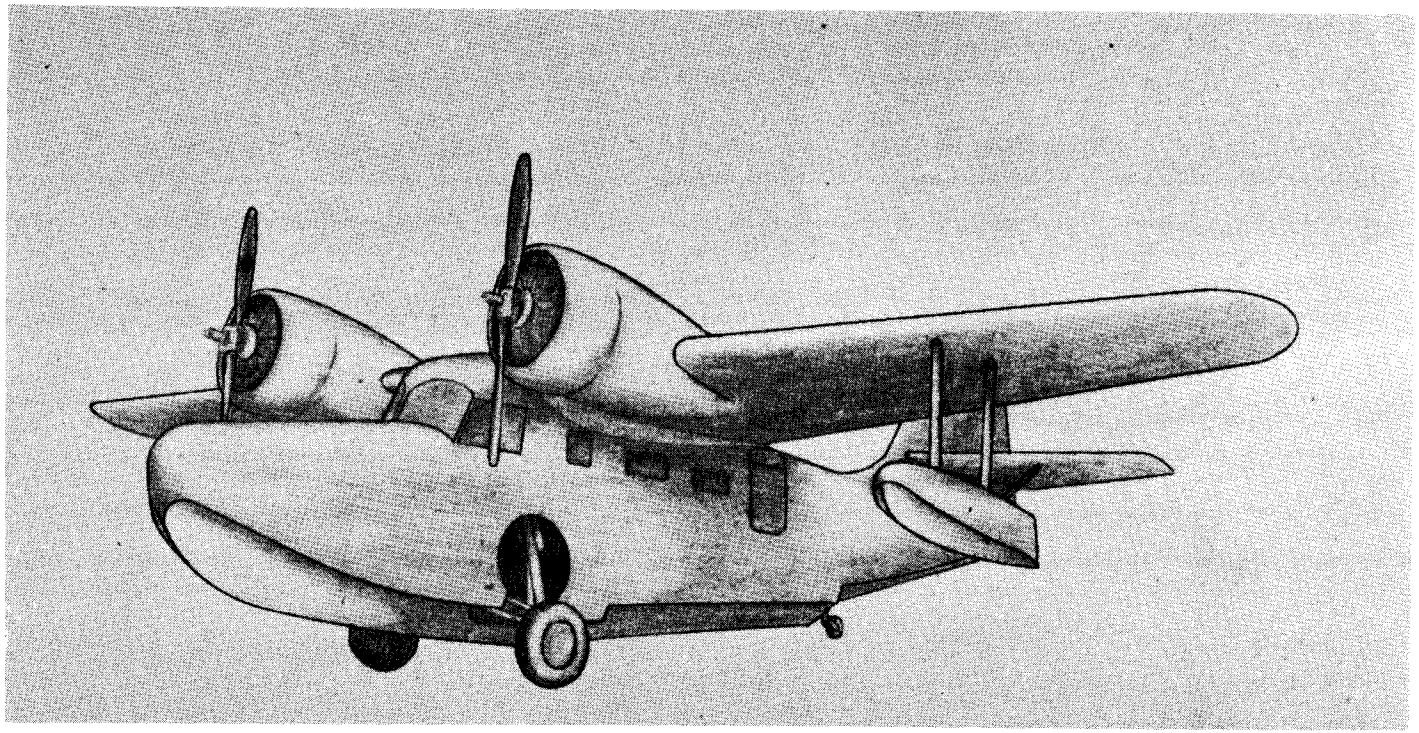
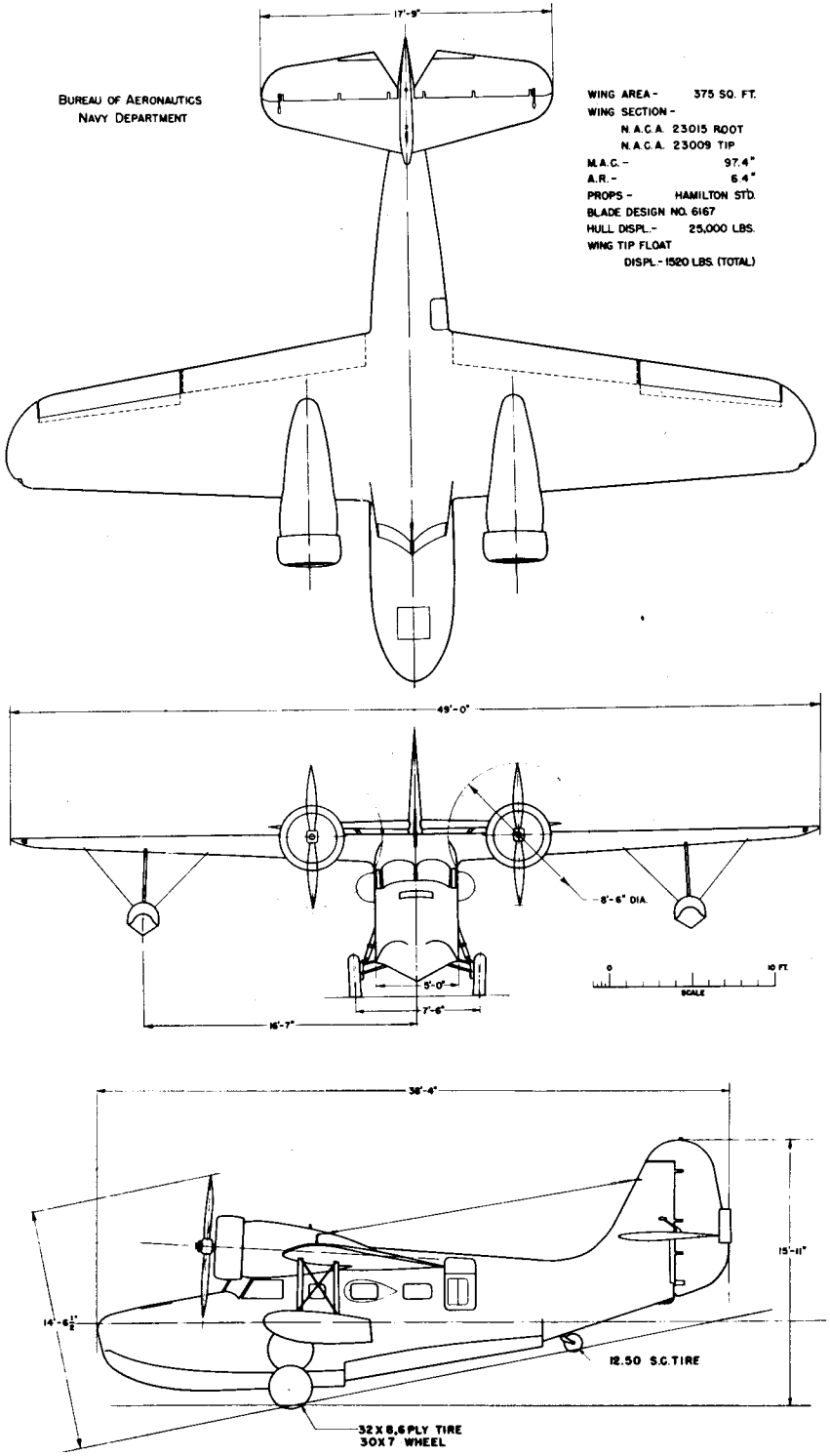


