

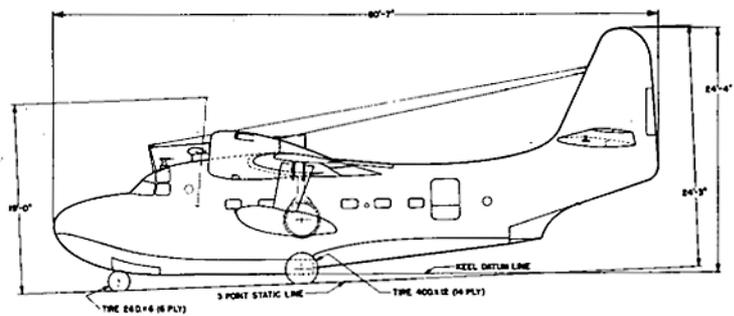
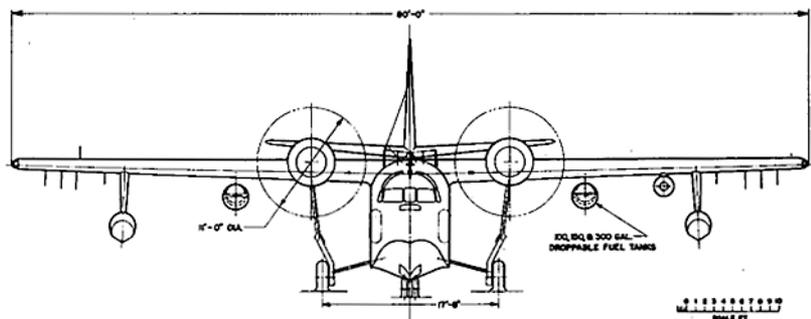
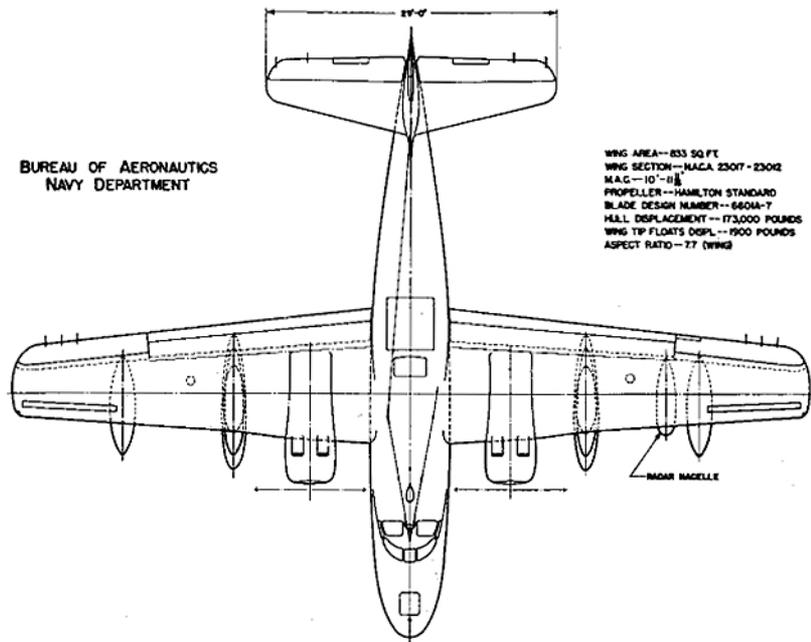
STANDARD AIRCRAFT CHARACTERISTICS

UF-1 "ALBATROSS"

GRUMMAN

BUREAU OF AERONAUTICS
NAVY DEPARTMENT

WING AREA--833 SQ FT
WING SECTION--MACA 2307-2302
M.A.C.--10'-11"
PROPELLER--HAMILTON STANDARD
BLADE DESIGN NUMBER--660A-7
HULL DISPLACEMENT--173,000 POUNDS
WING TIP FLOATS DISPL--1900 POUNDS
ASPECT RATIO--7.7 (WING)



MISSION AND DESCRIPTION

The UF-1 is a twin-engine general purpose utility amphibian for personnel and cargo transport, litter evacuation, and rescue operations.

