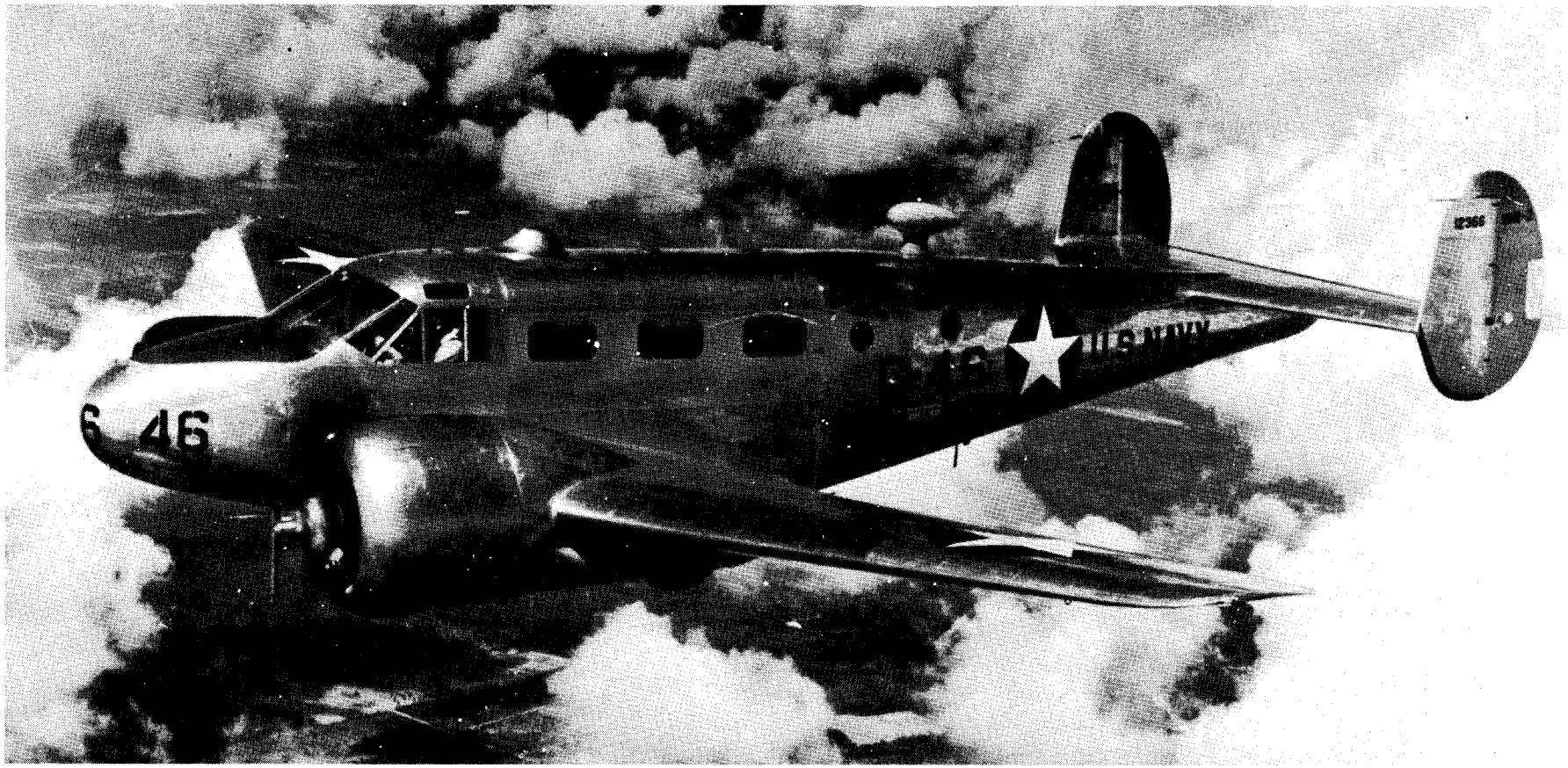
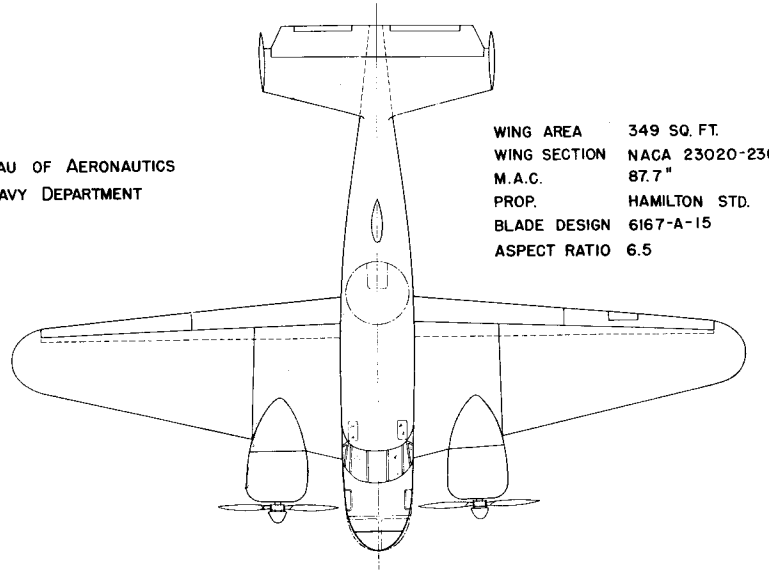
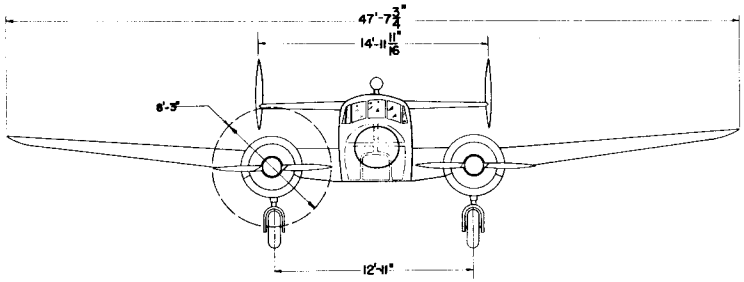


