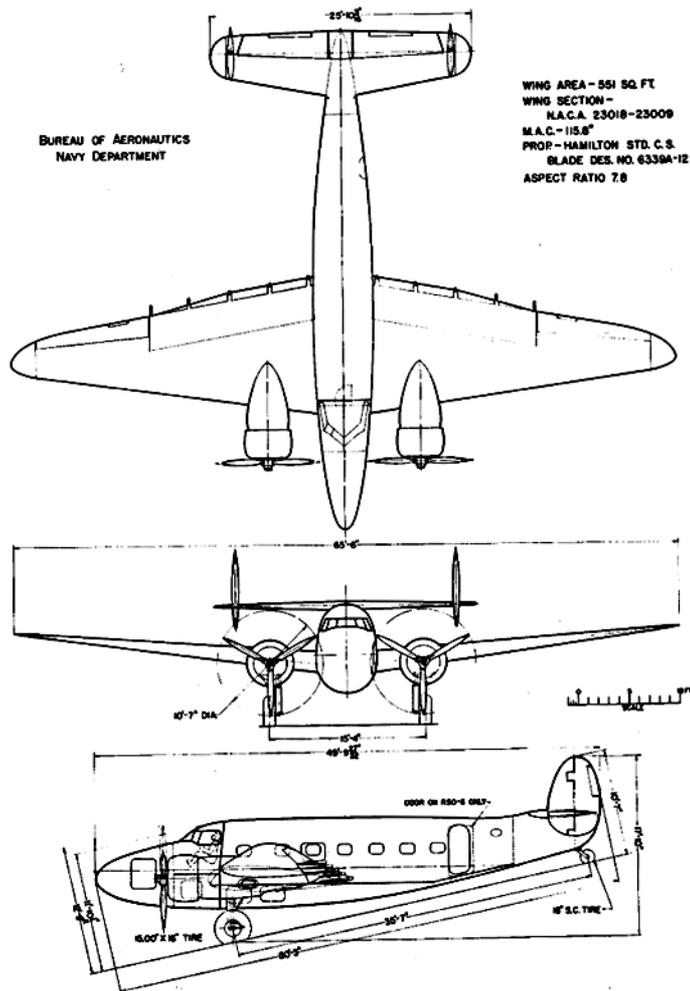


STANDARD AIRCRAFT CHARACTERISTICS
R50-6 "LODESTAR"

BUREAU OF AERONAUTICS
NAVY DEPARTMENT

WING AREA - 551 SQ. FT.
WING SECTION -
N.A.C.A. 23018-23009
M.A.C. - 115.8°
PROP. - HAMILTON STD. C. S.
BLADE DES. NO. 6339A-12
ASPECT RATIO 7.8



DESCRIPTIVE ARRANGEMENT

MISSION AND DESCRIPTION

Transport airplane compares with Air Force C-60A. It is of conventional transport design with exception of the twin tail feature. Landing gear main wheels are retractable. The commercial version, the Lodestar, has seen service on scheduled airlines and has also been widely used as an executive transport.

Hydraulically actuated Fowler flaps are fitted.

WEIGHTS

Loadings	Lbs.	L.F.
EMPTY.....	12708.....	
BASIC.....	13007.....	
DESIGN.....	18500.....	3.12
MAX.T.O.....	21500.....	2.70
MAX.LAND....	19500.....	

All weights are actual.

POWER PLANT

NO. & MODEL.....(2) R-1820-87
MFR.....Wright
SUPERCH.....1 Stage, 2 Speed
PROP.GEAR RATIO.....3:2
PROP. MFR.....Ham. Std.
PROP.DESIGN NO.....6339A-12
NO.BL./DIA.....3/10'-7"

RATINGS

	Bhp. @	Rpm. @	Alt.
T.O.	1200	2500	SL
NORMAL	1000	2300	SL to 6900'
	900	2300	15200'

SPEC. 704-E

FUEL AND OIL

Gal. - No. Tanks - Location
644.....4.....Wing

FUEL GRADE.....100/130
FUEL SPEC.....AN-F-48

OIL

CAPACITY (gal.).....40
SPEC.....AN-O-8
GRADE.....1100-1120

ACCOMMODATIONS

PASSENGERS.....12
MAX. PAYLOAD.....1714 lbs. *
CREW.....4

*With full fuel.

