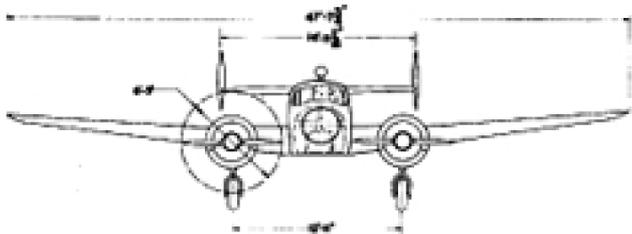
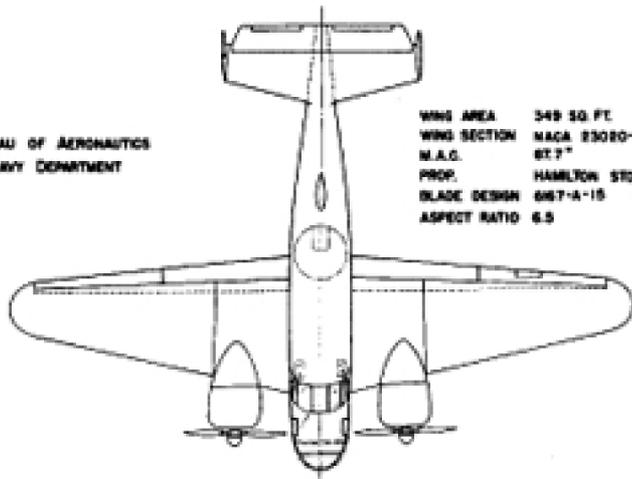


STANDARD AIRCRAFT CHARACTERISTICS
JRB-4 "EXPEDITOR"

BUREAU OF AERONAUTICS
NAVY DEPARTMENT

WING AREA 349 SQ. FT.
WING SECTION NACA 23020-2304E
M.A.C. 87.7"
PROP. HAMILTON STD.
BLADE DESIGN 6167-A-15
ASPECT RATIO 6.5



DESCRIPTIVE ARRANGEMENT

MISSION AND DESCRIPTION

Utility and personnel transport version of SNB type. Carries pilot, co-pilot and 3 to 5 passengers. Procured by Army Air Force for Navy (Navy version of AF C45-F) almost identical to SNB type except for interior furnishings. Equipped with De-icer boots and auto-pilot. Suitable for instrument flight clearance.

WEIGHTS

Load	Lbs.	LF
EMPTY.....	5900.....	
BASIC.....	6150.....	
DESIGN.....	8727.....	3.44
MAX.T.O.....	8730.....	3.44
MAX.LD.....	8400.....	

All weights are actual.

POWER PLANT

NO. & MODEL.....(2) R-985-AN-2
 MFR.....P.&W.
 SUPERCH.....1 Stage, 1 Speed
 PROP.GEAR RATIO.....D. D.
 PROP MFR.....Ham. Std.
 PROP DESIGN NO.....6187-A-15
 NO. BL./DIA.....2/8'-3"

RATINGS

	Map	WRpm	Alt
T. O.	450	2300	S. L.
Normal	400	2200	SL to 5000'

DATA FROM ENGINE SPEC.
 AE-2035

FUEL AND OIL

Gal.	No. Tanks - Location
206	4 wing
FUEL GRADE.....100/130	
FUEL SPEC.....AE-F-48	

OIL

CAPACITY (gals.).....	16
SPEC.....	AE-O-8
GRADE.....	1100-1120

ACCOMMODATIONS

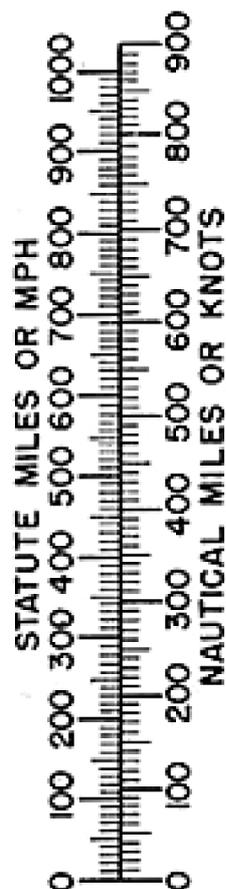
Crew.....	2
Passengers.....	5

DIMENSIONS

SPAN.....	47'-8"
LENGTH.....	34'-2"
HEIGHT.....	10'-4"
WING AREA.....	349 sq. ft.
M.A.C.....	87'-7"
TREAD.....	12'-11"

