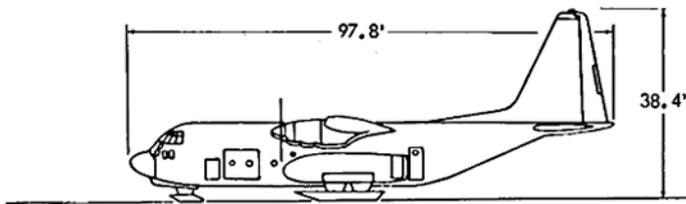
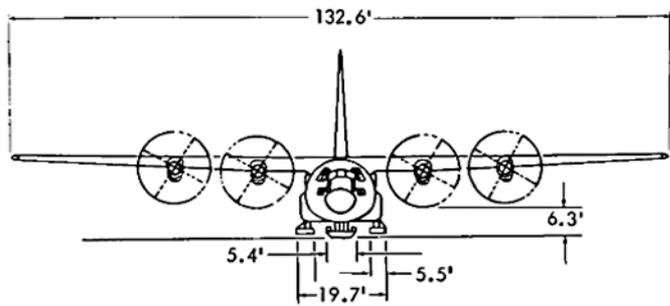
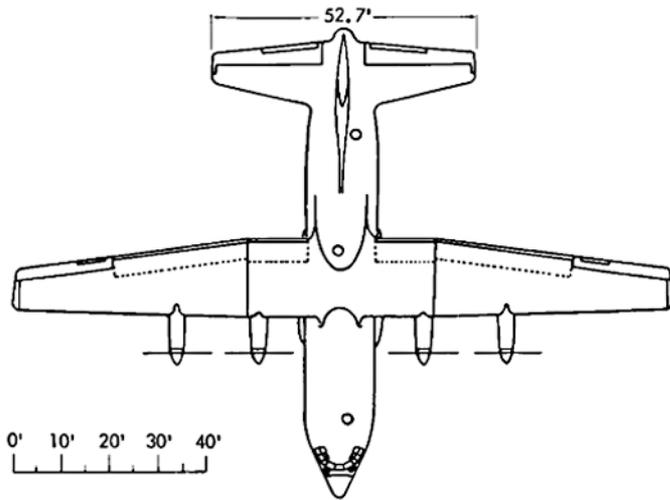


STANDARD AIRCRAFT CHARACTERISTICS

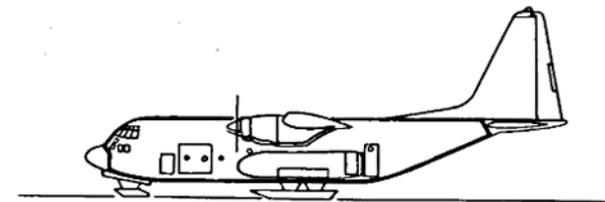
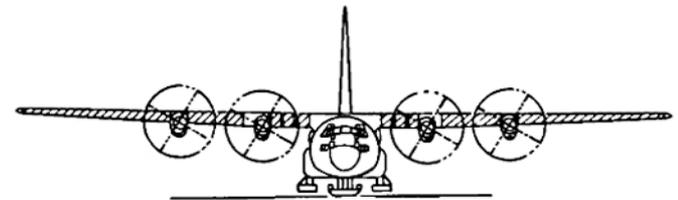
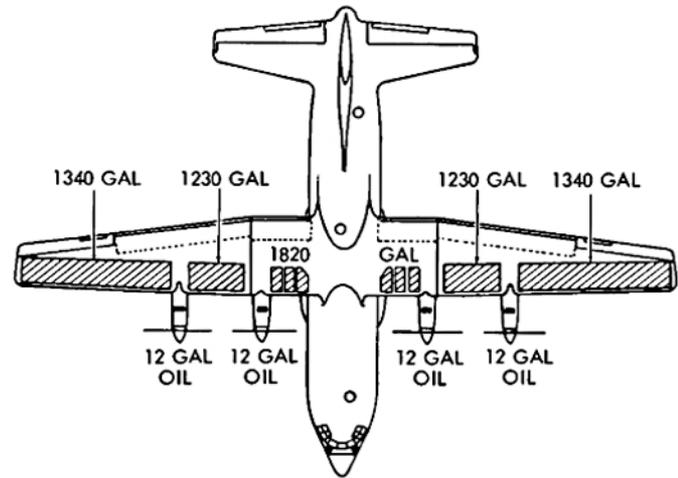
LC-130F

