

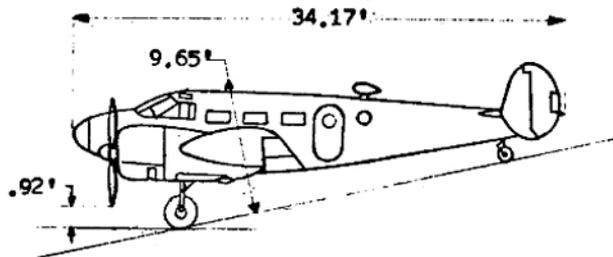
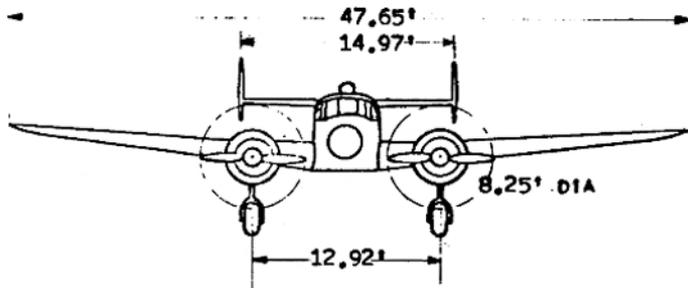
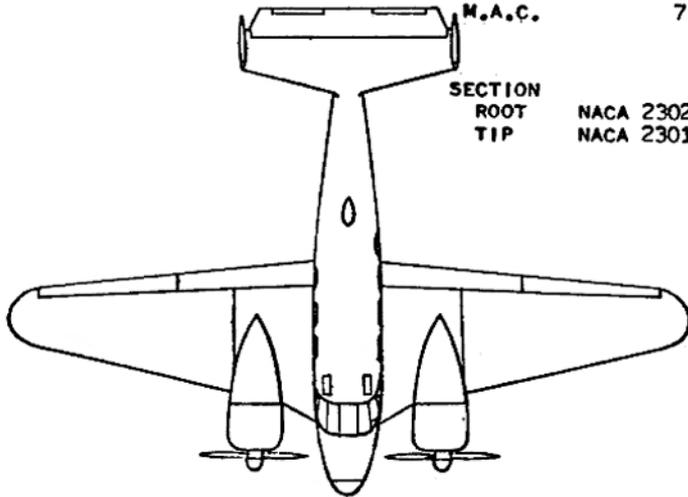
STANDARD AIRCRAFT CHARACTERISTICS

TC-45J

BUREAU OF NAVAL WEAPONS
NAVY DEPARTMENT

WING
AREA 349 SQ FT
ASPECT RATIO 6.5
M.A.C. 7.3 FT

SECTION
ROOT NACA 23020 (MOD)
TIP NACA 23012 (MOD)

