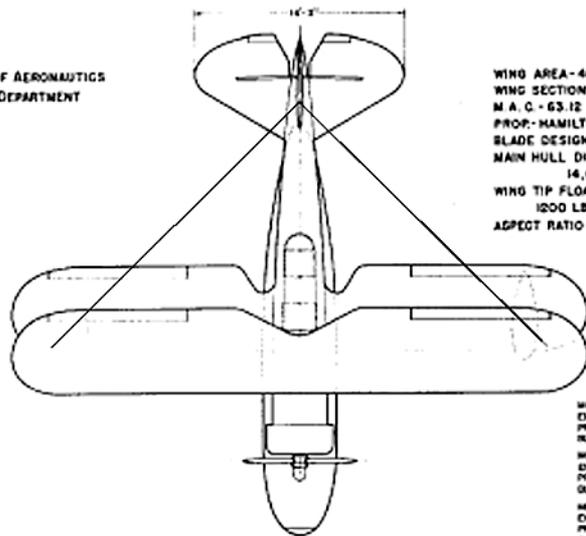




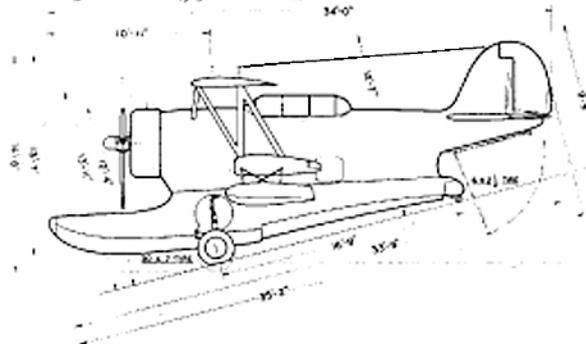
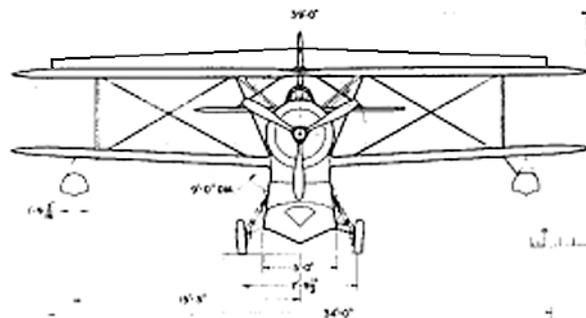
STANDARD AIRCRAFT CHARACTERISTICS
J2F-6 "DUCK"

BUREAU OF AERONAUTICS
NAVY DEPARTMENT



WING AREA-409 SQ. FT.
WING SECTION-CY-14
M. A. C. - 63.12
PROP. HAMILTON STD.
BLADE DESIGN NO. 6385A-13
MAIN HULL DISPL. -
14,600 LBS.
WING TIP FLOATS DISPL.
1200 LBS (TOTAL)
ASPECT RATIO 4.7

MODEL J2F-6
ENGINE R-1820-35
PROPELLER DIA. 9'-0"
BLADE DESIGN NO. 6385A-13
WHEELS 27" x 14" x 8"
BRAKE H-1820-35
PROPELLER DIA. 8'-1"
BLADE DESIGN NO. 6385A-14
MODEL J2F-1
ENGINE R-1820-20
PROPELLER DIA. 8'-1"
BLADE DESIGN NO. 6385A-14



DESCRIPTIVE ARRANGEMENT

MISSION AND DESCRIPTION

The airplane was designed for utility and rescue work, land-based or carrier-based.

It is a two-place, single-engine biplane amphibian which can land and take-off upon water, land or the deck of an airplane carrier. It is equipped for arrested landings but not for catapulting. It is equipped for aerial photography and target-towing. Manufactured by Grumman. Production of this type based on J2F-1 production 1934. With improved power plant.

WEIGHTS

Loadings	Lbs.	L.F.
EMPTY.....	5378.....	
BASIC.....	5539.....	
DESIGN.....	6503.....	5.0
MAX. T.O.....	7700.....	3.6
MAX. LAND....	7700.....	

All weights are actual.

