

AIRPLANE CHARACTERISTICS & PERFORMANCE

BUREAU OF AERONAUTICS, NAVY DEPT.

COLUMN NUMBER		1	2	3
LOADING CONDITION		PASSENGER TRANSPORT (DAY) 16 pass.	PASSENGER TRANSPORT (NIGHT) 9 pass.	PASSENGER TRANSPORT (DAY) 16 pass.
GROSS WEIGHT	LBS.	56000	56000	60000
EMPTY WEIGHT	-Actual- LBS.	32045		
FUEL/OIL	GALS.	2897/140	3150/140	3150/140
FIXED USEFUL LOAD	-LBS.	1920		
PAYLOAD	-LBS.	3600	2085	6082
ENGINE POWER USED FOR PERFORMANCE		NORMAL	NORMAL	NORMAL
WING LOADING	LBS./SQ.FT.	53.5	53.5	57.4
POWER LOADING ①	LBS./BHP.	12.7	12.7	13.6
V-MAX. SEA LEVEL	MPH.	244	244	239
V-MAX. AIRPLANE CRIT. ALT.	MPH.	310/26900	310/26900	306/26900
V-STALL GROSS WEIGHT ②	MPH.	91.8	91.8	95.2
V-STALL WITHOUT FUEL ②	MPH.	76.4	74.8	78.8
TIME-TO-CLIMB -10000FT-	MIN.	10.0	10.0	11.4
TIME-TO-CLIMB -20000FT-	MIN.	20.8	20.8	24.0
SERVICE CEILING	FT.	33400	33400	32400
TAKE-OFF DISTANCE -CALM-	FT.			
TAKE-OFF DISTANCE -15 KN-	FT.			
TAKE-OFF DISTANCE OVER 50 FT. OBST. FT.		2960	2960	3720
TAKE-OFF TIME	SECONDS			
RATE OF CLIMB -SL-	FT./MIN.	1010	1010	880
MAX. RANGE/V-AV ③	STMI/MPH.	3130/177	3405/176	3370/178
RANGE/V-AV -60% N.S.P. ③	ST.MI./MPH.	2550/206	2780/206	2750/204
BOMBING RADIUS/V-AV -35%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		4 P.&W. R-1830-65(16:9) Turbo		
ENGINE RATING BHP/RPM/ALT.		NORMAL		TAKE-OFF
		1100/2550/SL-25000'		1200/2700

TANKAGE IN GALLONS		OIL	FUEL	
FIXED	PROTECTED	140		PAYLOAD:- Passengers, cargo, baggage FIXED USEFUL LOAD:- Crew, trapped fuel and oil, and equipment. COMMUNICATING Equipment (568#) included in wt. empty. Performance with one engine inoperative (flaps & landing gear up & propeller feathered) is as follows: Gross Weight - 60000 Rate of Climb - SL - (T.O. power) - 505 Service Ceiling (normal power) - 26500
	UNPROTECTED		3150	
	TOTAL - FIXED INTERNAL	140	3150	
	TOTAL	140	3150	
AUX.	DROPPABLE			
	DROPPABLE			
NOTE	STATUTE MILES USED-EXCEPT-RADIUS IS GIVEN IN NAUTICAL MILES & KNOTS			PERFORMANCE is based on calculations. Range is based on engine requirement fuel consumption data increased by 15% to conform with past experience.
	① BHP AT MAX. CRIT. ALT.			
	② STALL - WITH POWER			
	③ AT 1500' ALTITUDE -NO RESERVE FUEL			

