



STANDARD AIRCRAFT CHARACTERISTICS R4Q-1/C-119B

FAIRCHILD

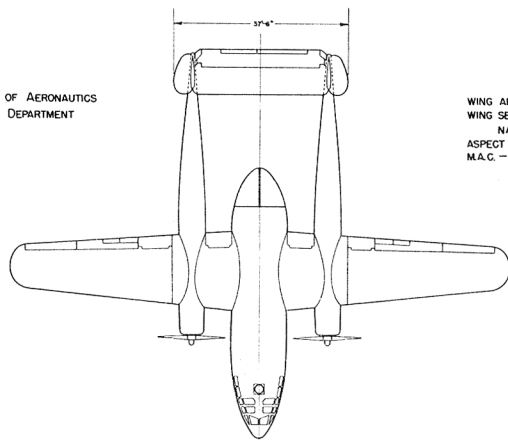
Standard Aircraft Characteristics NAVAER 1335A (REV. 1-49)

1 OCTOBER 1949

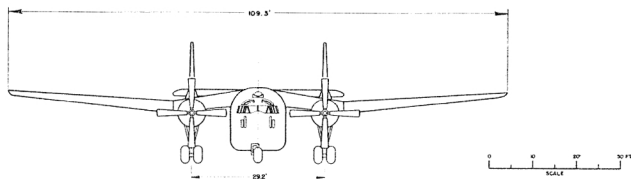
C-119B

SERVICE

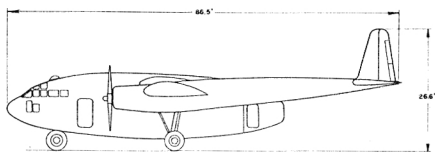
BUREAU OF AERONAUTICS
NAVY DEPARTMENT



WING AREA - 1447 SQ. FT.
WING SECTION -
NACA 2418, 4409
ASPECT RATIO - 8.25
M.A.C. - 14.02 FT.



0 10 20 30 FT
SCALE



DESCRIPTIVE ARRANGEMENT

Standard Aircraft Characteristics NAVAER 13358 (REV. 1-49)

MISSION AND DESCRIPTION

The tactical mission of the R4Q-1 is to transport cargo, personnel, litter patients, airborne supplies, and mechanized equipment. Provisions are made to glider tow.

Crew of five includes pilot, co-pilot, navigator, radio operator, and crew chief. No combat protection is provided. The large rear doors open to maximum cargo compartment dimensions to provide rapid unobstructed loading and unloading of cargo. Paracans may be dropped in flight through doors in the floor of the forward cargo compartment.

Fuel cells are bladder type.

DIMENSIONS

WING AREA.....1,447 sq. ft.
SPAN.....109' - 3"
LENGTH.....86' - 6"
HEIGHT.....26' - 7"
TREAD.....29' - 2"
PROP. CLEAR.....2' - 10"
M.A.C.....14' - 0"

WEIGHTS

Loadings	Lbs.	L.F.
EMPTY.....	37,691.....	
BASIC.....	38,065.....	
DESIGN.....	64,000.....	3.0
MAX.T.O.....	71,800.....	
MAX.LAND.....	71,800.....	

All weights are estimated.

FUEL AND OIL

Gals.	No. Tanks	Location
2,670	4	Wing
FUEL GRADE....115/145		
FUEL SPEC.....AN-F-48		

OIL

CAPACITY (Gals.).....	120
GRADE.....	1100-1120
SPEC.....	AN-O-8

ELECTRONICS

MF REC.....AN/ARR-11(BC-348Q)
ADF.....AN/ARN-7
LOCALIZER REC.....RC-103-A
GLIDE PATH REC.....AN/ARN-5A
ALTIMETER.....AN/APN-1
VHF.....AN/ARC-1 or -1A
MBR.....AN/ARN-8
LORAN.....AN/APN-4
IFF.....AN/APX-2 or -2A
RANGE REC.....R-23A/ARC-5
MHF TRANS/REC.....AN/ARC-2
TRANS.....AN/ART-13
SEE NOTES