DIMENSIONS

SPAN.....65'-6"
LENGTH.....49'-10"
HEIGHT.....12'-9"
WING AREA.....551 sq. ft.
M.A.C.115.8"
TREAD.....15'-4"

ELECTRONICS

COMMAND.....SCR-274-N
COMPASS.....SCR-269-G
LIAISON.....SCR-287
IFF.....SCR-595-A



PERFORMANCE SUMMARY			
LOADING CONDITION		TRANSPORT	
TAKE-OFF WEIGHT	lbs	19605	
Fuel	lbs	3864	
Bombs	lbs		
PAYLOAD	lbs	1714	
Wing/Power Loading (A)	lbs/sq.ft.lbs/ bhp	35.6/10.9	
Stall Speed--Power off	kn	66.3	
Stall Speed--Power off - No Fuel	kn	59.4	
Stall Speed--Power on	kn	54.7	
Maximum Speed/Alt (B)	kn/ft	225/16300	
Take-off Distance, deck -- calm	ft	1065	
Take-off Distance, deck	kn. ft		
Take-off Distance, Airport	ft	2130	
Rate of climb -- sea level (B)	ft/min	1340	
Service Ceiling (B)	ft	27900	
Time-to-climb 10000 ft. (B)	min	7.8	
Time-to-climb 20000 ft. (B)	min	18.5	
Combat Range/V av	ft. n.mi/kn	1355/113	
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		

