1.5							1.4 TO 1.5								
1.3 TO 1.4							1.3 TO 1.4								
1.2 TO 1.3							1.2 TO 1.3								
1.1 TO 1.2							1.1 TO 1.2								
0.9 TO 0.9							0.9 TO 0.9								
0.7 TO 0.9							0.7 TO 0.9								
0.6 TO 0.7							0.6 TO 0.7								
0.4 TO 0.6							0.4 TO 0.6								
0.2 TO 0.4							0.2 TO 0.4								
0. TO 0.2							0. TO 0.2								
BELOW 0.							BELOW 0.								
TIME (MIN)	4.0	66.3	74.2	3.5		148.0	TIME (MIN)	0.0	301.2	50.0	30.2		481.4		
NAUT MILES	13.0	303.1	302.6	10.4		629.0	NAUT MILES	31.2	1507.6	200.0	217.4		2131.2		
ALTITUDE - 25,000 TO 30,000 FEET								ALTITUDE - 30,000 TO 35,000 FEET							
LOAD FACTOR Gz	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL Gz	LOAD FACTOR Gz	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL Gz
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0							ABOVE 2.0								
2.4 TO 2.0							2.4 TO 2.0								
2.0 TO 2.4							2.0 TO 2.4								
1.8 TO 2.0							1.8 TO 2.0								
1.6 TO 1.8							1.6 TO 1.8								
1.5 TO 1.6							1.5 TO 1.6								
1.4 TO 1.5							1.4 TO 1.5								
1.3 TO 1.4							1.3 TO 1.4								
1.2 TO 1.3							1.2 TO 1.3								
1.1 TO 1.2							1.1 TO 1.2								
0.9 TO 0.9							0.9 TO 0.9								
0.7 TO 0.9							0.7 TO 0.9								
0.6 TO 0.7							0.6 TO 0.7								
0.4 TO 0.6							0.4 TO 0.6								
0.2 TO 0.4							0.2 TO 0.4								
0. TO 0.2							0. TO 0.2								
BELOW 0.							BELOW 0.								
TIME (MIN)							TIME (MIN)								
NAUT MILES							NAUT MILES								



**Table 60**  
**Maneuver Load Factors by Equivalent Airspeed and Altitude**  
**Mission III (Training)**  
**Gross Weight Range: 135,000 lb. and Above**

ALTITUDE - 0 TO 2,000 FEET							ALTITUDE - 2,000 TO 4,000 FEET								
LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NE	LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NE
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0								2.4 TO 2.0							
2.0 TO 2.4								2.0 TO 2.4							
1.8 TO 2.0								1.8 TO 2.0							
1.6 TO 1.8								1.6 TO 1.8							
1.5 TO 1.6								1.5 TO 1.6							
1.4 TO 1.5								1.4 TO 1.5							
1.3 TO 1.4		1					2	1.3 TO 1.4							4
1.2 TO 1.3	2	5	2				9	1.2 TO 1.3	1	3					4
1.1 TO 1.2	8	14					22	1.1 TO 1.2	17	1					18
0.8 TO 0.9								0.8 TO 0.9							
0.7 TO 0.8	0	0	2				2	0.7 TO 0.8	10	5					15
0.6 TO 0.7								0.6 TO 0.7	2						2
0.4 TO 0.6								0.4 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0. TO 0.2								0. TO 0.2							
DELTA 0.							9.2	DELTA 0.							12.1
TIME (HRS)	3.3	5.3	0.4				9.2	TIME (HRS)	0.1	5.0					5.1
NAVY MILES	0.0	10.0	2.1				12.1	NAVY MILES	20.1	10.0					30.1

ALTITUDE - 5,000 TO 10,000 FEET							ALTITUDE - 10,000 TO 15,000 FEET								
LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NE	LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NE
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0								2.4 TO 2.0							
2.0 TO 2.4								2.0 TO 2.4							
1.8 TO 2.0								1.8 TO 2.0							
1.6 TO 1.8								1.6 TO 1.8							
1.5 TO 1.6								1.5 TO 1.6							
1.4 TO 1.5								1.4 TO 1.5							
1.3 TO 1.4								1.3 TO 1.4							
1.2 TO 1.3								1.2 TO 1.3							
1.1 TO 1.2		0	2				2	1.1 TO 1.2							
0.8 TO 0.9								0.8 TO 0.9							
0.7 TO 0.8								0.7 TO 0.8	1						1
0.6 TO 0.7								0.6 TO 0.7							
0.4 TO 0.6								0.4 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0. TO 0.2								0. TO 0.2							
DELTA 0.							11	DELTA 0.							1
TIME (HRS)							20.7	TIME (HRS)	22.0						22.0
NAVY MILES							100.4	NAVY MILES	01.7						01.7

ALTITUDE - 15,000 TO 20,000 FEET							ALTITUDE - 20,000 TO 25,000 FEET								
LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NE	LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NE
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0								2.4 TO 2.0							
2.0 TO 2.4								2.0 TO 2.4							
1.8 TO 2.0								1.8 TO 2.0							
1.6 TO 1.8								1.6 TO 1.8							
1.5 TO 1.6								1.5 TO 1.6							
1.4 TO 1.5								1.4 TO 1.5							
1.3 TO 1.4								1.3 TO 1.4							
1.2 TO 1.3								1.2 TO 1.3							
1.1 TO 1.2								1.1 TO 1.2							
0.8 TO 0.9								0.8 TO 0.9							
0.7 TO 0.8								0.7 TO 0.8							
0.6 TO 0.7								0.6 TO 0.7							
0.4 TO 0.6								0.4 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0. TO 0.2								0. TO 0.2							
DELTA 0.							1	DELTA 0.							1
TIME (HRS)							100.0	TIME (HRS)	24.7	02.0					26.7
NAVY MILES							000.0	NAVY MILES	122.2	200.3					322.5

**Table 61**  
**Maneuver Load Factors by**  
**Equivalent Airspeed and Altitude**  
**Mission IV (Aerial Delivery)**  
**Gross Weight Range: Below 85,000 lb.**

ALTITUDE - 1,000 TO 4,000 FEET							
LOAD FACTOR NE	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NE
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0							
2.4 TO 2.0							
2.0 TO 2.4							
1.8 TO 2.0							
1.6 TO 1.8							
1.5 TO 1.6							
1.4 TO 1.5							
1.3 TO 1.4							
1.2 TO 1.3							
1.1 TO 1.2							
0.8 TO 0.9							
0.7 TO 0.8							
0.6 TO 0.7							
0.4 TO 0.6							
0.2 TO 0.4							
0. TO 0.2							
DELTA 0.							17.0
TIME (HRS)	0.9	0.1	0.2				1.2
NAVY MILES	15.0	10.0	10.2				35.2

**Table 62**  
**Maneuver Load Factors by Equivalent Airspeed and Altitude**  
**Mission IV (Aerial Delivery)**  
**Gross Weight Range: 85,000 to 95,000 lb.**

ALTITUDE - 0 TO 2,000 FEET							ALTITUDE - 2,000 TO 4,000 FEET								
LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ	LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0							2	2.4 TO 2.0							13
2.0 TO 2.4							8	2.0 TO 2.4							17
1.8 TO 2.0							2	1.8 TO 2.0							13
1.6 TO 1.8							10	1.6 TO 1.8							41
1.5 TO 1.6							31	1.5 TO 1.6							148
1.4 TO 1.5							71	1.4 TO 1.5							480
1.3 TO 1.4							296	1.3 TO 1.4							1474
1.2 TO 1.3							890	1.2 TO 1.3							3104
1.1 TO 1.2							599	1.1 TO 1.2							290
0.8 TO 0.9							184	0.8 TO 0.9							105
0.7 TO 0.8							58	0.7 TO 0.8							33
0.6 TO 0.7							21	0.6 TO 0.7							1
0.5 TO 0.6								0.5 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0. TO 0.2								0. TO 0.2							
BELOW 0.								BELOW 0.							
TIME (MIN)	179.0	111.7	131.5				482.9	TIME (MIN)	88.4	288.2	395.2	14.0		785.9	
NAUT MILES	391.2	341.8	477.6				1218.6	NAUT MILES	287.6	917.6	1452.1	63.9		2641.1	

ALTITUDE - 5,000 TO 10,000 FEET							ALTITUDE - 10,000 TO 15,000 FEET								
LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ	LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0								2.4 TO 2.0							
2.0 TO 2.4								2.0 TO 2.4							
1.8 TO 2.0								1.8 TO 2.0							
1.6 TO 1.8								1.6 TO 1.8							
1.5 TO 1.6								1.5 TO 1.6							
1.4 TO 1.5								1.4 TO 1.5							
1.3 TO 1.4								1.3 TO 1.4							
1.2 TO 1.3								1.2 TO 1.3							
1.1 TO 1.2								1.1 TO 1.2							
0.8 TO 0.9								0.8 TO 0.9							
0.7 TO 0.8								0.7 TO 0.8							
0.6 TO 0.7								0.6 TO 0.7							
0.5 TO 0.6								0.5 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0. TO 0.2								0. TO 0.2							
BELOW 0.								BELOW 0.							
TIME (MIN)	8.7	101.3	64.4				178.0	TIME (MIN)	0.5	76.8	63.2	11.0		152.3	
NAUT MILES	22.7	346.9	253.9				640.8	NAUT MILES	1.3	283.5	263.1	66.7		689.9	

ALTITUDE - 15,000 TO 20,000 FEET							ALTITUDE - 20,000 TO 25,000 FEET								
LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ	LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0								2.4 TO 2.0							
2.0 TO 2.4								2.0 TO 2.4							
1.8 TO 2.0								1.8 TO 2.0							
1.6 TO 1.8								1.6 TO 1.8							
1.5 TO 1.6								1.5 TO 1.6							
1.4 TO 1.5								1.4 TO 1.5							
1.3 TO 1.4								1.3 TO 1.4							
1.2 TO 1.3								1.2 TO 1.3							
1.1 TO 1.2								1.1 TO 1.2							
0.8 TO 0.9								0.8 TO 0.9							
0.7 TO 0.8								0.7 TO 0.8							
0.6 TO 0.7								0.6 TO 0.7							
0.5 TO 0.6								0.5 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0. TO 0.2								0. TO 0.2							
BELOW 0.								BELOW 0.							
TIME (MIN)		3.2	2.1				5.9	TIME (MIN)		1.0	96.0			97.9	
NAUT MILES		11.3	16.8				28.8	NAUT MILES		0.3	268.3			278.8	

**Table 63**  
**Maneuver Load Factors by Equivalent Airspeed and Altitude**  
**Mission IV (Aerial Delivery)**  
**Gross Weight Range: 95,000 to 105,000 lb.**

ALTITUDE - 0 TO 2,000 FEET							ALTITUDE - 2,000 TO 4,000 FEET						
LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL NZ	LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350			350 AND ABOVE	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	
ABOVE 2.0							ABOVE 2.0						
2.4 TO 2.0							2.4 TO 2.0						
2.0 TO 2.4						1	2.0 TO 2.4						1
1.8 TO 1.0						3	1.8 TO 2.0						3
1.6 TO 1.0						15	1.6 TO 1.0						15
1.5 TO 1.0						22	1.5 TO 1.0						22
1.4 TO 1.5						54	1.4 TO 1.5						54
1.3 TO 1.4						270	1.3 TO 1.4						270
1.2 TO 1.3						1120	1.2 TO 1.3						1120
1.1 TO 1.2						3320	1.1 TO 1.2						3320
0.8 TO 0.9						2174	0.8 TO 0.9						2174
0.7 TO 0.8						970	0.7 TO 0.8						970
0.6 TO 0.7						122	0.6 TO 0.7						122
0.4 TO 0.6						31	0.4 TO 0.6						31
0.2 TO 0.4						3	0.2 TO 0.4						3
0. TO 0.2							0. TO 0.2						
BELOW 0.							BELOW 0.						
TIME (MIN)	593.9	409.0	1000.6	20.0		2116.3	477.3	1647	2177	106		4623	
NAUT MILES	1313.3	1480.7	3706.5	126.4		6714.9	1130.6	3455.3	6125.4	501.2		11201.3	

ALTITUDE - 5,000 TO 10,000 FEET							ALTITUDE - 10,000 TO 15,000 FEET						
LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL NZ	LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350			350 AND ABOVE	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	
ABOVE 2.0							ABOVE 2.0						
2.4 TO 2.0							2.4 TO 2.0						
2.0 TO 2.4							2.0 TO 2.4						
1.8 TO 2.0							1.8 TO 2.0						
1.6 TO 1.0							1.6 TO 1.0						
1.5 TO 1.0							1.5 TO 1.0						
1.4 TO 1.5						1	1.4 TO 1.5						
1.3 TO 1.4						2	1.3 TO 1.4						
1.2 TO 1.3						16	1.2 TO 1.3						
1.1 TO 1.2						290	1.1 TO 1.2						
0.8 TO 0.9						173	0.8 TO 0.9						
0.7 TO 0.8						6	0.7 TO 0.8						
0.6 TO 0.7						1	0.6 TO 0.7						
0.4 TO 0.6							0.4 TO 0.6						
0.2 TO 0.4							0.2 TO 0.4						
0. TO 0.2							0. TO 0.2						
BELOW 0.							BELOW 0.						
TIME (MIN)						200.4	TIME (MIN)						426.9
NAUT MILES						1043.0	NAUT MILES						1733.1

ALTITUDE - 15,000 TO 20,000 FEET							ALTITUDE - 20,000 TO 30,000 FEET						
LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL NZ	LOAD FACTOR NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350			350 AND ABOVE	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	
ABOVE 2.0							ABOVE 2.0						
2.4 TO 2.0							2.4 TO 2.0						
2.0 TO 2.4							2.0 TO 2.4						
1.8 TO 2.0							1.8 TO 2.0						
1.6 TO 1.0							1.6 TO 1.0						
1.5 TO 1.0							1.5 TO 1.0						
1.4 TO 1.5							1.4 TO 1.5						
1.3 TO 1.4							1.3 TO 1.4						
1.2 TO 1.3							1.2 TO 1.3						
1.1 TO 1.2						2	1.1 TO 1.2						
0.8 TO 0.9							0.8 TO 0.9						
0.7 TO 0.8							0.7 TO 0.8						
0.6 TO 0.7							0.6 TO 0.7						
0.4 TO 0.6							0.4 TO 0.6						
0.2 TO 0.4							0.2 TO 0.4						
0. TO 0.2							0. TO 0.2						
BELOW 0.							BELOW 0.						
TIME (MIN)						6.0	TIME (MIN)						76.7
NAUT MILES						42.0	NAUT MILES						374.0

**Table 64**  
**Maneuver Load Factors by Equivalent Airspeed and Altitude**  
**Mission IV (Aerial Delivery)**  
**Gross Weight Range: 105,000 to 115,000 lb.**

ALTITUDE - 0 TO 2,000 FEET								ALTITUDE - 2,000 TO 5,000 FEET							
LOAD FACTOR Nz	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL Nz	LOAD FACTOR Nz	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL Nz
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0								2.4 TO 2.0							
2.0 TO 2.4								2.0 TO 2.4							
1.6 TO 2.0								1.6 TO 2.0	1		1				2
1.6 TO 1.6	1	9	7				17	1.6 TO 1.6	2		1				3
1.5 TO 1.6	1	13	7	2			23	1.5 TO 1.6	4		0				4
1.4 TO 1.6	4	24	26	3			57	1.5 TO 1.5	17	19					36
1.3 TO 1.4	24	79	122	20			245	1.3 TO 1.4	13	50	99				172
1.2 TO 1.3	174	331	449	34			1038	1.2 TO 1.3	47	308	425	24			804
1.1 TO 1.2	870	932	1017	147			3466	1.1 TO 1.2	312	1239	1271	76	1		3145
0.8 TO 0.9	443	590	955	74			2062	0.8 TO 0.9	405	821	870	48	1		2144
0.7 TO 0.9	66	137	274	21			518	0.7 TO 0.8	63	204	265	9			541
0.6 TO 0.7	11	20	36	1			68	0.6 TO 0.7	7	34	54	5			100
0.4 TO 0.6	1	7	17	1			26	0.5 TO 0.6	1	5	30	1			37
0.2 TO 0.4								0.2 TO 0.4			1				1
0. TO 0.2								0. TO 0.2							
BELOW 0.								BELOW 0.							
TIME (MIN)	483.3	486.3	1279.0	71.2			2360.0	TIME (MIN)	219.8	643.2	796.2	44.8	1.1		1761.2
NAUT MILES	1096.4	1500.6	4811.0	314.7			7740.7	NAUT MILES	426.0	2096.7	2929.0	203.9	0.7		5897.1

ALTITUDE - 5,000 TO 10,000 FEET								ALTITUDE - 10,000 TO 15,000 FEET							
LOAD FACTOR Nz	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL Nz	LOAD FACTOR Nz	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL Nz
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0								2.4 TO 2.0							
2.0 TO 2.4								2.0 TO 2.4							
1.6 TO 2.0								1.6 TO 2.0							
1.6 TO 1.6								1.6 TO 1.6							
1.5 TO 1.6								1.5 TO 1.6							
1.4 TO 1.5		6	1				7	1.5 TO 1.5							
1.3 TO 1.4		20	8	9			37	1.3 TO 1.4		1	4				5
1.2 TO 1.3	2	233	345	114			594	1.2 TO 1.3		4					4
1.1 TO 1.2	2	233	345	114			596	1.1 TO 1.2	2	48	12				62
0.8 TO 0.9	3	140	36	83			312	0.8 TO 0.9		16	3				19
0.7 TO 0.8		5	2	2			9	0.7 TO 0.8							
0.6 TO 0.7								0.6 TO 0.7							
0.4 TO 0.6								0.6 TO 0.6							
0.2 TO 0.4								0.2 TO 0.4							
0. TO 0.2								0. TO 0.2							
BELOW 0.								BELOW 0.							
TIME (MIN)	1.3	202.7	134.2	32.3			370.5	TIME (MIN)	0.6	71.4	42.5	1.0			115.5
NAUT MILES	3.5	647.1	530.0	152.3			1334.0	NAUT MILES	1.4	250.9	107.1	4.9			483.3