LOCKHEED

LC-130F



DESCRIPTIVE ARRANGEMENT



PRESSURIZED AREA

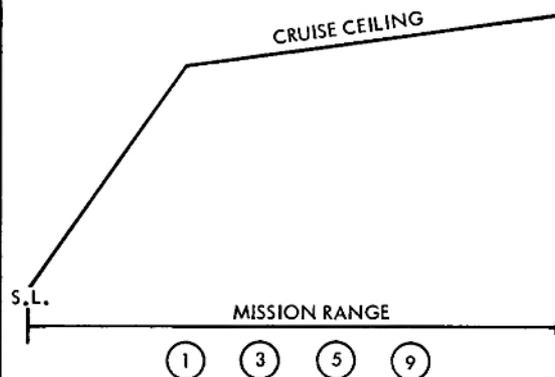
ARMAMENT AND TANKAGE

POWER PLANT	MISSION AND DESCRIPTION	WEIGHTS																								
NO. & MODEL (4) T56-A-16 MFR. ALLISON ENGINE SPEC. NO. 732 TYPE AXIAL RED. GEAR RATIO 0.0739 TAIL PIPE FIXED AREA PROP. MFR. HAMILTON STANDARD BLADE DESIGN NO. A-7111B-2 PROP. DIA. 13.5' NO. BLADES 4	A.F. EQUIVALENT: C-130B MFR.'S MODEL: 282C-44A-05 THE MISSION OF THE LC-130F IS THE TRANSPORTATION OF PERSONNEL OR CARGO FOR AERIAL OR CONVENTIONAL DELIVERY. THE AIRCRAFT IS CAPABLE OF CARRYING 92 COMBAT TROOPS OR 64 PARATROOPS WITH EQUIPMENT. IN THE AIR EVACUATION CONFIGURATION, THE AIRCRAFT IS CAPABLE OF CARRYING 74 LITTERS WITH 2 ATTENDANTS; THE NORMAL CREW IS COMPOSED OF PILOT, CO-PILOT, FLIGHT ENGINEER, NAVIGATOR AND LOADMASTER. THE AIRCRAFT IS AN ALL METAL, HIGH WING, LONG RANGE, LAND BASED MONOPLANE. THE LC-130F HAS GREATER STRUCTURAL STRENGTH THAN THE C-130A, AND CAN OPERATE AT HIGHER WEIGHTS. FEATURES INCLUDE AN INTERGAL CARGO RAMP AND DOOR; CREW AND CARGO COMPARTMENT PRESSURIZATION; GROUND AND INFLIGHT AIR CONDITIONING; THERMAL DE-ICING SYSTEM FOR THE LEADING EDGE OF THE WING AND EMPENNAGES; SINGLE POINT REFUELING SYSTEM; AND E-4 AUTOPILOT. THE AIRCRAFT IS EQUIPPED WITH FOUR FLAPS, CONSISTING OF AN OUTBOARD AND AN INBOARD FLAP IN EACH WING. THE FLAPS ARE OF THE LOCKHEED FOWLER, HIGH LIFT TYPE IN WHICH THE FLAP MOTION IS A COMBINATION OF AN AFT MOVEMENT TO INCREASE WING AREA AND A DOWNWARD TILTING MOVEMENT TO ALTER THE AIRFOIL SECTION TO INCREASE LIFT AND DRAG. THE LC-130F CAN TAKE OFF AND LAND FROM IMPROVED RUNWAYS OR SNOW COVERED SURFACES. SIMILAR TO THE USAF C-130B EXCEPT FOR MODIFICATIONS NECESSARY FOR ADDITION OF SKI LANDING GEAR. PROVISIONS EXIST FOR USING EXTERNALLY MOUNTED ATO UNITS TO PROVIDE ADDITIONAL THRUST FOR TAKE-OFF.	<table border="1"> <thead> <tr> <th>LOADING</th> <th>LBS.</th> <th>L.F.</th> </tr> </thead> <tbody> <tr> <td>EMPTY (C).....</td> <td>73,310.....</td> <td>-</td> </tr> <tr> <td>BASIC (C).....</td> <td>73,915.....</td> <td>-</td> </tr> <tr> <td>DESIGN.....</td> <td>135000.....</td> <td>2.5</td> </tr> <tr> <td>COMBAT.....