The Air Force designation is SA-16A-GR; the prototype airplane was the XJR2F-1. There is no provision for catapulting or arresting. Wing and tail deicing boots are furnished with each aircraft as packaged parts. Reverse pitch propellers with electronic deicing are installed.

A fixed-hinge, split flap is used.

DIMENSIONS

WING AREA.....	833 sq. ft.
SPAN.....	80' - 0"
LENGTH.....	60' - 7"
HEIGHT.....	24' - 3"
TREAD.....	17' - 8"
BEAM.....	7' - 11"
M.A.C.....	10' - 12"

WEIGHTS

Loadings	Lbs.	L.F.
EMPTY.....	19,820.....	
BASIC.....	21,245.....	
DESIGN.....	25,000.....	3.5
MAX.T.O.		
Smooth Water.....	29,500.....	3.2
Run-Way.....*	33,000.....	2.9
MAX.LAND.....	31,000.....	

All Weights are actual.
* Limited by single-engine performance.

FUEL AND OIL

Gals.	No. Tanks	Location
600	2	Wing, Drop
676	2	Wing
FUEL GRADE.....100/130		
FUEL SPEC.....MIL-F-5572		

OIL

CAPACITY (Gals.).....	58
GRADE.....	1120
SPEC.....	MIL-O-6082

ELECTRONICS

VHF TRANS. & REC.....AN/ARC-1
LF RANGE REC.....R-23A/ARC-5
MHF TRANS. & REC.....AN/ARC-2
RADIO COMM. TRANS...AN/ART-13
MF RADIO REC.....AN/ARR-11
MARKER BEACON.....AN/ARN-8
RADIO ALTIMETER.....AN/APN-1
LORAN.....AN/APN-9
IFF.....AN/APX-2 or -2A
RADAR.....AN/APS-31
VHF HOMING ANTENNA...AN/ARA-8
MF RADIO COMPASS.....AN/ARN-7
(Continued on NOTES sheet)

POWER PLANT

NO. & MODEL....(2) R-1820-76A
MFR.....W.A.C.
SUPERCH.....1 Stage, 2 Speed
PROP. GEAR RATIO.....0.666
PROP. MFR.....Har. Std.
PROP. DES. NO.....6601A-7
NO. BL./DIA.....3/11'-0"

RATINGS

	Bhp @	Rpm @	Alt.
T. O.	1,425	2,700	S. L.
MIL.	1,425	2,700	1,000'
	1,100	2,600	11,600'
NORM.	1,275	2,500	3,000'
	975	2,500	14,700'

SPEC. NO. N-826-B
(SEE NOTES)

ACCOMMODATIONS

CREW.....6
(Pilot, Co-pilot, Radioman,
Radar-Navigator, 2
Observers)
LITTERS.....12
SEATS.....10
CARGO DOOR SIZE:
Top.....58" x 63"
Port.....33" x 48"
Stbd.....23" x 38"
FLOOR LOADING:
lbs./ft.².....200



PERFORMANCE SUMMARY					
LOADING CONDITION		(1) TRANSPORT	(2) TRANSPORT	(3) RESCUE (Depart)	(4) RESCUE (Return)
TAKE-OFF WEIGHT	lbs.	28,670	33,000	31,250	29,450
Fuel	lbs.	4,050/-	4,050/3,600	4,050/3,600	4,050/-
Bombs	lbs.	—	—	—	—
Passengers/Cargo	no/lbs.	10/540	10/790	—	12/-
Wing/Power Loading (A)	lbs/sq.ft; lbs/bhp.	34.4/14.7	39.6/16.9	37.5/16.0	35.4/15.1
Stall Speed--Power off	kn.	69.7	75.4	73.4	70.6
Stall Speed--Power off - No Fuel	kn.	64.6	66.1	63.8	65.6
Stall Speed--Power on	kn.	60.7	63.8	62.1	61.5
Maximum Speed/Alt (B)	kn/ft.	215/18,000	208/4,600	210/4,600	215/4,600
Take-off Distance, deck -- calm	ft.	1,120	1,584	1,380	1,170
Take-off Distance, deck	kn.				
Take-off Time	secs.	31.4	—	—	34.1
Rate of climb -- sea level (B)	ft/min.	1,432	1,090	1,200	1,358
Service Ceiling (B)	ft.	24,800	21,300	22,700	24,100
Time-to-climb 10,000 ft. (B)	min.	9.1	13.1	11.4	9.7
Time-to-climb 20,000 ft. (B)	min.	27.0	61.7	49.2	39.0
Combat Range/V av 1,500	ft. n.mi/kn.	1,000/124	1,800/130	1,900/126	980/126
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.				