ALTITUDE - 25,000 TO 30,000 FEET							
LOAD FACTOR Nz	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL Nz
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0							
2.4 TO 2.0							
2.0 TO 2.4							
1.6 TO 2.0							
1.6 TO 1.6							
1.5 TO 1.6							
1.4 TO 1.5							
1.3 TO 1.4							
1.2 TO 1.3							
1.1 TO 1.2							
0.8 TO 0.9	1	1					2
0.7 TO 0.8							
0.6 TO 0.7							
0.4 TO 0.6							
0.2 TO 0.4							
0. TO 0.2							
BELOW 0.							
TIME (MIN)	2.0	36.6					38.6
NAUT MILES	6.5	149.9					156.4

**Table 65**  
**Maneuver Load Factors by Equivalent Airspeed and Altitude**  
**Mission IV (Aerial Delivery)**  
**Gross Weight Range: 115,000 to 125,000 lb.**

LOAD FACTOR NZ	ALTITUDE - 0 TO 2,000 FEET						TOTAL NZ	LOAD FACTOR NZ	ALTITUDE - 2,000 TO 4,000 FEET						TOTAL NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0								2.4 TO 2.0							
2.0 TO 2.4								2.0 TO 2.4							
1.8 TO 2.0								1.8 TO 2.0							
1.6 TO 1.8								1.6 TO 1.8							
1.5 TO 1.6		1					1	1.5 TO 1.6	1	1				2	
1.4 TO 1.5	1	2	4				7	1.4 TO 1.5			2			2	
1.3 TO 1.4	8	17	28	2			55	1.3 TO 1.4	2	26	32			60	
1.2 TO 1.3	49	91	95	6			251	1.2 TO 1.3	10	197	165	1		363	
1.1 TO 1.2	293	943	233	4			1033	1.1 TO 1.2	111	616	664			1392	
0.8 TO 0.9	107	284	121	4			576	0.8 TO 0.9	80	473	359	1		1173	
0.7 TO 0.8	23	37	62				122	0.7 TO 0.8	23	163	119			305	
0.6 TO 0.7	1	4	14				21	0.6 TO 0.7	5	20	23			56	
0.4 TO 0.6	1	1	3				5	0.4 TO 0.6		5	3			10	
0.2 TO 0.4								0.2 TO 0.4							
0. TO 0.2								0. TO 0.2							
BELOW 0.								BELOW 0.							
TIME (MIN)	132.2	353.4	240.4	14.7			740.6	TIME (MIN)	44.1	314.4	270.3	13.1		692.0	
NAUT MILES	309.3	1083.3	930.7	63.7			2303.2	NAUT MILES	100.3	1004.5	864.0	13.9		1064.5	

**Table 66**  
**Maneuver Load Factors by Equivalent Airspeed and Altitude**  
**Mission IV (Aerial Delivery)**  
**Gross Weight Range: 125,000 to 135,000 lb.**

LOAD FACTOR NZ	ALTITUDE - 0 TO 2,000 FEET						TOTAL NZ	LOAD FACTOR NZ	ALTITUDE - 2,000 TO 4,000 FEET						TOTAL NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0								ABOVE 2.0							
2.4 TO 2.0								2.4 TO 2.0							
2.0 TO 2.4								2.0 TO 2.4							
1.8 TO 2.0								1.8 TO 2.0							
1.6 TO 1.8								1.6 TO 1.8							
1.5 TO 1.6								1.5 TO 1.6							
1.4 TO 1.5								1.4 TO 1.5							
1.3 TO 1.4								1.3 TO 1.4							
1.2 TO 1.3	1	1					2	1.2 TO 1.3	2	1				3	
1.1 TO 1.2	6	13					19	1.1 TO 1.2	4	4				8	
0.8 TO 0.9	9	3					12	0.8 TO 0.9	7	3				10	
0.7 TO 0.8								0.7 TO 0.8	3	3				6	
0.6 TO 0.7		1					1	0.6 TO 0.7							
0.4 TO 0.6								0.4 TO 0.6		1				1	
0.2 TO 0.4								0.2 TO 0.4							
0. TO 0.2								0. TO 0.2							
BELOW 0.								BELOW 0.							
TIME (MIN)	2.0	3.3					5.3	TIME (MIN)	7.3	6.6				13.9	
NAUT MILES	5.4	10.4					15.8	NAUT MILES	24.2	36.0				60.2	

**Table 67**  
**Maneuver Load Factors by Equivalent Airspeed and Altitude**  
**Mission IV (Aerial Delivery)**  
**Gross Weight Range: 135,000 lb. and Above**

ALTITUDE - 0 TO 2,000 FEET								ALTITUDE - 2,000 TO 5,000 FEET								
LOAD FACTOR GZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL GZ	LOAD FACTOR GZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL GZ	
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE		
ABOVE 2.0																
2.4 TO 2.0																
2.0 TO 2.4																
1.8 TO 2.0																
1.6 TO 1.8																
1.5 TO 1.6																
1.4 TO 1.5			1													1
1.3 TO 1.4			1						3							7
1.2 TO 1.3			6						7							13
1.1 TO 1.2			36						15						1	30
0.8 TO 0.9			27		3				7		14					23
0.7 TO 0.8			2						2		1					3
0.6 TO 0.7																
0.4 TO 0.6																
0.2 TO 0.4																
0. TO 0.2																
WALK																
TIME (MIN)	15.4	6.5	0.5				22.4						23.2	13.5	1.5	50.2
NAUT MILES	33.0	10.2	1.0				53.4						57.4	30.0	3.4	100.8

ALTITUDE - 5,000 TO 10,000 FEET								ALTITUDE - 10,000 TO 15,000 FEET								
LOAD FACTOR GZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL GZ	LOAD FACTOR GZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL GZ	
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			
ABOVE 2.0																
2.4 TO 2.0																
2.0 TO 2.4																
1.8 TO 2.0																
1.6 TO 1.8																
1.5 TO 1.6																
1.4 TO 1.5																
1.3 TO 1.4																
1.2 TO 1.3			1													
1.1 TO 1.2			4		2											1
0.8 TO 0.9			8		1						1	1				2
0.7 TO 0.8																
0.6 TO 0.7																
0.4 TO 0.6																
0.2 TO 0.4																
0. TO 0.2																
WALK																
TIME (MIN)		17.7	3.6				21.3						9.0	2.6		11.6
NAUT MILES		37.0	13.7				70.7						21.0	12.0		43.0

ALTITUDE - 15,000 TO 20,000 FEET							
LOAD FACTOR GZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL GZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 2.0							
2.4 TO 2.0							
2.0 TO 2.4							
1.8 TO 2.0							
1.6 TO 1.8							
1.5 TO 1.6							
1.4 TO 1.5							
1.3 TO 1.4							
1.2 TO 1.3							
1.1 TO 1.2							
0.8 TO 0.9							
0.7 TO 0.8							
0.6 TO 0.7							
0.4 TO 0.6							
0.2 TO 0.4							
0. TO 0.2							
WALK							
TIME (MIN)	11.4	9.3					20.7
NAUT MILES	23.6	40.0					63.6

**Table 68**  
**Equivalent Maneuver Load Factors by Equivalent Airspeed**  
**and Altitude — Mission I (Long Range Logistics)**

ALTITUDE - 0 TO 2,000 FEET							ALTITUDE - 2,000 TO 5,000 FEET						
LOAD FACTOR RFE	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL RFE	LOAD FACTOR RFE	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL RFE
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 2.0							ABOVE 2.0						
2.4 TO 2.0							2.4 TO 2.0						
2.0 TO 2.4		1		1		2	2.0 TO 2.4		2				
1.8 TO 2.0	4	30	2	2		67	1.8 TO 2.0		14	5	1		
1.6 TO 1.8	197	513	64	23		797	1.6 TO 1.8	8	145	99	32	3	
1.5 TO 1.6	150	465	97	17		1029	1.5 TO 1.6	24	493	190	55	1	
1.4 TO 1.5	710	934	111	14	2	1773	1.4 TO 1.5	66	434	170	33		
1.3 TO 1.4	912	534	49	3		1100	1.3 TO 1.4	88	504	143	13		
1.2 TO 1.3	600	626	48	5		1779	1.2 TO 1.3	323	1000	275	44	1	
1.1 TO 1.2	1447	1107	135	13	2	2706	1.1 TO 1.2	536	1419	439	49	1	
0.8 TO 0.9	750	267	22	10		1059	0.8 TO 0.9	465	509	164	17	3	
0.7 TO 0.8	209	109	4	4		326	0.7 TO 0.8	293	208	73	6		
0.6 TO 0.7	34	16	1	2		53	0.6 TO 0.7	26	43	19	1		
0.2 TO 0.6	1	3				4	0.6 TO 0.6		10	12			
0.2 TO 0.2							0.2 TO 0.2						
BELOW 0.							BELOW 0.						
TIME (MIN)	1402.0	1295.6	124.1	12.0	0.4	2706.9	TIME (MIN)	765.9	2344.8	800.2	99.7	4.0	
NAUT MILES	3209.7	3572.9	444.2	54.3	2.1	7300.2	NAUT MILES	1775.7	7306.9	3000.3	450.0	20.3	

ALTITUDE - 3,000 TO 10,000 FEET							ALTITUDE - 10,000 TO 15,000 FEET						
LOAD FACTOR RFE	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL RFE	LOAD FACTOR RFE	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL RFE
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 2.0							ABOVE 2.0						
2.4 TO 2.0							2.4 TO 2.0						
2.0 TO 2.4							2.0 TO 2.4						
1.8 TO 2.0		2		1		3	1.8 TO 2.0		3				
1.6 TO 1.8		1	20	11		32	1.6 TO 1.8		10	7	1		
1.5 TO 1.6	1	193	20	1		205	1.5 TO 1.6	4	70	33			
1.4 TO 1.5	4	130	134	0		478	1.4 TO 1.5	140	70	0			
1.3 TO 1.4	4	263	164	23	1	495	1.3 TO 1.4	109	117	10			
1.2 TO 1.3	50	592	364	45	2	702	1.2 TO 1.3	3	200	142	32		
1.1 TO 1.2	39	504	483	81	10	1127	1.1 TO 1.2	4	217	220	44	3	
0.8 TO 0.9	22	100	237	37	2	367	0.8 TO 0.9	3	47	142	17		
0.7 TO 0.8	3	73	109	19		204	0.7 TO 0.8		0	40	0		
0.6 TO 0.7		1	4	2		7	0.6 TO 0.7		1	0			
0.4 TO 0.6		1	2			3	0.4 TO 0.6			1			
0.2 TO 0.4							0.2 TO 0.4						
0.2 TO 0.2							0.2 TO 0.2						
BELOW 0.							BELOW 0.						
TIME (MIN)	62.4	3174.6	1522.0	100.1	12.1	4970.0	TIME (MIN)	30.9	1426.6	1502.1	274.9	7.9	
NAUT MILES	167.2	10611.7	6223.0	891.0	64.1	17094.1	NAUT MILES	113.9	13723.9	6833.4	1434.9	47.1	

ALTITUDE - 15,000 TO 20,000 FEET							ALTITUDE - 20,000 TO 25,000 FEET						
LOAD FACTOR RFE	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL RFE	LOAD FACTOR RFE	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL RFE
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 2.0							ABOVE 2.0						
2.4 TO 2.0							2.4 TO 2.0						
2.0 TO 2.4							2.0 TO 2.4						
1.8 TO 2.0		1	3			4	1.8 TO 2.0		1	1			
1.6 TO 1.8	4	21	44			69	1.6 TO 1.8	1	40	91			
1.5 TO 1.6	6	133	279			418	1.5 TO 1.6	11	60	100	1		
1.4 TO 1.5	10	504	705	14		1249	1.4 TO 1.5	23	410	600	1		
1.3 TO 1.4	4	364	662	10		1040	1.3 TO 1.4	13	1257	1000	0		
1.2 TO 1.3	0	470	404	24		1378	1.2 TO 1.3	14	1440	900	0		
1.1 TO 1.2	14	471	600	30	5	1585	1.1 TO 1.2	39	1500	1212	0		
0.8 TO 0.9	2	25	120	20		177	0.8 TO 0.9	3	100	104	1		
0.7 TO 0.8		0	40	2		42	0.7 TO 0.8	1	44	70	1		
0.6 TO 0.7		2	1			3	0.6 TO 0.7		2	4	1		
0.4 TO 0.6			1			1	0.4 TO 0.6		2				
0.2 TO 0.4							0.2 TO 0.4		2				
0.2 TO 0.2							0.2 TO 0.2						
BELOW 0.							BELOW 0.						
TIME (MIN)	140.8	12000.1	20440.9	1504.1	6.1	40000.0	TIME (MIN)	283.2	64070.0	64104.2	870.2		
NAUT MILES	340.3	40074.0	125270.0	9704.0	30.1	100000.0	NAUT MILES	604.3	200323.3	218276.0	2140.0		

ALTITUDE - 25,000 TO 30,000 FEET							ALTITUDE - 30,000 TO ABOVE FEET						
LOAD FACTOR RFE	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL RFE	LOAD FACTOR RFE	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL RFE
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 2.0							ABOVE 2.0						
2.4 TO 2.0							2.4 TO 2.0						
2.0 TO 2.4							2.0 TO 2.4						
1.8 TO 2.0							1.8 TO 2.0						
1.6 TO 1.8		1				1	1.6 TO 1.8			1			
1.5 TO 1.6		1				1	1.5 TO 1.6			1			
1.4 TO 1.5	1	200	70			271	1.4 TO 1.5		12	22			
1.3 TO 1.4	3	401	277			700	1.3 TO 1.4		130	120			
1.2 TO 1.3	6	632	276	1		1122	1.2 TO 1.3		120	11			
1.1 TO 1.2	6	1130	300	1		1375	1.1 TO 1.2		300	60			
0.8 TO 0.9		30	63	1		94	0.8 TO 0.9		10	3			
0.7 TO 0.8		0	22			22	0.7 TO 0.8		14				
0.6 TO 0.7		0	2			2	0.6 TO 0.7		1				
0.4 TO 0.6		4	2			6	0.4 TO 0.6		1				
0.2 TO 0.4							0.2 TO 0.4						
0.2 TO 0.2							0.2 TO 0.2						
BELOW 0.							BELOW 0.						
TIME (MIN)	124.0	4323.4	6002.0	3.7		4929.1	TIME (MIN)	17.0	4023.0	345.0			
NAUT MILES	280.0	20700.4	30271.0	20.7		64200.5	NAUT MILES	70.0	27000.7	3120.2			