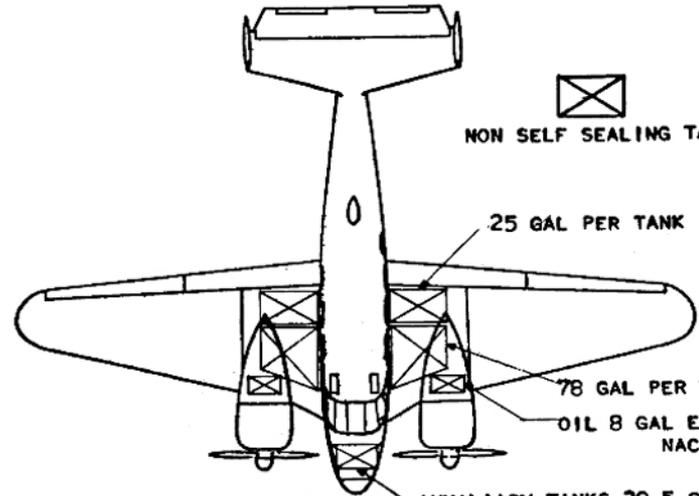


DESCRIPTIVE ARRANGEMENT

BUREAU OF NAVAL WEAPONS
NAVY DEPARTMENT



NON SELF SEALING TANKS

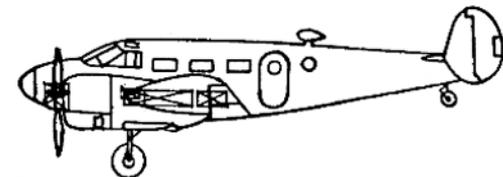
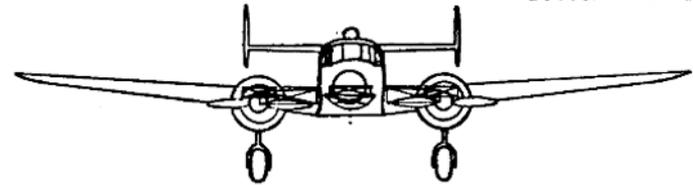