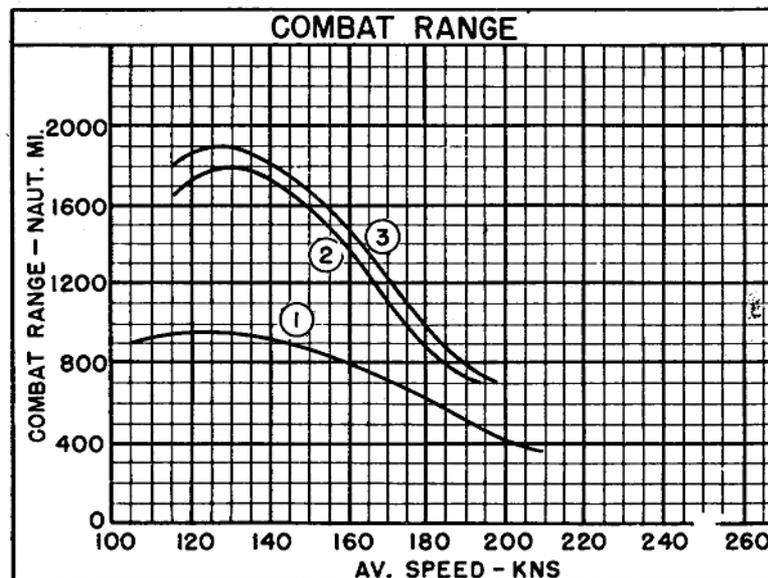
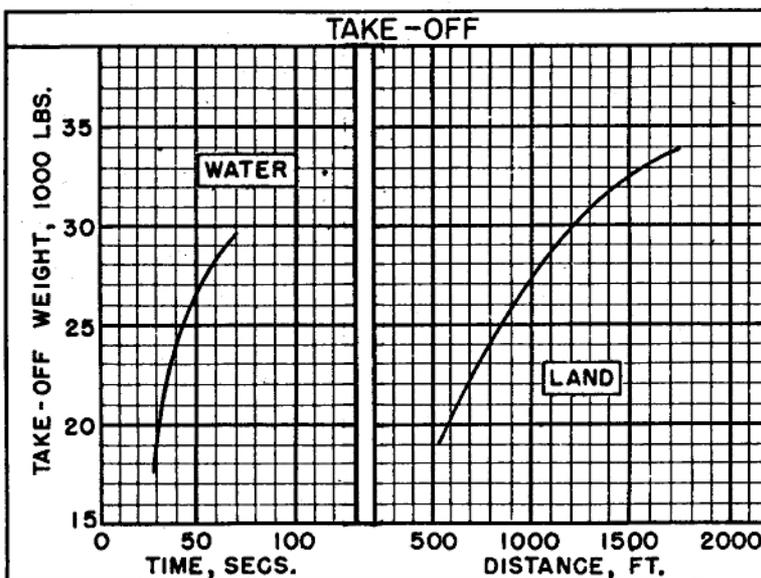
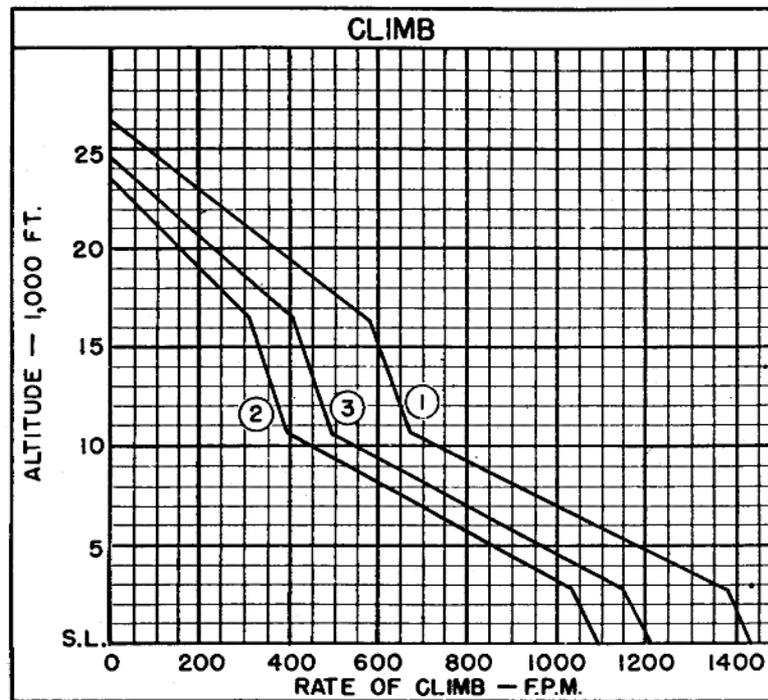
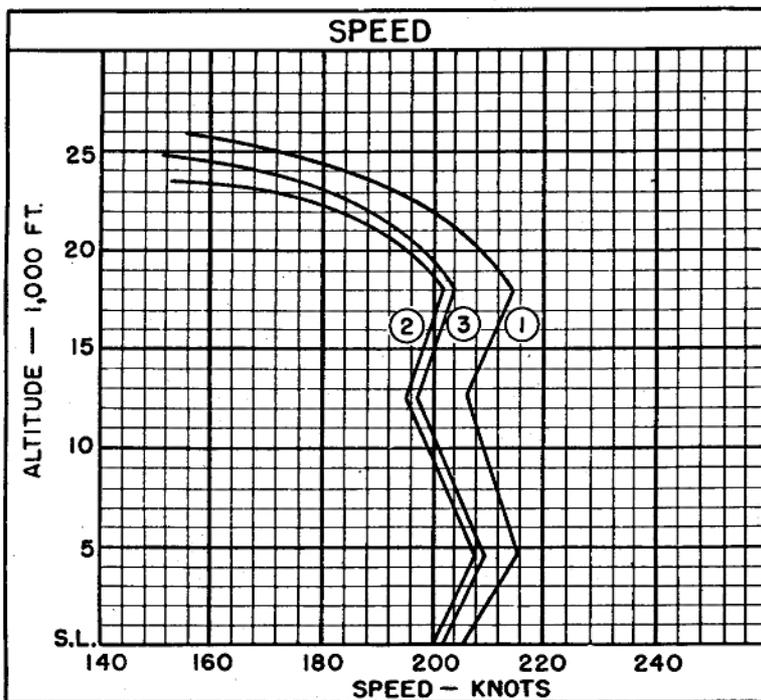
NOTES

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

Performance is based on flight test of XJR2F-1 airplane.

Range is based on XJR2F-1 flight test fuel consumption data increased by 5%.

AN/APS-4 is carried in all conditions.



○ LOADING CONDITION COLUMN NUMBER

NOTES

ELECTRONICS EQUIPMENT (Continued):

The following equipment to be Service Installed:

IFF IDENTIFICATION.....AN/APX-6

There are space provisions for the following equipment:

RADAR BOMBING EQUIPMENT...AN/APA-5A
 SONOBUOY REC.....AN/ARR-31
 WIRE RECORDER.....13-A-3-j
 RADAR SEARCH REC.....AN/APR-9
 ECM DF.....AN/APA-69
 PULSE ANALYZER.....AN/APA-64
 ECM TRANSMITTER.....AN/APT-16

 Performance based on engine power determined in flight test as follows:

NORMAL 1,275 BHP/ S. L. - 4,600'
 975 BHP/12,500'-18,000'

 Performance with one engine inoperative, prop feathered:

Weight	lbs.	30,300
Rate of Climb, Sea Level, T. O. Power	ft./min.	200
Service Ceiling, NRP	ft.	1,000