POWER PLANT

NO. & MODEL... (1)R-1820-54
 MFR..... W. A. C.
 SUPERCH.... 1 Stage, 2 Speed
 PROP. GEAR RATIO..... D.D.
 PROP. MFR..... Ham. Std.
 PROP. DES. NO..... 6383A-13
 NO. BL/VIA..... 3/9'-0"

RATINGS

	Bhp. @	Rpm. @	Alt.
T.O.	1050	2200	S.L.
NORMAL	900	2100	4700
	800	2100	14100

SEE NOTE
 SPEC NO. N-808-1

FUEL AND OIL

Gal. - No. Tanks - Location
 190..... 2..... Fuselage
 FUEL GRADE..... 100/130
 FUEL SPEC..... AN-F-48

OIL

CAPACITY (gals.)..... 12
 SPEC..... AN-O-8
 GRADE..... 1120

ORDNANCE

Type	BOMBS		
	Size	Location	No.
Bomb	100#	wing	2
D. B.	325#	wing	2

Sleeve target MK-15-1
 7000' line

Target reel MK-V

T-3A, K-38 or F-35 Camera

DIMENSIONS

SPAN..... 39'-0"
 LENGTH..... 34'-0"
 HEIGHT..... 13'-11"
 WING AREA..... 409 sq. ft.
 TREAD..... 7'-10"
 M.A.C..... 63.1"

