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NAVAER 1519A (REV 2-47)

ISSUE OF 4 PAGES

AIRPLANE CHARACTERISTICS & PERFORMANCE

BUREAU OF AERONAUTICS, NAVY DEPT.

COLUMN NUMBER		1	2		
LOADING CONDITION		TOW TARGET STOWED	TOW TARGET TRAILING		
GROSS WEIGHT	LBS.	31614	31614		
EMPTY WEIGHT (ACTUAL)	LBS.	19530			
FUEL / OIL	GALS.	925/60	925/60		
FIXED GUNS/AMMUNITION		NONE			
FLEXIBLE GUNS/AMMUNITION		NONE			
ENGINE POWER USED FOR PERFORMANCE		NORMAL	NORMAL		
WING LOADING	LBS./SQ.FT.	58.6	58.6		
POWER LOADING ①	LBS./BHP.	10.9	10.9		
V-MAX. SEA LEVEL	KN.	264	240		
V-MAX.	KN./FT.	287/13200	255/12400		
V-STALL GROSS WEIGHT ②	KN.	93.1	93.1		
V-STALL. WITHOUT FUEL ②	KN.	84.5	84.5		
TIME-TO-CLIMB -10000 FT-	MIN.	6.0	7.1		
TIME-TO-CLIMB -20000 FT-	MIN.	16.1	21.6		
SERVICE CEILING	FT.	27000	23900		
TAKE-OFF DISTANCE -CALM-	FT.	1378			
TAKE-OFF DISTANCE -15 KN-	FT.	995			
TAKE-OFF DISTANCE -25 KN-	FT.	772			
TAKE-OFF DISTANCE -50 FT. OBST.	FT.				
TAKE-OFF TIME	SECONDS				
RATE OF CLIMB -SL-	FT./MIN.	1860	1640		
MAX. RANGE / V-AV. ③	N MI/KN.	1845/150	1460/145		
RANGE / V-AV. -60% NSP-③-	N MI/KN.				
SEARCH RADIUS / V-AV. -20% R-	N MI/KN.				
A.S.W. RADIUS / V-AV. -20% R-	N MI/KN.				
TIME ON STATION	HRS.		3.0		
COMBAT RADIUS	N MI.				
ENGINE / PROP GEAR RATIO 2 P & W R-280J-71 / 2:1					
ENGINE RATING BHP/RPM/ALT.	MILITARY	NORMAL		TAKE-OFF	
	2000/2700/SL-1500'	1600/2400/3L-5700'		2000/2700/S.L.	
	1600/2700/13500'	1450/2400/8300'-13000'			
TANKAGE IN GALLONS		OIL	FUEL	OFFENSIVE ARMAMENT	
AUX. FIXED	PROTECTED			NONE	
	UNPROTECTED	60	925	In "Trailing" configuration, tow target is carried at the end of a 12000 ft. - 1/8" cable.	
	TOTAL - FIXED INTERNAL	60	925	Tow Target MK 23 Mod. 0 is used.	
	DROPPABLE				
DROPPABLE					
TOTAL		60	925		
NOTE	① BHP AT MAX. CRIT. ALT.				
	② STALL - WITH POWER				
	③ AT 1500' ALTITUDE				

