

**AIRPLANE CHARACTERISTICS & PERFORMANCE**

BUREAU OF AERONAUTICS, NAVY DEPT.

COLUMN NUMBER			1	2	3	4
LOADING CONDITION			TARGET TOW (See note)	TARGET TOW (See note)	TARGET TOW (See note) 4 B. B. TANKS	UTILITY
GROSS WEIGHT	LBS.		29752	29752	37515	28992
EMPTY WEIGHT	ACTUAL LBS.		21820			
FUEL/OIL	GALS.		962/64	962/64	1962/82	962/64
FIXED GUNS/AMMUNITION			NONE			
FLEXIBLE GUNS/AMMUNITION			NONE			
ENGINE POWER USED FOR PERFORMANCE			MILITARY	NORMAL	NORMAL	NORMAL
WING LOADING	LBS./SQ.FT.		45.2	45.2	57.0	44.0
POWER LOADING ①	LBS./BHP.		9.3	10.3	13.0	10.0
V-MAX. SEA LEVEL	MPH.		261	236	230	275
V-MAX. AIRPLANE CRIT. ALT.	MPH.		264/13000	255/14300	243/14200	305/14800
V-STALL GROSS WEIGHT ②	MPH.		92.9	92.9	104.4	91.7
V-STALL WITHOUT FUEL ②	MPH.		83.4	83.4	86.4	82.0
TIME-TO-CLIMB -10000 FT.-	MIN.		7.4	10.1	27.4	7.1
TIME-TO-CLIMB -20000 FT.-	MIN.		26.2	--	--	18.7
SERVICE CEILING	FT.		20900	19600	13800	23800
TAKE-OFF DISTANCE -CALM-	FT.		--	1114	2015	1044
TAKE-OFF DISTANCE -15 KN-	FT.		--	776	1465	723
TAKE-OFF DISTANCE -25 KN-	FT.		--	585	1156	542
TAKE-OFF TIME	SECONDS					
RATE OF CLIMB -SL-	FT./MIN.		1780	1180	570	1580
MAX. RANGE / V-AV. ③	ST.MI./MPH.					1820/156
BOMBING RADIUS/V-AV -20% R-	NMI/KN.					
BOMBING RADIUS/V-AV -33% R-	NMI/KN.					
PATROL RADIUS/V-AV -20% R-	NMI/KN.					
PATROL RADIUS/V-AV -33% R-	NMI/KN.					
SCOUT RADIUS	N MI.					
COMBAT RADIUS	N MI.					
ENGINE / PROP GEAR RATIO			2 P. & W. R - 2800-43 (2:1)			
ENGINE RATING BHP/RPM/ALT.	MILITARY		NORMAL		TAKE-OFF	
	2000/2700/SL-1800		1600/2400/SL-4800		2000/2700	
	1600/2700/7800-11900		1450/2400/7800-13300			
TANKAGE IN GALLONS			OIL	FUEL		
AUX. FIXED	PROTECTED			962	Note:	
	UNPROTECTED	82			Columns 1, 2 and 3 give the performance with a	
	TOTAL - FIXED INTERNAL				Mk-15-1 target on a 7000 ft. line.	
	DROPPABLE				Note:	
	DROPPABLE -4@ - 250 gal. Self Sealing, Bomb Bay			1000	This airplane may alternately be equipped with non	
TOTAL	82	1962			self-sealing bomb bay tanks of same capacity resulting in	
NOTE	STATUTE MILES USED-EXCEPT-RADIUS IS			a reduction of 712 lbs in the weight of 4 tanks.		
	GIVEN IN NAUTICAL MILES & KNOTS					
	① BHP AT MAX. CRIT. ALT.					
	② STALL-WITH POWER					
③ AT 1500 ft. ALTITUDE						

NAYAE-1519B (Rev. 4-44)

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BUREAU OF AERONAUTICS, NAVY DEPT.

