

ISSUE OF 4 PAGES

## AIRPLANE CHARACTERISTICS &amp; PERFORMANCE

BUREAU OF AERONAUTICS, NAVY DEPT.

COLUMN NUMBER		1	2	3	4
LOADING CONDITION		PERSONNEL RESCUE TRANSPORT	PERSONNEL TRANSPORT **	UTILITY TRANSPORT (CARGO)	FERRY
GROSS WEIGHT	LBS.	22770	23275	26000	25628
EMPTY WEIGHT	- SPECIFICATION - LBS.	16353			
FUEL / OIL	GALS.	260/17	260/17	675/38	1275/52
FIXED USEFUL LOAD		2009	1897	1128	-
PAYLOAD		2720	3340	4184	0
ENGINE POWER USED FOR PERFORMANCE		NORMAL	NORMAL	NORMAL	NORMAL
WING LOADING	LBS./SQ.FT.	27.7	28.3	31.6	31.2
POWER LOADING ①	LBS./BHP.	11.7	11.9	13.3	13.2
V-MAX. SEA LEVEL.	KN	201	201	200	196
V-MAX. / CRITICAL ALT.	KN/FT.	210/15800	210/15800	207/15800	203/15700
V-STALL GROSS WEIGHT ②	KN	61.2	61.8	65.4	64.8
V-STALL WITHOUT FUEL ②	KN	59.0	59.7	60.0	54.4
TIME-TO-CLIMB -10000FT-	MIN.	7.1	7.4	9.0	8.8
TIME-TO-CLIMB -20000FT-	MIN.	18.8	19.9	25.8	25.2
SERVICE CEILING	FT.	25700	25300	23400	23500
TAKE-OFF DISTANCE -CALM-	FT.	603	633	834	810
TAKE-OFF DISTANCE -15 KN-	FT.	359	379	515	498
TAKE-OFF DISTANCE -25 KN-	FT.	228	242	343	330
TAKE-OFF DISTANCE -50 FT. OBST.	FT.	1278	1333	1659	1626
TAKE-OFF TIME	SECONDS	15	16	22	21
RATE OF CLIMB -SL-	FT./MIN.	1665	1610	1355	1375
MAX. RANGE / V-AV. ③	NMI./KN	535/109	520/110	1285/113	2540/107
RANGE / V-AV. -60%NSP-③-	NMI./KN	295/166	290/166	755/164	
SEARCH RADIUS / V-AV. -20%R-	NMI./KN				
A.S.W. RADIUS / V-AV. -20%R-	NMI./KN				
SCOUT RADIUS	N MI.				
COMBAT RADIUS	N MI.				
ENGINE / PROP GEAR RATIO		2 - W.A.C.		R-1820-74 (3:2)	
ENGINE RATING BHP/RPM/ALT.	NORMAL		TAKE-OFF		
	1275/2500/S.L. - 3000'		1425/2700/S.L.		
	975/2500/10500-14700				
TANKAGE IN GALLONS		OIL	FUEL	OFFENSIVE ARMAMENT	
AUX. FIXED	PROTECTED			WINGS - external - alternate with dropp. tanks -	
	UNPROTECTED	52	675	Depth Bombs - 2 - 325#	
	TOTAL - FIXED INTERNAL	52	675		
	DROPPABLE - wings - 2 @ 300		600		
	DROPPABLE (alternate - 2 @ 150)				
TOTAL	52	1275			
NOTE	Performance is based on calculations				
	Range is based on Engine Specification Fuel Consumption				
	Data increased by 15% to conform with past experience.				
①	BHP AT MAX. CRIT. ALT.				
②	STALL-WITHOUT POWER				
③	AT 1500' ALTITUDE				

\* and \*\* See page 2

AMPHIBIAN

Reissued 1 January 1947

DATE 1 AUGUST 1945

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MODEL XJR2F-1

**PAYLOAD** - Passengers, Cargo & Baggage

- \*Col. 1 - 16 rescued personnel at 170#
- \*\*Col. 2 - 14 passengers at 190# plus 680# baggage
- Col. 3 - 4184# cargo

**FIXED USEFUL LOAD** - Crew, Trapped Fuel & Oil, and Equipment

- Col. 1 - Includes litters, life rafts & radar
- Col. 2 - Includes seats, carpets, life-rafts and radar
- Col. 3 - Includes life rafts & radar