STANDARD AIRCRAFT CHARACTERISTICS

JRF-5 "GOOSE"

BUREAU OF AERONAUTICS
NAVY DEPARTMENT

WING AREA - 375 SQ. FT.
WING SECTION -
N.A.C.A. 23015 ROOT
N.A.C.A. 23009 TIP
M.A.C. - 97.4"
A.R. - 6.4"
PROPS - HAMILTON STD.
BLADE DESIGN NO. 6167
HULL DISPL. - 25,000 LBS.
WING TIP FLOAT
DISPL. - 1520 LBS. (TOTAL)



DESCRIPTIVE ARRANGEMENT

MISSION AND DESCRIPTION

General utility, light transport, administrative and training airplane with provisions for bombing training, and photography.

It is a high-wing, twin-engine, amphibian with conventional hull and retractable landing-gear. Can land, take-off, and taxi on water or land. Manufactured by Grumman.

Structure is conventional. Box-beam wing, carrying split flaps vacuum-operated. Retractable landing gear is manually operated. A 12 lb. Northill anchor is carried in the bow compartment.

WEIGHTS

Loadings	Lbs.	L.F.
EMPTY	6415	
BASIC	6766	
DESIGN	8000	3.75
MAX. T.O.	8700	3.40
MAX. LAND	8700	

All weights are actual.

