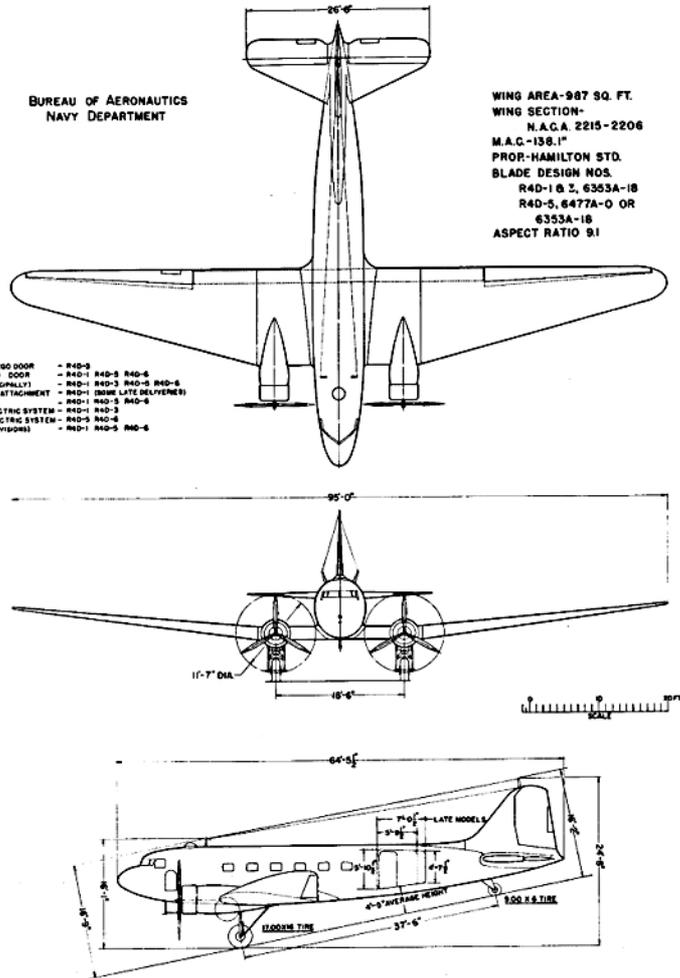


STANDARD AIRCRAFT CHARACTERISTICS
R4D-7 "SKYTRAIN"

BUREAU OF AERONAUTICS
NAVY DEPARTMENT

WING AREA-987 SQ. FT.
WING SECTION-
N.A.C.A. 2215-2206
M.A.C.-138.1"
PROP-HAMILTON STD.
BLADE DESIGN NOS.
R4D-1 & 2, 6353A-1B
R4D-5, 6477A-O OR
6353A-1B
ASPECT RATIO 9:1

NARROW CARGO DOOR - R4D-2
WIDE CARGO DOOR - R4D-1 R4D-3 R4D-6
TROOP (BRIGADIER) - R4D-1 R4D-3 R4D-5 R4D-6
GLIDER TOP ATTACHMENT - R4D-1 (WITH LATE DELIVERIES)
ASTROPHONE - R4D-1 R4D-3 R4D-6
16 VOLT ELECTRIC SYSTEM - R4D-1 R4D-3
24 VOLT ELECTRIC SYSTEM - R4D-5 R4D-6
LITTER (PROVIDORS) - R4D-1 R4D-5 R4D-6



DESCRIPTIVE ARRANGEMENT

MISSION AND DESCRIPTION

Similar to R4D-5 airplane, fitted out as an navigational trainer.

WEIGHTS

Loadings	Lbs.	L.F.
EMPTY.....	19069.....	
BASIC.....	19310.....	
DESIGN.....	29600.....	2.67
MAX.T.O.....	29000.....	2.50
MAX.LD.....	26000.....	

All weights are actual.

POWER PLANT

NO. & MODEL....(2) R-1830-90C
MFG.....P. & W.
SUPERCH.....1 Stage, 2 Speed
PROP.GEAR RATIO.....16:9
PROP MFG.....Ham. Std.
PROP DESIGN NO.....6477A-0
NO.BL./DIA.....3/11'-7"

RATINGS

	Bhp. @	Rpm. @	Alt.
T. O.	1200	2700	SL
NORMAL	1100	2550	SL-6100'
	1000	2550	12500'

SPEC. A-5144-A

FUEL AND OIL

Gals.	No. Tanks	Location
804.....	4.....	Wing
800.....	8.....	Cabin
FUEL GRADE.....100/130		
FUEL SPEC.....AN-F-48		