25 GAL PER TANK

78 GAL PER TANK

OIL 8 GAL EACH
NACELLE

AUXILIARY TANKS 38.5 GAL OR
47 GAL
TOP 11.5 GAL OR 20 GAL
BOTTOM 27 GAL

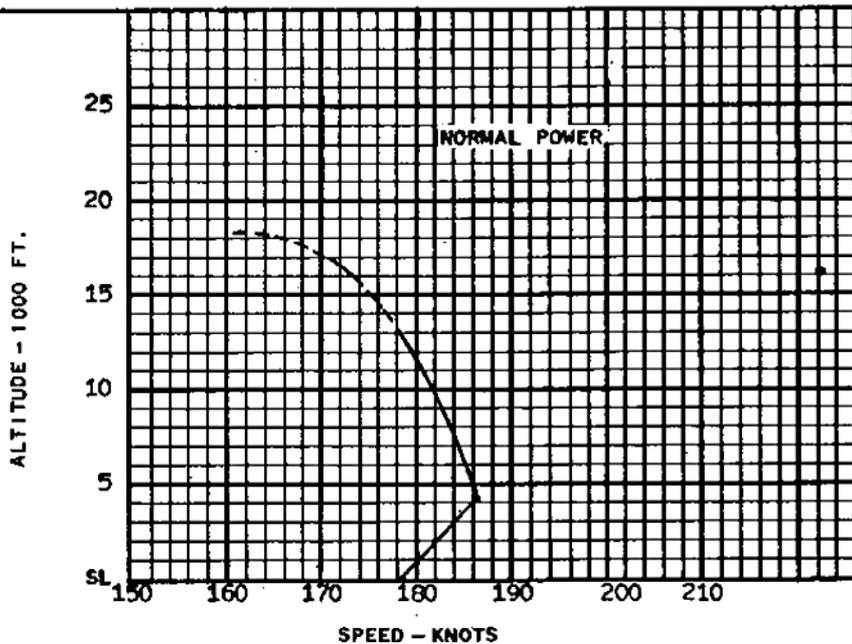


ARMAMENT AND TANKAGE

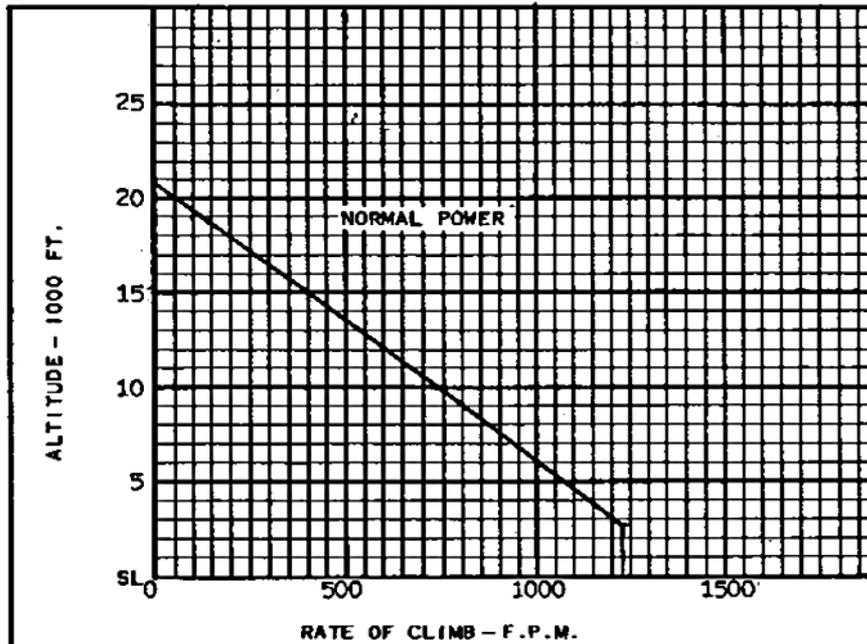
POWER PLANT		MISSION AND DESCRIPTION		WEIGHTS																																															
No. & Model.....(2)R-985-AN-14B MFR..... Pratt and Whitney Engine Spec. No. AN-2035 Superch 1 Stage, 1 Speed Reduction (Gear (Ratio) D.D. Prop. MFR Hamilton Std. Blade Design No 6531A-15		The principal mission of the SNB-5 is transportation of personnel. The aircraft is a twin engine, low wing, land monoplane of all metal construction. Power is provided by two Pratt and Whitney reciprocating engines. The aircraft is equipped with a tail wheel tricycle landing gear. The main landing gear and wing flaps are electrically operated. Brakes are hydraulically actuated. The fuselage is divided into four compartments. Three compartments are accessible in flight. These are: The pilots compartment, Cabin compartment, and rear compartment. The nose compartment is not accessible.		<table border="1"> <thead> <tr> <th>LOADING</th> <th>LBS</th> <th>L.F.</th> </tr> </thead> <tbody> <tr> <td>Empty.....</td> <td>6176</td> <td></td> </tr> <tr> <td></td> <td>6241(1)</td> <td></td> </tr> <tr> <td>Basic</td> <td>6355</td> <td></td> </tr> <tr> <td></td> <td>6380(1)</td> <td></td> </tr> <tr> <td>Design</td> <td>8730</td> <td>3.44</td> </tr> <tr> <td>Max. T.O.(Overload)</td> <td>8730</td> <td>3.44</td> </tr> <tr> <td>Max. Lnd.(Normal)</td> <td>8730</td> <td></td> </tr> <tr> <td>Max. Lnd.</td> <td>8300</td> <td></td> </tr> </tbody> </table>			LOADING	LBS	L.F.	Empty.....	6176			6241(1)		Basic	6355			6380(1)		Design	8730	3.44	Max. T.O.(Overload)	8730	3.44	Max. Lnd.(Normal)	8730		Max. Lnd.	8300																			
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PERSONELL Crew 2 Pilot Co-Pilot Passengers 3 Passengers 2(1)		Note (1) - Weights and Personnel - Auxiliary Fuel carried in nose compartment		ELECTRONICS VHF RECEIVER-TRANSMITTER AN/ARC-5 UHF COMMAND AN/ARC-27 MARKER BEACON AN/ARN-8 OMNI RANGE RECEIVER... AN/APN-30 RADAR ALTIMETERAN/APN-1 LOW FREQ DIR FINDER...AN/ARN-1/8 INTER PHONE SYSTEM..AN/ARC-35/36																																															
DIMENSIONS Wing Span 47.7 Ft Area 349 Sq Ft Incidence (Root)..... 3° 55' (Tip) 1° Dihedral..... 6° Sweepback (25% Chord).... 8° 23" Length 34.2 Ft Height 9.65 Ft Tread 12.9 Ft Prop. Grnd. Clearance .. .916 Ft																																																			