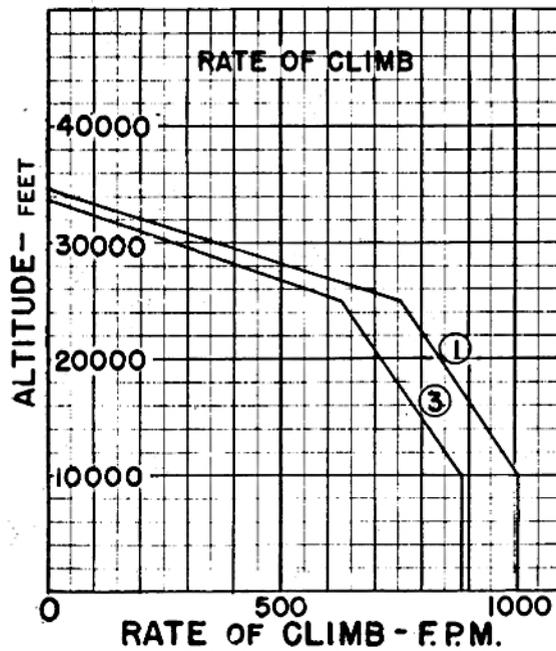
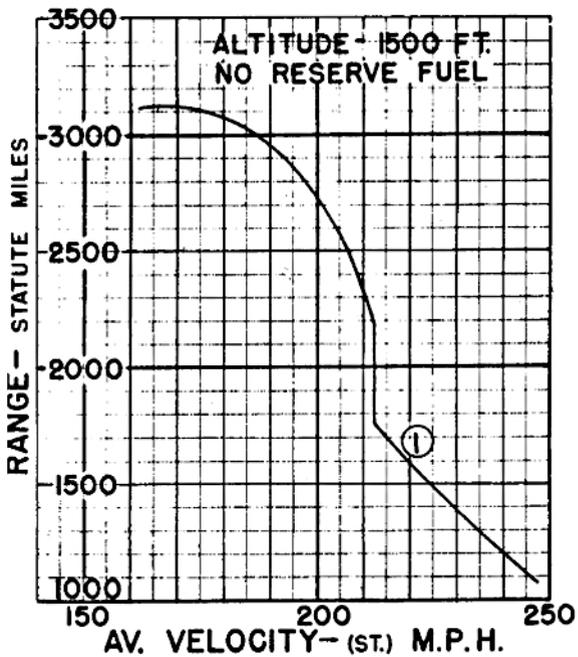
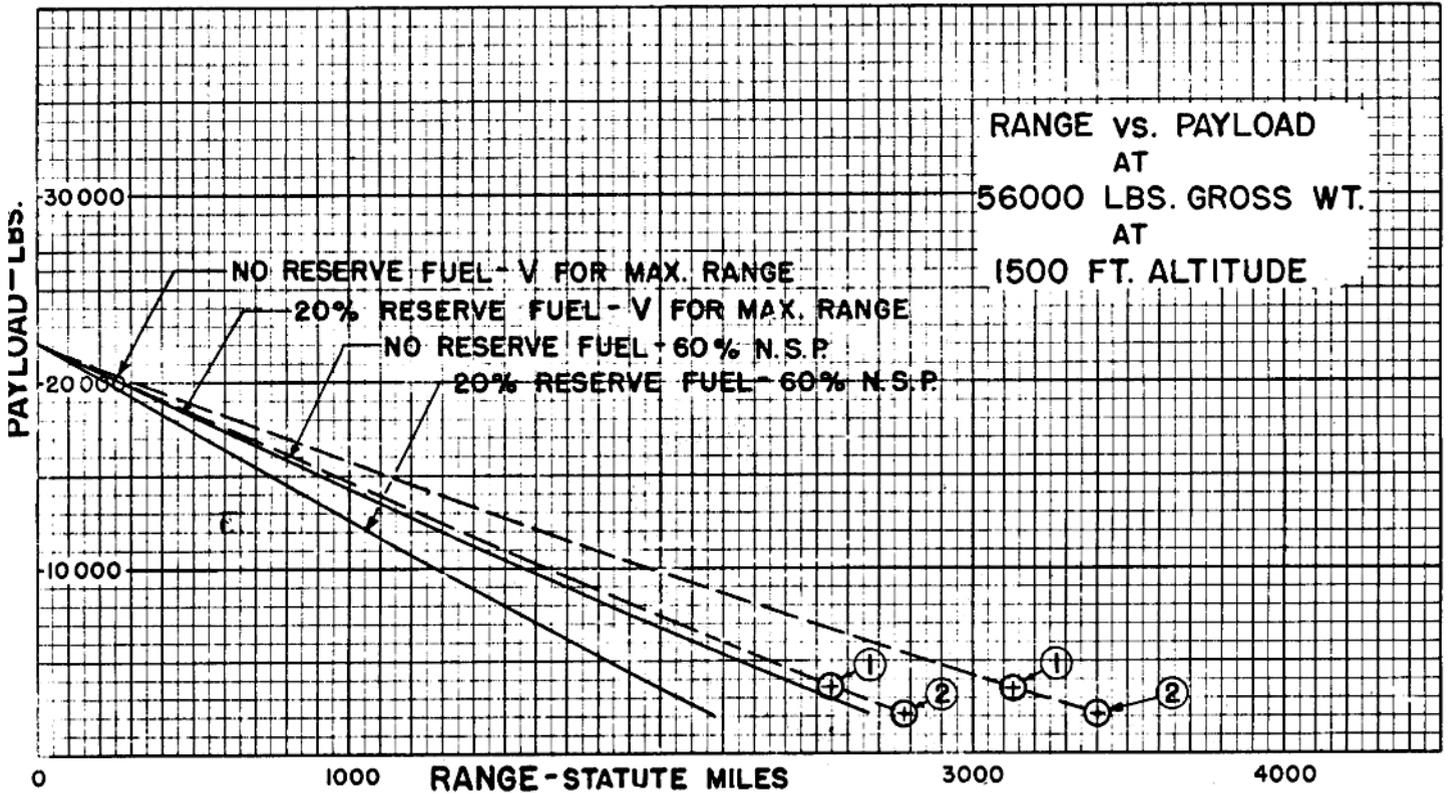
1 AUGUST 1944

MODEL-RY-1

AIRPLANE PERFORMANCE

NAVAER-1335 C

BUREAU OF AERONAUTICS, NAVY DEPT.



○ LOADING CONDITION COLUMN NUMBER

BUREAU OF AERONAUTICS
NAVY DEPARTMENT

WING AREA - 1048 SQ. FT.
WING SECTION - C.A.C. 22 %
TO 9.3 %
M.A.C. - 123.72"
PROP. - HAMILTON STD.
BLADE DESIGN NO. 6477A-0