OIL

CAPACITY (gals.).....	58
SPEC.....	AN-O-8
GRADE.....	1100-1120

ACCOMMODATIONS

CREW.....	4
STUDENTS.....	10

DIMENSIONS

SPAN.....	95'-0"
LENGTH.....	64'-6"
HEIGHT.....	16'-9"
WING AREA.....	987 sq. ft.
M.A.C.....	138.1"
TREAD.....	18'-6"

ELECTRONICS

COMMAND.....	SCR-()-183
LIAISON.....	SCR-187-A
COMPASS.....	SCR-280-A
	or SCR-269-G
MARKER BEACON REC....	RC-39()
IFF.....	SCR-595-()
	or SCR-695-()



PERFORMANCE SUMMARY				
LOADING CONLTION		(1) Navigational Trainer	(2) Navigational Trainer	
TAKE-OFF WEIGHT		29000	26000	
Fuel	lbs	4824	4824	
Bombs	lbs			
Payload	lbs	3728	728	
Wing/Power Loading (A)	lbs/sq.ft. lbs/bhp	29.4/13.2	26.3/11.8	
Stall Speed--Power off	kn	69.1	65.4	
Stall Speed--Power off - No Fuel	kn	63.0	59.0	
Stall Speed--Power on	kn	58.6	55.4	
Maximum Speed/Alt (B)	kn/ft	202/13000	204/13000	
Take-off Distance, deck -- calm	ft	1241	935	
Take-off Distance, deck	kn. ft			
Take-off Distance, Airport	ft	2380	1900	
Rate of climb -- sea level (B)	ft/min	1060	1260	
Service Ceiling (B)	ft	24700	26600	
Time-to-climb 10000 ft. (B)	min	10.1	8.4	
Time-to-climb 20000 ft. (B)	min	25.7	20.5	
Combat Range/V av 1500	ft. n.mi/kn	1295/111	1405/107	
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-tc-climb/Alt.	min/ft			

