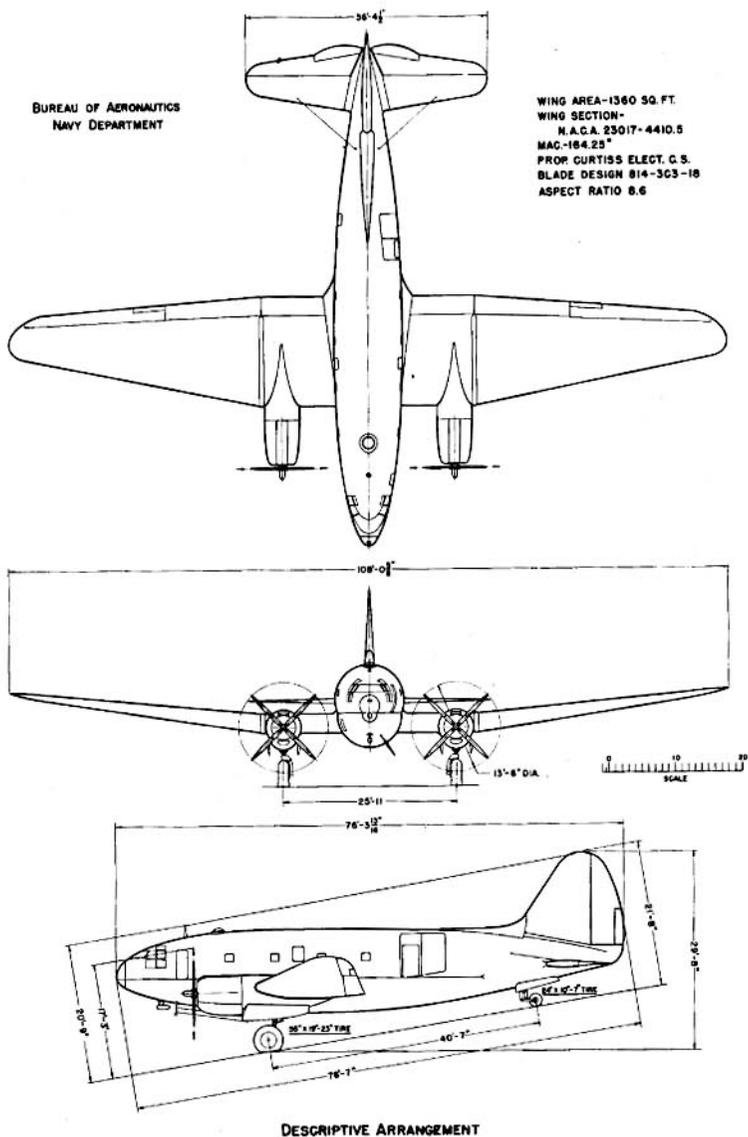


STANDARD AIRCRAFT CHARACTERISTICS  
R5C-1 "COMMANDO"

BUREAU OF AERONAUTICS  
NAVY DEPARTMENT

WING AREA-1360 SQ. FT.  
WING SECTION-  
N.A.C.A. 23017-4410.5  
MAC-184.25"  
PROP. CURTISS ELECT. G.S.  
BLADE DESIGN 814-3C3-18  
ASPECT RATIO 8.6



**MISSION AND DESCRIPTION**

The Curtiss "Commando" R5C-1 is a troop-cargo transport, similar to the Air Force C-46A, for medium-range hauls. It was used in the C.B.I. theatre by the Air Forces for over the "Hump" air lift, and extensively by the Marine Corps in the Central Pacific, North China and Japan. The airplane is of conventional design and construction. The wing carries Frise-type ailerons and rearward-moving slotted flaps hydraulically actuated. De-icer shoes may be fitted. Ailerons and elevator controls contain boosters, and rudder and elevator are fitted with spring-tabs. The fuselage cargo door is 78.5" high forward, 66.5" high aft, and 95.5" wide.

