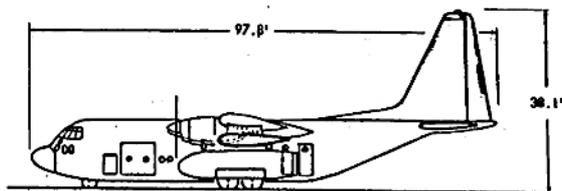
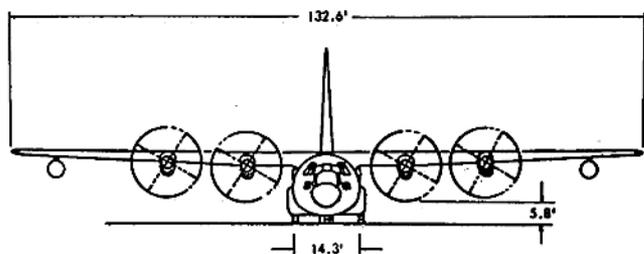
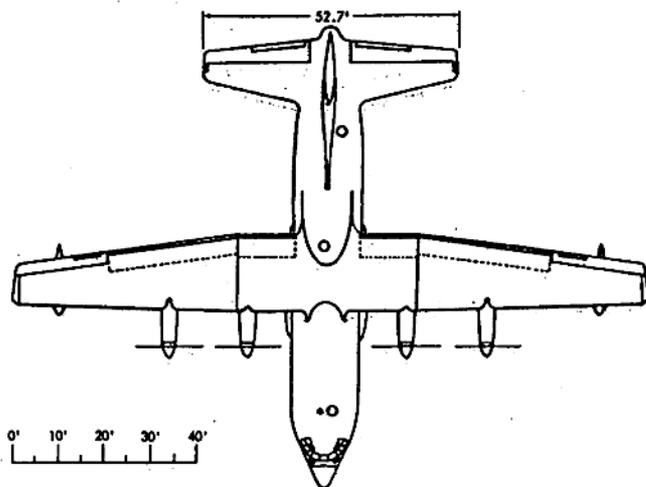


STANDARD AIRCRAFT CHARACTERISTICS

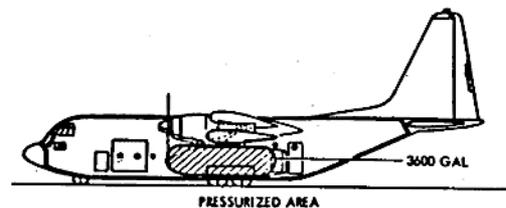
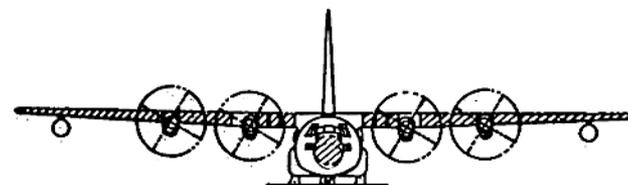
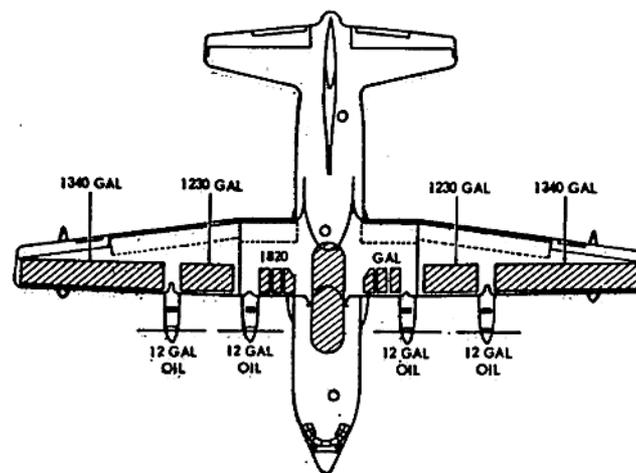
KC-130F