**Table 70**  
**Equivalent Maneuver Load Factors by Equivalent Airspeed**  
**and Altitude — Mission III (Training)**

ALTITUDE - 0 TO 2,000 FEET							ALTITUDE - 2,000 TO 4,000 FEET						
EQUIVALENT AIRSPEED - VE (KNOTS)							EQUIVALENT AIRSPEED - VE (KNOTS)						
LOAD FACTOR	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	TOTAL	LOAD FACTOR	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	TOTAL
MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN
ABOVE 2.0							ABOVE 2.0						
2.0 TO 2.0						1	2.0 TO 2.0						3
2.0 TO 2.4						0	2.0 TO 2.4			2	1		3
1.0 TO 2.0						0	1.0 TO 2.0			3	2	2	7
1.0 TO 1.0						0	1.0 TO 1.0			1	4	17	22
1.5 TO 1.0						0	1.5 TO 1.0			1	17	51	69
1.0 TO 1.5						0	1.0 TO 1.5			16	104	109	229
1.3 TO 1.0						0	1.3 TO 1.0			75	411	390	876
1.2 TO 1.3						2	1.2 TO 1.3			207	204	701	1112
1.1 TO 1.2						1	1.1 TO 1.2			1002	6730	2632	7364
0.0 TO 0.0						1	0.0 TO 0.0			5200	12745	5004	22949
0.7 TO 0.0						1	0.7 TO 0.0			4270	2013	3603	1444
0.0 TO 0.7						0	0.0 TO 0.7			620	1322	325	2267
0.0 TO 0.0						0	0.0 TO 0.0			0	200	150	350
0.2 TO 0.0						0	0.2 TO 0.0			0	0	0	0
0.0 TO 0.2						2	0.0 TO 0.2			0	0	0	0
0.0 TO 0.0						0	0.0 TO 0.0			0	0	0	0
TIME (MIN)	14445.3	9590.7	2705.0	122.3	0.3	27322.1	TIME (MIN)	4002.4	13304.3	5302.7	100.4	3.9	23727.3
MAN MANE	32400.0	27643.9	10214.2	537.7	1.6	71395.2	MAN MANE	11904.2	40143.9	19003.5	047.1	20.4	72044.1
ALTITUDE - 2,000 TO 4,000 FEET							ALTITUDE - 4,000 TO 6,000 FEET						
EQUIVALENT AIRSPEED - VE (KNOTS)							EQUIVALENT AIRSPEED - VE (KNOTS)						
LOAD FACTOR	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	TOTAL	LOAD FACTOR	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	TOTAL
MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN
ABOVE 2.0							ABOVE 2.0						
2.0 TO 2.0						7	2.0 TO 2.0						1
2.0 TO 2.4						17	2.0 TO 2.4						1
1.0 TO 2.0						30	1.0 TO 2.0						10
1.0 TO 1.0						60	1.0 TO 1.0						20
1.5 TO 1.0						113	1.5 TO 1.0						36
1.0 TO 1.5						204	1.0 TO 1.5						47
1.3 TO 1.0						421	1.3 TO 1.0						66
1.2 TO 1.3						2741	1.2 TO 1.3						309
1.1 TO 1.2						2	1.1 TO 1.2						1504
0.0 TO 0.0						9994	0.0 TO 0.0						3960
0.7 TO 0.0						2342	0.7 TO 0.0						1204
0.0 TO 0.7						270	0.0 TO 0.7						103
0.0 TO 0.0						60	0.0 TO 0.0						34
0.2 TO 0.0						7	0.2 TO 0.0						0
0.0 TO 0.2						0	0.0 TO 0.2						0
0.0 TO 0.0						0	0.0 TO 0.0						0
TIME (MIN)	294.7	6974.0	2074.0	100.0	3.3	9152.1	TIME (MIN)	432.0	2713.0	2770.7	77.0	3.9	3990.0
MAN MANE	2004.3	20110.4	6504.0	904.0	10.4	31264.2	MAN MANE	1150.2	11474.7	10004.0	391.7	23.7	27004.1
ALTITUDE - 6,000 TO 8,000 FEET							ALTITUDE - 8,000 TO 10,000 FEET						
EQUIVALENT AIRSPEED - VE (KNOTS)							EQUIVALENT AIRSPEED - VE (KNOTS)						
LOAD FACTOR	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	TOTAL	LOAD FACTOR	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	TOTAL
MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN
ABOVE 2.0							ABOVE 2.0						
2.0 TO 2.0						3	2.0 TO 2.0						1
2.0 TO 2.4						17	2.0 TO 2.4						1
1.0 TO 2.0						30	1.0 TO 2.0						10
1.0 TO 1.0						60	1.0 TO 1.0						20
1.5 TO 1.0						113	1.5 TO 1.0						36
1.0 TO 1.5						204	1.0 TO 1.5						47
1.3 TO 1.0						421	1.3 TO 1.0						66
1.2 TO 1.3						2741	1.2 TO 1.3						309
1.1 TO 1.2						2	1.1 TO 1.2						1504
0.0 TO 0.0						9994	0.0 TO 0.0						3960
0.7 TO 0.0						2342	0.7 TO 0.0						1204
0.0 TO 0.7						270	0.0 TO 0.7						103
0.0 TO 0.0						60	0.0 TO 0.0						34
0.2 TO 0.0						7	0.2 TO 0.0						0
0.0 TO 0.2						0	0.0 TO 0.2						0
0.0 TO 0.0						0	0.0 TO 0.0						0
TIME (MIN)	153.0	7224.7	1072.7	67.0	1.8	8023.2	TIME (MIN)	34.1	2742.2	2025.1	100.2	3.9	3990.0
MAN MANE	971.0	20644.0	6504.0	244.0	0.7	10040.3	MAN MANE	304.2	12724.4	12707.1	404.3	23.7	27004.1
ALTITUDE - 10,000 TO 12,000 FEET							ALTITUDE - 12,000 TO 14,000 FEET						
EQUIVALENT AIRSPEED - VE (KNOTS)							EQUIVALENT AIRSPEED - VE (KNOTS)						
LOAD FACTOR	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	TOTAL	LOAD FACTOR	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	TOTAL
MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN	MAN
ABOVE 2.0							ABOVE 2.0						
2.0 TO 2.0						1	2.0 TO 2.0						1
2.0 TO 2.4						17	2.0 TO 2.4						1
1.0 TO 2.0						30	1.0 TO 2.0						10
1.0 TO 1.0						60	1.0 TO 1.0						20
1.5 TO 1.0						113	1.5 TO 1.0						36
1.0 TO 1.5						204	1.0 TO 1.5						47
1.3 TO 1.0						421	1.3 TO 1.0						66
1.2 TO 1.3						2741	1.2 TO 1.3						309
1.1 TO 1.2						2	1.1 TO 1.2						1504
0.0 TO 0.0						9994	0.0 TO 0.0						3960
0.7 TO 0.0						2342	0.7 TO 0.0						1204
0.0 TO 0.7						270	0.0 TO 0.7						103
0.0 TO 0.0						60	0.0 TO 0.0						34
0.2 TO 0.0						7	0.2 TO 0.0						0
0.0 TO 0.2						0	0.0 TO 0.2						0
0.0 TO 0.0						0	0.0 TO 0.0						0
TIME (MIN)	153.0	7224.7	1072.7	67.0	1.8	8023.2	TIME (MIN)	34.1	2742.2	2025.1	100.2	3.9	3990.0
MAN MANE	971.0	20644.0	6504.0	244.0	0.7	10040.3	MAN MANE	304.2	12724.4	12707.1	404.3	23.7	27004.1

**Table 71**  
**Equivalent Maneuver Load Factors by Equivalent Airspeed**  
**and Altitude — Mission IV (Aerial Delivery)**

ALTITUDE - 0 TO 5,000 FEET							ALTITUDE - 5,000 TO 10,000 FEET						
LOAD FACTOR RANGE	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL	LOAD FACTOR RANGE	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 2.0							ABOVE 2.0						
2.0 TO 2.4							2.0 TO 2.4						
1.0 TO 2.0			2			2	1.0 TO 2.0			4			4
1.0 TO 1.0	7	27	0			37	1.0 TO 1.0	6	15	5			26
1.5 TO 1.0	19	29	21	2		71	1.5 TO 1.0	9	21	28			58
1.0 TO 1.5	56	70	63	0		209	1.0 TO 1.5	26	129	90			245
1.5 TO 1.5	150	209	259	26		794	1.5 TO 1.5	76	622	452			1150
1.7 TO 1.5	650	1000	843	60		2573	1.5 TO 1.5	267	1606	1100	15		3988
1.1 TO 1.2	1664	1080	2200	176		4376	1.1 TO 1.2	857	2270	2055	1		6183
0.7 TO 0.9	1491	1167	1905	129		4734	0.0 TO 0.9	1334	2002	3410	142	1	7790
0.7 TO 0.8	960	720	933	60		2699	0.7 TO 0.8	630	1763	2552	87		5032
0.5 TO 0.7	170	184	319	13		686	0.5 TO 0.7	112	172	465	15		1164
0.5 TO 0.5	27	45	103	3		178	0.5 TO 0.5	13	66	150	2		231
0.7 TO 0.2						0	0.2 TO 0.2	1		10			11
BELOW 0.							BELOW 0.						
TIME (MIN)	1418.3	1455.0	2646.8	113.9		5434.1	TIME (MIN)	619.5	2991.7	3067.9	109.3	0.1	6969.8
NAUT MILES	3168.6	4456.9	10007.5	506.8		18129.8	NAUT MILES	2176.2	7613.0	11632.9	862.5	0.7	22095.4

ALTITUDE - 10,000 TO 15,000 FEET							ALTITUDE - 15,000 TO 20,000 FEET						
LOAD FACTOR RANGE	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL	LOAD FACTOR RANGE	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 2.0							ABOVE 2.0						
2.0 TO 2.4							2.0 TO 2.4						
1.0 TO 2.0							1.0 TO 2.0						
1.0 TO 1.0		1				1	1.0 TO 1.0						
1.5 TO 1.0		3				3	1.5 TO 1.0						
1.0 TO 1.5		5	2			7	1.0 TO 1.5		1	1			2
1.5 TO 1.5		16	2			18	1.5 TO 1.5		1	3			4
1.7 TO 1.5	2	23	6			27	1.2 TO 1.3	1	5	3			9
1.1 TO 1.2	2	106	234	123		345	1.1 TO 1.2	3	40	27			70
0.8 TO 0.9	2	393	267	116		798	0.0 TO 0.9	1	160	120			381
0.7 TO 0.8	2	191	70	25		388	0.7 TO 0.8		140	91	7		238
0.5 TO 0.7		7				14	0.5 TO 0.7		5				10
0.5 TO 0.5					1	1	0.5 TO 0.5						
0.7 TO 0.2							0.2 TO 0.2						
BELOW 0.							BELOW 0.						
TIME (MIN)	0.0	509.2	296.0	66.1		871.3	TIME (MIN)	2.3	358.0	336.3	15.2		791.8
NAUT MILES	26.2	1709.1	1169.6	204.5		3110.3	NAUT MILES	7.5	1326.2	1426.0	76.0		2965.7

ALTITUDE - 20,000 TO 25,000 FEET							ALTITUDE - 25,000 TO 30,000 FEET						
LOAD FACTOR RANGE	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL	LOAD FACTOR RANGE	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 2.0							ABOVE 2.0						
2.0 TO 2.4							2.0 TO 2.4						
1.0 TO 2.0							1.0 TO 2.0						
1.0 TO 1.0							1.0 TO 1.0						
1.5 TO 1.0		1				1	1.5 TO 1.0						
1.0 TO 1.5		1	2			3	1.5 TO 1.5						
1.5 TO 1.5		1	1			2	1.5 TO 1.5						
1.7 TO 1.5		1	1			2	1.2 TO 1.3						
1.1 TO 1.2		1	2			3	1.1 TO 1.2						
0.8 TO 0.9			2	1		3	0.0 TO 0.9			1			1
0.7 TO 0.8							0.7 TO 0.8			1			1
0.5 TO 0.7							0.5 TO 0.7			2			2
0.5 TO 0.5							0.5 TO 0.5						
0.7 TO 0.2							0.2 TO 0.2						
BELOW 0.							BELOW 0.						
TIME (MIN)	1.2	29.2	116.0	6.5		146.9	TIME (MIN)	11.9	66.1			79.0	
NAUT MILES	3.0	69.1	306.0	3.8		424.9	NAUT MILES	49.7	276.3			326.0	

ALTITUDE - 30,000 TO 35,000 FEET						
LOAD FACTOR RANGE	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 2.0						
2.0 TO 2.4						
1.0 TO 2.0						
1.0 TO 1.0						
1.5 TO 1.0						
1.0 TO 1.5						
1.5 TO 1.5						
1.7 TO 1.5						
1.1 TO 1.2						
0.8 TO 0.9	1					1
0.7 TO 0.8						
0.5 TO 0.7						
0.5 TO 0.5						
0.7 TO 0.2						
BELOW 0.						
TIME (MIN)	0.5	399.7	8.0			404.2
NAUT MILES	0.5	100.8	26.0			127.3

**Table 72**  
**Incremental Gust Load Factors by Equivalent Airspeed and Altitude**  
**Mission I (Long Range Logistics)**  
**Gross Weight Range: 85,000 to 95,000 lb.**

ALTITUDE - 0 TO 2,000 FEET							ALTITUDE - 2,000 TO 4,000 FEET						
LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ	LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350			350 AND ABOVE	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	
ABOVE 1.0							ABOVE 1.0						
1.4 TO 1.0							1.4 TO 1.0						
1.0 TO 1.4							1.0 TO 1.4						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4							0.3 TO 0.4						
0.2 TO 0.3	4	3				9	0.2 TO 0.3			15			20
0.1 TO 0.2	20	4	6			30	0.1 TO 0.2	10	42	30			82
	154	57	21			232		69	182	130			401
-0.2 TO -0.1	131	51	15			197	-0.2 TO -0.1	66	144	130			340
-0.3 TO -0.2	15	6	3			24	-0.3 TO -0.2	8	9	31			40
-0.4 TO -0.3	2	1				3	-0.4 TO -0.3		9	12			21
-0.6 TO -0.4	1					1	-0.6 TO -0.4		3				3
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	55.7	13.2	3.3			72.4	TIME (MIN)	70.2	79.5	41.4			191.1
NAUT MILES	114.2	36.9	11.0			162.1	NAUT MILES	187.8	235.5	148.8			572.1

ALTITUDE - 5,000 TO 10,000 FEET							ALTITUDE - 10,000 TO 15,000 FEET						
LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ	LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350			350 AND ABOVE	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	
ABOVE 1.0							ABOVE 1.0						
1.4 TO 1.0							1.4 TO 1.0						
1.0 TO 1.4							1.0 TO 1.4						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4							0.3 TO 0.4						
0.2 TO 0.3							0.2 TO 0.3						
0.1 TO 0.2							0.1 TO 0.2						
-0.2 TO -0.1							-0.2 TO -0.1						
-0.3 TO -0.2							-0.3 TO -0.2						
-0.4 TO -0.3							-0.4 TO -0.3						
-0.6 TO -0.4							-0.6 TO -0.4						
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	39.8	91.2	9.7			130.7	TIME (MIN)	3.3	64.8	6.9			75.0
NAUT MILES	128.6	366.7	66.3			561.6	NAUT MILES	12.7	296.4	36.7			345.7

ALTITUDE - 15,000 TO 20,000 FEET							ALTITUDE - 20,000 TO 25,000 FEET						
LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ	LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350			350 AND ABOVE	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	
ABOVE 1.0							ABOVE 1.0						
1.4 TO 1.0							1.4 TO 1.0						
1.0 TO 1.4							1.0 TO 1.4						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4							0.3 TO 0.4						
0.2 TO 0.3							0.2 TO 0.3						
0.1 TO 0.2							0.1 TO 0.2						
-0.2 TO -0.1							-0.2 TO -0.1						
-0.3 TO -0.2							-0.3 TO -0.2						
-0.4 TO -0.3							-0.4 TO -0.3						
-0.6 TO -0.4							-0.6 TO -0.4						
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	5.0	42.0	5.5			52.5	TIME (MIN)	181.7	67.1	6.1			254.9
NAUT MILES	21.4	209.9	29.8			261.1	NAUT MILES	836.4	359.6	23.4			1199.4

ALTITUDE - 25,000 TO 30,000 FEET							ALTITUDE - 30,000 TO ABOVE FEET						
LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ	LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350			350 AND ABOVE	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	
ABOVE 1.0							ABOVE 1.0						
1.4 TO 1.0							1.4 TO 1.0						
1.0 TO 1.4							1.0 TO 1.4						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4							0.3 TO 0.4						
0.2 TO 0.3							0.2 TO 0.3						
0.1 TO 0.2							0.1 TO 0.2						
-0.2 TO -0.1							-0.2 TO -0.1						
-0.3 TO -0.2							-0.3 TO -0.2						
-0.4 TO -0.3							-0.4 TO -0.3						
-0.6 TO -0.4							-0.6 TO -0.4						
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	799.0	116.7				915.7	TIME (MIN)	263.4					263.4
NAUT MILES	3796.0	606.4				4402.4	NAUT MILES	1196.7					1196.7



**Table 74**  
**Incremental Gust Load Factors by Equivalent Airspeed and Altitude**  
**Mission I (Long Range Logistics)**  
**Gross Weight Range: 105,000 to 115,000 lb.**