ELECTRONICS

Command.....	SCR-274-M
Compass.....	SCR-269-G
Marker beacon.....	RC-43-B



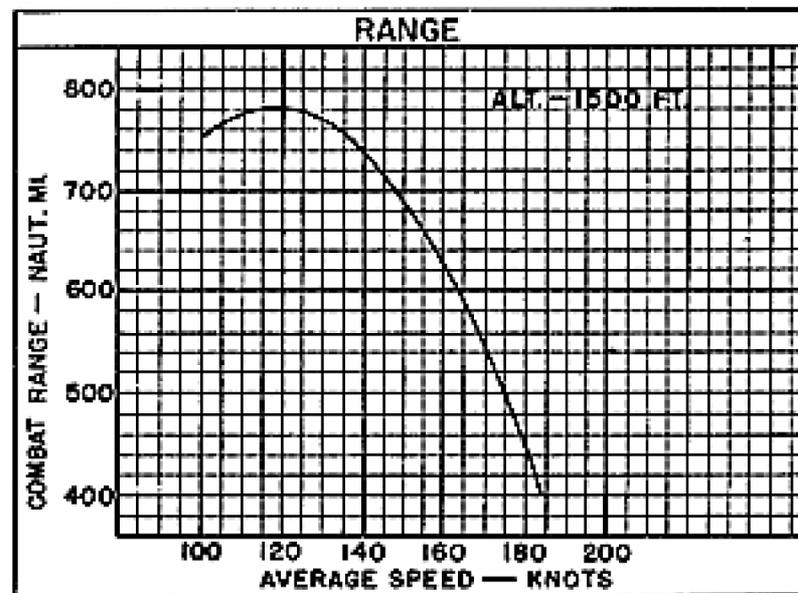
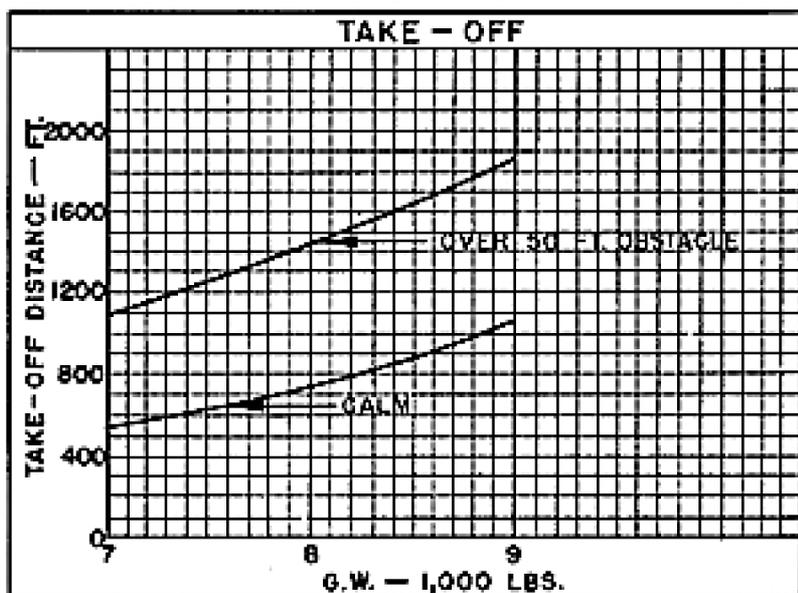
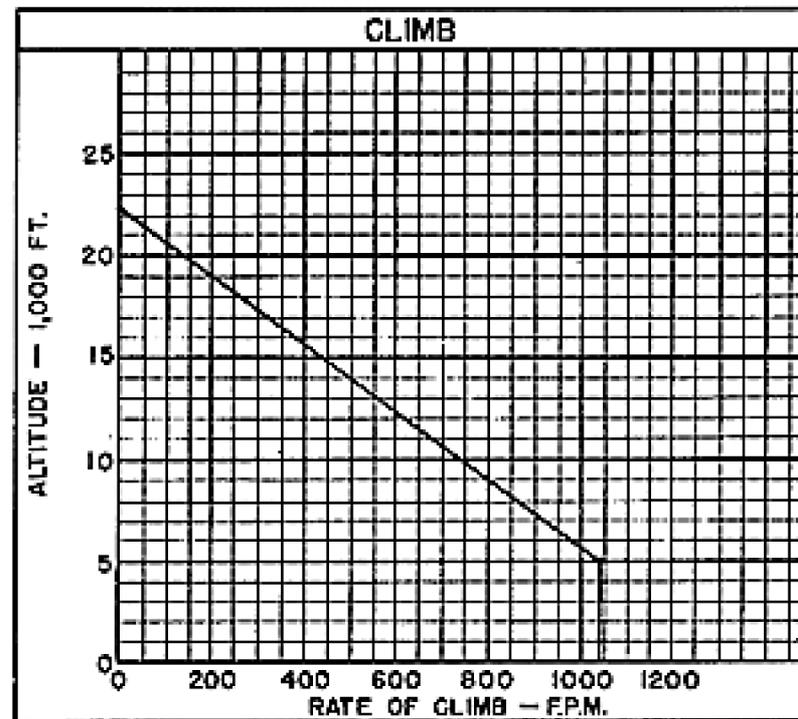
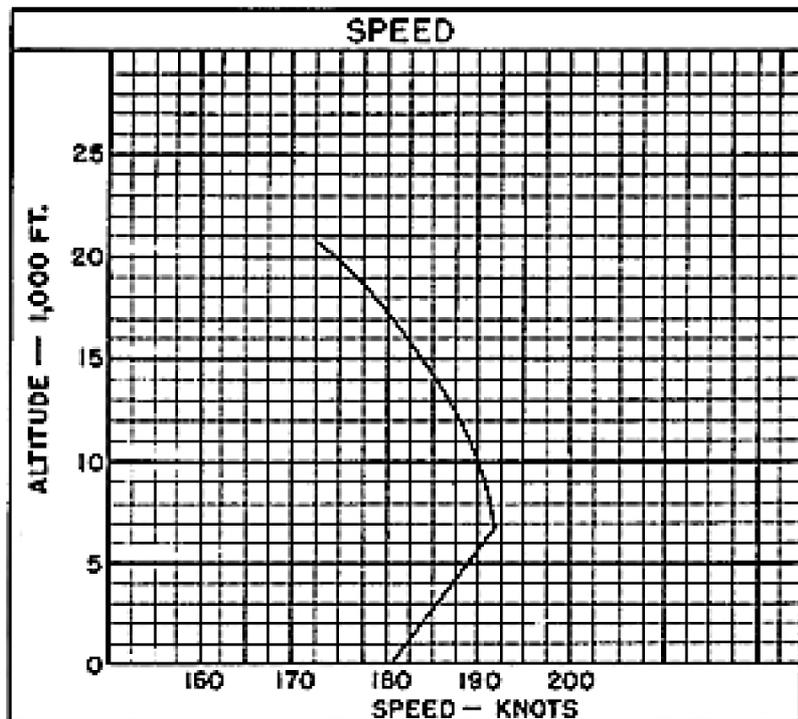
PERFORMANCE SUMMARY			
LOADING CONDITION		TRANSPORT	
TAKE-OFF WEIGHT		8730	
Fuel	lbs	1236	
Bombs	lbs		
CARGO	lbs	884	
Wing/Power Loading (A)	lbs/so.ft.lbs/ bhp	25.0/10.9	
Stall Speed--Power off	kn	68.2	
Stall Speed--Power off - No Fuel	kn	63.2	
Stall Speed--Power on	kn	55.9	
Maximum Speed/Alt (B)	kn/ft	192/6700	
Take-off distance, deck -- calm	ft	965	
Take-off distance, deck	kn. ft		
Take-off distance, Airport	ft	1740	
Rate of climb -- sea level (B)	ft/min	1040	
Service Ceiling	(B) ft	20800	
Time-to-climb 10000 ft. (B)	min	16.6	
Time-to-climb 20000 ft. (B)	min	43.4	
Combat Range/V av 1500	ft. n.mi/kn	720/122	
Combat Radius/V av	ft. n.mi/kn		
LOADING CONDITION			
GROSS WEIGHT	lbs		
Engine power			
Fuel	lbs		
Bombs/Tanks			
Max speed at sea level	kn		
Max. speed	ft. kn		
Combat speed/Alt.	kn/ft		
Rate of climb SL	ft/min		
Ceiling for 500 fpm R/C	ft		
Time-to-climb/Alt.	min/ft		