BUREAU OF NAVAL WEAPONS
NAVY DEPARTMENT



DESCRIPTIVE ARRANGEMENT

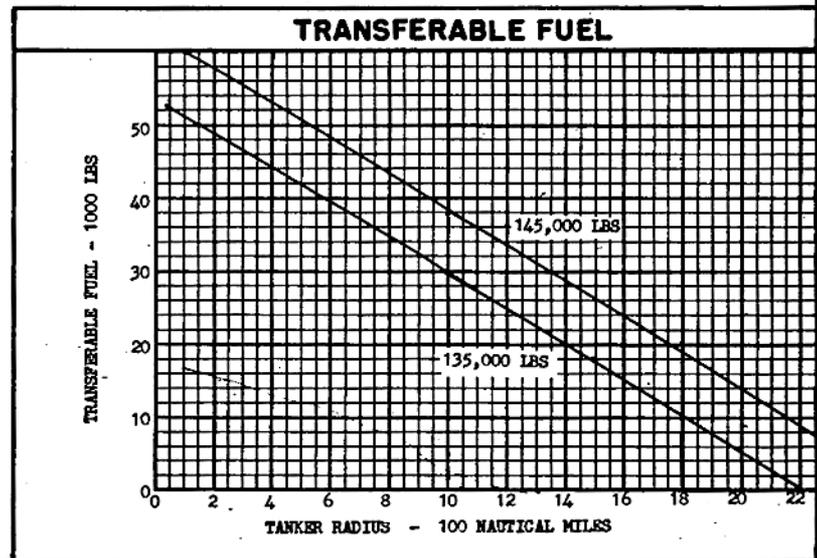
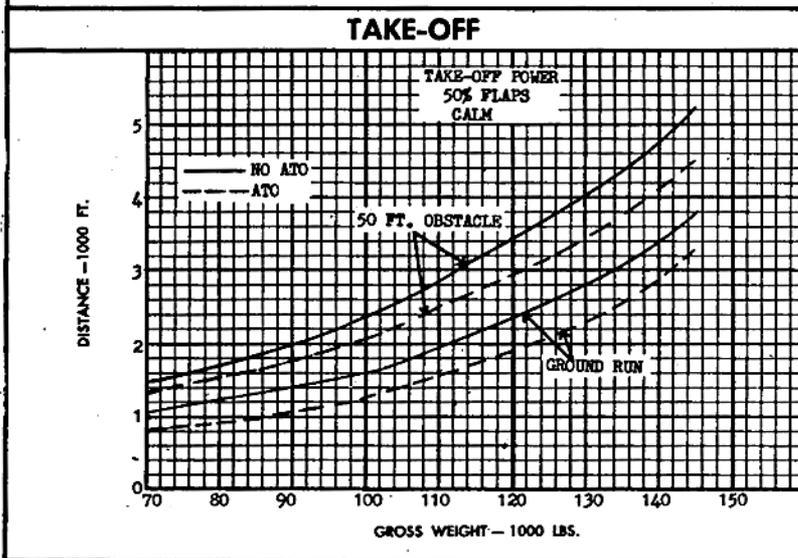
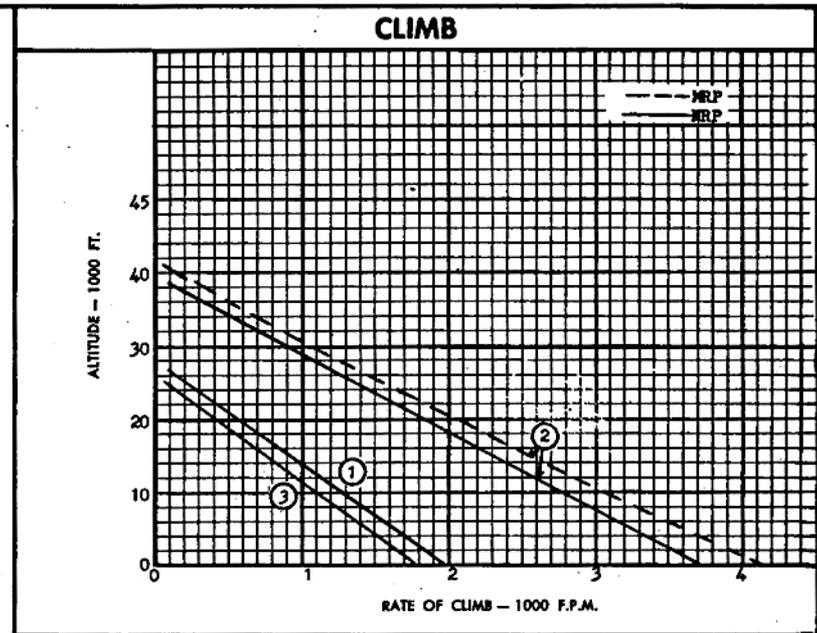
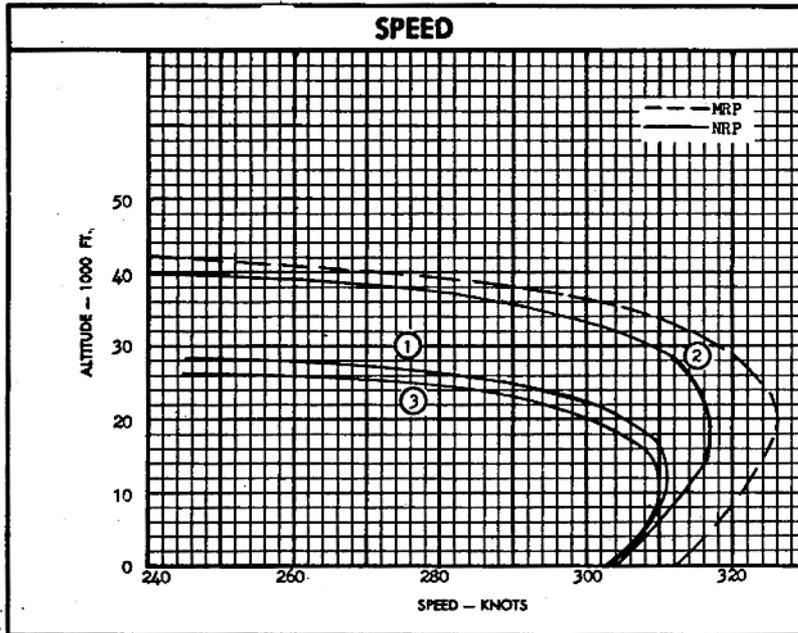
BUREAU OF NAVAL WEAPONS
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ARMAMENT AND TANKAGE

