

AIRPLANE CHARACTERISTICS & PERFORMANCE

BUREAU OF AERONAUTICS, NAVY DEPT.

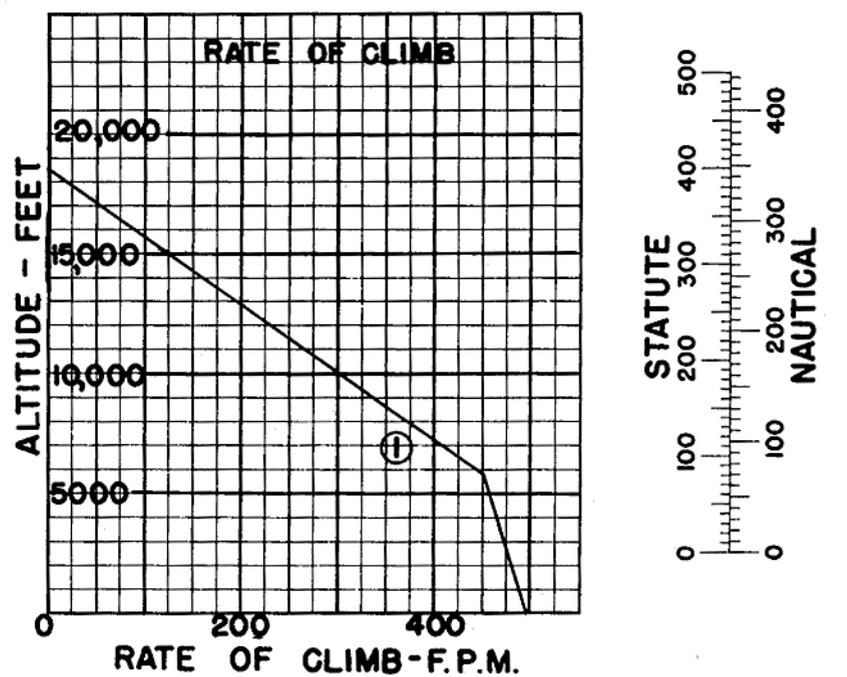
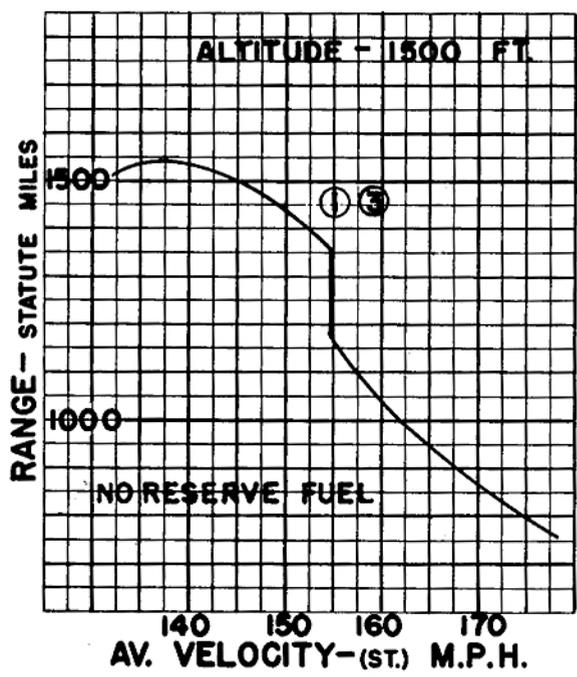
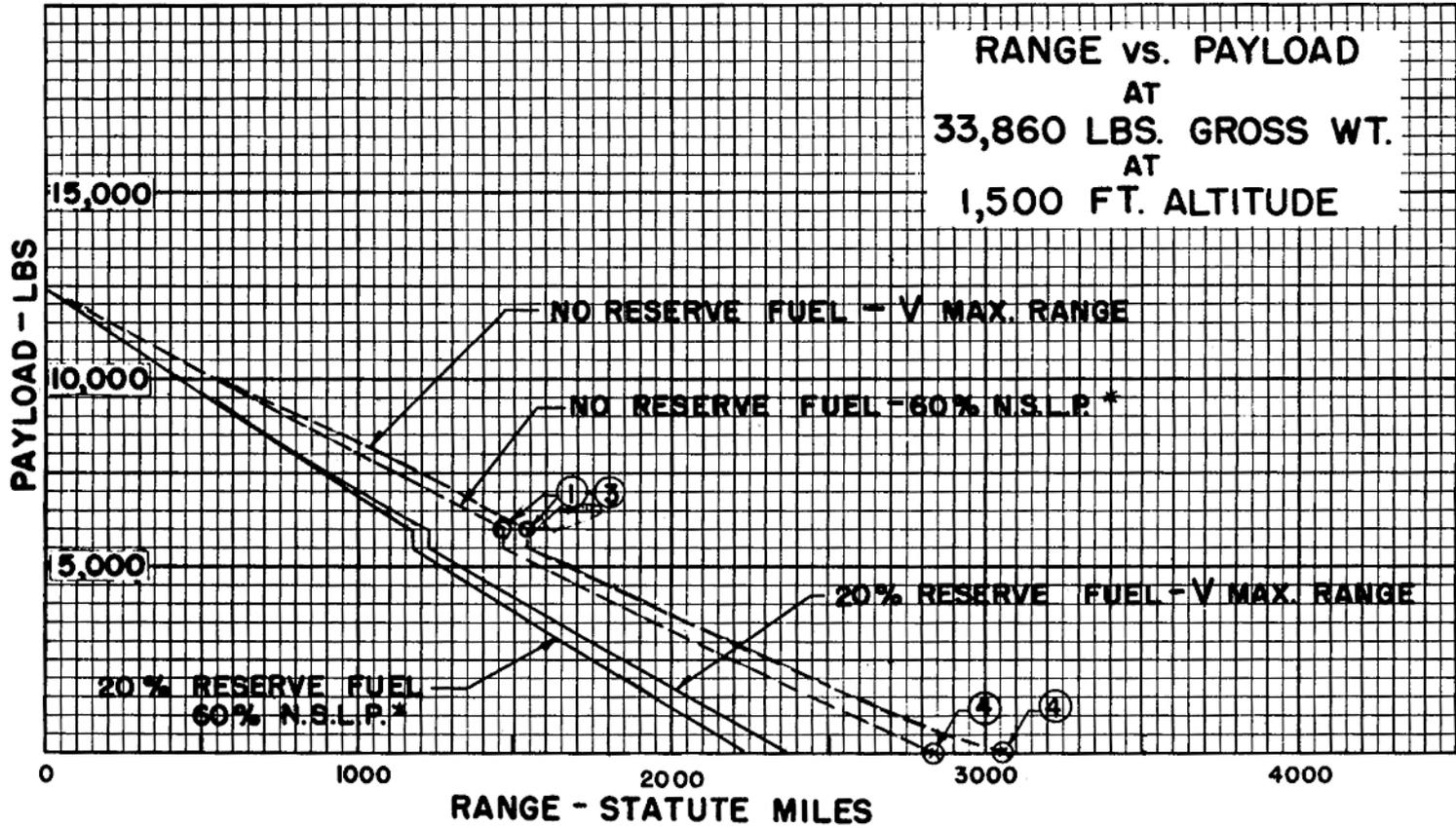
COLUMN NUMBER			1	2	3	4
LOADING CONDITION			CARGO	STRETCHER BEARER 24 PATIENTS	TRANSPORT 24 TROOPS	FERRY
GROSS WEIGHT	LBS.		33860	32000	33860	33860
EMPTY WEIGHT	- Actual -	LBS.	20778			
FUEL/OIL	GALS.		995/55	899/50	995/55	1884/90
FIXED USEFUL LOAD	LBS.		683	1371	683	1104
PAYLOAD	LBS.		6015	4095	6015	0
ENGINE POWER USED FOR PERFORMANCE			NORMAL	NORMAL	NORMAL	NORMAL
WING LOADING	LBS./SQ.FT.		24.2	22.9	24.2	24.2
POWER LOADING ①	LBS./BHP.		16.1	15.2	16.1	16.1
V-MAX. SEA LEVEL	MPH.		176	178	176	176
V-MAX. AIRPLANE CRIT. ALT.	MPH.		189/7400	191/7400	189/7400	189/7400
V-STALL GROSS WEIGHT ②	MPH.		67.8	65.9	67.8	67.8