ELECTRONICS

HF, VHF COMMAND,
 LIAISON..... AN/ARC-5
 COMPASS..... SCR-269-F
 IFF..... AN/APX-1



PERFORMANCE SUMMARY

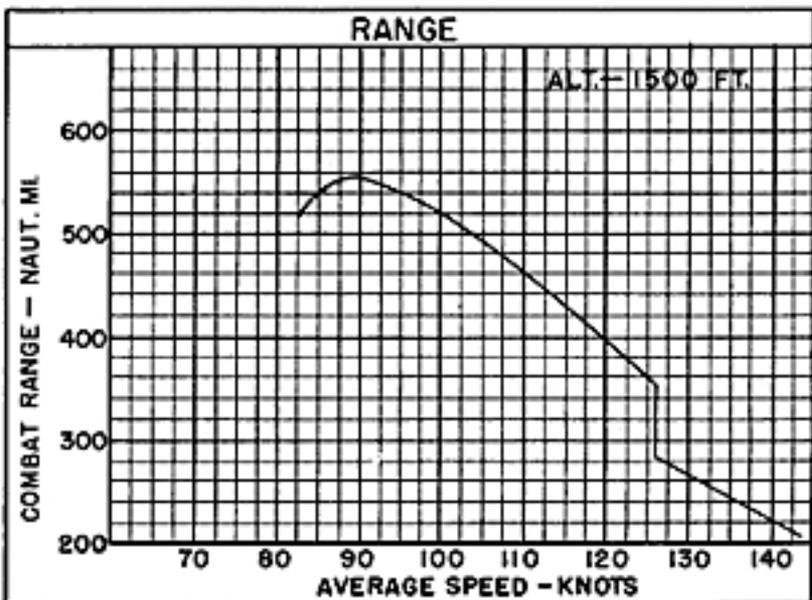
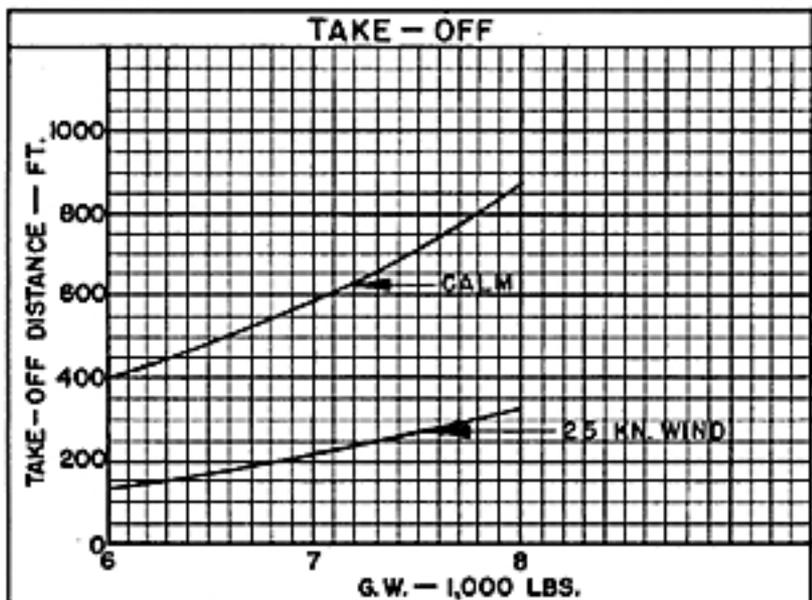
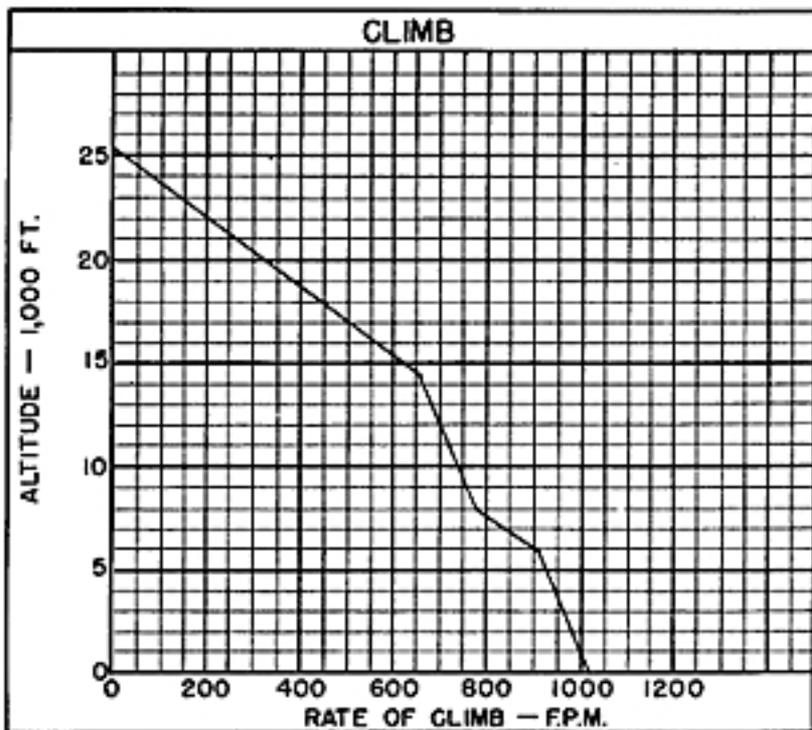
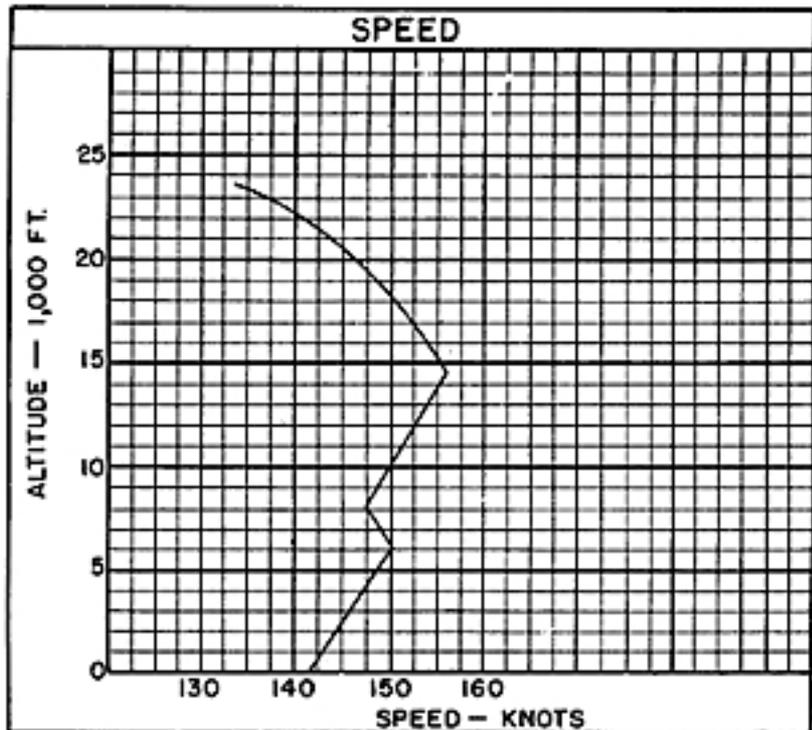
LOADING CONDITION	UTILITY			
TAKE-OFF WEIGHT		7700		
Fuel	lbs	1140		
Bombs	lbs			
PAYLOAD	lbs	491		
Wing/Power Loading (A)	lbs/sq.ft. lbs/kwhp	18.8/9.6		
Stall Speed--Power off	kn	60.1		
Stall Speed--Power off - No Fuel	kn	55.5		
Stall Speed--Power on	kn	56.4		
Maximum Speed/Alt (B)	kn/ft	156/14500		
Take-off Distance, deck -- calm	ft	768		
Take-off Distance, deck 25 kn.	ft	297		
Take-off Time	Sec.	16		
Rate of climb -- sea level (B)	ft/min	1010		
Service Ceiling (B)	ft	23500		
Time-to-climb 10000 ft. (B)	min	11.2		
Time-to-climb 20000 ft. (B)	min	27.1		
Combat Range/V av 1500	ft. n.mi/kn	560/90		
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.			
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) H/F at Maximum Critical Altitude,
(B) Normal H/F

Performance is based on flight test of the J2F-6 airplane. Range is based on engine specification fuel consumption data increased by 5%.

Notes continued on last page.



○ LOADING CONDITION COLUMN NUMBER

NOTES

Engine ratings from Flight Test:

	<u>Rpm.</u>	<u>Rpm.</u>	<u>Alt.</u>
T.O.	1050	2200	S.L.
Norm.	900	2100	S.L. to 5900
	800	2100	8100 to 14300