POWER PLANT	MISSION AND DESCRIPTION	WEIGHTS																																																												
<p>No. & Model (4) T56-A-7 Mfr. Allison Engine Spec No. 377F Type Axial Red. Gear Ratio 0.0739 Prop Mfr. Hamilton Standard Blade Design No. A7119C-2 Prop Dia. 13.51 No. Blades 4 Tail Pipe Fixed Area</p> <p style="text-align: center;">ATO</p> <p>No. & Model (8) 15KS-1000 Mfr. Aerojet Weight (loaded) 144 lb ea</p>	<p>AF Equip: None Mfr's Model: 282B-44A-10</p> <p>The mission of the KC-130F airplane shall be the aerial refueling of fighter and attack aircraft.</p> <p>The normal crew consists of pilot, copilot, flight engineer, navigator, radio operator and two reel operators.</p> <p>Features include integral ramp and cargo door, crew and cargo compartment pressurization, ground and in-flight air conditioning, thermal de-icing system for wing and empennage leading edge, E-4 autopilot, two detachable pods and pylons with an in-flight refueling system direct from fuselage tank to the pods, a transfer system (wing tank to fuselage tank), a fuel jettisoning system, a ground defueling system, and single point refueling.</p>	<table border="1"> <thead> <tr> <th>Loading</th> <th>Lb</th> <th>L.F.</th> </tr> </thead> <tbody> <tr> <td>Empty</td> <td>66,220(A)</td> <td></td> </tr> <tr> <td>Basic</td> <td>70,875*</td> <td></td> </tr> <tr> <td>Design</td> <td>135,000</td> <td>3.0</td> </tr> <tr> <td>Max T.O. (Overld)</td> <td>145,000</td> <td>3.0</td> </tr> <tr> <td>Max T.O. (Norm)</td> <td>135,000</td> <td>3.0</td> </tr> <tr> <td>Max Land</td> <td>135,000</td> <td></td> </tr> </tbody> </table> <p>*Includes inflight refueling installation</p>	Loading	Lb	L.F.	Empty	66,220(A)		Basic	70,875*		Design	135,000	3.0	Max T.O. (Overld)	145,000	3.0	Max T.O. (Norm)	135,000	3.0	Max Land	135,000																																								
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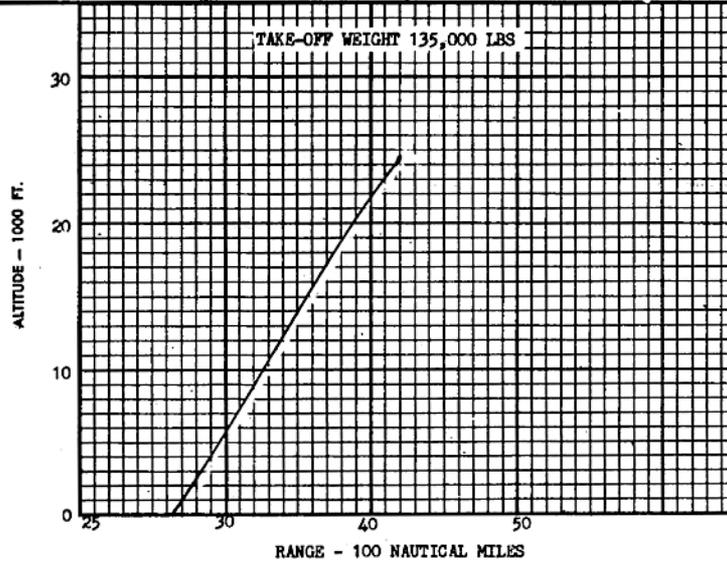
PERFORMANCE SUMMARY				
TAKE-OFF LOADING CONDITION		(1) Inflight Refueling Normal	(3) Inflight Refueling (Overload)	
TAKE-OFF WEIGHT	lb.	135,000	145,000 (A)	
Fuel Internal/external (JP-5) (B)	lb./lb.	61843/0	71720/0	
Payload (C)	lb.	46662	55546	
Wing loading	lb./sq. ft.	77.3	83.1	
Stall speed—power-off (D)	kn.	96	99	
Take-off run at S.L.— calm /JATO	ft.	3100/2600	3740/3290	
Take-off run at S.L.— 89.6°F	ft.	3760	4500	
Take-off to clear 50 ft.— calm/JATO	ft.	4420/3795	5200/4520	
Max. speed/altitude (E)	kn./ft.	311/12000	310/10000	
Rate of climb at S.L. (E)	fpm.	1957	1752	
Time: S.L. to 20,000 ft. (E)	min.	17.5	21.0	
Time: S.L. to S.C. ft. (E)	min.	45.0	45.0	
Service ceiling (100 fpm) (E)	ft.	26750	24750	
Combat range (F)	n.mi.	4652	5232	
Average cruising speed	kn.	274	273	
Cruising altitude(s)	ft.	31000	29800	
Combat radius/mission time	n.mi./hr.	300/3.41	300/3.54	
Average cruising speed	kn.	272/263	276/263	
Cruising Altitude(s)	ft.	25000/38400	25750/38000	
COMBAT LOADING CONDITION		(2) 60% Mission Fuel No Payload	(4) 60% Mission Fuel No Payload	
COMBAT WEIGHT (G)	lb.	82266	82984	
Engine power		MILITARY	MILITARY	
Fuel	lb.	9109	9704	
Combat speed/combat altitude	kn./ft.	324/25000	324/25000	
Rate of climb/combat altitude	fpm/ft.	1561/25000	1504/25000	
Combat ceiling (1500 fpm)	ft.	35750	35300	
Rate of climb at S.L.	fpm.	4149	4095	
Max. speed at S.L.	kn.	311	311	
Max. speed/altitude	kn./ft.	326/22000	325/21500	
LANDING WEIGHT (H)	lb.	75550	75743	
Fuel	lb.	2393	2463	
Stall speed—power-off/ V_{MRP} (I)	kn./kn.	71/60	71/60	
Landing distance—ground roll/over 50 ft. obst (I)	ft./ft.	1700/2520	1700/2535	
Performance Basis: U.S.A.F. C-130E Flight Tests; Calculated Data Based on Category II Performance Tests Range and Radius are Based on Flight Test Fuel Consumption not Increased by 5%		NOTES (A) Maximum Fuel Loading (B) Payload Fuel Included (C) Fuel available for transfer (D) 100% Flaps (E) NRP (F) All available fuel less reserve (G) Equipped Wt. empty + 60% Mission Fuel (H) Refueling Radius Mission (I) No Reverse Thrust		