ALTITUDE - 0 TO 2,000 FEET							ALTITUDE - 2,000 TO 5,000 FEET								
EQUIVALENT AIRSPEED - VE (KNOTS)							EQUIVALENT AIRSPEED - VE (KNOTS)								
LOAD FACTOR DELTA N2	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	TOTAL DELTA N2	LOAD FACTOR DELTA N2	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	TOTAL DELTA N2
ABOVE 1.0								ABOVE 1.0							
1.4 TO 1.0								1.4 TO 1.0							
1.0 TO 1.4								1.0 TO 1.4							
0.8 TO 1.0								0.8 TO 1.0							
0.6 TO 0.8								0.6 TO 0.8							
0.5 TO 0.6								0.5 TO 0.6							
0.4 TO 0.5		1					1	0.4 TO 0.5	3	2					5
0.3 TO 0.4	1						1	0.3 TO 0.4	6	4					12
0.2 TO 0.3	35	20					55	0.2 TO 0.3	32	10	11	3			64
0.1 TO 0.2	398	151	14	5			568	0.1 TO 0.2	236	320	123	70	2		761
-0.2 TO -0.1	307	135	13	4			539	-0.2 TO -0.1	210	270	102	0			602
-0.3 TO -0.2	26	10					36	-0.3 TO -0.2	17	20	4	5			46
-0.4 TO -0.3	2						2	-0.4 TO -0.3	4	3	1	1			9
-0.6 TO -0.4								-0.6 TO -0.4	1						1
-0.8 TO -0.6								-0.8 TO -0.6							
-1.0 TO -0.8								-1.0 TO -0.8							
BELOW -1.0								BELOW -1.0							
TIME (MIN)	495.3	240.0	23.3	2.3			761.6	TIME (MIN)	306.4	567.0	216.0	10.0	2.2		1114.3
NAUT MILES	1075.4	643.3	79.8	9.4			1800.0	NAUT MILES	732.2	1634.0	794.0	03.0	11.0		3237.7
ALTITUDE - 5,000 TO 10,000 FEET							ALTITUDE - 10,000 TO 15,000 FEET								
EQUIVALENT AIRSPEED - VE (KNOTS)							EQUIVALENT AIRSPEED - VE (KNOTS)								
LOAD FACTOR DELTA N2	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	TOTAL DELTA N2	LOAD FACTOR DELTA N2	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	TOTAL DELTA N2
ABOVE 1.0								ABOVE 1.0							
1.4 TO 1.0								1.4 TO 1.0							
1.0 TO 1.4								1.0 TO 1.4							
0.8 TO 1.0								0.8 TO 1.0							
0.6 TO 0.8								0.6 TO 0.8							
0.5 TO 0.6								0.5 TO 0.6							
0.4 TO 0.5			1				1	0.4 TO 0.5							
0.3 TO 0.4			2				2	0.3 TO 0.4							
0.2 TO 0.3			7				7	0.2 TO 0.3							
0.1 TO 0.2			51				51	0.1 TO 0.2							
-0.2 TO -0.1			369				369	-0.2 TO -0.1							
-0.3 TO -0.2			4				4	-0.3 TO -0.2							
-0.4 TO -0.3			3				3	-0.4 TO -0.3							
-0.6 TO -0.4			5				5	-0.6 TO -0.4							
-0.8 TO -0.6			9				9	-0.8 TO -0.6							
-1.0 TO -0.8			40				40	-1.0 TO -0.8							
BELOW -1.0								BELOW -1.0							
TIME (MIN)	34.8	320.0	498.7	93.9	0.0		927.6	TIME (MIN)	4.3	139.0	647.0	99.1	7.9		897.4
NAUT MILES	90.7	1094.1	2023.5	643.2	00.7		3663.3	NAUT MILES	12.0	500.4	2022.1	300.0	47.1		3096.3
ALTITUDE - 15,000 TO 20,000 FEET							ALTITUDE - 20,000 TO 25,000 FEET								
EQUIVALENT AIRSPEED - VE (KNOTS)							EQUIVALENT AIRSPEED - VE (KNOTS)								
LOAD FACTOR DELTA N2	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	TOTAL DELTA N2	LOAD FACTOR DELTA N2	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	TOTAL DELTA N2
ABOVE 1.0								ABOVE 1.0							
1.4 TO 1.0								1.4 TO 1.0							
1.0 TO 1.4								1.0 TO 1.4							
0.8 TO 1.0								0.8 TO 1.0							
0.6 TO 0.8								0.6 TO 0.8							
0.5 TO 0.6								0.5 TO 0.6							
0.4 TO 0.5								0.4 TO 0.5							
0.3 TO 0.4								0.3 TO 0.4							
0.2 TO 0.3								0.2 TO 0.3							
0.1 TO 0.2								0.1 TO 0.2							
-0.2 TO -0.1								-0.2 TO -0.1							
-0.3 TO -0.2								-0.3 TO -0.2							
-0.4 TO -0.3								-0.4 TO -0.3							
-0.6 TO -0.4								-0.6 TO -0.4							
-0.8 TO -0.6								-0.8 TO -0.6							
-1.0 TO -0.8								-1.0 TO -0.8							
BELOW -1.0								BELOW -1.0							
TIME (MIN)	4.1	532.3	2116.0	101.3	4.9		2669.9	TIME (MIN)	15.7	6000.6	3623.2	94.2		11000.7	
NAUT MILES	13.1	2239.4	10348.9	577.4	36.9		13200.6	NAUT MILES	61.3	37207.2	17000.1	390.0		56607.6	
ALTITUDE - 25,000 TO 30,000 FEET							ALTITUDE - 30,000 TO ABOVE FEET								
EQUIVALENT AIRSPEED - VE (KNOTS)							EQUIVALENT AIRSPEED - VE (KNOTS)								
LOAD FACTOR DELTA N2	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	TOTAL DELTA N2	LOAD FACTOR DELTA N2	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	TOTAL DELTA N2
ABOVE 1.0								ABOVE 1.0							
1.4 TO 1.0								1.4 TO 1.0							
1.0 TO 1.4								1.0 TO 1.4							
0.8 TO 1.0								0.8 TO 1.0							
0.6 TO 0.8								0.6 TO 0.8							
0.5 TO 0.6								0.5 TO 0.6							
0.4 TO 0.5								0.4 TO 0.5							
0.3 TO 0.4								0.3 TO 0.4							
0.2 TO 0.3								0.2 TO 0.3							
0.1 TO 0.2								0.1 TO 0.2							
-0.2 TO -0.1								-0.2 TO -0.1							
-0.3 TO -0.2								-0.3 TO -0.2							
-0.4 TO -0.3								-0.4 TO -0.3							
-0.6 TO -0.4								-0.6 TO -0.4							
-0.8 TO -0.6								-0.8 TO -0.6							
-1.0 TO -0.8								-1.0 TO -0.8							
BELOW -1.0								BELOW -1.0							
TIME (MIN)	37.5	12943.0	1317.4	3.7			13702.4	TIME (MIN)	3.2	10900.0	113.1			1000.0	
NAUT MILES	100.0	29101.4	7000.1	24.7			60466.7	NAUT MILES	22.4	8770.3	631.7			6033.6	

**Table 75**  
**Incremental Gust Load Factors by Equivalent Airspeed and Altitude**  
**Mission I (Long Range Logistics)**  
**Gross Weight Range: 115,000 to 125,000 lb.**

ALTITUDE - 0 TO 2,000 FEET							ALTITUDE - 2,000 TO 5,000 FEET						
LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ	LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 1.0							ABOVE 1.0						
1.4 TO 1.0							1.4 TO 1.0						
1.0 TO 1.4							1.0 TO 1.4						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4							0.3 TO 0.4						
0.2 TO 0.3	3	2	1			6	0.2 TO 0.3	2	2	1	2	1	6
0.1 TO 0.2	31	21	5	1		58	0.1 TO 0.2	5	11	9	6	1	32
	100	113	45			346		72	131	57	13	3	276
-0.2 TO -0.1	140	93	29			262	-0.2 TO -0.1	53	102	49	6	6	216
-0.3 TO -0.2	15	13	3			31	-0.3 TO -0.2	6	10	5			21
-0.4 TO -0.3	1	1	1			3	-0.4 TO -0.3	1	1	1			3
-0.6 TO -0.4	2					2	-0.6 TO -0.4	1					1
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	407.2	181.6	15.2	0.6		324.6	TIME (MIN)	129.5	200.1	85.5	9.5	0.2	512.7
NAUT MILES	472.5	207.0	55.0	0.5		617.7	NAUT MILES	316.0	839.1	316.2	43.2	1.0	1516.2
ALTITUDE - 5,000 TO 10,000 FEET							ALTITUDE - 10,000 TO 14,000 FEET						
LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ	LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 1.0							ABOVE 1.0						
1.4 TO 1.0							1.4 TO 1.0						
1.0 TO 1.4							1.0 TO 1.4						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4							0.3 TO 0.4						
0.2 TO 0.3	3	7	29	1	1	4	0.2 TO 0.3			1			1
0.1 TO 0.2	3	45	173	6	6	233	0.1 TO 0.2	8	70	7			85
-0.2 TO -0.1	3	49	146	12		212	-0.2 TO -0.1	9	67	5			81
-0.3 TO -0.2		2	27	3		32	-0.3 TO -0.2		1	1			2
-0.4 TO -0.3			2			2	-0.4 TO -0.3		1				1
-0.6 TO -0.4							-0.6 TO -0.4		1				1
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	16.7	246.0	232.5	23.1	3.3	545.6	TIME (MIN)	7.9	316.3	212.7	72.3		609.2
NAUT MILES	45.6	896.5	972.5	156.5	17.4	2065.4	NAUT MILES	23.6	1102.0	967.6	370.7		2466.7
ALTITUDE - 15,000 TO 20,000 FEET							ALTITUDE - 20,000 TO 25,000 FEET						
LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ	LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 1.0							ABOVE 1.0						
1.4 TO 1.0							1.4 TO 1.0						
1.0 TO 1.4							1.0 TO 1.4						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4							0.3 TO 0.4						
0.2 TO 0.3							0.2 TO 0.3						
0.1 TO 0.2							0.1 TO 0.2						
-0.2 TO -0.1							-0.2 TO -0.1						
-0.3 TO -0.2							-0.3 TO -0.2						
-0.4 TO -0.3							-0.4 TO -0.3						
-0.6 TO -0.4							-0.6 TO -0.4						
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	20.1	1094.4	2796.0	165.1	1.2	4063.6	TIME (MIN)	60.4	20005.1	6369.4	194.7		29422.6
NAUT MILES	80.0	7036.6	13012.2	1046.5	7.2	21990.3	NAUT MILES	210.0	97112.0	41816.0	1197.2		138096.0
ALTITUDE - 25,000 TO 30,000 FEET							ALTITUDE - 30,000 TO ABOVE FEET						
LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ	LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 1.0							ABOVE 1.0						
1.4 TO 1.0							1.4 TO 1.0						
1.0 TO 1.4							1.0 TO 1.4						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4							0.3 TO 0.4						
0.2 TO 0.3							0.2 TO 0.3						
0.1 TO 0.2							0.1 TO 0.2						
-0.2 TO -0.1							-0.2 TO -0.1						
-0.3 TO -0.2							-0.3 TO -0.2						
-0.4 TO -0.3							-0.4 TO -0.3						
-0.6 TO -0.4							-0.6 TO -0.4						
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	12.1	15409.2	2079.7			17621.0	TIME (MIN)	4.3	1299.1	132.0			1432.2
NAUT MILES	106.5	76437.0	11207.3			88294.0	NAUT MILES	10.6	6705.0	777.2			7581.6



**Table 77**  
**Incremental Gust Load Factors by Equivalent Airspeed and Altitude**  
**Mission I (Long Range Logistics)**  
**Gross Weight Range: 135,000 lb. and Above**

ALTITUDE - 0 TO 2,000 FEET							ALTITUDE - 2,000 TO 4,000 FEET						
EQUIVALENT AIRSPEED - VE (KNOTS)							EQUIVALENT AIRSPEED - VE (KNOTS)						
LOAD FACTOR DELTA HZ	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	LOAD FACTOR DELTA HZ	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE
ABOVE 1.0							ABOVE 1.0						
1.4 TO 1.0							1.4 TO 1.0						
1.0 TO 1.4							1.0 TO 1.4						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6			1	1	1	3	0.5 TO 0.6						
0.4 TO 0.5			3	2	1	7	0.4 TO 0.5				1		1
0.3 TO 0.4	2	4	0	0	1	25	0.3 TO 0.4	1	4	1	3		9
0.2 TO 0.3	19	134	57	29	2	241	0.2 TO 0.3	1	42	40	7		90
0.1 TO 0.2	302	870	174	83	2	1433	0.1 TO 0.2	7	341	151	22	3	544
-0.2 TO -0.1	232	515	144	84		1077	-0.2 TO -0.1	4	209	124	29	5	467
-0.3 TO -0.2	30	84	32	29	2	147	-0.3 TO -0.2		27	20	2	1	50
-0.4 TO -0.3	2	2	6	7		17	-0.4 TO -0.3		2				7
-0.6 TO -0.4			1			2	-0.6 TO -0.4			1			1
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	482.3	873.9	66.6	9.3	0.4	1182.7	TIME (MIN)	20.8	1040.2	332.3	63.3	1.3	1458.3
NAUT MILES	1077.2	2092.0	232.6	41.9	2.1	3465.9	NAUT MILES	50.4	3358.2	1316.0	295.9	7.7	5637.0
ALTITUDE - 4,000 TO 6,000 FEET							ALTITUDE - 6,000 TO 10,000 FEET						
EQUIVALENT AIRSPEED - VE (KNOTS)							EQUIVALENT AIRSPEED - VE (KNOTS)						
ABOVE 1.0							ABOVE 1.0						
1.4 TO 1.0							1.4 TO 1.0						
1.0 TO 1.4							1.0 TO 1.4						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4			2	1		3	0.3 TO 0.4						
0.2 TO 0.3			23	2	1	26	0.2 TO 0.3						
0.1 TO 0.2			206	21	1	302	0.1 TO 0.2			14			14
-0.2 TO -0.1			240	7	3	250	-0.2 TO -0.1	1	121	32			154
-0.3 TO -0.2			23	4		27	-0.3 TO -0.2			10			10
-0.4 TO -0.3			3	1		4	-0.4 TO -0.3			1			4
-0.6 TO -0.4			1			1	-0.6 TO -0.4						1
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	9.3	2033.7	363.0	26.8		2427.0	TIME (MIN)	25.7	2760.2	433.1	59.1		3278.1
NAUT MILES	27.3	6031.0	1474.1	97.4		8430.6	NAUT MILES	75.5	6060.6	1967.4	320.8		11978.0
ALTITUDE - 10,000 TO 15,000 FEET							ALTITUDE - 15,000 TO 20,000 FEET						
EQUIVALENT AIRSPEED - VE (KNOTS)							EQUIVALENT AIRSPEED - VE (KNOTS)						
ABOVE 1.0							ABOVE 1.0						
1.4 TO 1.0							1.4 TO 1.0						
1.0 TO 1.4							1.0 TO 1.4						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4							0.3 TO 0.4						
0.2 TO 0.3							0.2 TO 0.3						
0.1 TO 0.2							0.1 TO 0.2						
-0.2 TO -0.1							-0.2 TO -0.1						
-0.3 TO -0.2							-0.3 TO -0.2						
-0.4 TO -0.3							-0.4 TO -0.3						
-0.6 TO -0.4							-0.6 TO -0.4						
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	126.1	4229.1	14982.0	907.3		22325.4	TIME (MIN)	116.2	10969.3	15976.0	313.2		27376.7
NAUT MILES	420.1	24811.3	69515.3	5652.6		100399.3	NAUT MILES	419.3	50667.3	78219.0	1058.7		130937.0
ALTITUDE - 20,000 TO 25,000 FEET							ALTITUDE - 25,000 TO 30,000 FEET						
EQUIVALENT AIRSPEED - VE (KNOTS)							EQUIVALENT AIRSPEED - VE (KNOTS)						
ABOVE 1.0							ABOVE 1.0						
1.4 TO 1.0							1.4 TO 1.0						
1.0 TO 1.4							1.0 TO 1.4						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4							0.3 TO 0.4						
0.2 TO 0.3							0.2 TO 0.3						
0.1 TO 0.2							0.1 TO 0.2						
-0.2 TO -0.1							-0.2 TO -0.1						
-0.3 TO -0.2							-0.3 TO -0.2						
-0.4 TO -0.3							-0.4 TO -0.3						
-0.6 TO -0.4							-0.6 TO -0.4						
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	6.3	2636.3	771.4			3480.0	TIME (MIN)	301.7	106.2				399.0
NAUT MILES	33.0	12714.0	4094.1			16701.0	NAUT MILES	823.3	611.0				1136.0



**Table 78**  
**Incremental Gust Load Factors by Equivalent Airspeed and Altitude**  
**Mission II (Short Range Logistics)**  
**Gross Weight Range: Below 85,000 lb.**

ALTITUDE - 0 TO 2,000 FEET							ALTITUDE - 2,000 TO 4,000 FEET						
LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ	LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 1.0							ABOVE 1.0						
1.0 TO 1.0							1.0 TO 1.0						
1.0 TO 1.0							1.0 TO 1.0						
0.5 TO 1.0							0.5 TO 1.0						
0.5 TO 0.5							0.5 TO 0.5						
0.4 TO 0.5		1				1	0.4 TO 0.5		3				3
0.3 TO 0.4							0.3 TO 0.4		6				6
0.2 TO 0.3	1	2	1			4	0.2 TO 0.3	11	6				17
0.1 TO 0.2	10	21	4			35	0.1 TO 0.2	19	22				41
-0.2 TO -0.1	12	19	3			34	-0.2 TO -0.1	29	26				55
-0.3 TO -0.2	2	4				6	-0.3 TO -0.2	10	7				17
-0.4 TO -0.3							-0.4 TO -0.3	2	2				4
-0.6 TO -0.4							-0.6 TO -0.4	1	2				3
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0	9.0	6.2	1.3			17.4	BELOW -1.0	2.1	1.7				3.8
TIME (MIN)							TIME (MIN)						
NAVY MILES	21.2	17.7	6.3			45.2	NAVY MILES	6.3	6.6				12.9

ALTITUDE - 5,000 TO 10,000 FEET							ALTITUDE - 10,000 TO 14,000 FEET						
LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ	LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 1.0							ABOVE 1.0						
1.0 TO 1.0							1.0 TO 1.0						
1.0 TO 1.0							1.0 TO 1.0						
0.5 TO 1.0							0.5 TO 1.0						
0.5 TO 0.5							0.5 TO 0.5						
0.4 TO 0.5				1		1	0.4 TO 0.5						
0.3 TO 0.4				3		3	0.3 TO 0.4						
0.2 TO 0.3				8		8	0.2 TO 0.3						
0.1 TO 0.2			4	16		20	0.1 TO 0.2						
			4	31		35	0.1 TO 0.2						
-0.2 TO -0.1			17	32		49	-0.2 TO -0.1			1			1
-0.3 TO -0.2			2	16		18	-0.3 TO -0.2						
-0.4 TO -0.3			3	9		12	-0.4 TO -0.3						
-0.6 TO -0.4				2		2	-0.6 TO -0.4						
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0			0.7	1.0		1.7	BELOW -1.0			2.3			2.3
TIME (MIN)							TIME (MIN)						
NAVY MILES			3.1	6.6		9.7	NAVY MILES			11.1			11.1

ALTITUDE - 15,000 TO 27,000 FEET						
LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 1.0						
1.0 TO 1.0						
1.0 TO 1.0						
0.5 TO 1.0						
0.5 TO 0.5						
0.4 TO 0.5						
0.3 TO 0.4						
0.2 TO 0.3						
0.1 TO 0.2			12			12
-0.2 TO -0.1			6			6
-0.3 TO -0.2						
-0.4 TO -0.3						
-0.6 TO -0.4						
-0.8 TO -0.6						
-1.0 TO -0.8						
BELOW -1.0			20.0			20.0
TIME (MIN)						
NAVY MILES			100.0			100.0