POWER PLANT

NO. & MODEL...(2) R-985-AN-6
MFR.....P.&W.
SUPERCH.....1 Stage, 1 Speed
PROP.GEAR RATIO.....D.D.
PROP. MFR.....Ham. Std.
PROP DES. NO.....6167
NO.BL./DIA.....2/8'-6"

RATINGS

	Bhp.	@ Rpm.	@ Alt.
T. O.	450	2300	SL
NORMAL	400	2200	SL to 5000'

SPEC. AN-2035

FUEL AND OIL

Gals. - No. Tanks - Location
220.....2.....Wing

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

OIL

CAPACITY (Gals.).....15
SPEC.....AN-O-8
GRADE.....1100-1120

ORDNANCE

BOMBS

Type	Size	Location	No.
Bombs	100#	Wings	2
D.B.	325#	Wings	2

Racks MK 41-2

Provisions for vertical camera

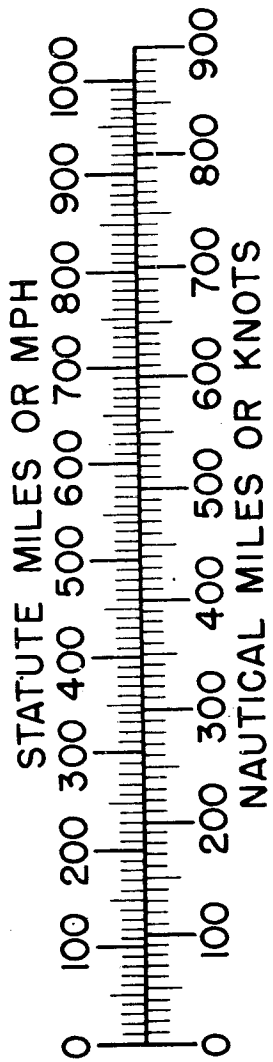
DIMENSIONS

CREW.....2
PASSENGERS.....4

SPAN.....49'-0"
LENGTH.....38'-4"
HEIGHT.....14'-7"
WING AREA.....375 sq.ft.
M.A.C.....97.4'