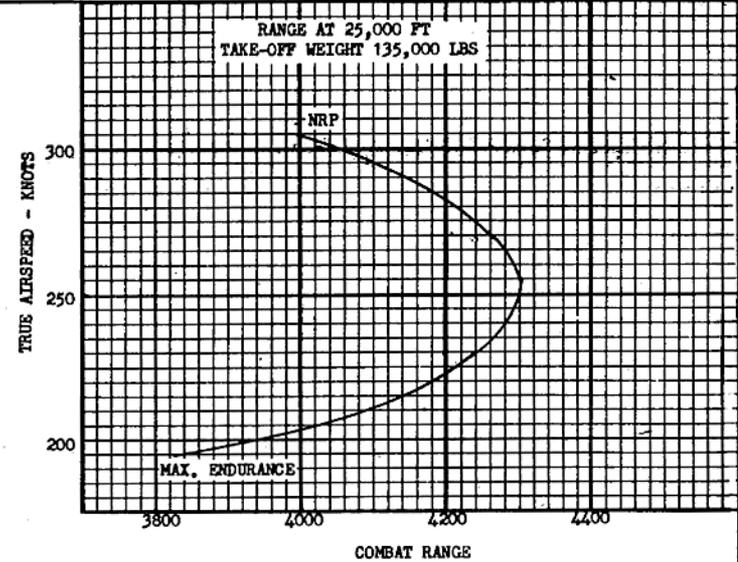
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SERVICE