**Table 80**  
**Incremental Gust Load Factors by Equivalent Airspeed and Altitude**  
**Mission II (Short Range Logistics)**  
**Gross Weight Range: 95,000 to 105,000 lb.**

ALTITUDE - 0 TO 5,000 FEET								ALTITUDE - 2,000 TO 5,000 FEET									
LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)							TOTAL DELTA MZ	LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)							TOTAL DELTA MZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	150			200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE				
ABOVE 1.0									ABOVE 1.0								
1.0 TO 1.0									1.0 TO 1.0								
1.0 TO 1.0									1.0 TO 1.0								
0.5 TO 0.5									0.5 TO 0.5								
0.5 TO 0.5									0.5 TO 0.5								
0.4 TO 0.4									0.4 TO 0.4								
0.3 TO 0.4									0.3 TO 0.4								
0.2 TO 0.3									0.2 TO 0.3								
0.1 TO 0.2									0.1 TO 0.2								
-0.2 TO -0.1									-0.2 TO -0.1								
-0.3 TO -0.2									-0.3 TO -0.2								
-0.4 TO -0.3									-0.4 TO -0.3								
-0.5 TO -0.4									-0.5 TO -0.4								
-0.6 TO -0.5									-0.6 TO -0.5								
-0.8 TO -0.6									-0.8 TO -0.6								
-1.0 TO -0.8									-1.0 TO -0.8								
BELOW -1.0									BELOW -1.0								
TIME (MIN)	354.9	154.0	130.6	2.6			430.1		121.0	271.7	173.9	28.0	5.5		600.7		
NAUT MILES	750.0	430.4	520.2	10.9			1716.5		200.1	010.4	044.6	120.9	31.3		1033.0		

ALTITUDE - 5,000 TO 10,000 FEET								ALTITUDE - 10,000 TO 15,000 FEET									
LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)							TOTAL DELTA MZ	LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)							TOTAL DELTA MZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	150			200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE				
ABOVE 1.0									ABOVE 1.0								
1.0 TO 1.0									1.0 TO 1.0								
1.0 TO 1.0									1.0 TO 1.0								
0.5 TO 0.5									0.5 TO 0.5								
0.5 TO 0.5									0.5 TO 0.5								
0.4 TO 0.4									0.4 TO 0.4								
0.3 TO 0.4									0.3 TO 0.4								
0.2 TO 0.3									0.2 TO 0.3								
0.1 TO 0.2									0.1 TO 0.2								
-0.2 TO -0.1									-0.2 TO -0.1								
-0.3 TO -0.2									-0.3 TO -0.2								
-0.4 TO -0.3									-0.4 TO -0.3								
-0.5 TO -0.4									-0.5 TO -0.4								
-0.6 TO -0.5									-0.6 TO -0.5								
-0.8 TO -0.6									-0.8 TO -0.6								
-1.0 TO -0.8									-1.0 TO -0.8								
BELOW -1.0									BELOW -1.0								
TIME (MIN)	3.1	213.0	420.3	120.5	14.0		770.9		1.4	133.3	270.3	60.9			474.0		
NAUT MILES	0.7	712.0	1000.2	612.9	00.2		3210.9		4.4	073.2	1204.2	354.2			2009.9		

ALTITUDE - 15,000 TO 20,000 FEET								ALTITUDE - 20,000 TO 25,000 FEET									
LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)							TOTAL DELTA MZ	LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)							TOTAL DELTA MZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	150			200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE				
ABOVE 1.0									ABOVE 1.0								
1.0 TO 1.0									1.0 TO 1.0								
1.0 TO 1.0									1.0 TO 1.0								
0.5 TO 0.5									0.5 TO 0.5								
0.5 TO 0.5									0.5 TO 0.5								
0.4 TO 0.4									0.4 TO 0.4								
0.3 TO 0.4									0.3 TO 0.4								
0.2 TO 0.3									0.2 TO 0.3								
0.1 TO 0.2									0.1 TO 0.2								
-0.2 TO -0.1									-0.2 TO -0.1								
-0.3 TO -0.2									-0.3 TO -0.2								
-0.4 TO -0.3									-0.4 TO -0.3								
-0.5 TO -0.4									-0.5 TO -0.4								
-0.6 TO -0.5									-0.6 TO -0.5								
-0.8 TO -0.6									-0.8 TO -0.6								
-1.0 TO -0.8									-1.0 TO -0.8								
BELOW -1.0									BELOW -1.0								
TIME (MIN)	1.7	150.1	000.4	23.0			050.0		0.0	000.1	1330.0	2.0			1002.4		
NAUT MILES	7.1	932.2	0377.4	104.2			0445.9		32.7	2734.0	0700.0	14.3			0577.0		

ALTITUDE - 25,000 TO 30,000 FEET								
LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)							TOTAL DELTA MZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE		
ABOVE 1.0								
1.0 TO 1.0								
1.0 TO 1.0								
0.5 TO 0.5								
0.5 TO 0.5								
0.4 TO 0.4								
0.3 TO 0.4								
0.2 TO 0.3								
0.1 TO 0.2								
-0.2 TO -0.1								
-0.3 TO -0.2								
-0.4 TO -0.3								
-0.5 TO -0.4								
-0.6 TO -0.5								
-0.8 TO -0.6								
-1.0 TO -0.8								
BELOW -1.0								
TIME (MIN)	20.0	770.1	237.1				1007.0	
NAUT MILES	04.0	3702.0	1304.0				5000.1	

**Table 81**  
**Incremental Gust Load Factors by Equivalent Airspeed and Altitude**  
**Mission II (Short Range Logistics)**  
**Gross Weight Range: 105,000 to 115,000 lb.**

ALTITUDE - C TO 7,000 FEET										ALTITUDE - 2,000 TO 5,000 FEET									
EQUIVALENT AIRSPEED - VE (KNOTS)										EQUIVALENT AIRSPEED - VE (KNOTS)									
LOAD FACTOR	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	TOTAL DELTA NE	LOAD FACTOR	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	TOTAL DELTA NE				
ABOVE 1.0								ABOVE 1.0											
1.4 TO 1.0								1.4 TO 1.0											
1.0 TO 1.4								1.0 TO 1.4											
0.8 TO 1.0								0.8 TO 1.0											
0.6 TO 0.8								0.6 TO 0.8											
0.5 TO 0.4								0.5 TO 0.4											
0.4 TO 0.5								0.4 TO 0.5											
0.3 TO 0.4								0.3 TO 0.4											
0.2 TO 0.3								0.2 TO 0.3											
0.1 TO 0.2								0.1 TO 0.2											
-0.2 TO -0.1								-0.2 TO -0.1											
-0.3 TO -0.2								-0.3 TO -0.2											
-0.4 TO -0.3								-0.4 TO -0.3											
-0.6 TO -0.4								-0.6 TO -0.4											
-0.8 TO -0.6								-0.8 TO -0.6											
-1.0 TO -0.8								-1.0 TO -0.8											
BELOW -1.0								BELOW -1.0											
TIME (HRS)	688.5	683.7	272.3	2.0			1688.4	688.1	674.0	531.0	64.7				1878.4				
NAUT MILES	1053.2	1303.6	1036.4	6.7			4313.9	915.0	2470.0	2023.4	306.0				9495.3				
ALTITUDE - 5,000 TO 10,000 FEET										ALTITUDE - 10,000 TO 15,000 FEET									
EQUIVALENT AIRSPEED - VE (KNOTS)										EQUIVALENT AIRSPEED - VE (KNOTS)									
LOAD FACTOR	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	TOTAL DELTA NE	LOAD FACTOR	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	TOTAL DELTA NE				
ABOVE 1.0								ABOVE 1.0											
1.4 TO 1.0								1.4 TO 1.0											
1.0 TO 1.4								1.0 TO 1.4											
0.8 TO 1.0								0.8 TO 1.0											
0.6 TO 0.8								0.6 TO 0.8											
0.5 TO 0.4								0.5 TO 0.4											
0.4 TO 0.5								0.4 TO 0.5											
0.3 TO 0.4								0.3 TO 0.4											
0.2 TO 0.3								0.2 TO 0.3											
0.1 TO 0.2								0.1 TO 0.2											
-0.2 TO -0.1								-0.2 TO -0.1											
-0.3 TO -0.2								-0.3 TO -0.2											
-0.4 TO -0.3								-0.4 TO -0.3											
-0.6 TO -0.4								-0.6 TO -0.4											
-0.8 TO -0.6								-0.8 TO -0.6											
-1.0 TO -0.8								-1.0 TO -0.8											
BELOW -1.0								BELOW -1.0											
TIME (HRS)	36.7	370.0	1009.4	294.0	7.6		1608.3	17.0	474.0	575.7	222.4	1.9			1291.0				
NAUT MILES	64.1	1004.1	1009.4	1400.0	43.0		7000.4	52.3	1000.0	2000.0	1170.7	11.2			5745.2				
ALTITUDE - 15,000 TO 20,000 FEET										ALTITUDE - 20,000 TO 25,000 FEET									
EQUIVALENT AIRSPEED - VE (KNOTS)										EQUIVALENT AIRSPEED - VE (KNOTS)									
LOAD FACTOR	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	TOTAL DELTA NE	LOAD FACTOR	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	TOTAL DELTA NE				
ABOVE 1.0								ABOVE 1.0											
1.4 TO 1.0								1.4 TO 1.0											
1.0 TO 1.4								1.0 TO 1.4											
0.8 TO 1.0								0.8 TO 1.0											
0.6 TO 0.8								0.6 TO 0.8											
0.5 TO 0.4								0.5 TO 0.4											
0.4 TO 0.5								0.4 TO 0.5											
0.3 TO 0.4								0.3 TO 0.4											
0.2 TO 0.3								0.2 TO 0.3											
0.1 TO 0.2								0.1 TO 0.2											
-0.2 TO -0.1								-0.2 TO -0.1											
-0.3 TO -0.2								-0.3 TO -0.2											
-0.4 TO -0.3								-0.4 TO -0.3											
-0.6 TO -0.4								-0.6 TO -0.4											
-0.8 TO -0.6								-0.8 TO -0.6											
-1.0 TO -0.8								-1.0 TO -0.8											
BELOW -1.0								BELOW -1.0											
TIME (HRS)	62.0	686.0	2007.7	192.5			3338.7	15.3	2493.5	902.5	16.4				7700.9				
NAUT MILES	131.0	2300.3	17907.1	1200.0			10330.0	70.0	11000.7	21200.0	40.2				34000.0				
ALTITUDE - 25,000 TO 30,000 FEET																			
EQUIVALENT AIRSPEED - VE (KNOTS)																			
LOAD FACTOR	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	TOTAL DELTA NE												
ABOVE 1.0																			
1.4 TO 1.0																			
1.0 TO 1.4																			
0.8 TO 1.0																			
0.6 TO 0.8																			
0.5 TO 0.4																			
0.4 TO 0.5																			
0.3 TO 0.4																			
0.2 TO 0.3																			
0.1 TO 0.2																			
-0.2 TO -0.1																			
-0.3 TO -0.2																			
-0.4 TO -0.3																			
-0.6 TO -0.4																			
-0.8 TO -0.6																			
-1.0 TO -0.8																			
BELOW -1.0																			
TIME (HRS)	4.0	1107.1	700.1				1851.2												
NAUT MILES	10.0	9700.0	3700.0				13780.0												

**Table 82**  
**Incremental Gust Load Factors by Equivalent Airspeed and Altitude**  
**Mission II (Short Range Logistics)**  
**Gross Weight Range: 115,000 to 125,000 lb.**

ALTITUDE - 0 TO 2,000 FEET							ALTITUDE - 2,000 TO 5,000 FEET						
EQUIVALENT AIRSPEED - VE (KNOTS)							EQUIVALENT AIRSPEED - VE (KNOTS)						
LOAD FACTOR DELTA W	LESS THAN 100	100 TO 200	200 TO 300	300 TO 400	400 AND ABOVE	TOTAL DELTA W	LOAD FACTOR DELTA W	LESS THAN 100	100 TO 200	200 TO 300	300 TO 400	400 AND ABOVE	TOTAL DELTA W
ABOVE 1.0							ABOVE 1.0						
1.0 TO 1.0							1.0 TO 1.0						
1.0 TO 1.0							1.0 TO 1.0						
0.5 TO 0.5							0.5 TO 0.5						
0.5 TO 0.5							0.5 TO 0.5						
0.5 TO 0.5							0.5 TO 0.5						
0.2 TO 0.2							0.2 TO 0.2						
0.2 TO 0.2							0.2 TO 0.2						
0.1 TO 0.1							0.1 TO 0.1						
-0.2 TO -0.1							-0.2 TO -0.1						
-0.2 TO -0.2							-0.2 TO -0.2						
-0.2 TO -0.2							-0.2 TO -0.2						
-0.1 TO -0.1							-0.1 TO -0.1						
-0.1 TO -0.1							-0.1 TO -0.1						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	325.0	271.0	134.5	22.3		752.8	216.4	129.0	227.4	150.0	1.0		1002.7
NET WEIGHT	7000	602.7	305.3	100.0		3173.0	517.3	1022.0	604.4	327.3	0.3		3004.3

ALTITUDE - 5,000 TO 10,000 FEET							ALTITUDE - 10,000 TO 15,000 FEET						
EQUIVALENT AIRSPEED - VE (KNOTS)							EQUIVALENT AIRSPEED - VE (KNOTS)						
LOAD FACTOR DELTA W	LESS THAN 100	100 TO 200	200 TO 300	300 TO 400	400 AND ABOVE	TOTAL DELTA W	LOAD FACTOR DELTA W	LESS THAN 100	100 TO 200	200 TO 300	300 TO 400	400 AND ABOVE	TOTAL DELTA W
ABOVE 1.0							ABOVE 1.0						
1.0 TO 1.0							1.0 TO 1.0						
1.0 TO 1.0							1.0 TO 1.0						
0.5 TO 0.5							0.5 TO 0.5						
0.5 TO 0.5							0.5 TO 0.5						
0.5 TO 0.5							0.5 TO 0.5						
0.2 TO 0.2							0.2 TO 0.2						
0.2 TO 0.2							0.2 TO 0.2						
0.1 TO 0.1							0.1 TO 0.1						
-0.2 TO -0.1							-0.2 TO -0.1						
-0.2 TO -0.2							-0.2 TO -0.2						
-0.2 TO -0.2							-0.2 TO -0.2						
-0.1 TO -0.1							-0.1 TO -0.1						
-0.1 TO -0.1							-0.1 TO -0.1						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	48.0	439.0	600.0	120.7		1208.3	12.0	601.0	204.7	107.0			1070.1
NET WEIGHT	110.0	2120.7	2000.3	610.3		5751.3	20.7	7002.2	1020.0	607.1			4273.0

ALTITUDE - 15,000 TO 20,000 FEET							ALTITUDE - 20,000 TO 25,000 FEET						
EQUIVALENT AIRSPEED - VE (KNOTS)							EQUIVALENT AIRSPEED - VE (KNOTS)						
LOAD FACTOR DELTA W	LESS THAN 100	100 TO 200	200 TO 300	300 TO 400	400 AND ABOVE	TOTAL DELTA W	LOAD FACTOR DELTA W	LESS THAN 100	100 TO 200	200 TO 300	300 TO 400	400 AND ABOVE	TOTAL DELTA W
ABOVE 1.0							ABOVE 1.0						
1.0 TO 1.0							1.0 TO 1.0						
1.0 TO 1.0							1.0 TO 1.0						
0.5 TO 0.5							0.5 TO 0.5						
0.5 TO 0.5							0.5 TO 0.5						
0.5 TO 0.5							0.5 TO 0.5						
0.2 TO 0.2							0.2 TO 0.2						
0.2 TO 0.2							0.2 TO 0.2						
0.1 TO 0.1							0.1 TO 0.1						
-0.2 TO -0.1							-0.2 TO -0.1						
-0.2 TO -0.2							-0.2 TO -0.2						
-0.2 TO -0.2							-0.2 TO -0.2						
-0.1 TO -0.1							-0.1 TO -0.1						
-0.1 TO -0.1							-0.1 TO -0.1						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	10.0	1000.0	1070.0	40.2		2220.2	20.1	600.0	200.0	70.0			870.1
NET WEIGHT	07.0	2120.0	2070.0	200.0		4497.0	20.0	2000.0	200.0	70.0			2270.0

ALTITUDE - 25,000 TO 30,000 FEET							ALTITUDE - 30,000 TO 35,000 FEET						
EQUIVALENT AIRSPEED - VE (KNOTS)							EQUIVALENT AIRSPEED - VE (KNOTS)						
LOAD FACTOR DELTA W	LESS THAN 100	100 TO 200	200 TO 300	300 TO 400	400 AND ABOVE	TOTAL DELTA W	LOAD FACTOR DELTA W	LESS THAN 100	100 TO 200	200 TO 300	300 TO 400	400 AND ABOVE	TOTAL DELTA W
ABOVE 1.0							ABOVE 1.0						
1.0 TO 1.0							1.0 TO 1.0						
1.0 TO 1.0							1.0 TO 1.0						
0.5 TO 0.5							0.5 TO 0.5						
0.5 TO 0.5							0.5 TO 0.5						
0.5 TO 0.5							0.5 TO 0.5						
0.2 TO 0.2							0.2 TO 0.2						
0.2 TO 0.2							0.2 TO 0.2						
0.1 TO 0.1							0.1 TO 0.1						
-0.2 TO -0.1							-0.2 TO -0.1						
-0.2 TO -0.2							-0.2 TO -0.2						
-0.2 TO -0.2							-0.2 TO -0.2						
-0.1 TO -0.1							-0.1 TO -0.1						
-0.1 TO -0.1							-0.1 TO -0.1						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	12.0	100.0	100.0	0.0		220.0	1.0	100.0	70.0	0.0			171.0
NET WEIGHT	00.0	700.0	600.0	0.0		1300.0	1.0	700.0	100.0	0.0			801.0