</td> <td>93478.....</td> <td>2.5</td> </tr> <tr> <td>MAX. T.O. (OVER-LOAD).....</td> <td>+145000.....</td> <td>2.25</td> </tr> <tr> <td>MAX. T.O. (NORMAL).....</td> <td>+135000.....</td> <td>2.5</td> </tr> <tr> <td>MAX. LAND.....</td> <td>+135000.....</td> <td>2.5</td> </tr> </tbody> </table> <p>(C) CALCULATED + LIMITED BY GEAR STRENGTH</p>	LOADING	LBS.	L.F.	EMPTY (C).....	73,310.....	-	BASIC (C).....	73,915.....	-	DESIGN.....	135000.....	2.5	COMBAT.....	93478.....	2.5	MAX. T.O. (OVER-LOAD).....	+145000.....	2.25	MAX. T.O. (NORMAL).....	+135000.....	2.5	MAX. LAND.....	+135000.....	2.5
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ELECTRONICS	DEVELOPMENT DATE OF CONTRACT SEPTEMBER 1959 FIRST FLIGHT JUNE 1960 FIRST ACCEPTANCE FEBRUARY 1961 FIRST SERVICE FEBRUARY 1961																									
UHF COMMAND..... AN/ARC-34 VHF COMMAND..... COLLINS VHF-101 LIAISON (2)..... COLLINS 618S-1 EMERGENCY KEYS..... AN/ARA-26 INTERPHONE..... AN/AIC-10A PUBLIC ADDRESS SYSTEM..... AN/AIC-13 RADAR SET..... AN/APN-59 RADAR SET (IFF)..... AN/APX-25A RADAR SET (LORAN)..... AN/APN-70 GLIDE PATH..... AN/ARN-67 RADIO COMPASS (2)..... AN/ARN-6 OMNIDIRECTIONAL RANGE..... AN/ARN-14 MARKER BEACON..... AN/ARN-32 RADAR ALTIMETER..... AN/APN-22 RADAR ALTIMETER..... SCR-718F DIRECTION FINDER (UHF)..... AN/ARA-25 DOPPLER..... AN/APA-52A RADIO SET (TACAN)..... AN/ARN-21 FLIGHT DIRECTOR..... MA-1 STATIC DISCHARGE..... AN/ASA-3A PRESSURIZATION KIT..... AN/ASQ-14	DIMENSIONS WING SPAN..... 132.6' INCIDENCE (ROOT)..... 3° INCIDENCE (TIP)..... 0° DIHEDRAL..... 2°30' SWEEPBACK (18% CHORD)..... 0° AREA..... 1745.5 SQ. FT. LENGTH..... 97.8' HEIGHT..... 38.4' THREAD..... 14.3' PROP. GROUND CLEARANCE..... 6.3' MLG SKI WIDTH/LENGTH..... 5.5/20.5' NLG SKI WIDTH/LENGTH..... 5.4/10.3'	CARGO MAXIMUM LOAD DIMENSIONS (MAIN COMP'T) LENGTH..... 41.4' WIDTH..... 10.3' HEIGHT..... 9.1' OPENING FOR CARGO LOADING (MAIN LOADING DOOR) WIDTH..... 10.0' HEIGHT..... 9.1' HEIGHT FROM GROUND..... 3.7' SIDE CARGO DOOR WIDTH..... 6.7' HEIGHT..... 6.0' HEIGHT FROM GROUND..... 4.0' MAXIMUM CARGO WEIGHT (135,000 LBS. GROSS WEIGHT) 29,522 LBS. @ 2.5G LIMIT LOAD FACTOR WITH 30,000 LBS. FUEL (JP-5).																								