V-STALL WITHOUT FUEL ②	MPH.		61.5	60.1	61.5	55.3
TIME-TO-CLIMB -10000FT-	MIN.		23.3	19.7	23.3	23.3
TIME-TO-CLIMB -20000FT-	MIN.					
SERVICE CEILING	FT.		15600	16900	15600	15600
TAKE-OFF DISTANCE OVER 50 FT. OBST. FT.			2730	2360	2730	2730
TAKE-OFF DISTANCE -15 KN-	FT.					
TAKE-OFF DISTANCE -25 KN-	FT.					
TAKE-OFF TIME	SECONDS					
RATE OF CLIMB -SL-	FT./MIN.		490	580	490	490
MAX. RANGE /V-AV. ③	STMI/MPH.		1540/139	1430/129	1540/139	3060/122
RANGE/V-AV -60%NSP ③	STMI/MPH		1470/147	1340/149	1470/147	2840/149
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 R-1830-92/16 to 9			
ENGINE RATING BHP/RPM/ALT.	NORMAL		NOTES Engine ratings are AEL ratings. These do not conform to the engine data obtained in the RB-1 flight tests. The flight test data are used in the performance calculations. Range and radius are based on engine requirement fuel consumption data increased by 15% to conform with past experience.			
	1050/2550/SL - 7000					
	TAKE-OFF					
		1200/2700				
TANKAGE IN GALLONS			OIL	FUEL		
AUX. FIXED	PROTECTED				PAYLOAD:- Cargo, passengers, or baggage.	
	UNPROTECTED		60	995	FIXED USEFUL LOAD:- Crew, trapped fuel & oil, and equipment	
	TOTAL - FIXED INTERNAL				COMMUNICATING Equipment (375#) included in weight empty.	
	DROPPABLE				Performance with one engine inoperative (flaps and landing gear up, propeller feathered) is as follows:	
	NOT DROPPABLE		30	995	Gross Weight at 100 fpm R. of C. (T.O. power) = 30400 lb.	
TOTAL		90	1990	Gross Weight at 1000 ft. Service Ceiling - (normal power) = 27900 lb.		
NOTE	STATUTE MILES USED-EXCEPT-RADIUS IS GIVEN IN NAUTICAL MILES & KNOTS					
	① BHP AT MAX. CRIT. ALT.					
	② STALL - WITH POWER					
③ AT 1500' ALTITUDE						