**Table 83**  
**Incremental Gust Load Factors by Equivalent Airspeed and Altitude**  
**Mission II (Short Range Logistics)**  
**Gross Weight Range: 125,000 to 135,000 lb.**

LOAD FACTOR DELTA NE	ALTITUDE - 0 TO 2,000 FEET							TOTAL DELTA NE	LOAD FACTOR DELTA NE	ALTITUDE - 2,000 TO 5,000 FEET							TOTAL DELTA NE
	EQUIVALENT AIRSPEED - VE (KNOTS)									EQUIVALENT AIRSPEED - VE (KNOTS)							
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	LESS THAN 150			150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			
ABOVE 1.0								ABOVE 1.0									
1.0 TO 1.0								1.0 TO 1.0									
0.8 TO 1.0								0.8 TO 1.0									
0.6 TO 1.0								0.6 TO 1.0									
0.5 TO 0.6								0.5 TO 0.6									
0.4 TO 0.6								0.4 TO 0.6									
0.3 TO 0.6								0.3 TO 0.6									
0.2 TO 0.6	1	2	10	1	4		17	0.2 TO 0.6	22	27	10	2		61			
0.1 TO 0.6	125	140	203	62	12		532	0.1 TO 0.6	119	109	62	21		311			
-0.2 TO -0.1	0	130	100	35	15		280	-0.2 TO -0.1	32	122	127	55	22	338			
-0.3 TO -0.2	0	10	0	1	1		22	-0.3 TO -0.2	1	13	10	12	2	26			
-0.4 TO -0.3							0	-0.4 TO -0.3	2	0	1	1		4			
-0.5 TO -0.4							0	-0.5 TO -0.4			1	2		3			
-0.6 TO -0.5							0	-0.6 TO -0.5						0			
-1.0 TO -0.8							0	-1.0 TO -0.8						0			
DELTA NE	161.2	196.0	196.1	12.0	2.2		522.4	DELTA NE	41.3	273.4	146.2	66.3	1.1	522.3			
TIME (MIN)	208.5	577.0	999.3	94.1	11.3		1691.0	TIME (MIN)	101.0	260.1	547.1	312.1	14.9	1095.0			
NAUT MILES								NAUT MILES									
	ALTITUDE - 5,000 TO 10,000 FEET								ALTITUDE - 10,000 TO 15,000 FEET								
	EQUIVALENT AIRSPEED - VE (KNOTS)								EQUIVALENT AIRSPEED - VE (KNOTS)								
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	TOTAL DELTA NE	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	TOTAL DELTA NE			
ABOVE 1.0								ABOVE 1.0									
1.0 TO 1.0								1.0 TO 1.0									
0.8 TO 1.0								0.8 TO 1.0									
0.6 TO 1.0								0.6 TO 1.0									
0.5 TO 0.6								0.5 TO 0.6									
0.4 TO 0.6								0.4 TO 0.6									
0.3 TO 0.6								0.3 TO 0.6									
0.2 TO 0.6	4	2	10	1	4		17	0.2 TO 0.6	20	19				39			
0.1 TO 0.6	16	120	203	62	12		434	0.1 TO 0.6	107	116	7			230			
-0.2 TO -0.1	10	130	223	20			383	-0.2 TO -0.1	123	127	3			253			
-0.3 TO -0.2		14	11	1			26	-0.3 TO -0.2	23	15				38			
-0.4 TO -0.3		2					2	-0.4 TO -0.3	3	4				7			
-0.5 TO -0.4							0	-0.5 TO -0.4	2	1				3			
-0.6 TO -0.5							0	-0.6 TO -0.5						0			
-1.0 TO -0.8							0	-1.0 TO -0.8						0			
DELTA NE	18.1	241.0	276.5	37.0			592.6	DELTA NE	24.0	406.0	136.7	16.3		683.0			
TIME (MIN)	47.0	248.7	1172.7	176.0			2044.4	TIME (MIN)	61.0	406.0	682.0	97.0		1246.0			
NAUT MILES								NAUT MILES									
	ALTITUDE - 15,000 TO 20,000 FEET								ALTITUDE - 20,000 TO 25,000 FEET								
	EQUIVALENT AIRSPEED - VE (KNOTS)								EQUIVALENT AIRSPEED - VE (KNOTS)								
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	TOTAL DELTA NE	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	TOTAL DELTA NE			
ABOVE 1.0								ABOVE 1.0									
1.0 TO 1.0								1.0 TO 1.0									
0.8 TO 1.0								0.8 TO 1.0									
0.6 TO 1.0								0.6 TO 1.0									
0.5 TO 0.6								0.5 TO 0.6									
0.4 TO 0.6								0.4 TO 0.6									
0.3 TO 0.6								0.3 TO 0.6									
0.2 TO 0.6								0.2 TO 0.6									
0.1 TO 0.6								0.1 TO 0.6									
-0.2 TO -0.1								-0.2 TO -0.1									
-0.3 TO -0.2								-0.3 TO -0.2									
-0.4 TO -0.3								-0.4 TO -0.3									
-0.5 TO -0.4								-0.5 TO -0.4									
-0.6 TO -0.5								-0.6 TO -0.5									
-1.0 TO -0.8								-1.0 TO -0.8									
DELTA NE	19.7	262.0	277.0	32.0			690.7	DELTA NE	25.0	275.0	261.0	26.0		827.0			
TIME (MIN)	55.0	2094.0	2011.0	176.0			4716.0	TIME (MIN)	65.0	1230.0	1400.0	176.0		2471.0			
NAUT MILES								NAUT MILES									
	ALTITUDE - 25,000 TO 30,000 FEET								ALTITUDE - 30,000 TO 35,000 FEET								
	EQUIVALENT AIRSPEED - VE (KNOTS)								EQUIVALENT AIRSPEED - VE (KNOTS)								
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	TOTAL DELTA NE	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	TOTAL DELTA NE			
ABOVE 1.0								ABOVE 1.0									
1.0 TO 1.0								1.0 TO 1.0									
0.8 TO 1.0								0.8 TO 1.0									
0.6 TO 1.0								0.6 TO 1.0									
0.5 TO 0.6								0.5 TO 0.6									
0.4 TO 0.6								0.4 TO 0.6									
0.3 TO 0.6								0.3 TO 0.6									
0.2 TO 0.6								0.2 TO 0.6									
0.1 TO 0.6								0.1 TO 0.6									
-0.2 TO -0.1								-0.2 TO -0.1									
-0.3 TO -0.2								-0.3 TO -0.2									
-0.4 TO -0.3								-0.4 TO -0.3									
-0.5 TO -0.4								-0.5 TO -0.4									
-0.6 TO -0.5								-0.6 TO -0.5									
-1.0 TO -0.8								-1.0 TO -0.8									
DELTA NE	15.0	267.0	176.0				558.0	DELTA NE	176.0					176.0			
TIME (MIN)	60.2	2207.1	2400.0				4717.3	TIME (MIN)	134.1					134.1			
NAUT MILES								NAUT MILES									

**Table 84**  
**Incremental Gust Load Factors by Equivalent Airspeed and Altitude**  
**Mission II (Short Range Logistics)**  
**Gross Weight Range: 135,000 lb. and Above**

ALTITUDE - C TO 2,000 FEET							ALTITUDE - 2,000 TO 5,000 FEET						
LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ	LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350 AND ABOVE	
ABOVE 1.0							ABOVE 1.0						
1.4 TO 1.0							1.4 TO 1.0						
1.0 TO 1.4							1.0 TO 1.4						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4							0.3 TO 0.4						
0.2 TO 0.3							0.2 TO 0.3						
0.1 TO 0.2							0.1 TO 0.2						
-0.2 TO -0.1							-0.2 TO -0.1						
-0.3 TO -0.2							-0.3 TO -0.2						
-0.4 TO -0.3							-0.4 TO -0.3						
-0.6 TO -0.4							-0.6 TO -0.4						
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	57.3	90.2	13.3	0.5		101.3	TIME (MIN)	11.5	122.6	49.0	5.0		183.9
NAUT MILES	191.4	273.2	47.6	2.0		473.2	NAUT MILES	27.1	397.0	194.3	17.0		640.3
ALTITUDE - 5,000 TO 10,000 FEET							ALTITUDE - 10,000 TO 15,000 FEET						
LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ	LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350 AND ABOVE	
ABOVE 1.0							ABOVE 1.0						
1.4 TO 1.0							1.4 TO 1.0						
1.0 TO 1.4							1.0 TO 1.4						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4							0.3 TO 0.4						
0.2 TO 0.3							0.2 TO 0.3						
0.1 TO 0.2							0.1 TO 0.2						
-0.2 TO -0.1							-0.2 TO -0.1						
-0.3 TO -0.2							-0.3 TO -0.2						
-0.4 TO -0.3							-0.4 TO -0.3						
-0.6 TO -0.4							-0.6 TO -0.4						
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	221.3	58.4	3.7			283.4	TIME (MIN)	14.0	270.0	61.1	7.5		372.7
NAUT MILES	741.0	235.1	17.0			993.0	NAUT MILES	42.7	930.2	351.3	30.8		1371.2
ALTITUDE - 15,000 TO 20,000 FEET							ALTITUDE - 20,000 TO 25,000 FEET						
LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ	LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350 AND ABOVE	
ABOVE 1.0							ABOVE 1.0						
1.4 TO 1.0							1.4 TO 1.0						
1.0 TO 1.4							1.0 TO 1.4						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4							0.3 TO 0.4						
0.2 TO 0.3							0.2 TO 0.3						
0.1 TO 0.2							0.1 TO 0.2						
-0.2 TO -0.1							-0.2 TO -0.1						
-0.3 TO -0.2							-0.3 TO -0.2						
-0.4 TO -0.3							-0.4 TO -0.3						
-0.6 TO -0.4							-0.6 TO -0.4						
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	19.1	373.4	4.7.6	5.3		405.4	TIME (MIN)	8.0	537.4	712.2			1257.6
NAUT MILES	61.7	1413.4	1044.2	29.5		3450.8	NAUT MILES	32.1	2414.7	3472.5			5919.3
ALTITUDE - 25,000 TO 30,000 FEET							ALTITUDE - 30,000 TO 35,000 FEET						
LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ	LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350 AND ABOVE	
ABOVE 1.0							ABOVE 1.0						
1.4 TO 1.0							1.4 TO 1.0						
1.0 TO 1.4							1.0 TO 1.4						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4							0.3 TO 0.4						
0.2 TO 0.3							0.2 TO 0.3						
0.1 TO 0.2							0.1 TO 0.2						
-0.2 TO -0.1							-0.2 TO -0.1						
-0.3 TO -0.2							-0.3 TO -0.2						
-0.4 TO -0.3							-0.4 TO -0.3						
-0.6 TO -0.4							-0.6 TO -0.4						
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	124.0	118.5				242.4	TIME (MIN)						
NAUT MILES	690.3	613.0				1263.3	NAUT MILES						

Table 85  
 Incremental Gust Load Factors by Equivalent Airspeed and Altitude  
 Mission III (Training)  
 Gross Weight Range: Below 85,000 lb.

LOAD FACTOR DELTA NZ	ALTITUDE - 0 TO 2,000 FEET					TOTAL DELTA NZ	LOAD FACTOR DELTA NZ	ALTITUDE - 2,000 TO 5,000 FEET					TOTAL DELTA NZ
	EQUIVALENT AIRSPEED - VE (KNOTS)							EQUIVALENT AIRSPEED - VE (KNOTS)					
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350 AND ABOVE	
ABOVE 1.0							ABOVE 1.0						
1.4 TO 1.0							1.4 TO 1.0						
1.0 TO 1.4							1.0 TO 1.4						
0.8 TO 1.0							0.8 TO 1.0						
0.3 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4		2	1			3	0.3 TO 0.4						
0.2 TO 0.3		14	14			28	0.2 TO 0.3					2	
0.1 TO 0.2		94	59	2		155	0.1 TO 0.2	2	5			27	
-0.1 TO -0.1		64	50	2		116	-0.2 TO -0.1		19	5		24	
-0.3 TO -0.2		9	4			13	-0.3 TO -0.2		6			6	
-0.4 TO -0.3		2	4			6	-0.4 TO -0.3		1			1	
-0.6 TO -0.4							-0.6 TO -0.4						
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	54.2	34.5	10.3	0.5		100.2	TIME (MIN)	14.2	16.9	7.9		39.0	
NAUT MILES	134.3	95.1	39.8	2.0		281.0	NAUT MILES	31.5	47.8	30.6		109.8	



**Table 86**  
**Incremental Gust Load Factors by Equivalent Airspeed and Altitude**  
**Mission III (Training)**  
**Gross Weight Range: 85,000 to 95,000 lb.**

ALTITUDE - 0 TO 2,000 FEET							ALTITUDE - 2,000 TO 5,000 FEET						
LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ	LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 1.0						5	ABOVE 1.0						7
1.4 TO 1.0						25	1.4 TO 1.0						48
1.0 TO 1.4						182	1.0 TO 1.4						224
0.8 TO 1.0						590	0.8 TO 1.0						1322
0.6 TO 0.8	14	15	1			3177	0.6 TO 0.8	1	5	2		7	
0.5 TO 0.6	32	25	14			16379	0.5 TO 0.6	10	20			48	
0.4 TO 0.5	190	327	42	2			0.4 TO 0.5	20	120	00	4	224	
0.3 TO 0.4	1323	1602	243	9			0.3 TO 0.4	135	670	510	7	1322	
0.2 TO 0.3	8656	6617	1093	13			0.2 TO 0.3	1049	3010	2390	67	7313	
0.1 TO 0.2						16407	0.1 TO 0.2						7601
-0.2 TO -0.1	8656	6732	1016	21		2805	-0.2 TO -0.1	1091	4114	2356	40	1200	
-0.3 TO -0.2	1254	1310	233			455	-0.3 TO -0.2	107	690	407	15	221	
-0.4 TO -0.3	170	244	40	1		71	-0.4 TO -0.3	22	101	92	6	42	
-0.6 TO -0.4	30	34	7			2	-0.6 TO -0.4	1	14	26	1		
-0.8 TO -0.6	1	1				3	-0.8 TO -0.6						
-1.0 TO -0.8	2	1					-1.0 TO -0.8						
BELOW -1.0						7561.3	BELOW -1.0						6303.1
TIME (MIN)	4489.8	2701.0	266.5	4.0		10330.6	TIME (MIN)	1516.5	3329.9	1472.4	24.0	0.1	10333.6
NAUT MILES	10113.4	7409.5	1290.0	16.9			NAUT MILES	3721.9	9095.6	3545.1	150.5	0.5	

ALTITUDE - 5,000 TO 10,000 FEET							ALTITUDE - 10,000 TO 15,000 FEET						
LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ	LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 1.0						4	ABOVE 1.0						2
1.4 TO 1.0						16	1.4 TO 1.0						3
1.0 TO 1.4						83	1.0 TO 1.4						5
0.8 TO 1.0						516	0.8 TO 1.0						10
0.6 TO 0.8						507	0.6 TO 0.8						90
0.5 TO 0.6						76	0.5 TO 0.6						70
0.4 TO 0.5	2	4	4			10	0.4 TO 0.5						23
0.3 TO 0.4	4	19	37	1		10	0.3 TO 0.4						6
0.2 TO 0.3	34	135	343	6		5	0.2 TO 0.3						3
0.1 TO 0.2						1019.2	0.1 TO 0.2						404.4
-0.2 TO -0.1	15	170	315	7		3320.0	-0.2 TO -0.1	30	60				
-0.3 TO -0.2	1	19	35	1			-0.3 TO -0.2	13	10				
-0.4 TO -0.3	1	4	13				-0.4 TO -0.3	4	2				
-0.6 TO -0.4							-0.6 TO -0.4	2	1				
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0						1019.2	BELOW -1.0						
TIME (MIN)	104.7	503.5	207.4	40.6	1.1	1019.2	TIME (MIN)	90.1	255.5	122.2	0.3	1.3	
NAUT MILES	271.5	1900.2	1155.2	106.0	1.0	3320.0	NAUT MILES	250.4	600.2	344.0	44.0	0.0	

ALTITUDE - 15,000 TO 20,000 FEET							ALTITUDE - 20,000 TO 25,000 FEET						
LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ	LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 1.0						1	ABOVE 1.0						2
1.4 TO 1.0						14	1.4 TO 1.0						
1.0 TO 1.4							1.0 TO 1.4						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4							0.3 TO 0.4						
0.2 TO 0.3							0.2 TO 0.3						
0.1 TO 0.2							0.1 TO 0.2						
-0.2 TO -0.1						7	-0.2 TO -0.1						
-0.3 TO -0.2							-0.3 TO -0.2						
-0.4 TO -0.3							-0.4 TO -0.3						
-0.6 TO -0.4							-0.6 TO -0.4						
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0						130.3	BELOW -1.0						242.0
TIME (MIN)	4.2	94.3	34.4	2.3		130.3	TIME (MIN)	0.7	100.7	01.4			
NAUT MILES	21.0	251.0	175.0	12.7		261.0	NAUT MILES	2.0	650.3	412.0			

**Table 87**  
**Incremental Gust Load Factors by Equivalent Airspeed and Altitude**  
**Mission III (Training)**  
**Gross Weight Range: 95,000 to 105,000 lb.**