POWER PLANT

NO. & MODEL.....(2) R-4360-20
MFR.....Pratt & Whitney
SUPERCH.....1 Stg., Var. Spd.
PROP. GEAR RATIO.....0.425
PROP. MFR.....Ham. Std.
PROP. DES. NO.....2H17F3-24R
NO. BL./DIA.....4/15'-1 $\frac{1}{4}$ "

RATINGS

	Bhp @	Rpm @	Alt.
T. O.	3,250	2,700	S. L.
MIL.	3,250	2,700	1,500
	2,500	2,700	17,000
NORMAL	2,650	2,550	6,000
	2,300	2,550	18,000
SPEC. NO. N-7056			

ACCOMODATIONS

CREW.....5
TROOPS (Normal).....42
TROOPS (Max.).....64
LITTERS.....35
ATTENDANTS.....4
MAX. CARGO.....30,000 lbs.
CARGO COMPARTMENT:
LENGTH.....36'-11"
WIDTH.....9'-10"
HEIGHT.....8'-0"
REAR LOADING DOOR:
WIDTH.....9'-10"
HEIGHT.....8'-0"

MISSION AND DESCRIPTION

The tactical mission of the R4Q-1 is to transport cargo, personnel, litter patients, airborne supplies, and mechanized equipment. Provisions are made to glider tow.

Crew of five includes pilot, co-pilot, navigator, radio operator, and crew chief. No combat protection is provided. The large rear doors open to maximum cargo compartment dimensions to provide rapid unobstructed loading and unloading of cargo. Paracans may be dropped in flight through doors in the floor of the forward cargo compartment.

Fuel cells are bladder type.

DIMENSIONS

WING AREA.....1,447 sq. ft.
SPAN.....109' - 3"
LENGTH.....86' - 6"
HEIGHT.....26' - 7"
TREAD.....29' - 2"
PROP. CLEAR.....2' - 10"
M.A.C.....14' - 0"

WEIGHTS

Loadings	Lbs.	L.F.
EMPTY.....	37,691.....	
BASIC.....	38,065.....	
DESIGN.....	64,000.....	3.0
MAX.T.O.....	71,800.....	
MAX.LAND.....	71,800.....	

All weights are estimated.

FUEL AND OIL

Gals.	No. Tanks	Location
2,670	4	Wing
FUEL GRADE....115/145		
FUEL SPEC.....AN-F-48		

OIL

CAPACITY (Gals.).....	120
GRADE.....	1100-1120
SPEC.....	AN-O-8

ELECTRONICS

MF REC.....AN/ARR-11(BC-348Q)
ADF.....AN/ARN-7
LOCALIZER REC.....RC-103-A
GLIDE PATH REC.....AN/ARN-5A
ALTIMETER.....AN/APN-1
VHF.....AN/ARC-1 or -1A
MBR.....AN/ARN-8
LORAN.....AN/APN-4
IFF.....AN/APX-2 or -2A
RANGE REC.....R-23A/ARC-5
MHF TRANS/REC.....AN/ARC-2
TRANS.....AN/ART-13

SEE NOTES

POWER PLANT

NO. & MODEL.....(2) R-4360-20
MFR.....Pratt & Whitney
SUPERCH.....1 Stg., Var. Spd.
PROP. GEAR RATIO.....0.425
PROP. MFR.....Ham. Std.
PROP. DES. NO.....2H17F3-24R
NO. BL./DIA.....4/15'-1 $\frac{1}{4}$ "

RATINGS

	Bhp @	Rpm @	Alt.
T. O.	3,250	2,700	S. L.
MIL.	3,250	2,700	1,500
	2,500	2,700	17,000
NORMAL	2,650	2,550	6,000
	2,300	2,550	18,000
SPEC. NO. N-7056			

ACCOMODATIONS

CREW.....5
TROOPS (Normal).....42
TROOPS (Max.).....64
LITTERS.....35
ATTENDANTS.....4
MAX. CARGO.....30,000 lbs.
CARGO COMPARTMENT:
LENGTH.....36'-11"
WIDTH.....9'-10"
HEIGHT.....8'-0"
REAR LOADING DOOR:
WIDTH.....9'-10"
HEIGHT.....8'-0"



