

AIRPLANE CHARACTERISTICS & PERFORMANCE

BUREAU OF AERONAUTICS, NAVY DEPT.

COLUMN NUMBER		1	2	3
LOADING CONDITION		Personnel Transport 6-200# Pass.	Utility Transport	Rescue AN/APS-4 Rescue 4-180# Survivors
GROSS WEIGHT	LBS.	13958	10884	12946
EMPTY WEIGHT	CALCULATED LBS.	8137		
FUEL/OIL	GALS.	550/31	275/18	550/31
USEFUL LOAD	LBS.	5821	2747	
PAYLOAD	LBS.	1200	3074	
ENGINE POWER USED FOR PERFORMANCE		NORMAL	NORMAL	NORMAL
WING LOADING	LBS./SQ.FT.	33.8	26.3	31.4
POWER LOADING ①	LBS./BHP.	10.9	8.5	10.1
V-MAX. SEA LEVEL	KN	170	173	167
V-MAX./CRITICAL ALT.	KN/FT.	171/15500	181/15500	170/15500
V-STALL GROSS WEIGHT ②	KN	69.7	61.6	67.1
V-STALL WITHOUT FUEL ②	KN	60.8	56.7	58.0
TIME-TO-CLIMB -10000FT-	MIN.	10.8	6.6	9.3
TIME-TO-CLIMB -20000FT-	MIN.	43.4	17.7	29.9
SERVICE CEILING	FT.	19600	24400	20900
TAKE-OFF DISTANCE -CALM-	FT.	1170	605	985
TAKE-OFF DISTANCE -15 KN-	FT.	749	361	616
TAKE-OFF DISTANCE -25 KN-	FT.	515	230	418
TAKE-OFF DISTANCE -50 FT. OBST.	FT.			
TAKE-OFF TIME	SECONDS	22	16	19
RATE OF CLIMB -SL-	FT./MIN.	1170	1770	1340
MAX. RANGE / V-AV. ③	NMI./KN	1505/113	900/102	1545/107
RANGE / V-AV. -60%NSP-③-	NMI./KN			
RESCUE RADIUS / V-AV.	NMI./KN.			650/107
A.S.W. RADIUS / V-AV. -20%R-	NMI./KN.			
SCOUT RADIUS	N MI.			
COMBAT RADIUS	N MI.			
ENGINE / PROP. GEAR RATIO		WAC - R - 1820 76 / 3:2		
ENGINE RATING BHP/RPM/ALT.	MILITARY	NORMAL	T.O.	
	1425/2700/SL-10000	1275/2500/SL-3000	1425/2700/SL	
	1100/2600/8700-11600	975/2500/10500-14700		

TANKAGE IN GALLONS		OIL	FUEL	WINGS (external)
AUX. FIXED	PROTECTED			Bombs: 2-250#, 6-100#
	UNPROTECTED	31	550	Depth Bombs: 12-325#
	TOTAL - FIXED INTERNAL			
	DROPPABLE			
	DROPPABLE			
TOTAL		31	550	
NOTE.	① BHP AT MAX. CRIT. ALT.			
	② STALL - WITHOUT POWER			
	③ AT 1500' ALTITUDE			