**DIMENSIONS**

SPAN.....108'-0"  
 LENGTH.....76'-4"  
 HEIGHT.....21'-8"  
 WING AREA.....1360 sq. ft.  
 M.A.C.....164.3"  
 TREAD.....25'-11"

**WEIGHTS**

Loadings	Lbs.	L.F.
EMPTY.....	30,241.....	
BASIC.....	31,828.....	
DESIGN....	46,000.....	2.67
MAX. T.O..	52,000.....	2.52
MAX.LAND..	52,000.....	

All weights are actual.

**FUEL AND OIL**

Gals. - No. Tanks - Location  
 1400.....6.....Wing  
 1600.....16.....Fuselage  
 FUEL GRADE.....100/130  
 FUEL SPEC.....AN-F-48

**OIL**

CAPACITY (gal.).....120  
 SPEC.....AN-C-E  
 GRADE.....1120-1100

**ELECTRONICS**

COMMAND.....SCR-274-N  
 or SCR-522  
 LIAISON.....SCR-287-A  
 COMPASS.....SCR-269-G  
 or AN/ARN-7  
 or MN-26-C  
 MARKER BEACON REC.....RC-43B  
 GLIDER INTERPHONE..AN/AIA-1A  
 GLIDEPATH REC.....AN/ARN-5A  
 ALTIMETER.....SCR-518  
 or AN/APN-1

**POWER PLANT**

NO. & MODEL.....(2) R-2800-51  
 MFR.....F. & W.  
 SUPERCH.....1 Stage, 2 Speed  
 PROP.C/FAR RATIO.....2:1  
 PROP. MFR.....Curtiss  
 PROP.DES.NO.....814-3C3-18  
 NO.BL./DIA.....4/13'-6"

**RATINGS**

T.O.	Bhp.	CR.m.	@Alt.
	2000	2700	S.L.
NORMAL	1600	2400	S.L.
		to	5700'
	1450	2400	13000'

SEE NOTE

SPEC NO. A-8035-D

**ORDNANCE**

Max. package size  
 90" x 60" x 80"

Max. Payload.....10,000#  
 100 psf....floor load, Fwd.  
 200 psf....floor load, aft.  
 31 psf....floor load, lower



PERFORMANCE SUMMARY				
LOADING CONDITION		(1) CARGO - TROOP TRANSPORT	(2) CARGO - TROOP TRANSPORT	(3) CARGO - TROOP TRANSPORT
TAKE-OFF WEIGHT	lbs	52000	45000	48000
Fuel	lbs	8838	8838	8838
Bombs	lbs			
PAYLOAD	lbs	10000	3000	6000
Wing/Power Loading (A)	lbs/sq.ft. lbs/bhp	38.2/17.9	33.1/15.5	35.3/16.6
Stall Speed--Power off	kn	76.6	71.2	73.6
Stall Speed--Power off - No Fuel	kn	69.8	63.8	66.5
Stall Speed--Power on	kn			
Maximum Speed/Alt (B)	kn/ft	227/16000	233/16100	236/16000
Take-off Distance, deck -- calm	ft	1900	1300	1540
Take-off Distance, deck	kn. ft			
Take-off Distance, Airport (50 ft.)	ft	4900	3160	3850
Rate of climb -- sea level (B)	ft/min	595	830	720
Service Ceiling (B)	ft	18000	20600	19300
Time-to-climb 10000 ft. (B)	min	19.2	13.3	15.5
Time-to-climb 20000 ft. (B)	min		38.6	
Combat Range/V av 1500	ft. n.mi/kn	1665/135	1960/121	1750/129
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			