NOTES

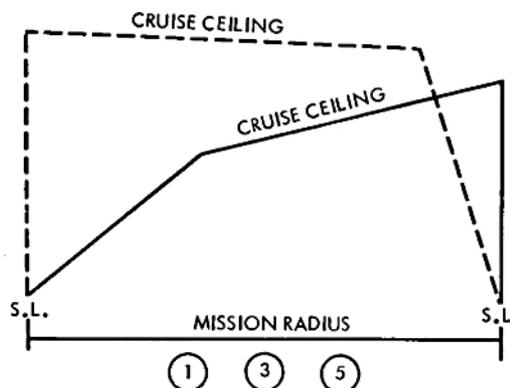
RANGE MISSION

START ENGINES, WARM UP, TAKE-OFF, ACCELERATE TO CLIMB SPEED.
 5 MINUTES AT MAXIMUM CONTINUOUS POWER AT SEA LEVEL.
 CLIMB ON COURSE TO CRUISE CEILING AT MAXIMUM CONTINUOUS POWER.
 CRUISE TO REMOTE BASE AT SPEEDS FOR MAXIMUM RANGE.
 LAND AT REMOTE SEA LEVEL BASE WITH RESERVES (NO FUEL CONSUMED, NO DISTANCE CREDIT).
 RESERVE: 30 MINUTES AT SEA LEVEL AT SPEEDS FOR MAXIMUM ENDURANCE PLUS 5 PERCENT OF INITIAL FUEL.



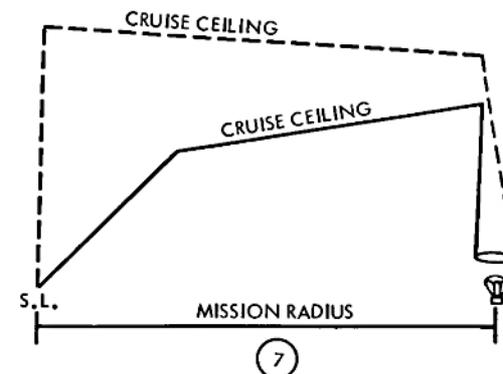
RADIUS MISSION

START ENGINES, WARM UP, TAKE-OFF, ACCELERATE TO CLIMB SPEED.
 5 MINUTES AT MAXIMUM CONTINUOUS POWER AT SEA LEVEL.
 CLIMB ON COURSE TO CRUISE CEILING AT MAXIMUM CONTINUOUS POWER.
 CRUISE TO REMOTE SEA LEVEL BASE AT SPEEDS FOR MAXIMUM RANGE.
 LAND AT REMOTE SEA LEVEL BASE AND UNLOAD ENTIRE CARGO (NO FUEL CONSUMED, NO DISTANCE CREDIT).
 START ENGINES, WARM-UP, TAKE-OFF, ACCELERATE TO CLIMB SPEED.
 5 MINUTES AT MAXIMUM CONTINUOUS POWER AT SEA LEVEL.
 CLIMB ON COURSE TO CRUISE CEILING AT MAXIMUM CONTINUOUS POWER.
 CRUISE TO HOME BASE AT SPEEDS FOR MAXIMUM RANGE AT ALTITUDES FOR MAXIMUM RANGE.
 LAND AT HOME BASE WITH RESERVES.
 RESERVES: 30 MINUTES AT SEA LEVEL AT SPEEDS FOR MAXIMUM ENDURANCE PLUS 5 PERCENT OF INITIAL FUEL.