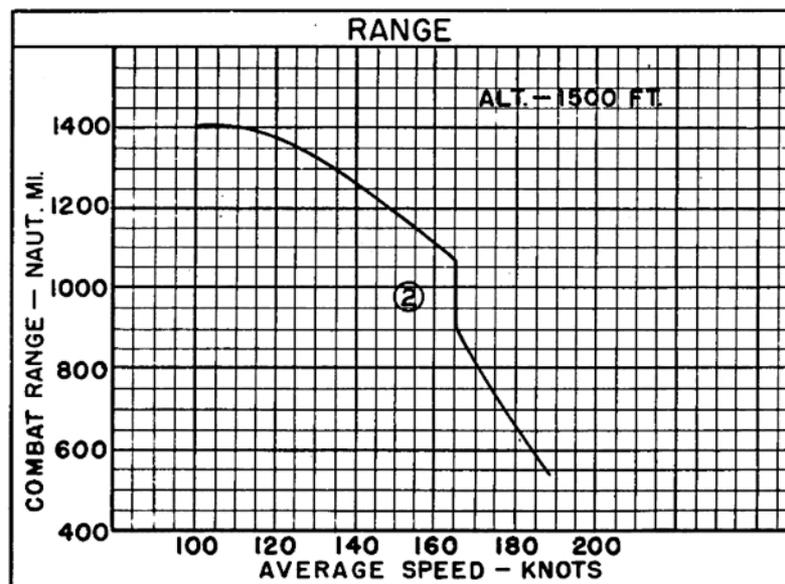
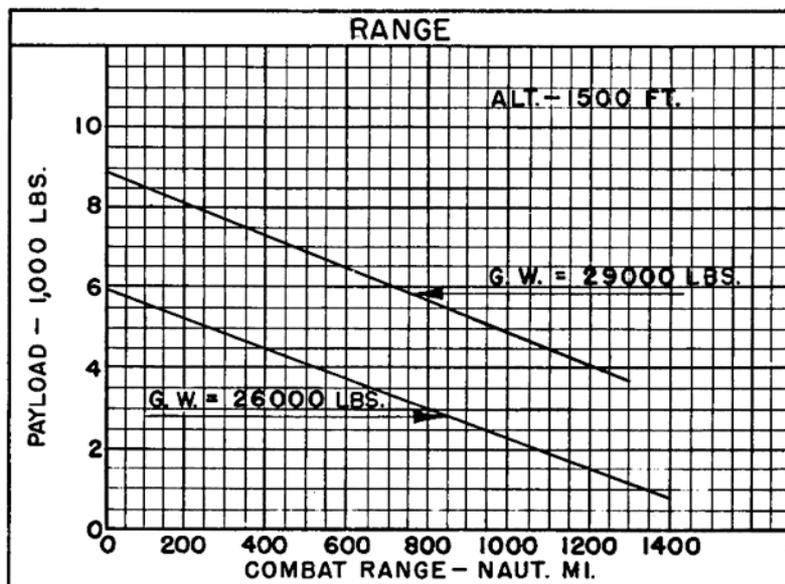
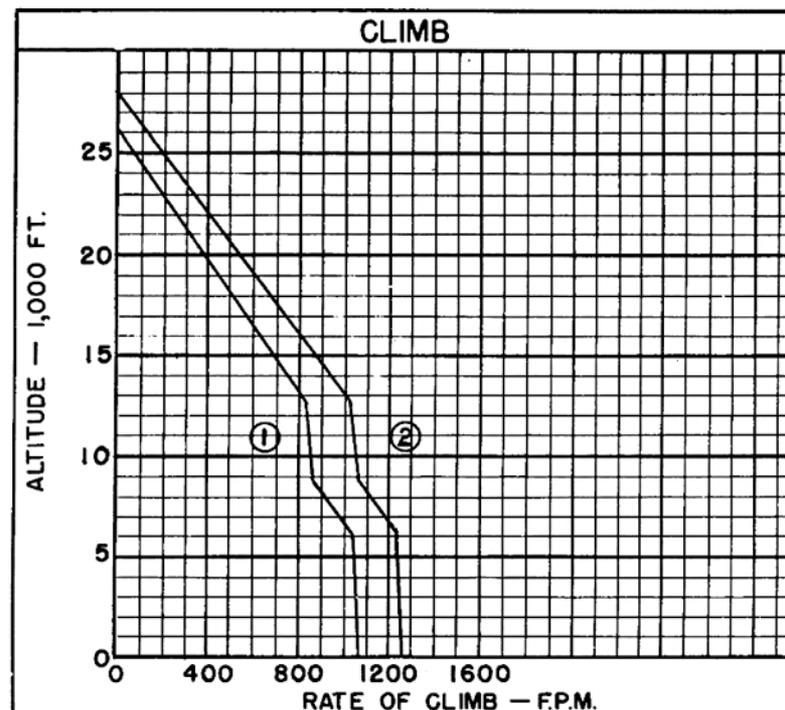
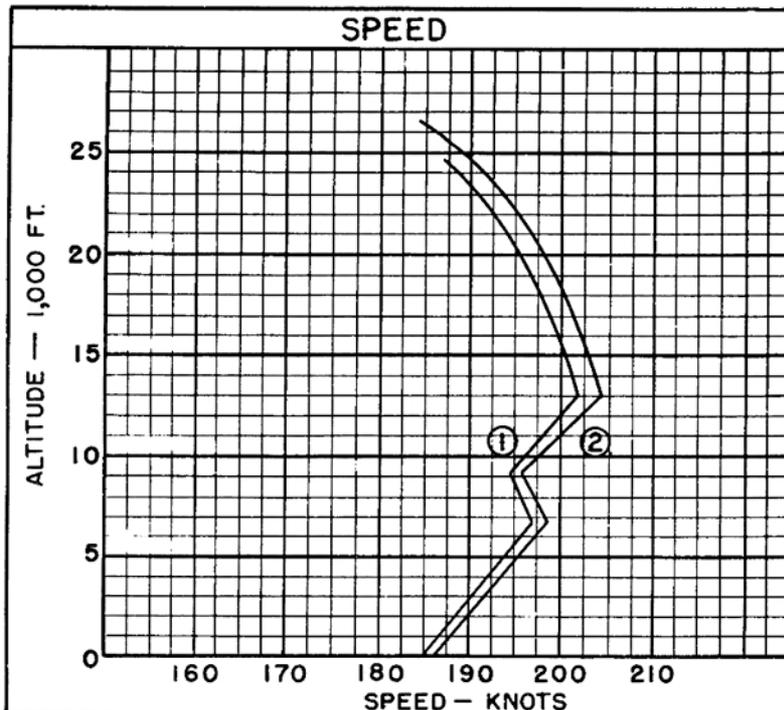
NOTES

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

Performance is based on flight test of the R4D-3 airplane. Range is based on A.E.L. fuel consumption data increased by 5%.

Provisions for 10 students and instructor are incorporated.

NOTES CONTINUED ON BACK PAGE



○ LOADING CONDITION COLUMN NUMBER

NOTES

Performance includes the effect of de-icer boots. Removal of de-icer boots increased Vmax at ACA by 3.0 knots and maximum combat range at 1500 ft. by 2%.

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

Gross Weight.....26000#
Rate of Climb - S.L. - T.O. Power.....335 ft./min.
Service Ceiling - Normal Power.....12600 ft.