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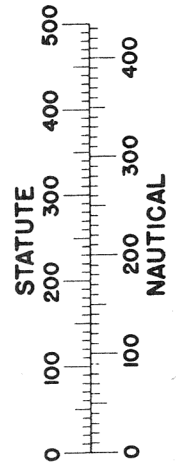
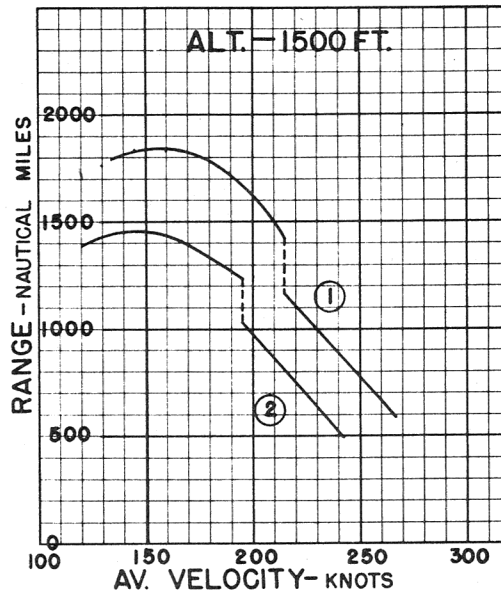
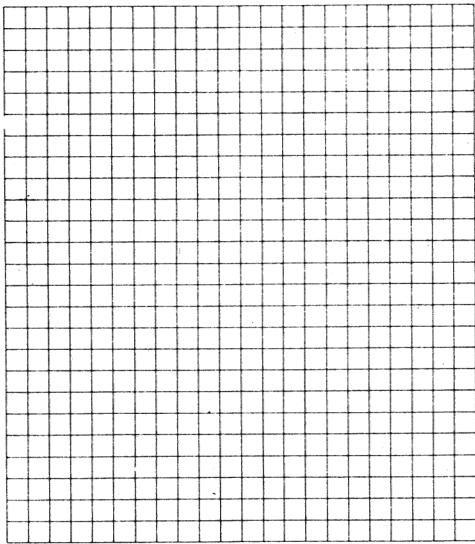
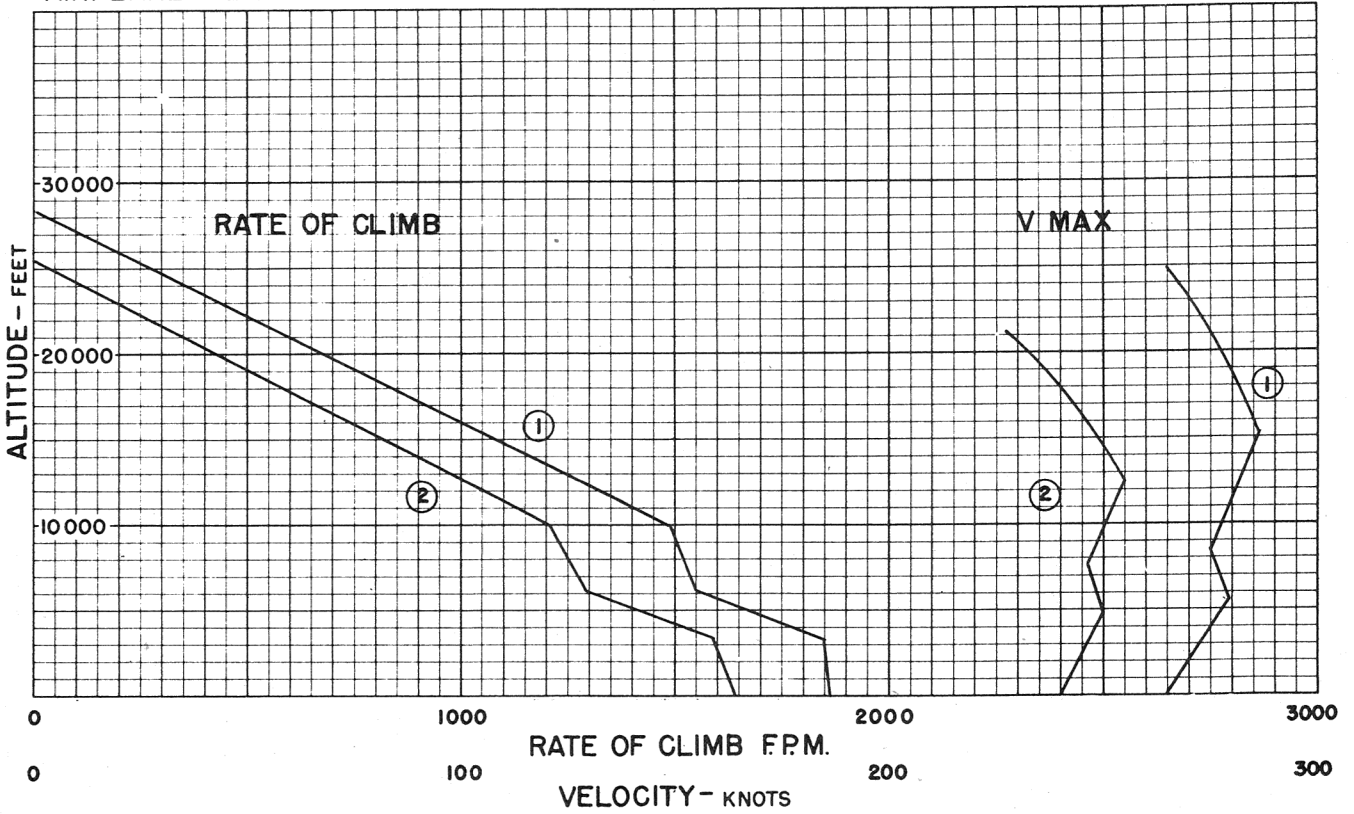
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Performance is based on flight test. Range and radius are based on flight test, fuel consumption data increased 5% to conform with past experience.

Time on station is based on a radius of 100 nautical miles at 1500 ft. altitude, at speed for maximum range. Fuel allowances are: 20 min./5 rated RPM, for start and warm-up: 1 min./rated T.O. power, for take-off: one hour/max. range speed, for reserve. Time on station is at continuous utility power.

Time on station is reduced 2.6 minutes for each 10 nautical miles of radius beyond 100 nautical miles.

All performance calculated with de-icer boots on wing and tail.



○ LOADING CONDITION COLUMN NUMBER

BUREAU OF AERONAUTICS
NAVY DEPARTMENT

WING AREA 540.0 SQ. FT.
WING SECTION
N.A.C.A. 65, 2-215
M. A. C. 97.53 IN.
PROP - HAMILTON STD. HYDROMATIC
BLADE DESIGN NO. 6359A-18