AERIAL DELIVERY MISSION

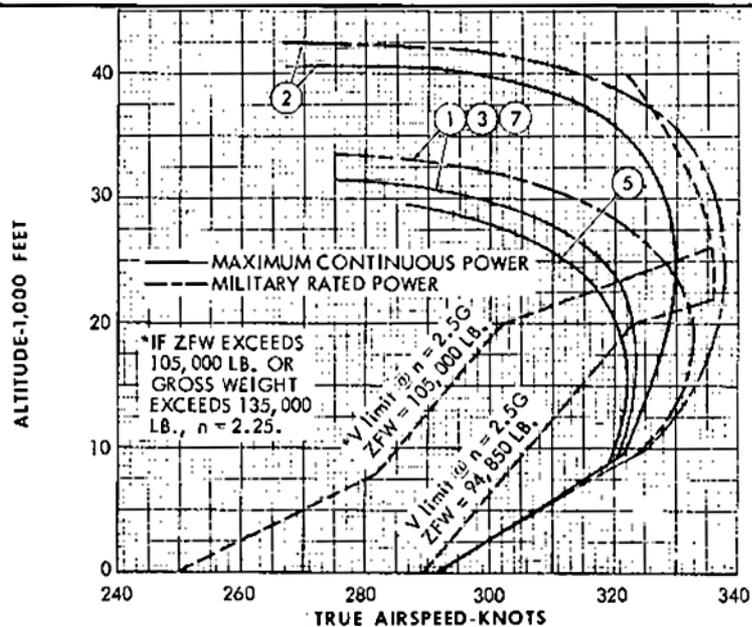
START ENGINES, WARM UP, TAKE-OFF, ACCELERATE TO CLIMB SPEED.
 5 MINUTES AT MAXIMUM CONTINUOUS POWER AT SEA LEVEL.
 CLIMB ON COURSE TO CRUISE CEILING AT MAXIMUM CONTINUOUS POWER.
 CRUISE TO REMOTE SEA LEVEL BASE AT SPEEDS FOR MAXIMUM RANGE.
 DESCEND TO REMOTE SEA LEVEL BASE (NO FUEL CONSUMED, NO DISTANCE CREDIT).
 ALLOW 15 MINUTES AT SPEEDS FOR MAXIMUM ENDURANCE AT REMOTE SEA LEVEL BASE.
 DROP CARGO.
 CLIMB ON COURSE TO CRUISE CEILING AT MAXIMUM CONTINUOUS POWER.
 CRUISE TO HOME BASE AT SPEEDS FOR MAXIMUM RANGE.
 LAND AT HOME BASE WITH RESERVES.
 RESERVES: 30 MINUTES AT SEA LEVEL AT SPEEDS FOR MAXIMUM ENDURANCE PLUS 5 PERCENT OF INITIAL FUEL.



