



DECLASSIFIED

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DATE 1 DECEMBER 1947

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MODEL XA2D-1

**AIRPLANE CHARACTERISTICS & PERFORMANCE**

BUREAU OF AERONAUTICS, NAVY DEPT.

Performance is based on flight tests of XBT2D-1 airplane. Range and radius are based on engine specification data increased by 7.5% to conform with past experience.

Attack Conditions 1 & 2: two external racks.

**FIGHTER COMBAT RADIUS FORMULA NO. F-3-MODIFIED CONDITION NO. - 3**      RADIUS=CLIMB+CRUISE-OUT+CRUISE BACK

WARM-UP	RENDEZVOUS	CLIMB	CRUISE OUT	DROP TANKS	COMBAT	CRUISE BACK	RESERVE
30 sec. at Max Stat. Thrust	Climb to 5000 ft.	to 30000 ft.	at 30000 ft.	and	15 min. -V max. at 15000 ft.	at 30000 ft.	15 min. at 10000 ft.
<u>TAKE-OFF</u> 1 min. at T.O. Thrust	Mil. Thrust 10 min. REND. Vel. for Max. Range	Mil. Thrust	at Vel. for Max. Range	<u>DESCEND</u> to 15000 ft.	Mil. Thrust <u>RETURN</u> to 30000 ft. Mil. Thr.	at Vel. for Max. Range	15 min. at S.L. Vel. for max. End.

XA2D-1 is equipped with fuel transfer system, no fuel dropped before entering combat

**FIGHTER ENDURANCE FORMULA NO. F-3-MODIFIED CONDITION NO. - 3**

WARM-UP	RENDEZVOUS	CLIMB	ENDURANCE	RESERVE
30 sec. at Max Stat. Thrust	Climb to 5000 ft.	to 30,000 ft.	at 30000 ft. at Vel. for Max. Endurance	15 min. at 10000 ft. 15 min. at S.L. Vel. for Max. End.
<u>TAKE-OFF</u> 1 min. at T. O. Thrust	Mil. Thrust 10 min. REND. Vel. for Max. Range	Mil. Thrust		

Endurance is reduced 17 minutes for each 5 minutes of combat power operation at 30,000 ft. altitude.

**BOMBER COMBAT RADIUS FORMULA NO. B-3-MODIFIED CONDITION NO. - 4**      RADIUS=CLIMB+CRUISE OUT+CRUISE BACK

WARM-UP	RENDEZVOUS	CLIMB	CRUISE OUT	DROP TANKS	COMBAT	CRUISE BACK	RESERVE
30 sec. at Max Stat. Thrust	Climb to 5000 ft.	to 30000 ft.	at 30000 ft.	<u>DESCEND</u> to 1500 ft.	10 min. -V max. at 1500 ft.	at 30000 ft.	15 min. at 10000 ft.
<u>TAKE-OFF</u> 1 min. at T.O. Thrust	Mil. Thrust 10 min. REND. Vel. for Max. Range	Mil. Thrust	at Vel. for Max. Range	<u>DROP BOMBS</u>	Mil. Thrust <u>RETURN</u> to 30000 ft. Mil. Thr.	at Vel. for Max. Range	15 min. at S. L. Vel. for max. End.

XA2D-1 is equipped with fuel transfer system. No fuel is dropped before entering combat.

200 ft. length is required to spot 20 airplanes on the 96ft. wide deck immediately aft of the forward ramp on CV-9 class carriers.