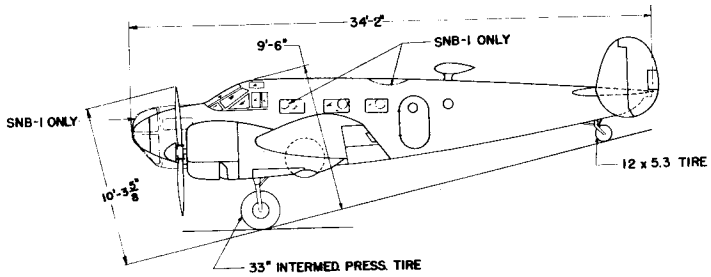
STANDARD AIRCRAFT CHARACTERISTICS
SNB-1 "KANSAN"
SNB-2,-3,-4 "NAVIGATOR"

BUREAU OF AERONAUTICS
NAVY DEPARTMENT

WING AREA	349 SQ. FT.
WING SECTION	NACA 23020-23C'?
M.A.C.	87.7"
PROP.	HAMILTON STD.
BLADE DESIGN	6167-A-15
ASPECT RATIO	6.5







DESCRIPTIVE ARRANGEMENT

MISSION AND DESCRIPTION

Originally designed for bombing training (SNB-1), its present primary mission is in multi-engine and instrument training. Also used for maintaining flight proficiency in multi-engine type and for flying classroom training of radar operators and night fighters.

Procured from Army Air Forces for Navy use; manufactured by Beech Aircraft Co. A low-wing, twin-engine, five- to seven-place conventional airplane of all-metal construction (Navy version of AF AT-11)

WEIGHTS

Loadings	Lbs.	L.F.
EMPTY	5800	
BASIC	6109	
DESIGN	8727	3.44
MAX. T.O.	8730	3.44
MAX. LAND	8300	

All weights are actual.

POWER PLANT

NO. & MODEL (2) R-985-AN-1
MFR.....P. & W.
SUPERCH.....1 Stage, 1 Speed
PROP.GEAR RATIO.....D.D.
PROP. MFR.....Ham. Std.
PROP.DES.NO.....6167A-15
NO.BL./DIA.....2/8'-3"

RATINGS

	Bhp.	@ Rpm.	@ Alt.
T. O.	450	2300	SL
NORMAL	400	2200	SL

SPEC. AN-2035

FUEL AND OIL

Gals.	No. Tanks	Location
206	4	Wing

FUEL GRADE.....91/98
FUEL SPEC.....AN-F-48

OIL

CAPACITY (Gals.).....16
SPEC.....AN-O-8
GRADE.....1100-1120

ACCOMMODATIONS

-1 Bombardier Trainer
-2 Instrument Trainer
-3 Navigator Trainer
-4 Pilot proficiency airplane