ALTITUDE - 0 TO 2,000 FEET								ALTITUDE - 2,000 TO 5,000 FEET							
LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL DELTA MZ	LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL DELTA MZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 1.0															
1.4 TO 1.0															
1.0 TO 1.0															
0.8 TO 1.0															
0.6 TO 0.8															
0.5 TO 0.6															
0.4 TO 0.5															
0.3 TO 0.4															
0.2 TO 0.3															
0.1 TO 0.2															
-0.2 TO -0.1															
-0.3 TO -0.2															
-0.4 TO -0.3															
-0.6 TO -0.4															
-0.8 TO -0.6															
-1.0 TO -0.8															
BELOW -1.0															
TIME (MIN)	6375.9	9537.3	1569.7	67.4	0.3	15566.6	2841.5	7219.4	2953.0	72.0	2.3	12724.3			
NAUT MILES	19129.3	15190.3	3776.6	297.3	1.4	48995.0	7086.8	21441.4	9729.4	327.0	12.2	38517.7			

ALTITUDE - 5,000 TO 10,000 FEET								ALTITUDE - 10,000 TO 15,000 FEET							
LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL DELTA MZ	LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL DELTA MZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 1.0															
1.4 TO 1.0															
1.0 TO 1.0															
0.8 TO 1.0															
0.6 TO 0.8															
0.5 TO 0.6															
0.4 TO 0.5															
0.3 TO 0.4															
0.2 TO 0.3															
0.1 TO 0.2															
-0.2 TO -0.1															
-0.3 TO -0.2															
-0.4 TO -0.3															
-0.6 TO -0.4															
-0.8 TO -0.6															
-1.0 TO -0.8															
BELOW -1.0															
TIME (MIN)	365.6	3920.5	1271.1	112.1	2.3	5675.3	205.1	773.5	1677.2	43.9	2.2	4161.4			
NAUT MILES	1456.0	12979.0	5068.0	527.4	12.7	20895.1	753.6	7982.6	7174.5	219.5	13.1	16043.9			

ALTITUDE - 15,000 TO 20,000 FEET								ALTITUDE - 20,000 TO 24,000 FEET							
LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL DELTA MZ	LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL DELTA MZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 1.0															
1.4 TO 1.0															
1.0 TO 1.0															
0.8 TO 1.0															
0.6 TO 0.8															
0.5 TO 0.6															
0.4 TO 0.5															
0.3 TO 0.4															
0.2 TO 0.3															
0.1 TO 0.2															
-0.2 TO -0.1															
-0.3 TO -0.2															
-0.4 TO -0.3															
-0.6 TO -0.4															
-0.8 TO -0.6															
-1.0 TO -0.8															
BELOW -1.0															
TIME (MIN)	111.2	1192.7	889.0	16.1	0.4	2169.4	41.2	1058.4	905.5	2.7	2088.0				
NAUT MILES	349.0	4594.0	4189.6	88.5	2.6	9189.4	139.0	4544.3	4516.4	15.7	9316.4				

ALTITUDE - 25,000 TO 30,000 FEET								ALTITUDE - 30,000 TO ABOVE FEET							
LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL DELTA MZ	LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)						TOTAL DELTA MZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 1.0															
1.4 TO 1.0															
1.0 TO 1.0															
0.8 TO 1.0															
0.6 TO 0.8															
0.5 TO 0.6															
0.4 TO 0.5															
0.3 TO 0.4															
0.2 TO 0.3															
0.1 TO 0.2															
-0.2 TO -0.1															
-0.3 TO -0.2															
-0.4 TO -0.3															
-0.6 TO -0.4															
-0.8 TO -0.6															
-1.0 TO -0.8															
BELOW -1.0															
TIME (MIN)	0.0	365.7	305.9				699.3	16.7	75.3				90.0		
NAUT MILES	36.0	1899.4	1544.2				3529.7	59.3	306.0				455.4		

**Table 88**  
**Incremental Gust Load Factors by Equivalent Airspeed and Altitude**  
**Mission III (Training)**  
**Gross Weight Range: 105,000 to 115,000 lb.**

ALTITUDE - C TO 2,000 FEET							ALTITUDE - 2,000 TO 4,000 FEET						
LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ	LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350			350 AND ABOVE	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	
ABOVE 1.0							ABOVE 1.0						
1.0 TO 1.0							1.0 TO 1.0						
1.0 TO 1.0							1.0 TO 1.0						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4							0.3 TO 0.4						
0.2 TO 0.3							0.2 TO 0.3						
0.1 TO 0.2							0.1 TO 0.2						
-0.2 TO -0.1							-0.2 TO -0.1						
-0.3 TO -0.2							-0.3 TO -0.2						
-0.4 TO -0.3							-0.4 TO -0.3						
-0.6 TO -0.4							-0.6 TO -0.4						
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	1495.5	1519.3	832.5	47.4		3994.7	TIME (MIN)	265.1	2495.1	1008.1	73.6	1.4	4023.4
NAUT MILES	3215.0	4002.7	3006.7	206.3		11612.5	NAUT MILES	986.9	7716.0	4129.9	333.3	7.7	13096.6
ALTITUDE - 5,000 TO 10,000 FEET							ALTITUDE - 10,000 TO 15,000 FEET						
LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ	LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350			350 AND ABOVE	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	
ABOVE 1.0							ABOVE 1.0						
1.0 TO 1.0							1.0 TO 1.0						
1.0 TO 1.0							1.0 TO 1.0						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4							0.3 TO 0.4						
0.2 TO 0.3							0.2 TO 0.3						
0.1 TO 0.2							0.1 TO 0.2						
-0.2 TO -0.1							-0.2 TO -0.1						
-0.3 TO -0.2							-0.3 TO -0.2						
-0.4 TO -0.3							-0.4 TO -0.3						
-0.6 TO -0.4							-0.6 TO -0.4						
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	112.1	1434.0	448.5	26.5		2021.1	TIME (MIN)	50.7	500.5	464.4	14.6	0.4	1110.6
NAUT MILES	207.5	4756.7	1706.7	125.0		6984.7	NAUT MILES	141.9	2884.5	2023.2	77.4	2.5	4339.6
ALTITUDE - 15,000 TO 20,000 FEET							ALTITUDE - 20,000 TO 25,000 FEET						
LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ	LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350			350 AND ABOVE	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	
ABOVE 1.0							ABOVE 1.0						
1.0 TO 1.0							1.0 TO 1.0						
1.0 TO 1.0							1.0 TO 1.0						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4							0.3 TO 0.4						
0.2 TO 0.3							0.2 TO 0.3						
0.1 TO 0.2							0.1 TO 0.2						
-0.2 TO -0.1							-0.2 TO -0.1						
-0.3 TO -0.2							-0.3 TO -0.2						
-0.4 TO -0.3							-0.4 TO -0.3						
-0.6 TO -0.4							-0.6 TO -0.4						
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	31.1	735.0	654.1	14.9	1.1	1437.0	TIME (MIN)	36.2	770.0	497.4	5.7		1503.4
NAUT MILES	102.2	3012.2	3083.2	84.4	7.2	6399.2	NAUT MILES	110.0	3468.4	3406.7	79.1		7110.0
ALTITUDE - 25,000 TO 30,000 FEET							ALTITUDE - 30,000 TO ABOVE FEET						
LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ	LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350			350 AND ABOVE	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	
ABOVE 1.0							ABOVE 1.0						
1.0 TO 1.0							1.0 TO 1.0						
1.0 TO 1.0							1.0 TO 1.0						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4							0.3 TO 0.4						
0.2 TO 0.3							0.2 TO 0.3						
0.1 TO 0.2							0.1 TO 0.2						
-0.2 TO -0.1							-0.2 TO -0.1						
-0.3 TO -0.2							-0.3 TO -0.2						
-0.4 TO -0.3							-0.4 TO -0.3						
-0.6 TO -0.4							-0.6 TO -0.4						
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	2.1	812.9	206.0			794.0	TIME (MIN)	0.3	111.1				111.3
NAUT MILES	0.3	2423.1	1076.3			3571.1	NAUT MILES	0.0	361.4				361.3

**Table 89**  
**Incremental Gust Load Factors by Equivalent Airspeed and Altitude**  
**Mission III (Training)**  
**Gross Weight Range: 115,000 to 125,000 lb.**

ALTITUDE - 0 TO 2,000 FEET							ALTITUDE - 2,000 TO 5,000 FEET						
LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ	LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 1.0							ABOVE 1.0						
1.4 TO 1.0							1.4 TO 1.0						
1.0 TO 1.4							1.0 TO 1.4						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4							0.3 TO 0.4						
0.2 TO 0.3	1					1	0.2 TO 0.3	1	5	3			3
0.1 TO 0.2	10	7				17	0.1 TO 0.2	4	103	46			111
	60	40	3			111		71	542	203	3		819
-0.2 TO -0.1	65	42	3			110	-0.2 TO -0.1	76	465	223	1		765
-0.3 TO -0.2	6					12	-0.3 TO -0.2	7	105	51			163
-0.4 TO -0.3							-0.4 TO -0.3		10	10			20
-0.6 TO -0.4							-0.6 TO -0.4		7	9			16
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	35.0	24.0	2.0			66.7	TIME (MIN)	132.7	234.2	62.2	3.3		492.2
NAUT MILES	93.0	87.2	10.6			181.6	NAUT MILES	248.9	732.0	231.4	14.3		1225.3

ALTITUDE - 5,000 TO 10,000 FEET							ALTITUDE - 10,000 TO 15,000 FEET						
LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ	LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 1.0							ABOVE 1.0						
1.4 TO 1.0							1.4 TO 1.0						
1.0 TO 1.4							1.0 TO 1.4						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4							0.3 TO 0.4						
0.2 TO 0.3							0.2 TO 0.3						
0.1 TO 0.2							0.1 TO 0.2						
-0.2 TO -0.1							-0.2 TO -0.1						
-0.3 TO -0.2							-0.3 TO -0.2						
-0.4 TO -0.3							-0.4 TO -0.3						
-0.6 TO -0.4							-0.6 TO -0.4						
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	76.4	37.0	7.5			121.1	TIME (MIN)	92.0	63.2	0.1			155.3
NAUT MILES	200.2	148.0	34.0			442.2	NAUT MILES	322.4	201.4	10.0			563.7

ALTITUDE - 15,000 TO 20,000 FEET							ALTITUDE - 20,000 TO 25,000 FEET						
LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ	LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 1.0							ABOVE 1.0						
1.4 TO 1.0							1.4 TO 1.0						
1.0 TO 1.4							1.0 TO 1.4						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4							0.3 TO 0.4						
0.2 TO 0.3							0.2 TO 0.3						
0.1 TO 0.2							0.1 TO 0.2						
-0.2 TO -0.1							-0.2 TO -0.1						
-0.3 TO -0.2							-0.3 TO -0.2						
-0.4 TO -0.3							-0.4 TO -0.3						
-0.6 TO -0.4							-0.6 TO -0.4						
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	4.7	126.6	249.1	2.6		387.2	TIME (MIN)	4.0	917.1	710.2	105.0		1837.3
NAUT MILES	23.3	562.3	1164.0	16.7		1704.3	NAUT MILES	15.0	1000.0	3452.3	636.1		6003.0

ALTITUDE - 25,000 TO 30,000 FEET						
LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 1.0						
1.4 TO 1.0						
1.0 TO 1.4						
0.8 TO 1.0						
0.6 TO 0.8						
0.5 TO 0.6						
0.4 TO 0.5						
0.3 TO 0.4						
0.2 TO 0.3						
0.1 TO 0.2						
-0.2 TO -0.1						
-0.3 TO -0.2						
-0.4 TO -0.3						
-0.6 TO -0.4						
-0.8 TO -0.6						
-1.0 TO -0.8						
BELOW -1.0						
TIME (MIN)	1.3	596.1				600.4
NAUT MILES	26.6	2423.6				2900.4

**Table 90**  
**Incremental Gust Load Factors by Equivalent Airspeed and Altitude**  
**Mission III (Training)**  
**Gross Weight Range: 125,000 to 135,000 lb.**

ALTITUDE - 0 TO 2,000 FEET							ALTITUDE - 2,000 TO 5,000 FEET						
LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ	LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350			350 AND ABOVE	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	
ABOVE 1.0							ABOVE 1.0						
1.4 TO 1.0							1.4 TO 1.0						
1.0 TO 1.4							1.0 TO 1.4						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4							0.3 TO 0.4						
0.2 TO 0.3							0.2 TO 0.3						
0.1 TO 0.2							0.1 TO 0.2						
-0.2 TO -0.1							-0.2 TO -0.1						
-0.3 TO -0.2							-0.3 TO -0.2						
-0.4 TO -0.3							-0.4 TO -0.3						
-0.6 TO -0.4							-0.6 TO -0.4						
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	7.1	13.2	3.1	3.0		26.4	TIME (MIN)	2.0	90.0	72.0	4.7		172.2
NAUT MILES	10.0	41.7	12.0	13.2		66.1	NAUT MILES	7.4	201.0	270.1	21.0		500.1

ALTITUDE - 5,000 TO 10,000 FEET							ALTITUDE - 10,000 TO 15,000 FEET						
LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ	LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350			350 AND ABOVE	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	
ABOVE 1.0							ABOVE 1.0						
1.4 TO 1.0							1.4 TO 1.0						
1.0 TO 1.4							1.0 TO 1.4						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4							0.3 TO 0.4						
0.2 TO 0.3							0.2 TO 0.3						
0.1 TO 0.2							0.1 TO 0.2						
-0.2 TO -0.1							-0.2 TO -0.1						
-0.3 TO -0.2							-0.3 TO -0.2						
-0.4 TO -0.3							-0.4 TO -0.3						
-0.6 TO -0.4							-0.6 TO -0.4						
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)		24.3	23.2	3.2		60.1	TIME (MIN)	20.1	12.1	2.0		73.2	
NAUT MILES		117.4	92.0	14.0		225.7	NAUT MILES	207.0	63.4	10.3		279.2	

ALTITUDE - 15,000 TO 20,000 FEET							ALTITUDE - 20,000 TO 25,000 FEET						
LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ	LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350			350 AND ABOVE	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	
ABOVE 1.0							ABOVE 1.0						
1.4 TO 1.0							1.4 TO 1.0						
1.0 TO 1.4							1.0 TO 1.4						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6							0.5 TO 0.6						
0.4 TO 0.5							0.4 TO 0.5						
0.3 TO 0.4							0.3 TO 0.4						
0.2 TO 0.3							0.2 TO 0.3						
0.1 TO 0.2							0.1 TO 0.2						
-0.2 TO -0.1							-0.2 TO -0.1						
-0.3 TO -0.2							-0.3 TO -0.2						
-0.4 TO -0.3							-0.4 TO -0.3						
-0.6 TO -0.4							-0.6 TO -0.4						
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	6.0	60.3	70.2	3.3		140.0	TIME (MIN)	6.0	63.7	50.0	20.2		140.0
NAUT MILES	11.0	202.1	202.0	10.4		406.0	NAUT MILES	21.0	1007.0	200.0	217.0		2112.0

**Table 91**  
**Incremental Gust Load Factors by Equivalent Airspeed and Altitude**  
**Mission III (Training)**  
**Gross Weight Range: 135,000 lb. and Above**

ALTITUDE - 0 TO 2,000 FEET							ALTITUDE - 2,000 TO 5,000 FEET						
LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ	LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ
	LESS THAN 100	100 TO 200	200 TO 250	250 TO 300	300 TO 350			350 ABOVE	LESS THAN 100	100 TO 200	200 TO 250	250 TO 300	
ABOVE 1.0							ABOVE 1.0						
1.0 TO 1.0							1.0 TO 1.0						
1.0 TO 1.0							1.0 TO 1.0						
0.0 TO 0.0							0.0 TO 0.0						
0.0 TO 0.0							0.0 TO 0.0						
0.4 TO 0.4			1			1	0.4 TO 0.4						
0.3 TO 0.4			1			1	0.3 TO 0.4						
0.2 TO 0.3	2	4				6	0.2 TO 0.3	3	2				5
0.1 TO 0.2	10	10	3			23	0.1 TO 0.2	43	27				70
-0.2 TO -0.1	0	27	2			29	-0.2 TO -0.1	34	13				47
-0.1 TO -0.2	1	3	1			5	-0.1 TO -0.2	1	4				5
-0.4 TO -0.2							-0.4 TO -0.2						
-0.6 TO -0.4			1			1	-0.6 TO -0.4						
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0	3.3	5.3	0.6			9.2	BELOW -1.0	0.1	5.0				5.1
TIME (MIN)							TIME (MIN)						
NAUT MILES	0.6	10.0	2.1			12.7	NAUT MILES	20.1	10.0				30.1

ALTITUDE - 5,000 TO 10,000 FEET							ALTITUDE - 10,000 TO 20,000 FEET						
LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ	LOAD FACTOR DELTA MZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA MZ
	LESS THAN 100	100 TO 200	200 TO 250	250 TO 300	300 TO 350			350 ABOVE	LESS THAN 100	100 TO 200	200 TO 250	250 TO 300	
ABOVE 1.0							ABOVE 1.0						
1.0 TO 1.0							1.0 TO 1.0						
1.0 TO 1.0							1.0 TO 1.0						
0.0 TO 0.0							0.0 TO 0.0						
0.0 TO 0.0							0.0 TO 0.0						
0.3 TO 0.3							0.3 TO 0.3						
0.2 TO 0.3							0.2 TO 0.3						
0.1 TO 0.2		3	13			16	0.1 TO 0.2		3	0			3
-0.2 TO -0.1		25	9			34	-0.2 TO -0.1		64	1			65
-0.3 TO -0.2		2	1			3	-0.3 TO -0.2		0				0
-0.4 TO -0.3							-0.4 TO -0.3						
-0.6 TO -0.4							-0.6 TO -0.4						
-0.8 TO -0.6							-0.8 TO -0.6						
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)							TIME (MIN)						
NAUT MILES		20.1	5.0			25.1	NAUT MILES	100.0	200.0	0.1			120.1

Table 92  
 Incremental Gust Load Factors by Equivalent Airspeed and Altitude  
 Mission IV (Aerial Delivery)  
 Gross Weight Range: 85,000 to 95,000 lb.