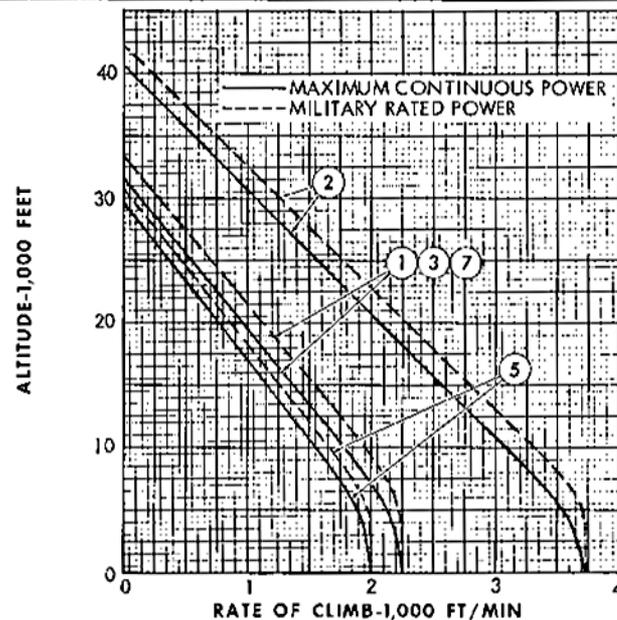
PERFORMANCE BASIS: LOCKHEED ENGINEERING REPORT NO. 8472 C-130K
 SUBSTANTIATING DATA REPORT, 30 SEPTEMBER 1966.