NOTES

- (A) H/F at Maximum Critical Altitude
 (B) Normal H/F

Performance is based on flight tests of the JRB-1 airplane. Range is based on engine specification fuel consumption data increased by 5%.

 All data calculated with de-icer boots installed. Removal of de-icer boots increases V_{max} by 5 knots.

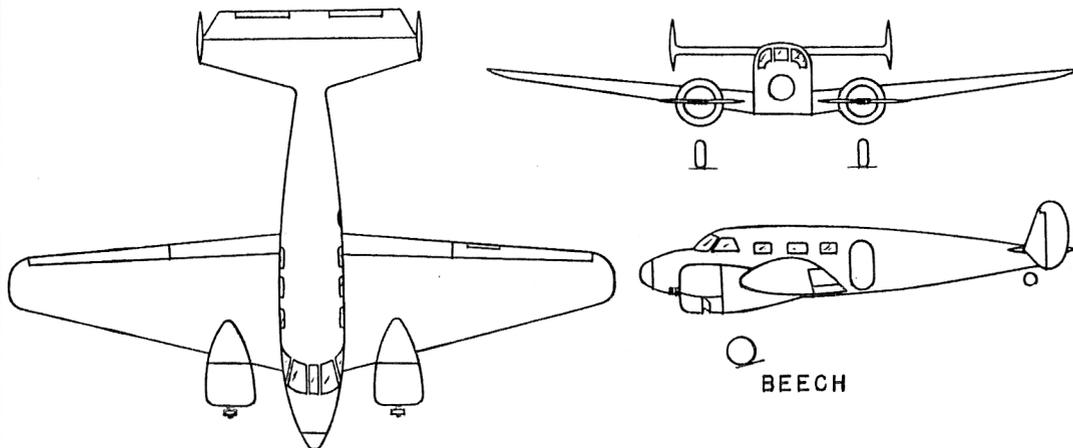


○ LOADING CONDITION COLUMN NUMBER

NOTES

Characteristics Summary

CARGO G-45F



Wing area 349 sq ft Length 34.2 ft
 Span 47.6 ft Height 9.3 ft

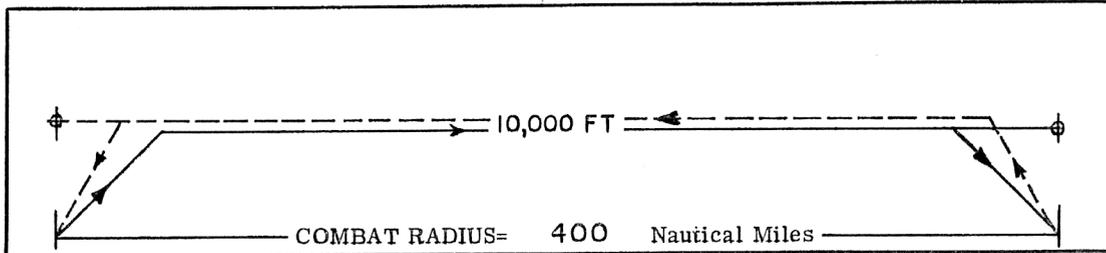
AVAILABILITY			PROCUREMENT			
Number available			Number to be delivered in fiscal years			
ACTIVE	RESERVE	TOTAL				

STATUS

1. First acceptance: March 1940
2. Production completed: August 1945
3. Navy designation: JRB-4

POWER PLANT	FEATURES	ARMAMENT
(2) R-985-AN-1 or AN-3 Pratt-Whitney ENGINE RATINGS BHP - RPM - ALT T.O: 450 - 2300 - S.L. Nor: 400 - 2200 - 5100	Crew: 2 Passengers: 5 Prop Anti-icing Boot De-icer Life Rafts (2) (prov) Auto-Pilot Max Fuel Cap: 247 gal	NONE

Characteristics Summary Basic Mission C-45F



PERFORMANCE		
COMBAT RADIUS	COMBAT RANGE	COMBAT SPEED
400 naut. mi with 1000 lb payload at 111 knots avg. in 7.5 hours.	635 ⁽²⁾ naut. mi with 1000 lb payload at 113 knots avg. in 5.8 hours.	192 knots at 10,000 ft alt, max power
		MAXIMUM SPEED
		195 knots at 3000 ft alt, max power
CLIMB	CEILING	TAKE - OFF
1110 fpm sea level, take-off weight normal power	21,000 ft 100 fpm, take-off weight normal power	ground run 1030 ft no assist — ft assisted
1870 fpm sea level, combat weight maximum power	20,700 ft 500 fpm, combat weight maximum power	over 50 ft height 1530 ft no assist — ft assisted
LOAD	WEIGHTS	STALLING SPEED
Passengers: 5	Empty..... 5850 lb Combat... 7040 lb Take - off 8800 lb limited by space	59 knots flaps down, take-off weight
Fuel: *238 gal protected 0 % droppable 0 % external 0 %		TIME TO CLIMB —

N O T E S

- PERFORMANCE BASIS:
 - Flight test
 - Fuel density: 6.0 lb/gal
 - In computing Radius and Range, specific fuel consumptions have been increased 5% to allow for variation of fuel flow in service aircraft.
 - Performance shown above for max power is based on 450 BHP @ 2300 RPM @ 3000 ft.
- Nose auxiliary fuel tank must remain full if two aft passenger seats are occupied
- REVISION BASIS: To show engine ratings and changes in "Status", "Features" and "Notes" blocks.

* Note: Majority of aircraft now have 47 gal nose tank. (Total fuel 247 gal). A few aircraft will retain 38.5 gal nose tank. (Total fuel 238.5 gal). Above performance is based on 238 gal fuel.