SUPERSEDES 1 APRIL, 1943

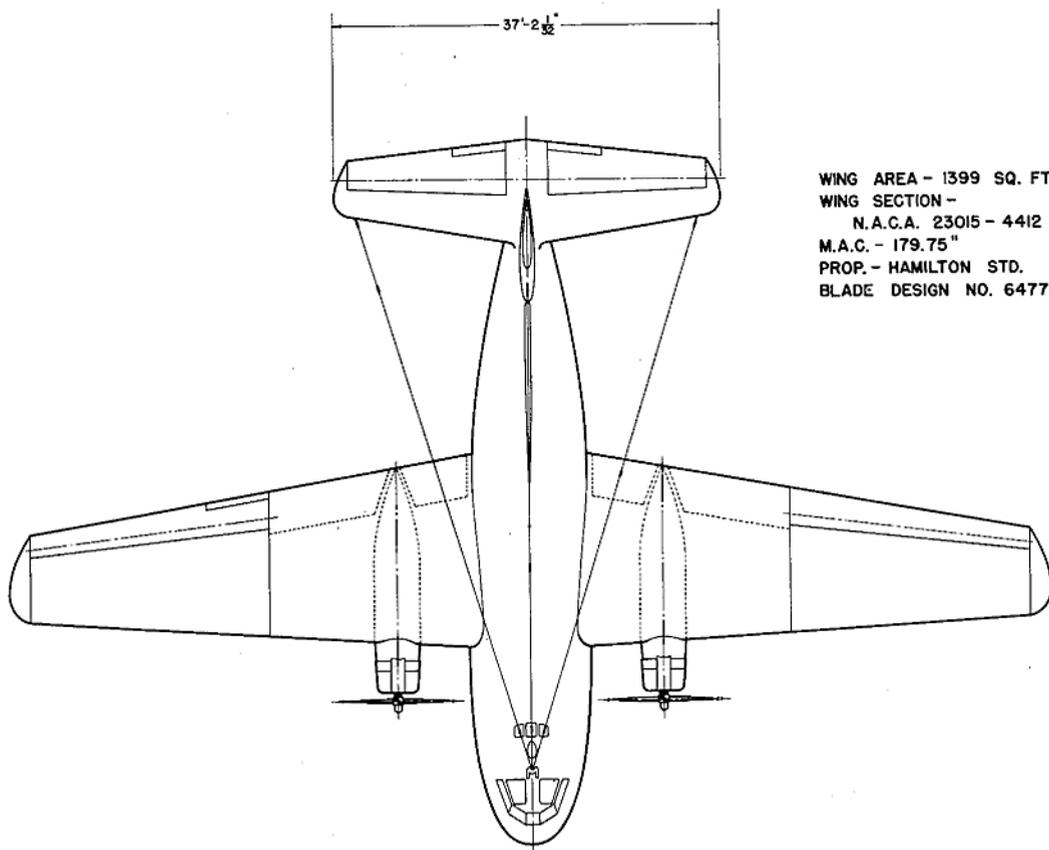
DATE 1 Sept. 1944

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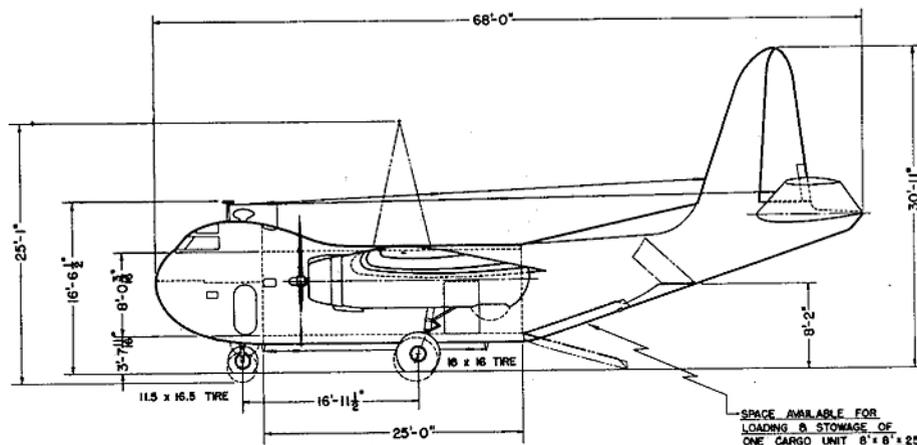
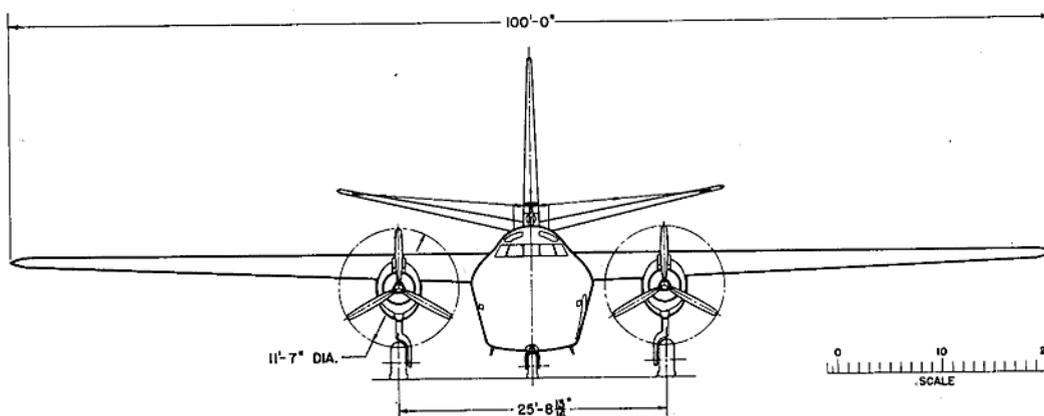
MODEL RB-1



○ LOADING CONDITION COLUMN NUMBER
 * NORMAL SEA LEVEL POWER



WING AREA - 1399 SQ. FT.
 WING SECTION -
 N.A.C.A. 23015 - 4412
 M.A.C. - 179.75"
 PROP. - HAMILTON STD.
 BLADE DESIGN NO. 6477A-0



SPACE AVAILABLE FOR
 LOADING & STOWAGE OF
 ONE CARGO UNIT 8' x 6' x 25'