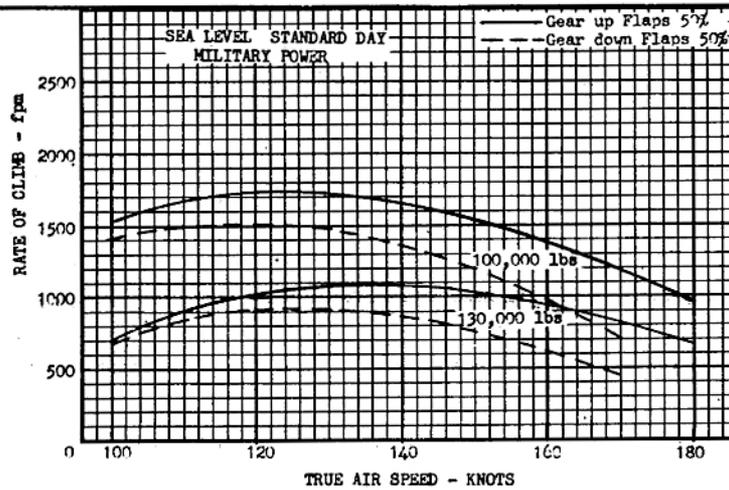
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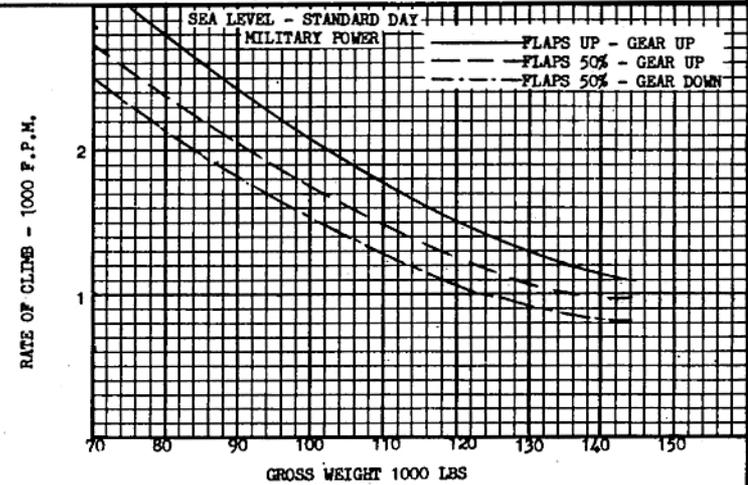
COMBAT RANGE