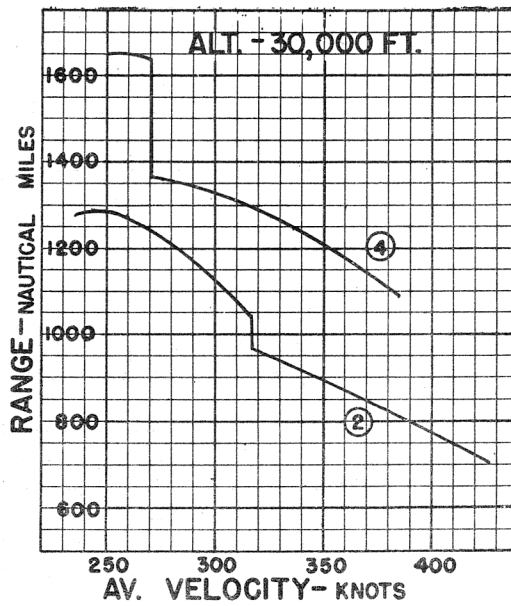
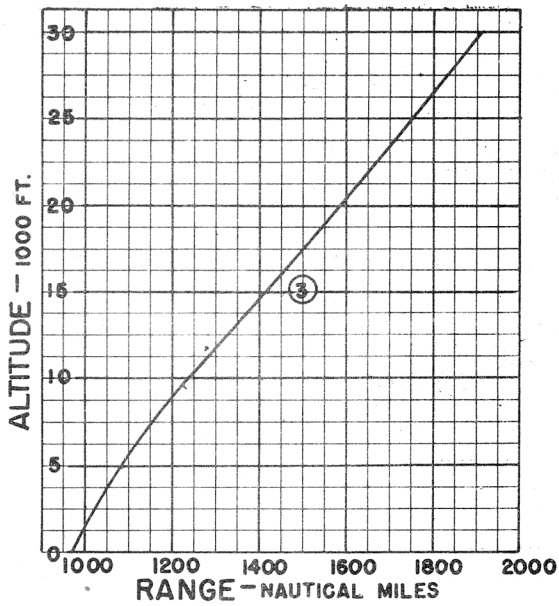
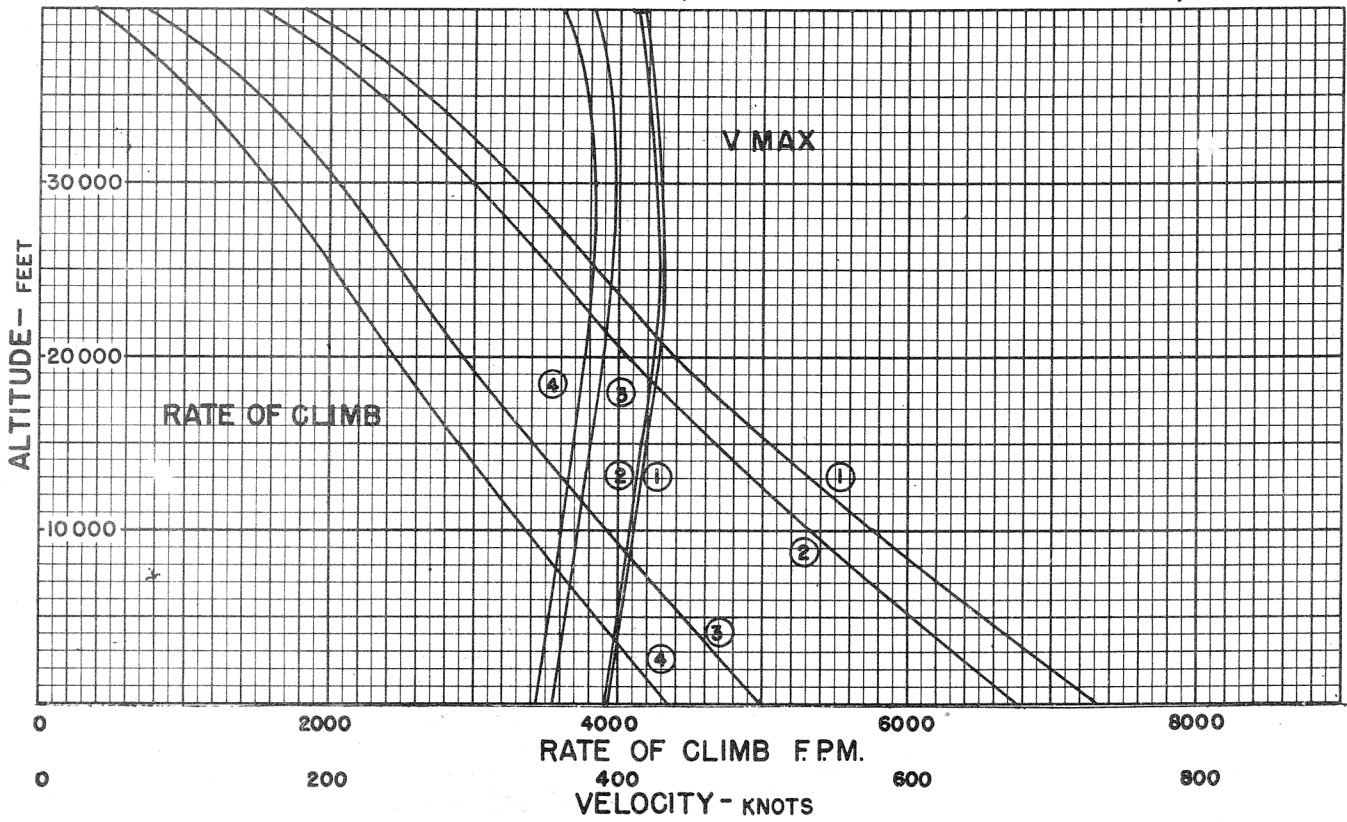
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AIRPLANE PERFORMANCE

NAVAER - 1335 C (REV. 2-47)

BUREAU OF AERONAUTICS, NAVY DEPT.



○ LOADING CONDITION COLUMN NUMBER

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MODEL - XA2D-1

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BUREAU OF AERONAUTICS  
NAVY DEPARTMENT

WING AREA - 400 SQ. FT.  
WING SECTION:  
ROOT - N.A.C.A. 0012 (4.4) 45/45 -15°  
TIP - N.A.C.A. 0012 -63/30 -15°  
MAC - 99.5"