PERFORMANCE SUMMARY				
LOADING CONDITION		(1) TRANSPORT	(2) TRANSPORT	(3) FERRY
TAKE-OFF WEIGHT	lbs.	70,025	71,800	56,012
Fuel	lbs.	16,020	16,020	16,020
Bombs	lbs.	14,000	15,800	---
Wing/Power Loading (A) lbs/sq.ft; lbs/bhp.		48.4/15.2	49.6/15.6	38.7/12.2
Stall Speed--Power off	kn.	90.0	91.0	80.0
Stall Speed--Power off - No Fuel	kn.	79.1	80.2	67.6
Stall Speed--Power on	kn.	82.4	83.3	73.7
Maximum Speed/Alt (B)	kn/ft.	228/18,000	226/18,000	235/18,000
Take-off Distance, deck -- calm	ft.	2,120	2,260	1,240
Take-off Distance, deck	kn.			
Take-off Distance, Airport	ft.	3,040	3,210	1,970
Rate of climb -- sea level (B)	ft/min.	950	890	1,440
Service Ceiling	(B) ft.	21,800	21,200	27,200
Time-to-climb 10,000 ft.	(B) min.	11.7	12.5	7.5
Time-to-climb 20,000 ft.	(B) min.	30.0	34.0	17.7
Combat Range/V av 10,000	ft. n.mi./kn.	1,780/150	1,695/150	2,295/131
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/Alt	kn/ft.			
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