ELECTRONICS

MF LIAISON TRANS.....GP-7
MF REC.....RU-18
VHF HOMING.....AN/ARR-1
DF.....DW-1
IFF.....ABK



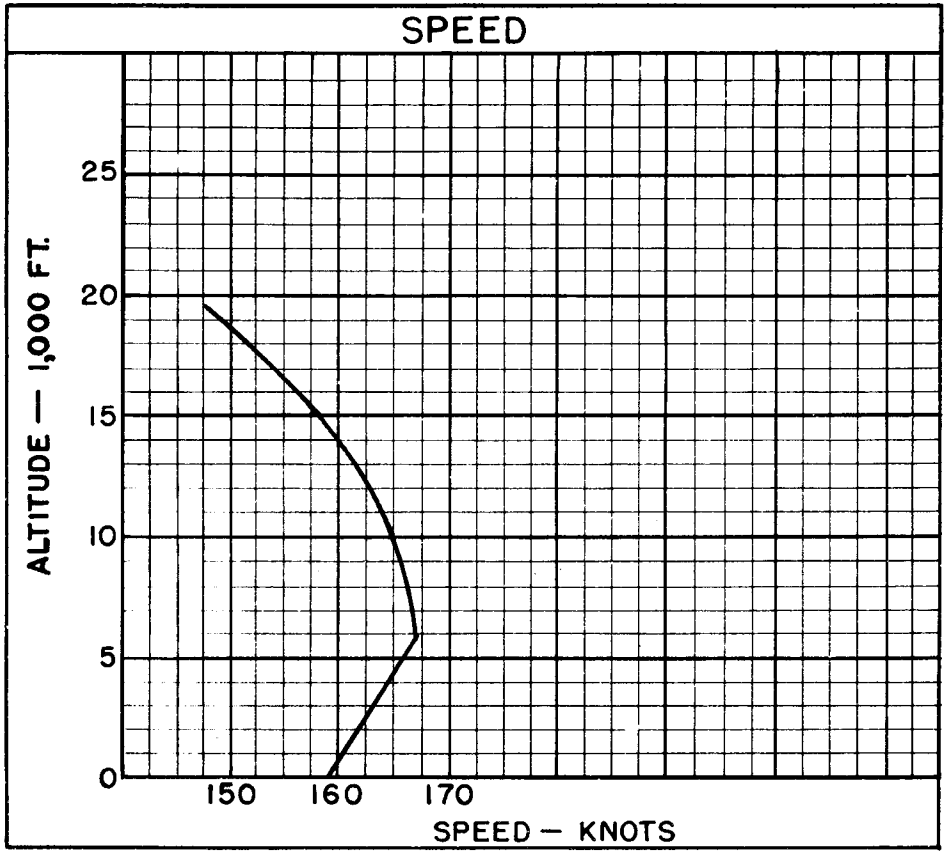
PERFORMANCE SUMMARY

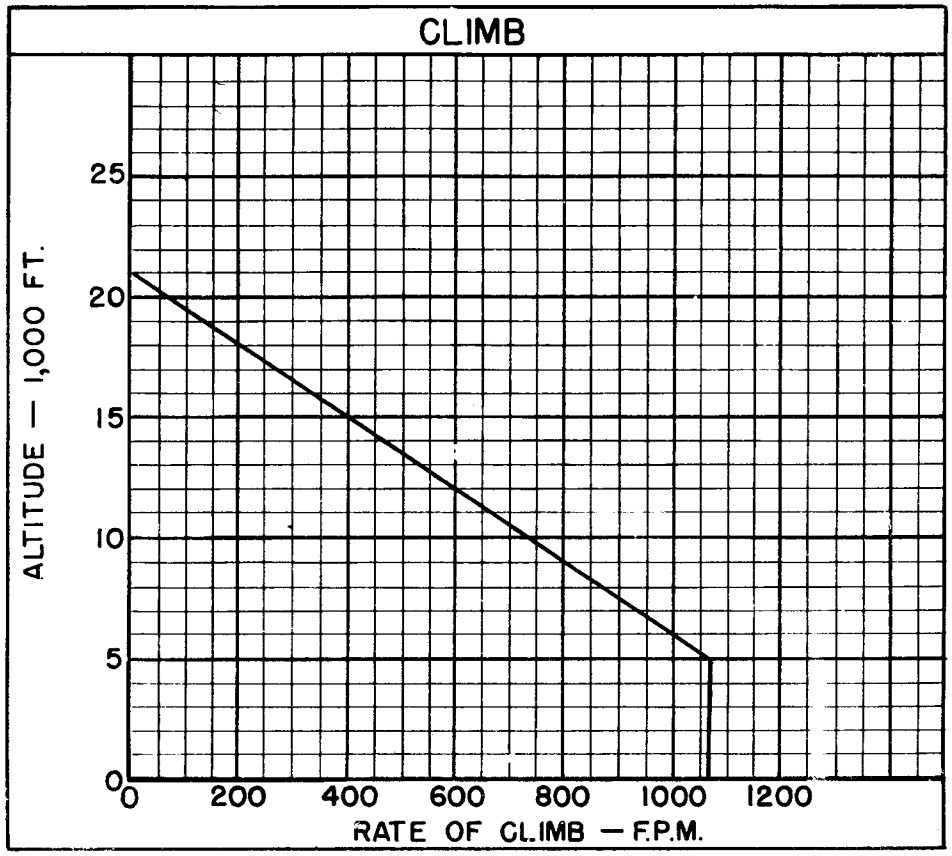
LOADING CONDITION		UTILITY			
TAKE-OFF WEIGHT	lbs	8700			
Fuel	lbs	1320			
Bombs	lbs				
PAYLOAD	lbs	101			
Wing/Power Loading (A)lbs/sq.ft.lbs/	bhp	23.2/10.9			
Stall Speed--Power off	kn	58.3			
Stall Speed--Power off - No Fuel	kn	53.7			
Stall Speed--Power on	kn				
Maximum Speed/Alt (B)	kn/ft	167/5800			
Take-off Distance, deck -- calm	ft	750			
Take-off Time	sec.	16			
Take-off Distance, Airport	ft	1450			
Rate of climb -- sea level (B)	ft/min	1070			
Service Ceiling (B)	ft	19700			
Time-to-climb 10000 ft. (B)	min	10.1			
Time-to-climb ft. (B)	min				
Combat Range/V av 1500 ft.	n.mi/kn	760/99			
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				