COLUMN NUMBER				
LOADING CONDITION				
GROSS WEIGHT LBS.				
EMPTY WEIGHT LBS.				
FUEL/OIL GALS.				
FIXED GUNS/AMMUNITION				
FLEXIBLE GUNS/AMMUNITION				
ENGINE POWER USED FOR PERFORMANCE				
WING LOADING LBS./SQ.FT.				
POWER LOADING ① LBS./BHP				
V-MAX. SEA LEVEL MPH.				
V-MAX. AIRPLANE CRIT. ALT. MPH.				
V-STALL. GROSS WEIGHT ② MPH.				
V-STALL. WITHOUT FUEL ② MPH.				
TIME-TO-CLIMB -10000FT.- MIN.				
TIME-TO-CLIMB -20000FT.- MIN.				
SERVICE CEILING FT.				
TAKE-OFF DISTANCE -CALM- FT.				
TAKE-OFF DISTANCE -15 KN.- FT.				
TAKE-OFF DISTANCE -25KN.- FT.				
TAKE-OFF TIME SECONDS.				
RATE OF CLIMB -SL- FT/MIN.				
MAX. RANGE /V-AV. ③ ST.MI./MPH.				
BOMBING RADIUS/V-AV -20%R- NMI./KN.				
BOMBING RADIUS/V-AV -33%R- NMI./KN.				
PATROL RADIUS/V-AV -20%R- NMI./KN.				
PATROL RADIUS/V-AV -33%R- NMI./KN.				
SCOUT RADIUS NMI.				
COMBAT RADIUS NMI.				