PERFORMANCE SUMMARY					
TAKE-OFF LOADING CONDITION		PERSONNEL TRANS- PORT (1) (NORMAL FUEL)	PERSONNEL TRANS- PORT (2) (MAXIMUM FUEL)		
TAKE-OFF WEIGHT	LB.	8730	8730		
FUEL INTERNAL	LB.	1236	1510		
PAYLOAD	LB.	639	340		
WING LOADING	LB./SQ.FT.	25.0	25.0		
STALL SPEED - POWER-OFF	KN.	64	64		
TAKE-OFF RUN AT S.L. - CALM	(A) FT.	1857	1857		
TAKE-OFF RUN AT S.L. - KN. WIND	(A) FT.	855/30	855/30		
TAKE-OFF TO CLEAR 50 FT. - CALM	(A) FT.	2238	2238		
MAX. SPEED/ALTITUDE	(B) KN./FT.	186/4300	186/4300		
RATE OF CLIMB AT S.L.	(B) FPM.	1220	1220		
TIME: S.L. TO 5000 FT.	(B) MIN.	4	4		
TIME: S.L. TO 10000 FT.	(B) MIN.	10	10		
SERVICE CEILING (100 FPM.)	(B) FT.	19300	19300		
COMBAT RANGE	N.MI.	881	1120		
AVERAGE CRUISING SPEED	KN.	120	120		
CRUISING ALTITUDE(S)	FT.	5000	5000		
COMBAT RADIUS/MISSION TIME	N.MI./HR.	395/6.7	511/8.7		
AVERAGE CRUISING SPEED	KN.	120	120		
COMBAT LOADING CONDITION					
COMBAT WEIGHT	LB.	8236	8126		
ENGINE POWER		MAXIMUM	MAXIMUM		
FUEL	LB.	742	906		
COMBAT SPEED/COMBAT ALTITUDE	KN./FT.	189/5000	189/5000		
RATE OF CLIMB/COMBAT ALTITUDE	FPM./FT.	1240/5000	1270/5000		
COMBAT CEILING (500 FPM.)	FT.	15300	15800		
RATE OF CLIMB AT S.L.	FPM.	1480	1510		
MAX. SPEED AT S.L.	KN.	187	187		
MAX. SPEED/ALTITUDE	KN./FT.	192/1400	192/1400		
LANDING WEIGHT	LB.	6980	7019		
FUEL	LB.	125	139		
STALL SPEED - POWER-OFF/APPR. POWER	KN./KN.	58/48	58/48		
DIST. - GRD ROLL/OVER 50 FT. OBS.	FT./FT.	530/1248	538/1255		
NOTES: A. Take-Off Power No Flaps B. Normal Rated Power C. Power Off - 100% Flaps Performance Basis: Flight Test Data 10/24/52					