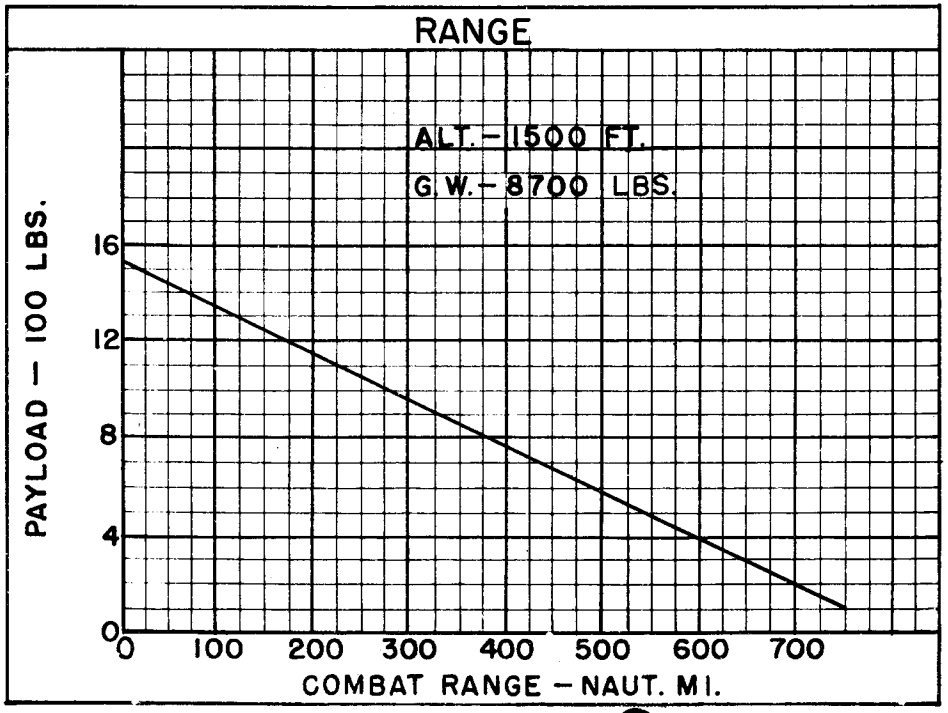
NOTES

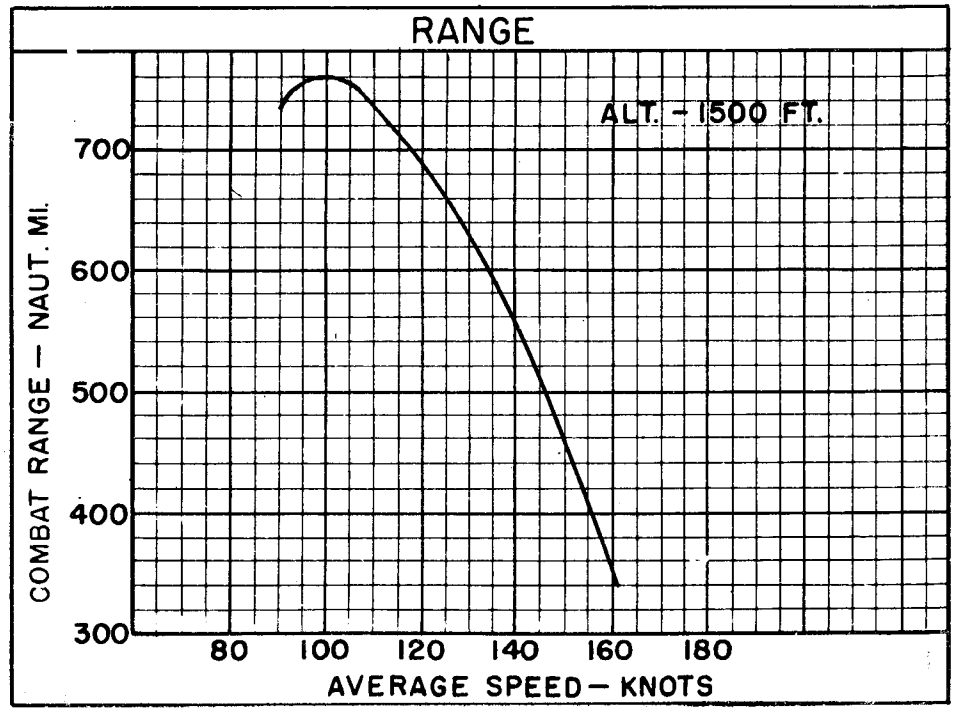
(A) BHP at Maximum Critical Altitude
(B) Normal BHP

Performance is based on flight test of the JRF-6B airplane. Range is based on engine specification fuel consumption data increased by 5%.


SPEED
ALTITUDE — 1,000 FT.
25
20
15
10
5
0
150
160
170
SPEED — KNOTS


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


RANGE
ALT. — 1500 FT.
G.W. — 8700 LBS.
PAYLOAD — 100 LBS.
16
12
8
4
0
0
100
200
300
400
500
600
700
COMBAT RANGE — NAUT. MI.


RANGE
ALT. — 1500 FT.
COMBAT RANGE — NAUT. MI.
700
600
500
400
300
80
100
120
140
160
180
AVERAGE SPEED — KNOTS