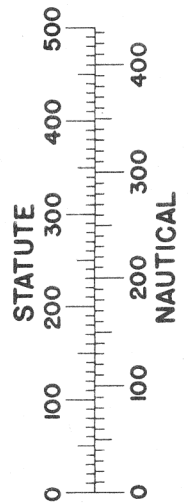
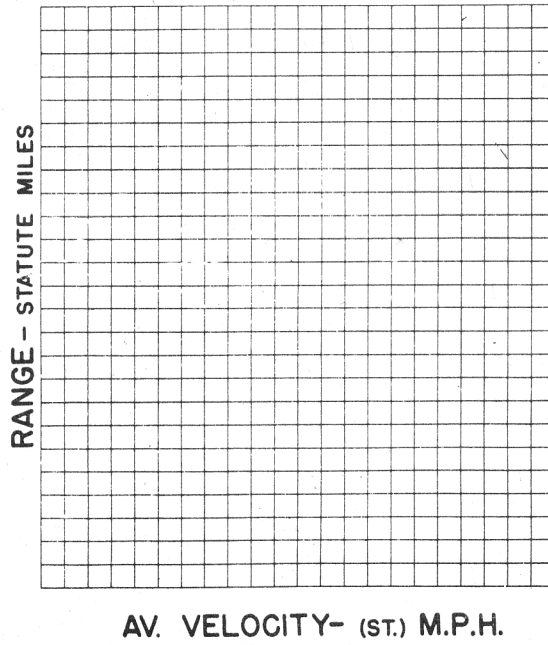
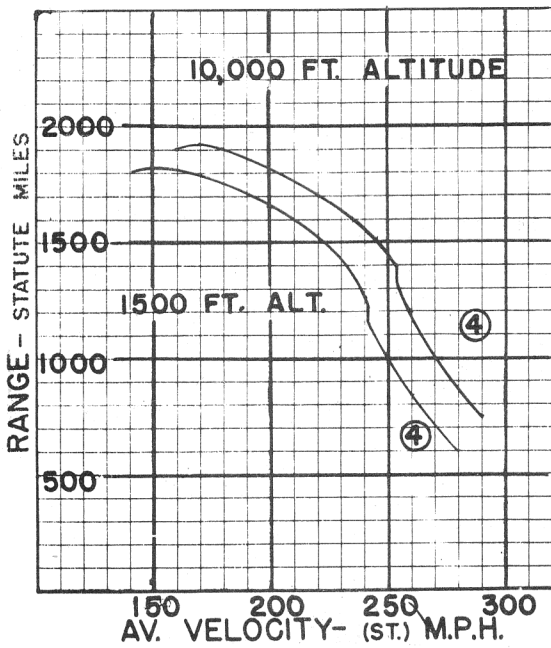
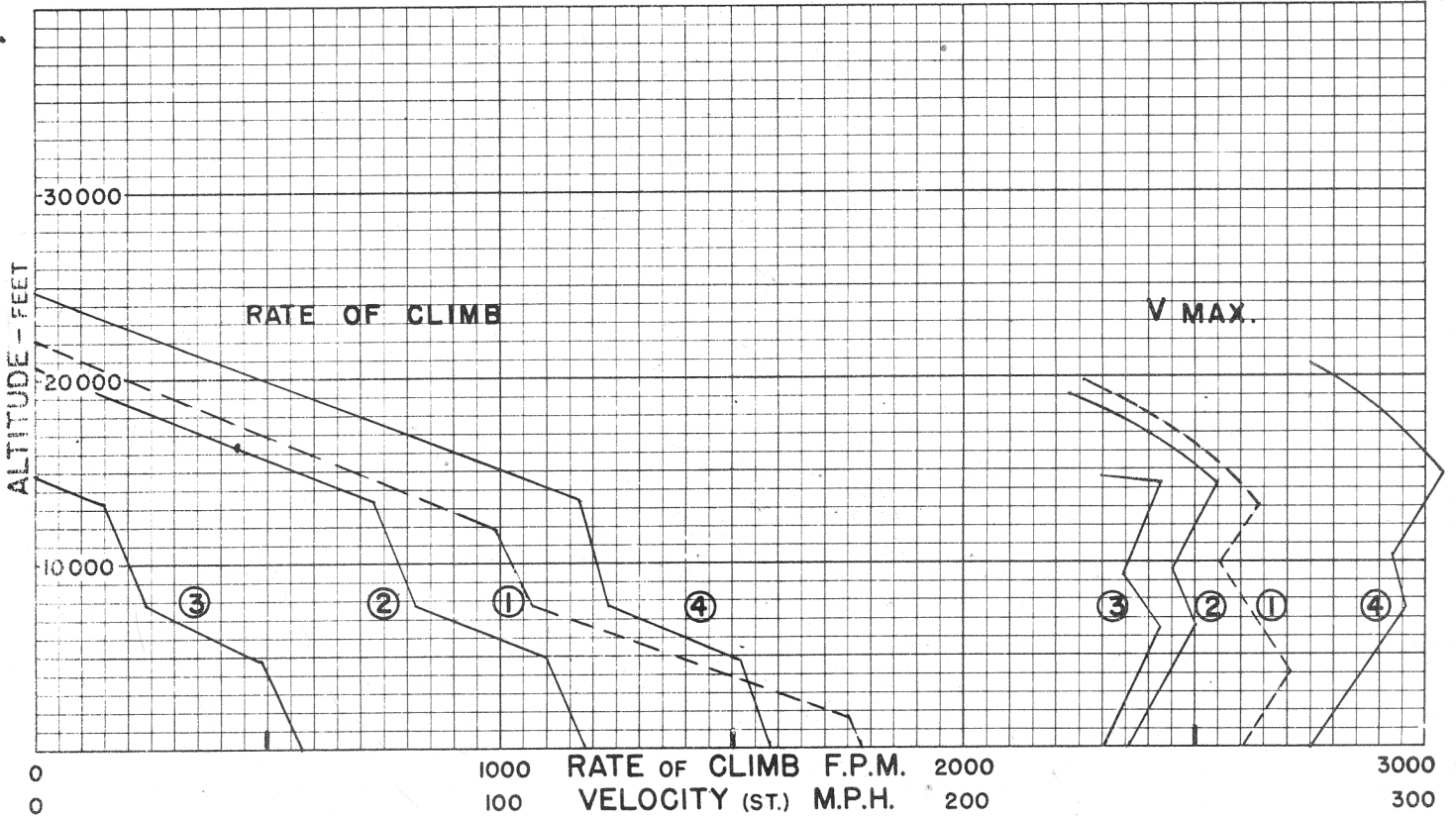
PERFORMANCE IS BASED ON - FLIGHT TEST

RANGE & RADIUS ARE BASED ON ENGINE REQUIREMENTS

FUEL CONSUMPTION DATA INCREASED

BY 15 PERCENT TO CONFORM WITH PAST EXPERIENCE.

Fuel consumption while towing MK15-1 sleeve target on 7000' line at 75% normal sea-level power at 10000 ft. is estimated to be 281 gal/hr. at Vave. of 225 st.mph. 93 gal. fuel consumed in climb to 10000 ft. at 75% nsp. Take-off gross weight = 29750#.



○ LOADING CONDITION COLUMN NUMBER

BUREAU OF AERONAUTICS  
NAVY DEPARTMENT

WING AREA - 659 SQ. FT.  
WING SECTION -  
N.A.C.A. { 0016.7 - 64  
          { 00096 - 64  
M.A.C. 121.8  
PROP. - CURTISS AMERICAN  
BLADE DESIGN NO. C 3821306

