

**INTER-OFFICE MEMORANDUM**  
**ARMY AIR FORCES**  
**HEADQUARTERS OF THE MATERIEL COMMAND**  
**WASHINGTON**

October 23, 1942

**TO:** Chief, Experimental Engineering Section, Wright Field.

8975

**SUBJECT:** Performance and Characteristics of the Japanese Zero  
 Model A6M2 Airplane.

1. Forwarded herewith is a condensed report of pertinent information taken from Navy Department reports on the Zero-2, Model A6M2 airplane. The figures are the results of flight tests recently undertaken by the Navy at San Diego, California. This information should be treated with reserve in lieu of a forthcoming formal report:

**Gross Weight:** 5555 pounds.

**Engine:** 14 cylinder radial, 3690 cubic inch displacement.  
 900 B.H.P. estimated at take-off.  
 840 B.H.P. normal.

**Armament:** Two (2) synchronized 7.7mm/500 rounds each.  
 Two (2) 20mm Oerlikon/60 rounds each.

**Fuel:** Two (2) 51.5 gal. wing tanks  
 One (1) 38.0 gal. fuselage tank  
 One (1) 87. gal. belly tank (droppable).

**Range:** 1175 miles with all internal fuel.

**Performance:** These preliminary figures for maximum speed and rate of climb are not reduced to standard conditions and are not corrected for compressibility.

	Approx. V max.	at sea level	(MPH)	277
	" " "	at 6000 feet	(MPH)	299
	" " "	at 12,000 feet	(MPH)	320
*	" " "	at 16,000 feet	(MPH)	335
	" " "	at 20,000 feet	(MPH)	331
	" " "	at 24,000 feet	(MPH)	319

	Approx. rate of climb	at sea level	(ft/min)	2710
	" " "	at 6000 feet	(ft/min)	2620
	" " "	at 12,000 feet	(ft/min)	2530
**	" " "	at 15,000 feet	(ft/min)	2480
	" " "	at 20,000 feet	(ft/min)	1760

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- \* Approx. critical altitude in level flight.
- \*\* Approx. critical altitude in climb.

Service Ceiling: 37000' at maximum power.

NOTE: For these tests the propeller setting used permitted a maximum RPM of approximately 2600 and the manifold pressure is automatically regulated to 35" below critical altitude.

*B. W. Chidlaw, Col., A.C.*  
B. W. CHIDLAW,  
Colonel, Air Corps,  
Assistant Chief of Staff (E)

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