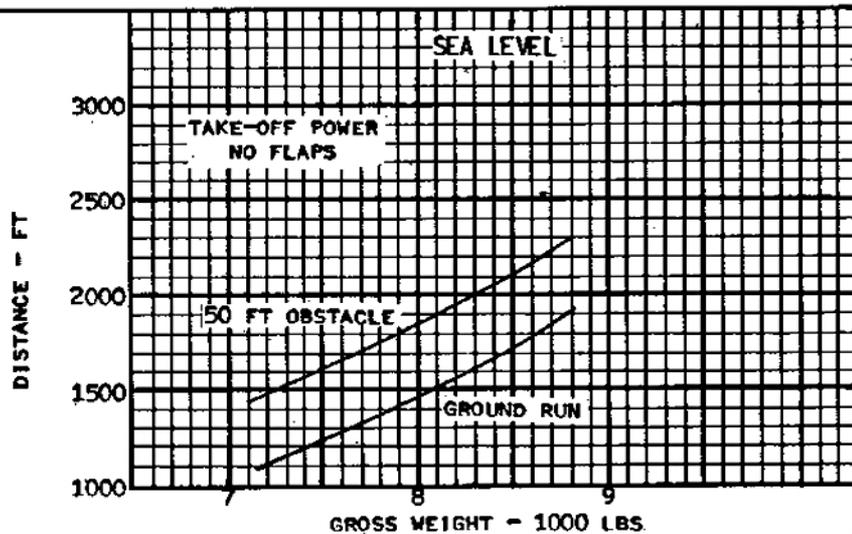
SPEED



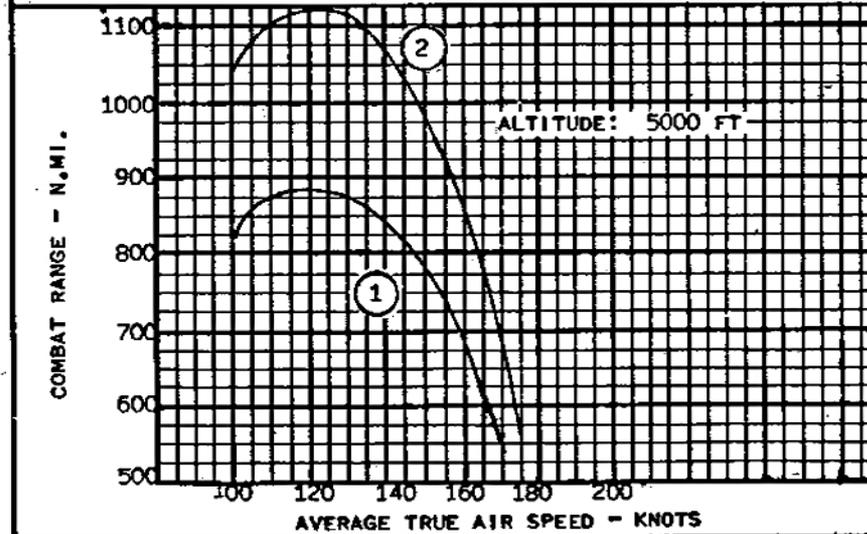
CLIMB



TAKE-OFF



COMBAT RANGE



○ LOADING CONDITION CODE NUMBER

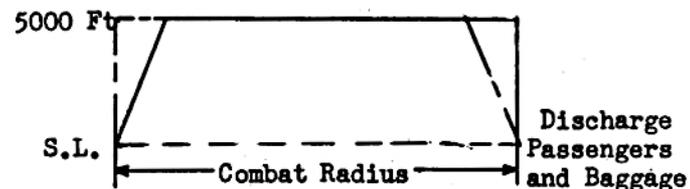
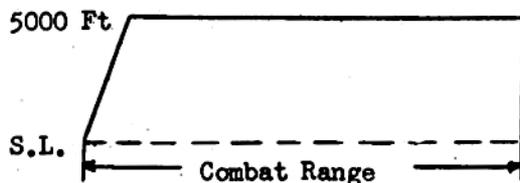
NOTES

RADIUS MISSION

Warm-up, Take-off, Climb on course to 5000 feet at Normal Power, cruise out at long range speeds to remote base, land and discharge passengers and baggage. Without refueling, warm-up, take-off, climb on course to 5000 feet at Normal Power and return at long range speeds. Range free allowances are 20 minutes of Normal Power for warm-up and take-off plus fuel for 30 minutes at speeds for long range at sea level and 5% of initial fuel for reserve.

RANGE MISSION

Warm-up, Take-off, Climb on course to 5000 feet at Normal Power, cruise out at long range speeds until only reserve fuel remains. Range free allowances are 10 minutes of Normal Power for warm-up and take-off, plus fuel for 30 minutes at speeds for long range at sea level and 5% of initial fuel for reserve.



⊙ LOADING CONDITION COLUMN NUMBER

TC-45J