ALTITUDE - 0 TO 2,000 FEET							ALTITUDE - 2,000 TO 5,000 FEET						
LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ	LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 1.0							ABOVE 1.0						
1.4 TO 1.0							1.4 TO 1.0						
1.0 TO 1.4							1.0 TO 1.4						
0.8 TO 1.0							0.8 TO 1.0						
0.6 TO 0.8							0.6 TO 0.8						
0.5 TO 0.6		2	1			1	0.5 TO 0.6		6	3			9
0.4 TO 0.5	1	10	16			8	0.4 TO 0.5		7	21			28
0.3 TO 0.4	4	31	60			27	0.3 TO 0.4		14	92			127
0.2 TO 0.3	32	148	281			100	0.2 TO 0.3	1	114	295			423
0.1 TO 0.2	250	361	600			461	0.1 TO 0.2	62	567	1120			1749
-0.2 TO -0.1	295	376	666			1337	-0.2 TO -0.1	62	534	1063			1661
-0.3 TO -0.2	23	141	229			396	-0.3 TO -0.2	10	143	297			450
-0.4 TO -0.3	4	43	80			127	-0.4 TO -0.3	3	36	93			132
-0.6 TO -0.4		11	24			35	-0.6 TO -0.4	1	21	23			45
-0.8 TO -0.6							-0.8 TO -0.6		1	1			2
-1.0 TO -0.8							-1.0 TO -0.8						
BELOW -1.0							BELOW -1.0						
TIME (MIN)	179.0	111.7	131.5			422.9	TIME (MIN)	88.4	286.2	395.2	14.0	789.9	
NAUT MILES	301.2	361.0	477.0			1210.0	NAUT MILES	207.6	917.6	1492.1	63.9	2641.1	

ALTITUDE - 5,000 TO 10,000 FEET						
LOAD FACTOR DELTA NZ	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA NZ
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE	
ABOVE 1.0						
1.4 TO 1.0						
1.0 TO 1.4						
0.8 TO 1.0						
0.6 TO 0.8						
0.5 TO 0.6						
0.4 TO 0.5						
0.3 TO 0.4						
0.2 TO 0.3						
0.1 TO 0.2		1	16			17
-0.2 TO -0.1			1			1
-0.3 TO -0.2			1	1		2
-0.4 TO -0.3						
-0.6 TO -0.4						
-0.8 TO -0.6						
-1.0 TO -0.8						
BELOW -1.0						
TIME (MIN)	8.7	101.3	64.0	3.0	176.0	
NAUT MILES	22.7	366.9	252.9	17.3	648.0	

**Table 93**  
**Incremental Gust Load Factors by Equivalent Airspeed and Altitude**  
**Mission IV (Aerial Delivery)**  
**Gross Weight Range: 95,000 to 105,000 lb.**

ALTITUDE - 0 TO 2,000 FEET								ALTITUDE - 2,000 TO 4,000 FEET							
LOAD FACTOR DELTA M2	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA M2	LOAD FACTOR DELTA M2	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA M2		
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			
ABOVE 1.0							ABOVE 1.0								
1.4 TO 1.0							1.4 TO 1.0								
1.0 TO 1.4							1.0 TO 1.4								
0.8 TO 1.0							0.8 TO 1.0								
0.6 TO 0.8							0.6 TO 0.8								
0.5 TO 0.6	1	2	3			26	0.5 TO 0.6	1	7	1		9			
0.4 TO 0.5	2	14	23			113	0.4 TO 0.5	3	20	5		28			
0.3 TO 0.4	5	45	422	18		490	0.3 TO 0.4	4	34	362	13	413			
0.2 TO 0.3	74	234	1751	61		2120	0.2 TO 0.3	42	275	1517	35	1869			
0.1 TO 0.2	566	901	4229	202		7976	0.1 TO 0.2	363	1504	5272	157	7326			
-0.2 TO -0.1	504	997	6547	222		8950	-0.2 TO -0.1	410	1565	5027	166	7168			
-0.3 TO -0.2	40	234	1739	59		2065	-0.3 TO -0.2	46	250	1366	33	1695			
-0.4 TO -0.3	10	67	372	12		461	-0.4 TO -0.3	4	54	339	14	411			
-0.5 TO -0.4			101	7		110	-0.5 TO -0.4	3	13	112	6	134			
-0.6 TO -0.5			3	2		5	-0.6 TO -0.5			4	1	5			
-1.0 TO -0.6			1			1	-1.0 TO -0.6			1		1			
BELOW -1.0							BELOW -1.0								
TIME (MIN)	593.9	493.0	1006.5	26.0		2114.3	TIME (MIN)	677.3	1095.0	1637.5	127.6	3337.5			
NAUT MILES	1313.3	1468.7	3766.3	106.4		6714.9	NAUT MILES	1139.4	3495.3	6125.4	501.2	11861.3			

ALTITUDE - 5,000 TO 10,000 FEET								ALTITUDE - 10,000 TO 15,000 FEET							
LOAD FACTOR DELTA M2	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA M2	LOAD FACTOR DELTA M2	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA M2		
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE			
ABOVE 1.0							ABOVE 1.0								
1.4 TO 1.0							1.4 TO 1.0								
1.0 TO 1.4							1.0 TO 1.4								
0.8 TO 1.0							0.8 TO 1.0								
0.6 TO 0.8							0.6 TO 0.8								
0.5 TO 0.6							0.5 TO 0.6								
0.4 TO 0.5							0.4 TO 0.5								
0.3 TO 0.4							0.3 TO 0.4								
0.2 TO 0.3							0.2 TO 0.3								
0.1 TO 0.2							0.1 TO 0.2								
-0.2 TO -0.1							-0.2 TO -0.1								
-0.3 TO -0.2							-0.3 TO -0.2								
-0.4 TO -0.3							-0.4 TO -0.3								
-0.5 TO -0.4							-0.5 TO -0.4								
-0.6 TO -0.5							-0.6 TO -0.5								
-1.0 TO -0.6							-1.0 TO -0.6								
BELOW -1.0							BELOW -1.0								
TIME (MIN)	107.4	92.5	6.4			206.4	TIME (MIN)	1.3	201.4	221.0	2.4	426.9			
NAUT MILES	634.0	372.0	36.0			1043.0	NAUT MILES	4.4	705.0	973.0	11.2	1793.1			

ALTITUDE - 15,000 TO 20,000 FEET							
LOAD FACTOR DELTA M2	EQUIVALENT AIRSPEED - VE (KNOTS)					TOTAL DELTA M2	
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 AND ABOVE		
ABOVE 1.0							
1.4 TO 1.0							
1.0 TO 1.4							
0.8 TO 1.0							
0.6 TO 0.8							
0.5 TO 0.6							
0.4 TO 0.5							
0.3 TO 0.4							
0.2 TO 0.3							
0.1 TO 0.2							
-0.2 TO -0.1							
-0.3 TO -0.2							
-0.4 TO -0.3							
-0.5 TO -0.4							
-0.6 TO -0.5							
-1.0 TO -0.6							
BELOW -1.0							
TIME (MIN)	1.0	2.0	6.2			9.2	
NAUT MILES	1.2	6.3	30.1			37.6	



**Table 94**  
**Incremental Gust Load Factors by Equivalent Airspeed and Altitude**  
**Mission IV (Aerial Delivery)**  
**Gross Weight Range: 105,000 to 115,000 lb.**

LOAD FACTOR DELTA G	ALTITUDE - 0 TO 2,000 FEET						ALTITUDE - 2,000 TO 5,000 FEET					
	EQUIVALENT AIRSPEED - VE (KNOTS)						EQUIVALENT AIRSPEED - VE (KNOTS)					
	LESS THAN 100	100 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	LESS THAN 100	100 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE
ABOVE 1.0												
1.0 TO 1.0												
0.9 TO 1.0												
0.8 TO 1.0												
0.7 TO 1.0												
0.6 TO 1.0												
0.5 TO 1.0												
0.4 TO 1.0												
0.3 TO 1.0												
0.2 TO 1.0												
0.1 TO 1.0												
-0.2 TO -0.1												
-0.3 TO -0.2												
-0.4 TO -0.3												
-0.5 TO -0.4												
-0.6 TO -0.4												
-0.7 TO -0.4												
-0.8 TO -0.4												
-0.9 TO -0.4												
-1.0 TO -0.4												
BELOW -1.0												
TIME (MIN)	405.5	406.3	1275.0	71.2		2250.0	279.0	640.2	700.2	64.0	0.1	1361.2
NET WEIGHT	1006.0	1000.0	4011.0	316.7		7750.7	600.0	2000.7	2400.0	200.9	0.7	5007.1

LOAD FACTOR DELTA G	ALTITUDE - 5,000 TO 10,000 FEET						ALTITUDE - 10,000 TO 15,000 FEET					
	EQUIVALENT AIRSPEED - VE (KNOTS)						EQUIVALENT AIRSPEED - VE (KNOTS)					
	LESS THAN 100	100 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	LESS THAN 100	100 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE
ABOVE 1.0												
1.0 TO 1.0												
0.9 TO 1.0												
0.8 TO 1.0												
0.7 TO 1.0												
0.6 TO 1.0												
0.5 TO 1.0												
0.4 TO 1.0												
0.3 TO 1.0												
0.2 TO 1.0												
0.1 TO 1.0												
-0.2 TO -0.1												
-0.3 TO -0.2												
-0.4 TO -0.3												
-0.5 TO -0.3												
-0.6 TO -0.3												
-0.7 TO -0.3												
-0.8 TO -0.3												
-0.9 TO -0.3												
-1.0 TO -0.3												
BELOW -1.0												
TIME (MIN)	1.5	202.7	130.2	20.3		300.0	0.0	21.0	62.0	1.0		113.0
NET WEIGHT	1.0	667.1	100.0	100.0		1200.0	1.0	200.0	100.1	0.0		400.1

**Table 95**  
**Incremental Gust Load Factors by Equivalent Airspeed and Altitude**  
**Mission IV (Aerial Delivery)**  
**Gross Weight Range: 115,000 to 125,000 lb.**

LOAD FACTOR DELTA G	ALTITUDE - 0 TO 2,000 FEET						ALTITUDE - 2,000 TO 5,000 FEET					
	EQUIVALENT AIRSPEED - VE (KNOTS)						EQUIVALENT AIRSPEED - VE (KNOTS)					
	LESS THAN 100	100 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	LESS THAN 100	100 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE
ABOVE 1.0												
1.0 TO 1.0												
0.9 TO 1.0												
0.8 TO 1.0												
0.7 TO 1.0												
0.6 TO 1.0												
0.5 TO 1.0												
0.4 TO 1.0												
0.3 TO 1.0												
0.2 TO 1.0												
0.1 TO 1.0												
-0.2 TO -0.1												
-0.3 TO -0.2												
-0.4 TO -0.3												
-0.5 TO -0.3												
-0.6 TO -0.3												
-0.7 TO -0.3												
-0.8 TO -0.3												
-0.9 TO -0.3												
-1.0 TO -0.3												
BELOW -1.0												
TIME (MIN)	120.0	200.0	200.0	20.0		200.0	100.0	200.0	200.0	20.0		200.0
NET WEIGHT	1000.0	1000.0	1000.0	100.0		2000.0	1000.0	1000.0	1000.0	100.0		2000.0

**Table 96**  
**Incremental Gust Load Factors by Equivalent Airspeed and Altitude**  
**Mission IV (Aerial Delivery)**  
**Gross Weight Range: 125,000 to 135,000 lb.**

LOAD FACTOR DELTA M	ALTITUDE - 0 TO 7,000 FEET						TOTAL DELTA M	ALTITUDE - 3,000 TO 10,000 FEET						TOTAL DELTA M
	EQUIVALENT AIRSPEED - VE (KNOTS)							EQUIVALENT AIRSPEED - VE (KNOTS)						
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE		LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 1.0														
1.0 TO 1.0														
1.0 TO 1.0														
0.8 TO 1.0														
0.6 TO 0.8														
0.4 TO 0.6														
0.2 TO 0.4														
0.2 TO 0.2														
0.1 TO 0.2														
-0.2 TO -0.1														
-0.3 TO -0.2														
-0.4 TO -0.3														
-0.6 TO -0.4														
-0.8 TO -0.6														
-1.0 TO -0.8														
DELTA -1.0														
TIME (MINS)	2.0	3.3				5.3	7.3	9.0				17.3		
AMT Miles	5.4	10.4				15.8	23.2	36.0				59.2		

**Table 97**  
**Incremental Gust Load Factors by Equivalent Airspeed and Altitude**  
**Mission IV (Aerial Delivery)**  
**Gross Weight Range: 135,000 lb. and Above**

LOAD FACTOR DELTA M	ALTITUDE - 0 TO 7,000 FEET						TOTAL DELTA M	ALTITUDE - 3,000 TO 10,000 FEET						TOTAL DELTA M
	EQUIVALENT AIRSPEED - VE (KNOTS)							EQUIVALENT AIRSPEED - VE (KNOTS)						
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE		LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 1.0														
1.0 TO 1.0														
1.0 TO 1.0														
0.8 TO 1.0														
0.6 TO 0.8														
0.4 TO 0.6														
0.2 TO 0.4														
0.2 TO 0.2														
0.1 TO 0.2														
-0.2 TO -0.1														
-0.3 TO -0.2														
-0.4 TO -0.3														
-0.6 TO -0.4														
-0.8 TO -0.6														
-1.0 TO -0.8														
DELTA -1.0														
TIME (MINS)	15.4	2.5	5.5			23.4	25.2	33.0	1.4			60.2		
AMT Miles	25.0	10.2	1.0			36.2	57.0	60.0	0.0			100.0		

LOAD FACTOR DELTA M	ALTITUDE - 3,000 TO 10,000 FEET						TOTAL DELTA M
	EQUIVALENT AIRSPEED - VE (KNOTS)						
	LESS THAN 150	150 TO 200	200 TO 250	250 TO 300	300 TO 350	350 AND ABOVE	
ABOVE 1.0							
1.0 TO 1.0							
1.0 TO 1.0							
0.8 TO 1.0							
0.6 TO 0.8							
0.4 TO 0.6							
0.2 TO 0.4							
0.2 TO 0.2							
0.1 TO 0.2							
-0.2 TO -0.1							
-0.3 TO -0.2							
-0.4 TO -0.3							
-0.6 TO -0.4							
-0.8 TO -0.6							
-1.0 TO -0.8							
DELTA -1.0							
TIME (MINS)	17.7	2.0				21.7	
AMT Miles	27.0	12.7				40.7	

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DOCUMENT CONTROL DATA - R&D		
<i>(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)</i>		
1. ORIGINATING ACTIVITY (Corporate author) Technology Incorporated Dayton, Ohio	2a. REPORT SECURITY CLASSIFICATION	
	2b. GROUP n/a	
3. REPORT TITLE STRUCTURAL FLIGHT LOADS DATA FROM C-130E AIRCRAFT.		
4. DESCRIPTIVE NOTES (Type of report and inclusive dates) Final Report, Nov 63 - Apr 65		
5. AUTHOR(S) (Last name, first name, initial) Cory, Larry E. Morton, W. Wallace, Jr.		
6. REPORT DATE OCTOBER 1965	7a. TOTAL NO. OF PAGES 132	7b. NO. OF REFS 5
8a. CONTRACT OR GRANT NO. AF 33(657)-9845	8b. ORIGINATOR'S REPORT NUMBER(S) n/a	
b. PROJECT NO.	9b. OTHER REPORT NO(S) (Any other numbers that may be assigned this report) 18/ SEG-TR-65-34	
c. Task No. 400L	d.	
10. AVAILABILITY/LIMITATION NOTICES The distribution of this report is limited because reports of test and evaluation of military operational aircraft are not considered of general interest to the public scientific and technical community.		
11. SUPPLEMENTARY NOTES	12. SPONSORING MILITARY ACTIVITY Systems Engineering Group Wright-Patterson AFB, Ohio	
13. ABSTRACT To provide information for the derivation of the operational loads spectrum of C-130E aircraft, this report presents the 6317 hours of in-flight data processed during a C-130E structural loads program. Of the thirty-five C-130E's instrumented to collect the data, 20 were based at Charleston Air Force Base to fly MATS EASTAF transatlantic routes and 15 at Travis Air Force Base to fly MATS WESTAF transpacific routes. Four parameters basic to flight loads studies were recorded: time, airspeed, altitude, and normal acceleration at the aircraft center of gravity. Included among the variables derived from the basic parameters are equivalent maneuver load factor and derived gust velocity. Techniques used to process and analyze the data are discussed. A supplement to this report presents the derived gust velocities by season and MATS routes. None of the loads sustained by these aircraft exceeded the design limits.		

14 KEY WORDS	LINK A		LINK B		LINK C	
	ROLE	WT	ROLE	WT	ROLE	WT
Maneuver Load Factors Loads Spectrum Gust Spectrum Mission Types Base - EASTAF, WESTAF Velocity Spectrum Altitude Spectrum						

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