SUPERSEDES 1 MAR 1945

DATE 1 JAN. 1947

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MODEL XJL-1

AMPHIBIAN

DATE 1 January 1947

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MODEL XJL-1

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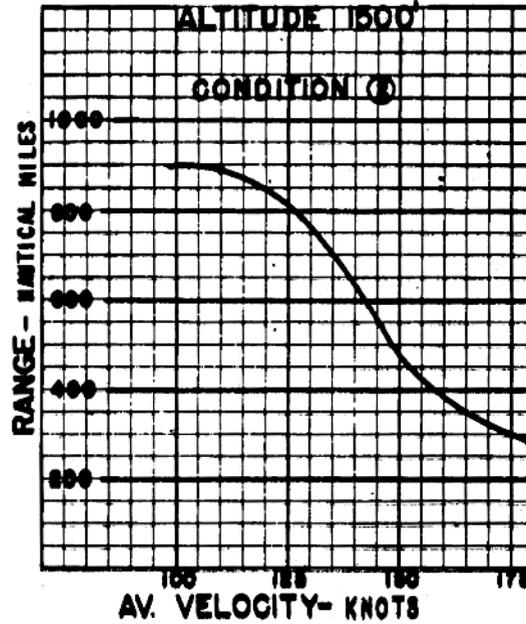
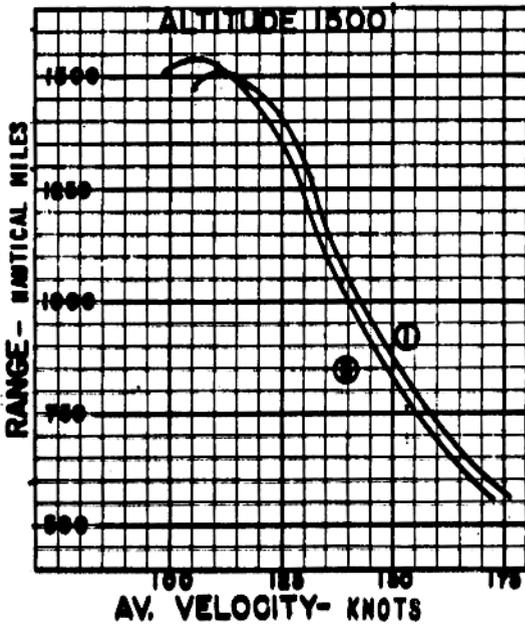
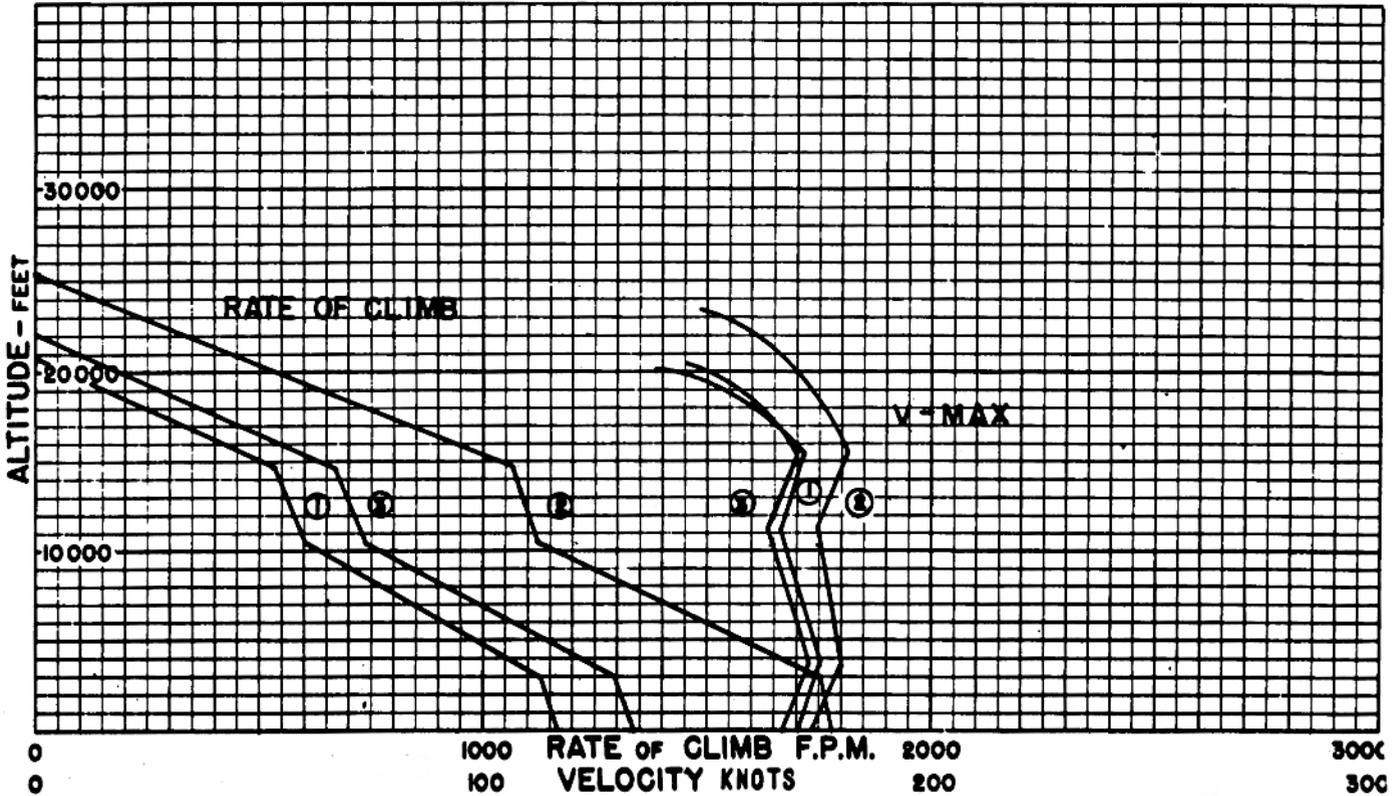
Performance is based on calculations. Range and radius are based on engine specification fuel consumption data increased by 15 percent to conform to past experience.

Two Mk 51-7 wing bomb-racks are available for either bombs or AN/APS-4 radar. Except for the rescue condition performance figures do not include the effect of bomb-racks or radar. Rescue condition performance and range figures include the effect of AN/APS-4 radar on stbd. MA 51-7 bomb-rack.

RESCUE RADIUS FORMULA, Condition No. 3

Top off and catapult; 1 min. at T.O. BHP (includes allowance to climb to 1500 ft.); cruise out at 1500 ft. at V for max. range; 30 min. search at V for max. range; 20 min. to land and rescue 4 survivors at 180 pounds each (fuel may be taken as 03 times normal sea-level rated power); 1 min. at T.O. BHP (includes allowance to climb to 1500 ft.); cruise back at 1500 ft. at V for max. range; 60 min. fuel for rendezvous, landing and reserve at V for max. range.

Gross weight for T.O. after rescue 4 survivors is 12000 pounds.



○ LOADING CONDITION COLUMN NUMBER

MODEL XJL-1

BUREAU OF AERONAUTICS
NAVY DEPARTMENT

WING AREA-415 SQ. FT.
WING SECTION-N.A.C.A.
441B-441E
M.A.C.-101.2°
PROP-HAMILTON STD. C.S.
BLADE DES. NO. 6457A-30
MAIN HULL DISPL.
33,200 LBS.
WING TIP FLOATS DISPL.
1,524 LBS. (TOTAL)