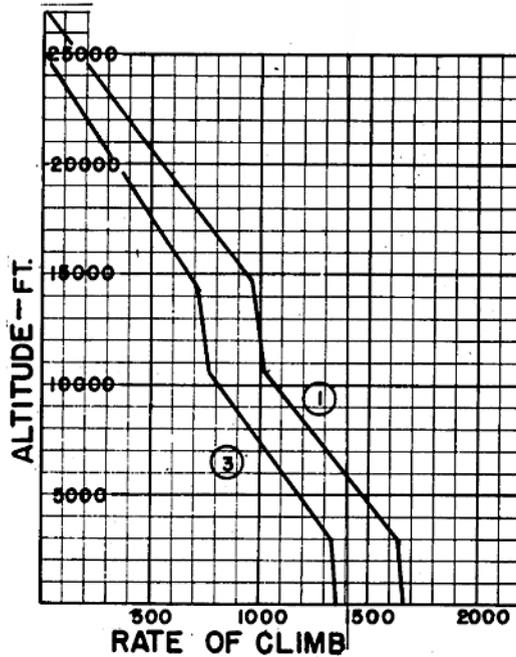
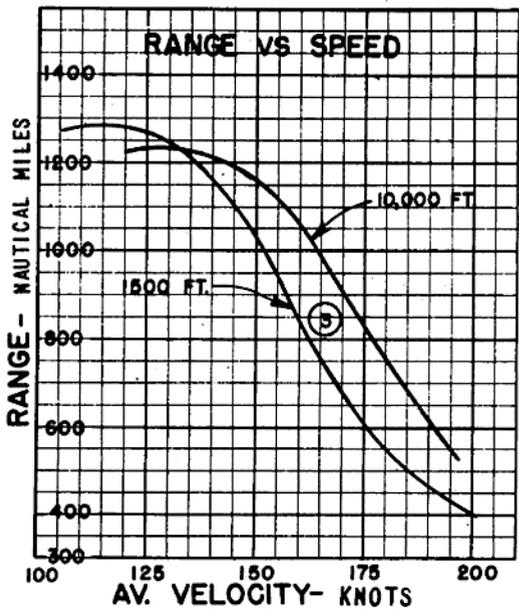
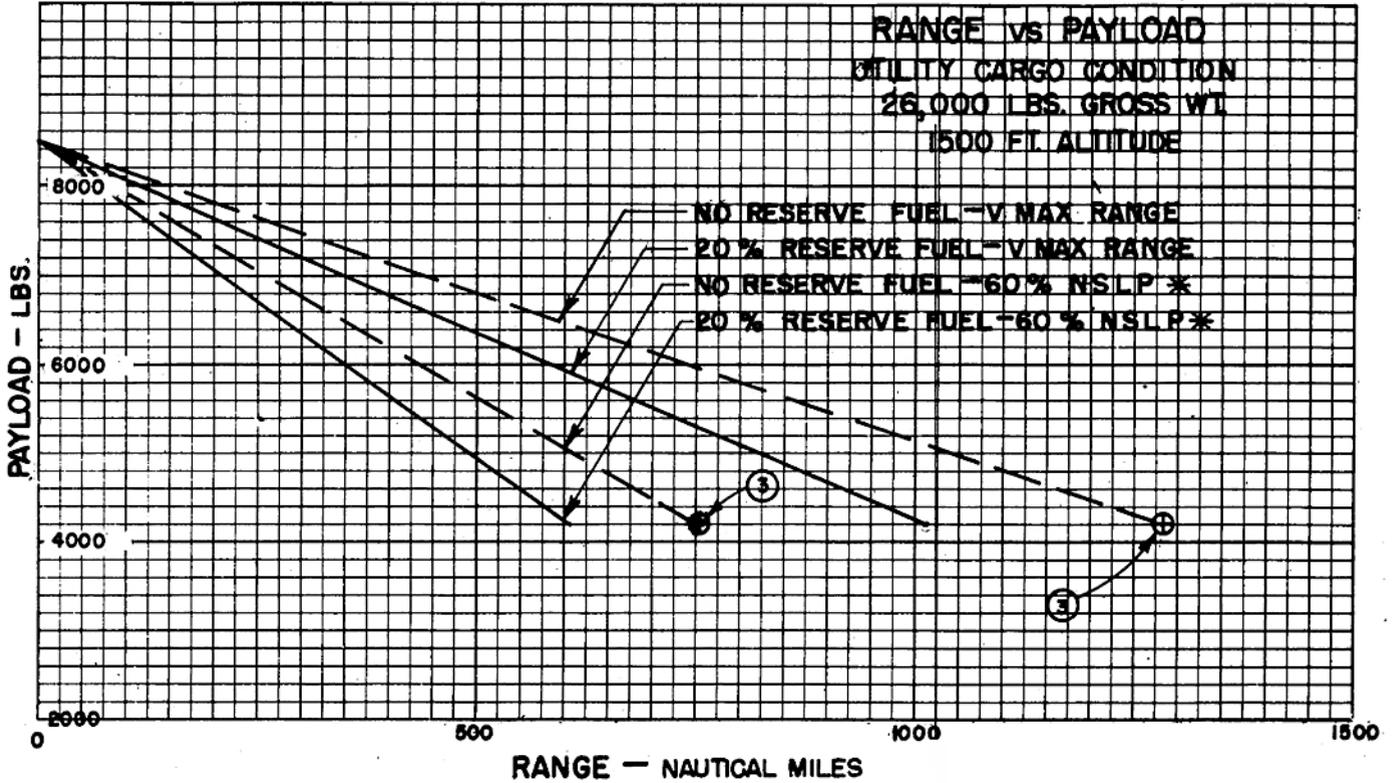
**WEIGHT EMPTY** - Includes de-icer boots and 494# communicating equipment

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

Gross Weight		26000#
Rate of climb/S.L.	- T.O. power	400
Service Ceiling	- Normal Power	8700

NOTE: Performance for all conditions includes effect of de-icer boots. Removal of boots increases V max/S.L. by 1 Kn and max. range at 1500 ft. by 1% (condition 3). Performance for all conditions except ferry includes effect of AN/APS-4 radar on wing. Removal of radar increases V max/S.L. by 3 Kns and max. range at 1500 ft. by 2.5% (condition 3). Performance for all conditions includes effect of two faired wing bomb racks. Removal of racks increases V max/S.L. by 1 Kn max range at 1500 ft. by 0.5% (condition 3).

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BUREAU OF AERONAUTICS, NAVY DEPT.



○ LOADING CONDITION COLUMN NUMBER  
 \* NORMAL SEA LEVEL POWER

BUREAU OF AERONAUTICS  
NAVY DEPARTMENT

WING AREA-822 SQ. FT.  
WING SECTION-  
N.A.C.A. 23017-23012  
M.A.C.-129.1"  
PROPS.-HAMILTON STD. 3 BLADES-  
BLADE DES. NO. 6459A-6  
HULL DISPL.- 150,000 LBS.  
WING TIP FLOATS DISPL.-  
3710 LBS.