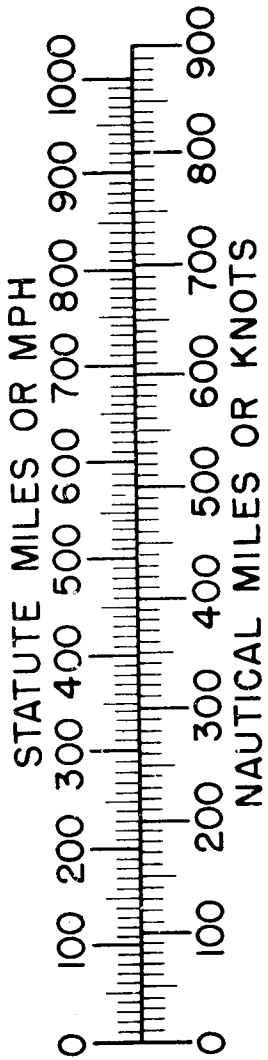
DIMENSIONS

SPAN.....47'-8"
LENGTH.....34'-2"
HEIGHT.....10'-4"
WING AREA.....349 sq. ft.
M.A.C.....87.7"
TREAD.....12'-11"

ELECTRONICS

SNB-1
COMMAND.....SCR-283

SNB-2, -3
COMMAND.....SCR-283
COMPASS.....SCR-269G
MARKER BEACON.....RC-43B



PERFORMANCE SUMMARY

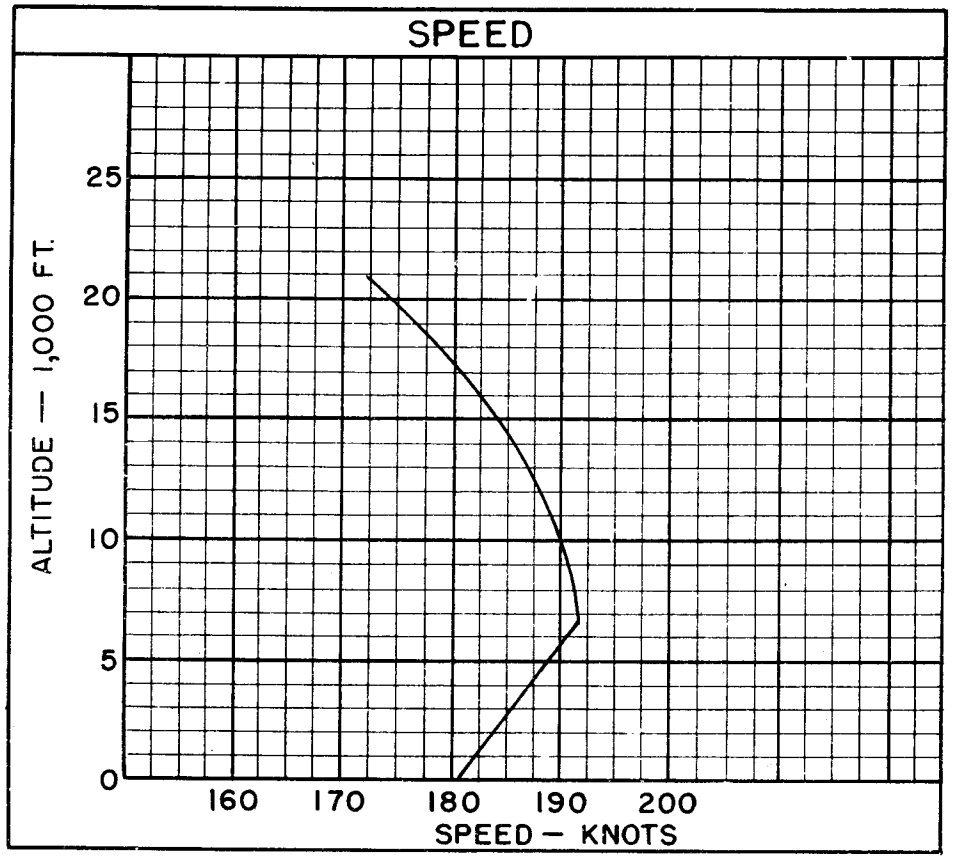
LOADING CONDITION		TRANSPORT			
TAKE-OFF WEIGHT		8730			
Fuel	lbs	1236			
Bombs	lbs				
CARGO	lbs	925			
Wing/Power Loading (A)lbs/sq.ft.lbs/	bhp	25.0/10.9			
Stall Speed--Power off	kn	68.2			
Stall Speed--Power off - No Fuel	kn	63.2			
Stall Speed--Power on	kn	55.9			
Maximum Speed/Alt (B)	kn/ft	192/6700			
Take-off Distance, deck -- calm	ft	965			
Take-off Distance, deck 25 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	780/122			
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				