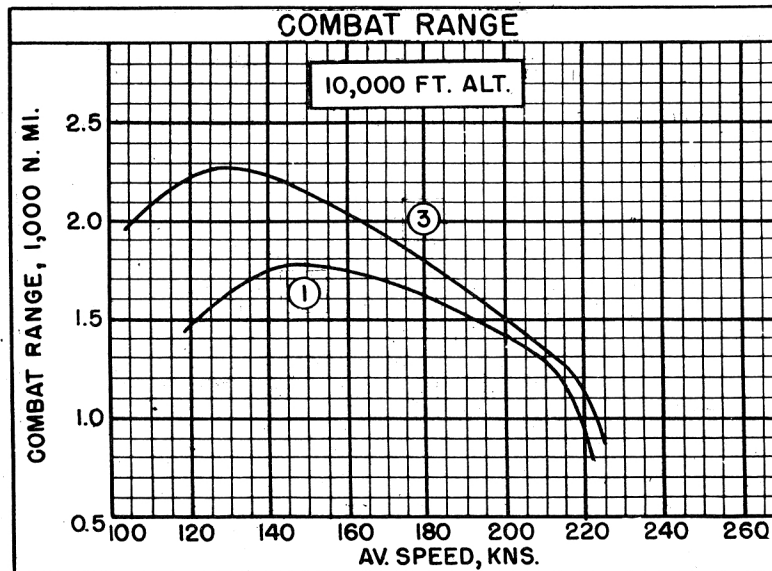
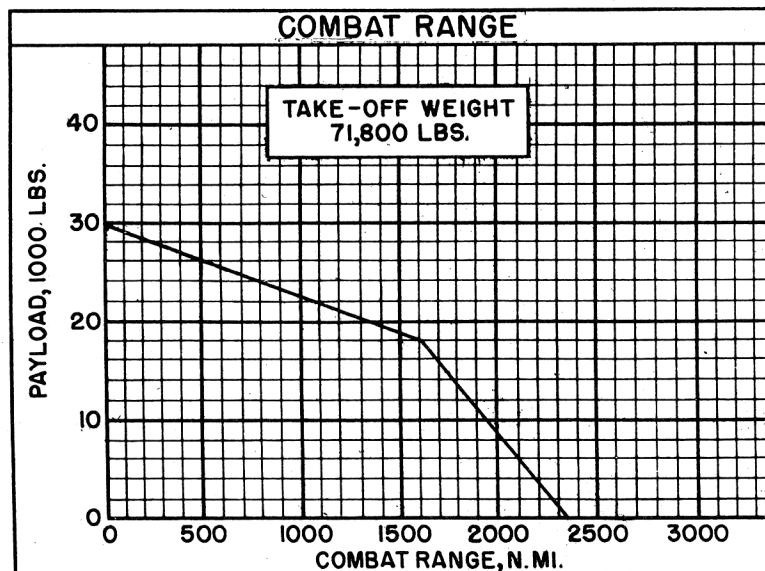
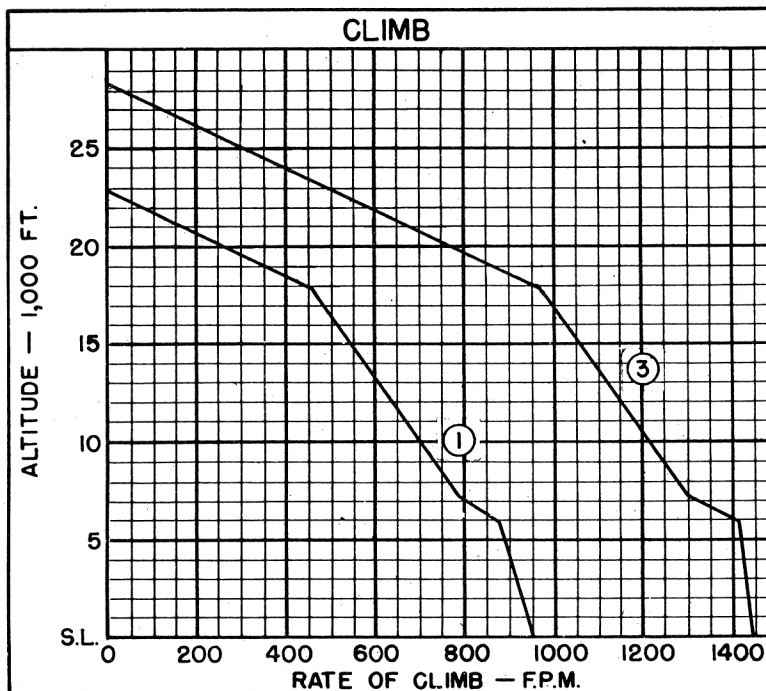
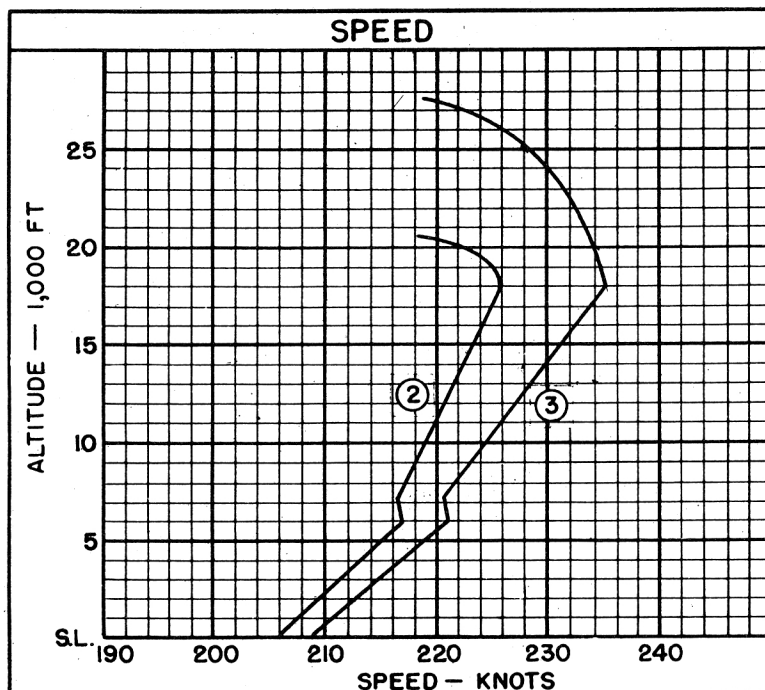
(A) BHP at Maximum Critical Altitude

(B) Normal BHP

Performance is based on USAF Standard Aircraft Characteristics chart for Model C-119B airplane, which is based on flight tests of the XC-82 airplane. Range and radius are based on engine specification fuel consumption data increased by 5%.

Performance with one engine inoperative, propeller feathered, flaps and landing gear retracted, at a gross weight of 70,000 pounds, is:

S. L. rate of climb.....138 ft./min. with military power
Service ceiling.....1,400 ft. with military power



○ LOADING CONDITION COLUMN NUMBER

NOTES

The following Electronics equipment will probably be fleet installed:

RADAR.....AN/APS-42

IFF.....AN/APX-6