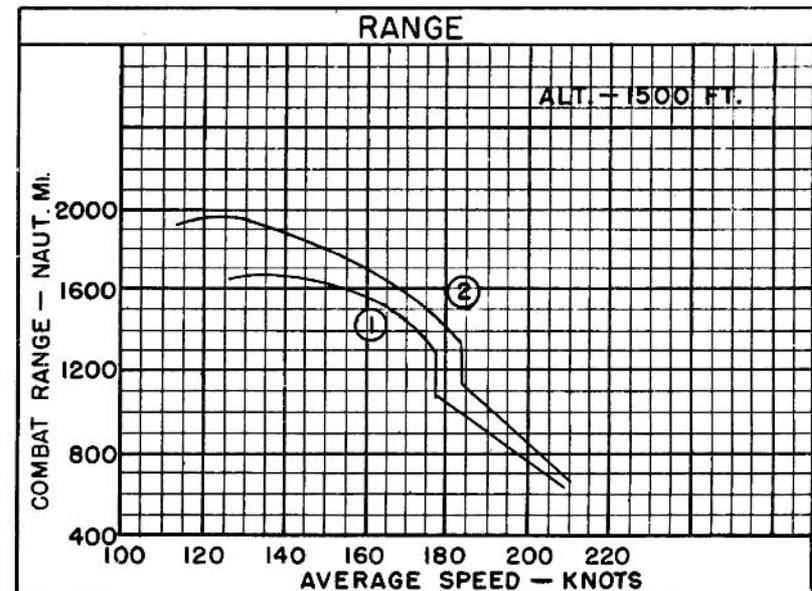
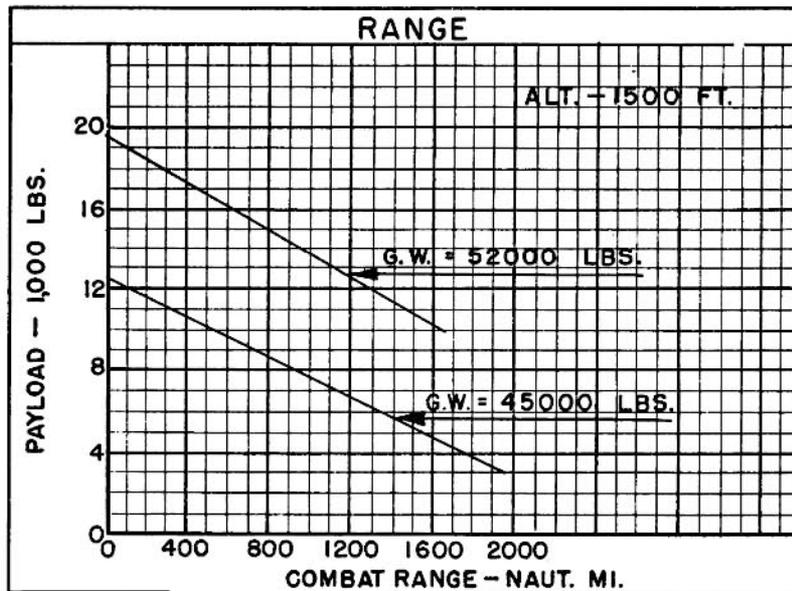
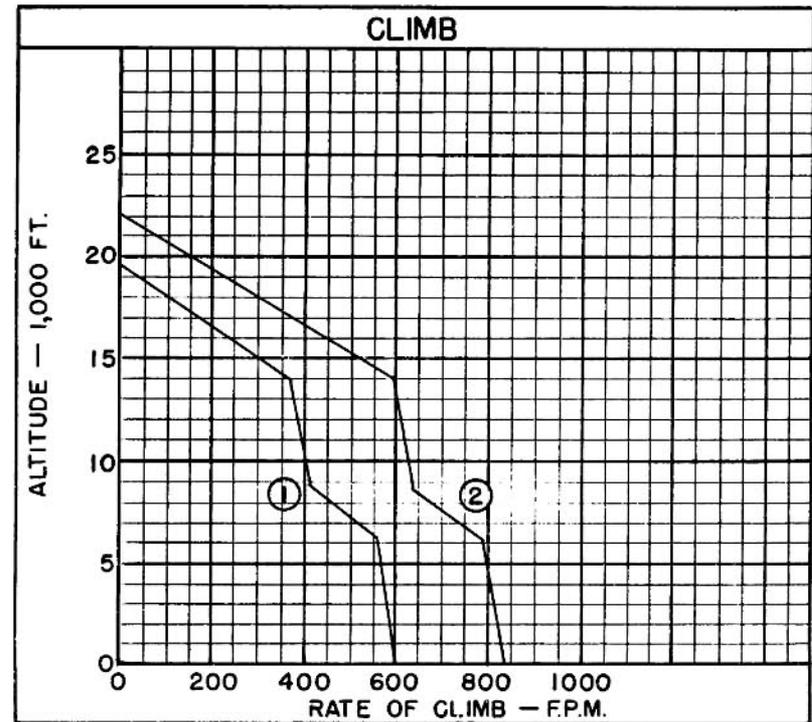
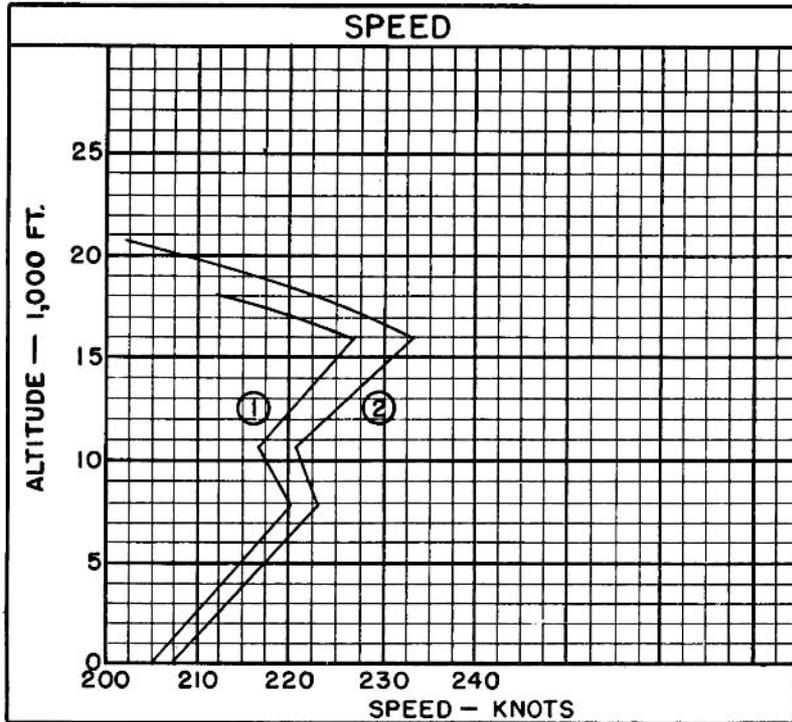
## NOTES

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

Performance is based on flight test of the R5C-1 airplane. Range is based on engine specification, fuel consumption data increased by 5%.

Maximum combat range is reduced by generator limitations which restrict operation below 1600 RPM.

Notes continued on last page.



○ LOADING CONDITION COLUMN NUMBER

# NOTES

Provisions for 40 troop seats or 24 litter patients are incorporated.

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 Performance includes the effect of de-icer boots. Removal of de-icer boots increases Vmax at ACA by 4.5 knots and maximum combat range at 1500 ft. by 3%.  
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Performance with one engine inoperative, propeller feathered, landing gear and flaps retracted is estimated to be:

Gross Weight.....50000#  
 Rate of Climb - S.L. - T.O. Power.....110 Ft./Min.  
 Service Ceiling (normal power) is 1000 ft. at 42300#

-----  
 100 gallons auxiliary fuel tanks may be installed in pairs in the main cabin, up to 1600 gallons.  
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Engine ratings from Flight Test:

	<u>Bhp.</u>	<u>Rpm.</u>	<u>Alt.</u>
T.O.	2000	2700	S.L.
Mil.	2000	2700	1500'
	1600	2700	13500'
Norm.	1600	2400	6100'
	1450	2400	14000'