○ LOADING CONDITION COLUMN NUMBER

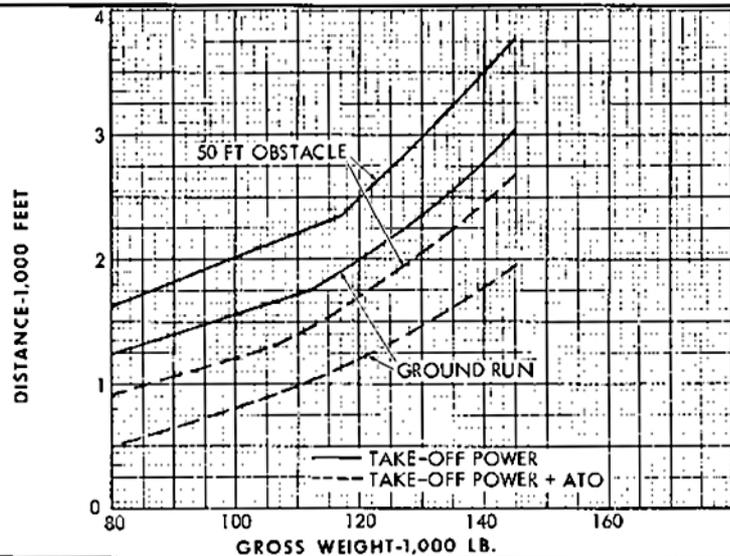
SPEED



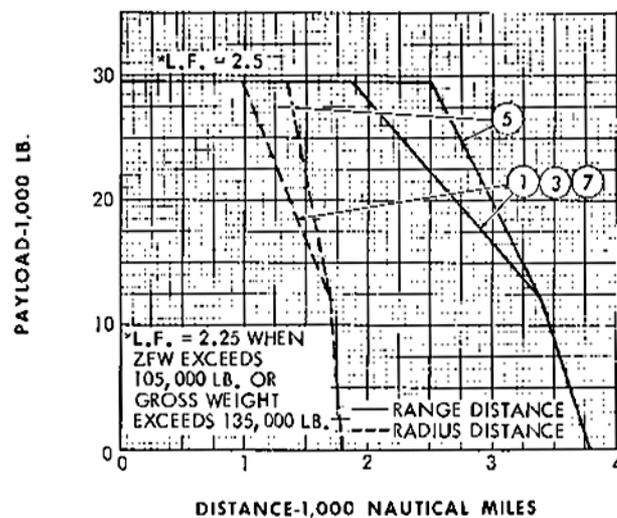
CLIMB



TAKE-OFF 50% FLAPS



PAYLOAD-DISTANCE



○ LOADING CONDITION COLUMN NUMBER

PERFORMANCE SUMMARY

TAKE-OFF LOADING CONDITION	DESIGN MAXIMUM PAYLOAD ①	DESIGN MAXIMUM FUEL ③	MAXIMUM OVERLOAD ⑤	AERIAL DELIVERY ⑦	FERRY RANGE ⑨
TAKE-OFF WEIGHT lb.	135,000	135,000	145,000	135,000	122,806
Fuel internal/external (JP-5) lb./lb.	30000/0	(1) 47328/0	40000/0	40150/0	47328/0
Payload lb.	29522	12345	29522	19372	0
Wing loading lb./sq. ft.	77.4	77.4	83.1	77.4	70.3
Stall speed—power-off (2) kn.	95	95	97	95	90
Take-off run at S.L.— calm (8)/ATO (3) (8) ft.	2590/1610	2590/1610	3060/1950	2590/1610	2110/1290
Take-off run at S.L.— 25 kn. wind (8) ft.	1550	1550	1900	1550	1270
Take-off to clear 50 ft.— calm (8)/ATO (3) (8) ft.	3220/2285	3220/2285	3800/2700	3220/2285	2610/1825
Max. speed/altitude (4) (10) kn./ft.	320/23500	323/20000	316/23000	323/20000	325/20000
Rate of climb at S.L. (4) (9) fpm.	2265	2265	2010	2265	2580
Time: S.L. to 20,000 ft. (4) min.	12.7	12.7	14.8	12.7	10.5
Time: S.L. to 30,000 ft. (4) min.	34.5	34.5	(5) 44.5	34.5	25.0
Service ceiling (100 fpm) (4) ft.	31500	31500	29500	31500	33800
Combat range n.mi.	1875	3389	2508	-	3777
Average cruising speed kn.	285	285	285	-	286
Cruising altitude(s) ft.	28892/34269	28892/38425	26705/34146	-	31643/41608
Combat radius/mission time n.mi./hr.	988/7.13	1700/12.1	1351/9.7	1395/10.2	-
Average cruising speed kn.	285/286	285/286	284/286	285/286	-
COMBAT LOADING CONDITION	60% MISSION FUEL NO PAYLOAD ②	60% MISSION FUEL NO PAYLOAD ④	60% MISSION FUEL NO PAYLOAD ⑥	60% MISSION FUEL NO PAYLOAD ⑧	60% MISSION FUEL NO PAYLOAD ⑩
COMBAT WEIGHT lb.	93,478	103,724	99,478	99,568	103,875
Engine power	MILITARY	MILITARY	MILITARY	MILITARY	MILITARY
Fuel lb.	18000	28397	24000	24093	28397
Combat speed/combat altitude (10) kn./ft.	325/37500	324/35500	321/36700	320/36650	323/35450
Rate of climb/combat altitude fpm/ft.	500/37500	500/35500	500/36700	500/36650	500/35450
Combat ceiling (500 fpm) ft.	37500	35500	36700	36650	35450
Rate of climb at S.L. (9) fpm.	3740	3255	3500	3494	3250
Max. speed at S.L. (9) kn.	292	292	292	292	292
Max. speed/altitude (10) kn./ft.	336/23500	336/25000	336/25000	336/25000	336/25000
LANDING WEIGHT (6) lb.	108492	91899	108996	79246	79608
Fuel lb.	3492	4226	3996	3768	4129
Stall speed—power-off/military power (11) kn./kn.	91/74	83/67	91/74	77/63	77/63
Landing distance—ground roll/over 50 ft. obst. (7) ft./ft.	(11) 2400/4000	(11) 2000/3300	(11) 2412/4010	(11) 1800/2900	(11) 1809/2907

NOTES

(1) Maximum Fuel Limited To 47,328 Lbs.

(2) 100% Flaps.

(3) 8 - 1000 Lb. Thrust ATO Units - Operating For 15 Sec.

(4) Maximum Continuous Power.

(5) Service Ceiling.

(6) Cargo Plus Fuel Reserves.

(7) No Reverse Thrust.

(8) 50% Flaps - 4200 PSHP Limited.

(9) 4200 PSHP Limited.

(10) Speed Limited.

(11) 50% Flaps.