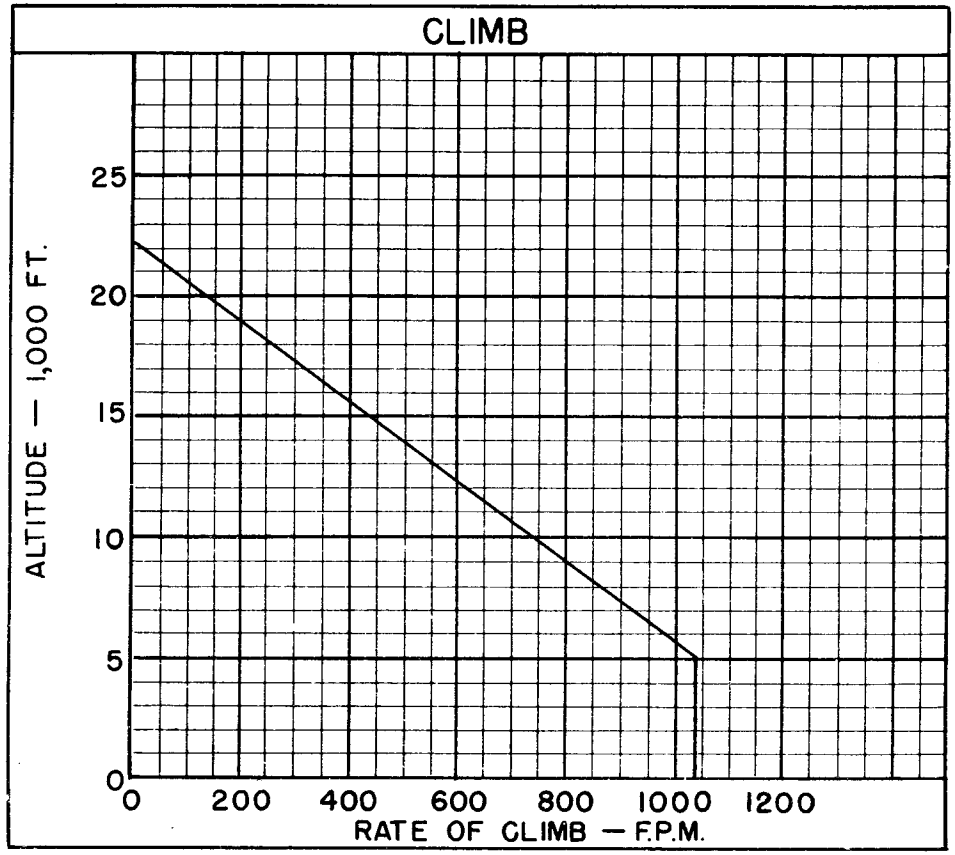
NOTES

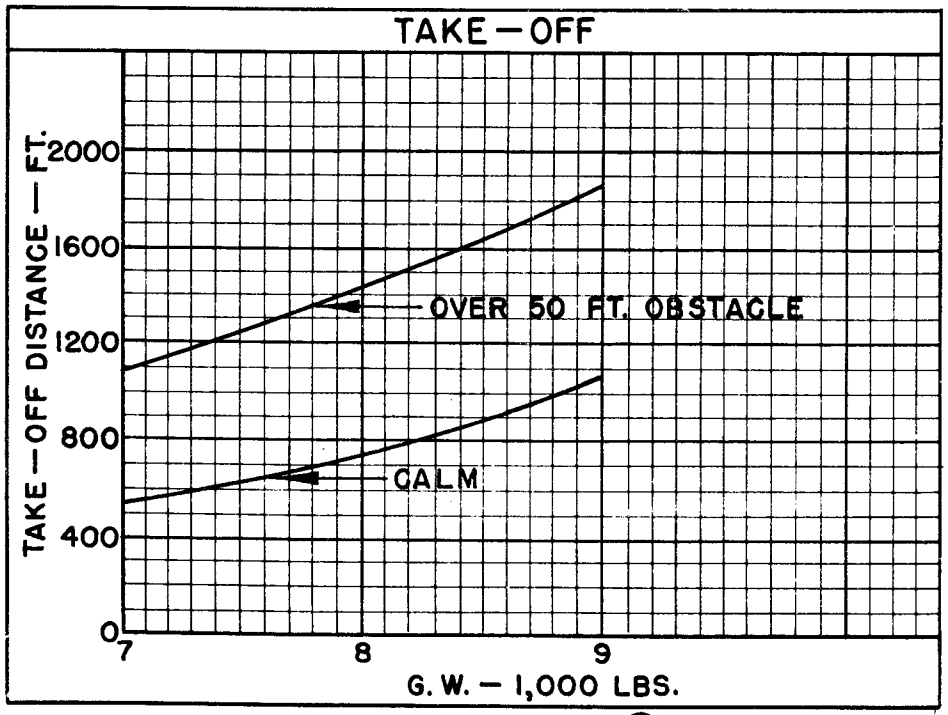
(A) BHP at Maximum Critical Altitude
(B) Normal BHP

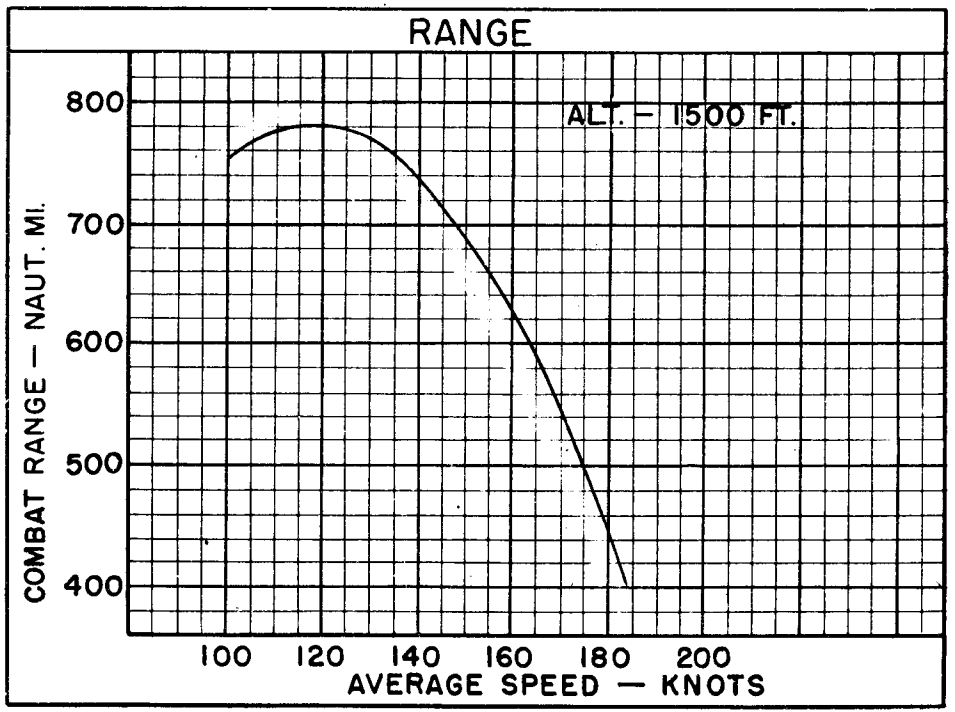
Performance is based on flight tests of the JRB-1 airplane. Range is based on engine specification fuel consumption data increased by 5%.

All data calculated with de-icer boots installed. Removal of de-icer boots increases Vmax by 5 knots.


SPEED
ALTITUDE — 1,000 FT.
0
5
10
15
20
25
160
170
180
190
200
SPEED — KNOTS


CLIMB
ALTITUDE — 1,000 FT.
0
5
10
15
20
25
0
200
400
600
800
1000
1200
RATE OF CLIMB — F.P.M.


TAKE—OFF
TAKE—OFF DISTANCE — FT.
0
400
800
1200
1600
2000
OVER 50 FT. OBSTACLE
CALM
7
8
9
G. W. — 1,000 LBS.


RANGE
ALT. — 1500 FT.
COMBAT RANGE — NAUT. MI.
400
500
600
700
800
100
120
140
160
180
200
AVERAGE SPEED — KNOTS