CLIMB ONE ENGINE INOPERATIVE



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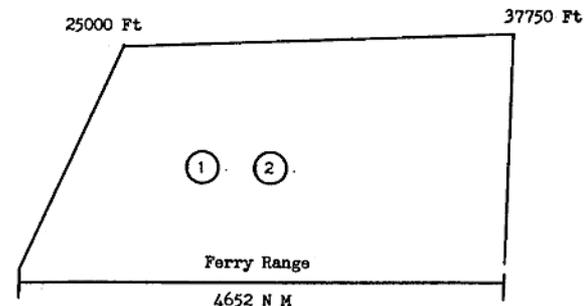
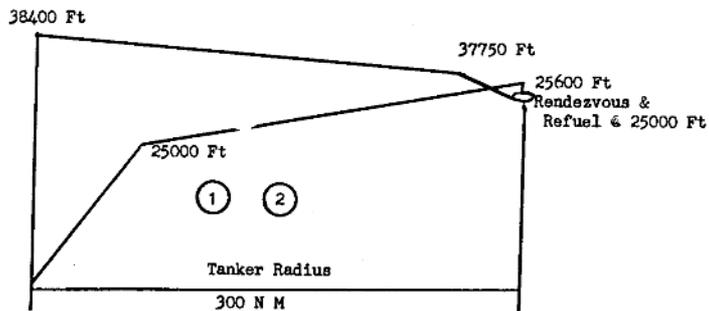
NOTES

INFLIGHT REFUELING MISSION

Warm-up, take-off, climb on course to cruise ceiling at normal power, cruise out at cruise ceiling at speeds for maximum range to rendezvous area, rendezvous and refuel receiver aircraft at 25,000 feet. Climb on course from refueling altitude to cruise ceiling at normal power, cruise back to home base at cruise ceiling at speeds for maximum range. Range free allowance are 5 minutes at normal power for warm-up and take-off, plus one hour at speeds for maximum endurance at refueling altitude for rendezvous and refueling of receiver aircraft, plus fuel for 30 minutes at speeds for maximum endurance at sea level and 5 percent of mission fuel (fuel not available for transfer) for reserve.

TANKER FERRY RANGE MISSION

Warm-up, take-off, climb on course to cruise ceiling at normal power, cruise out at cruise ceiling at speeds for maximum range until only reserve fuel remains and land. Range free allowances are 5 minutes of normal power for warm-up, and take-off plus fuel for 30 minutes at speeds for maximum endurance at sea level and 5 percent of initial fuel for reserve.



NOTE: External Refueling Tanks and Internal Tanks are Removable. Removable of Refueling Equipment Converts KC-130F (CV-1) to C-130F (CV-1U)

○ LOADING CONDITION COLUMN NUMBER