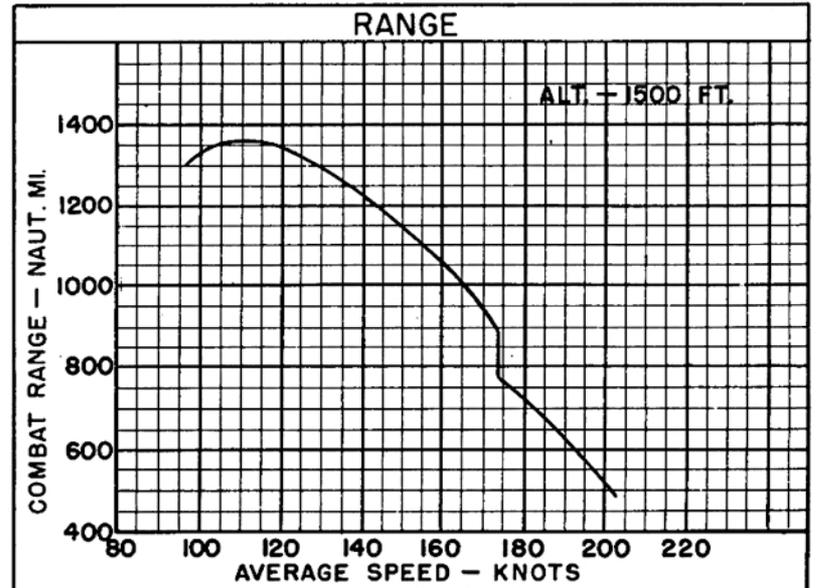
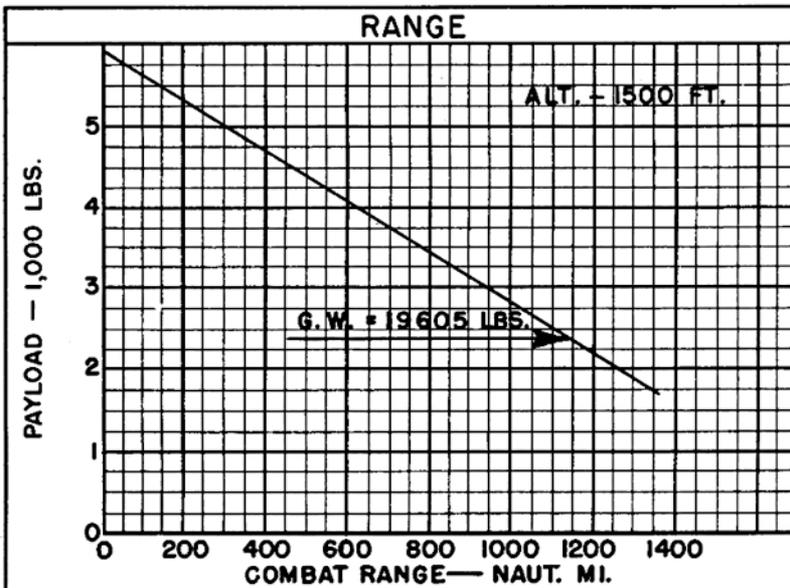
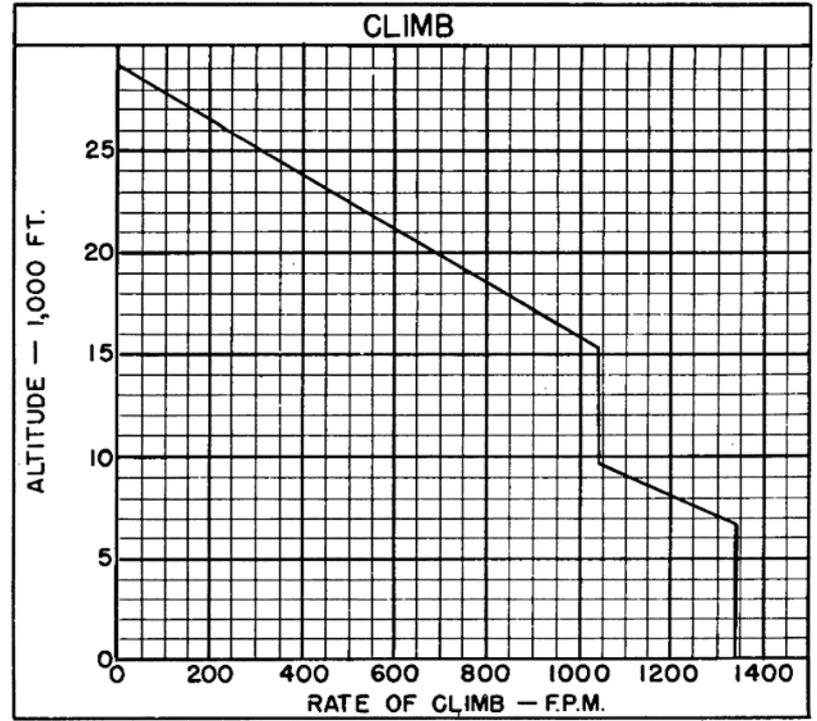
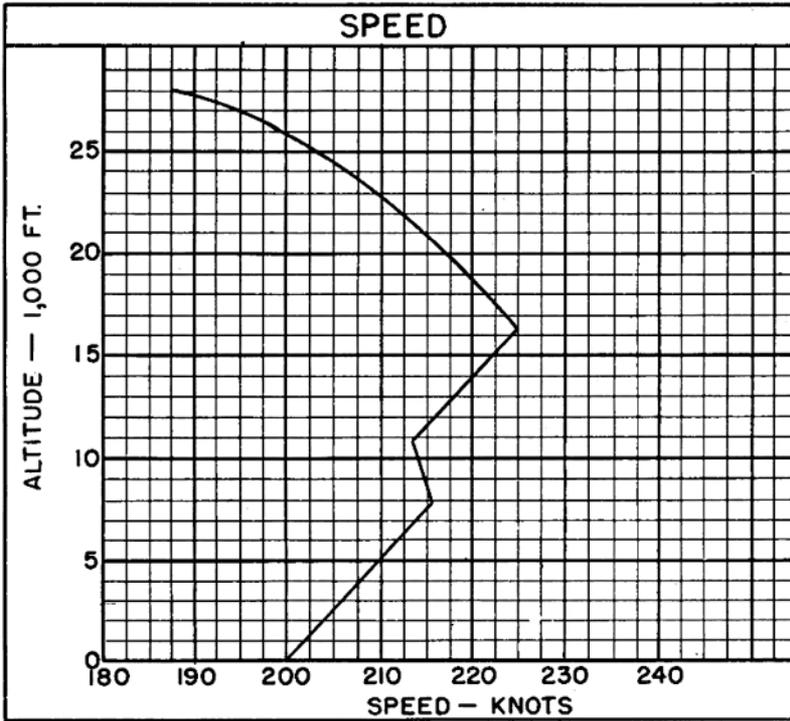
NOTES

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

Performance is based on flight test. Range is based on engine specification fuel consumption data increased by 5%.

Provisions for 12 passenger seats are incorporated.

NOTES CONTINUED ON LAST PAGE



○ LOADING CONDITION COLUMN NUMBER

NOTES

Performance includes the effect of de-icer boots. Removal of de-icer boots increases $V_{max}/S.L.$ by 4.5 knots and V_{max} combat range at 1500 ft. by 1.5%.

Performance with one engine inoperative, flaps and landing gear retracted, and propeller feathered is estimated to be:

Gross Weight.....19605#
Rate of Climb-S.L. - T.O. Power.....350 ft./min.
Service Ceiling - Normal Power.....8200 ft.