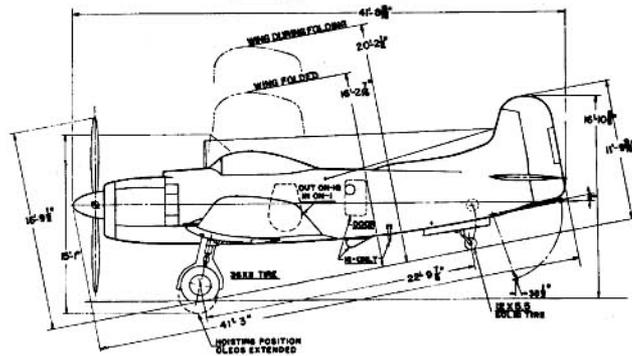
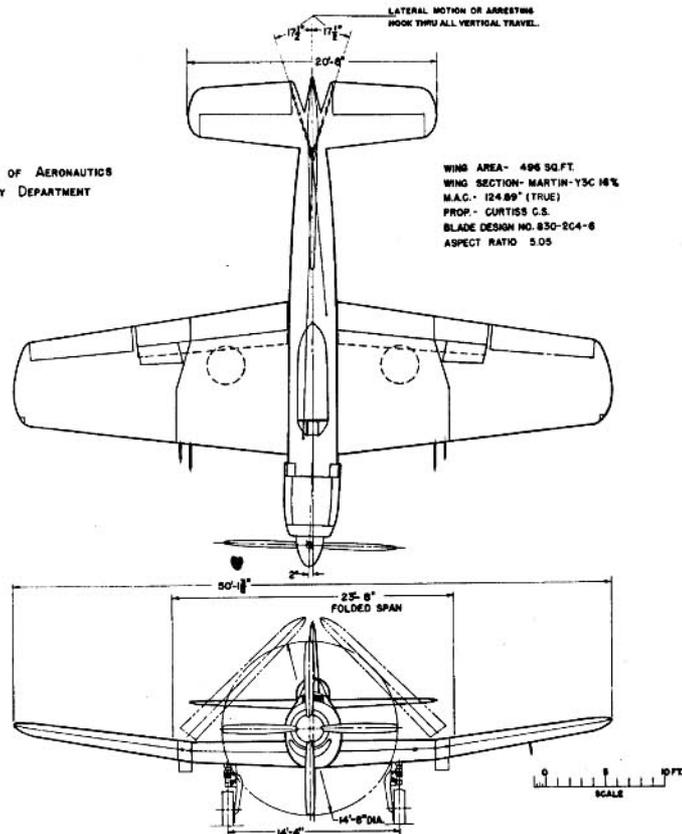


STANDARD AIRCRAFT CHARACTERISTICS
AM-1Q "MAULER"

BUREAU OF AERONAUTICS
NAVY DEPARTMENT

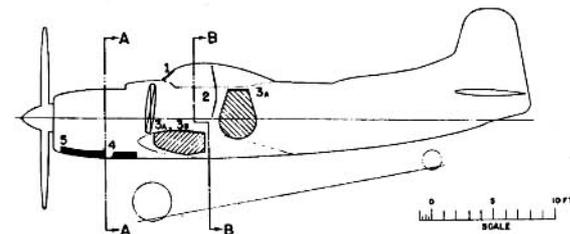
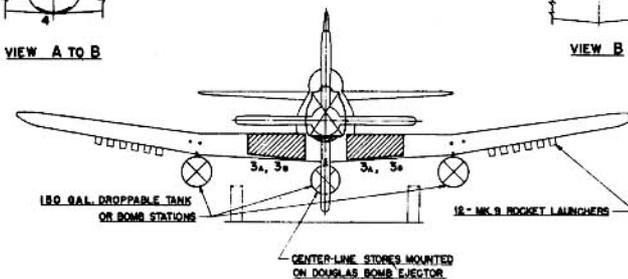
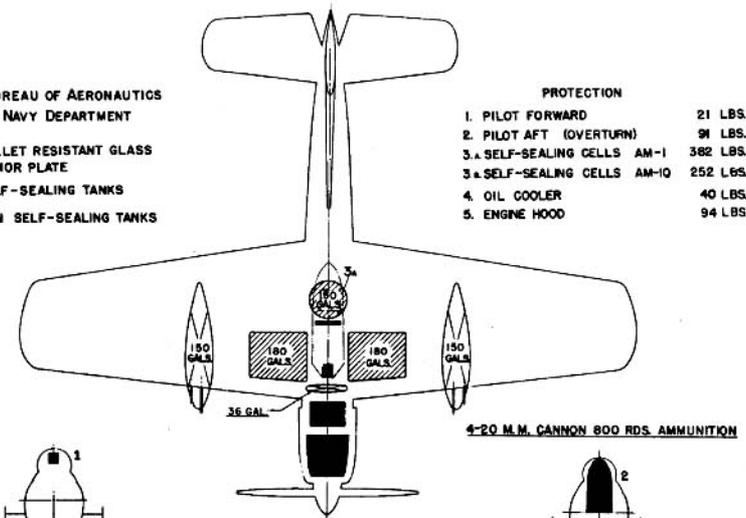


BUREAU OF AERONAUTICS
NAVY DEPARTMENT

- BULLET RESISTANT GLASS
ARMOR PLATE
- ▨ SELF-SEALING TANKS
- ⊗ NON SELF-SEALING TANKS

PROTECTION

- | | |
|-----------------------------|----------|
| 1. PILOT FORWARD | 21 LBS. |
| 2. PILOT AFT (OVERTURN) | 91 LBS. |
| 3. SELF-SEALING CELLS AM-1 | 382 LBS. |
| 3. SELF-SEALING CELLS AM-1Q | 252 LBS. |
| 4. OIL COOLER | 40 LBS. |
| 5. ENGINE HOOD | 94 LBS. |



ARMAMENT & TANKS

MISSION AND DESCRIPTION

The AM-1Q is intended for torpedo and dive-bombing, scouting, and RCM operations. It is presently in production.

All bombs, mines, torpedoes, rockets, etc, are carried externally on three pylons on wings and fuselage. Provision for radar on right wing pylon. Crew of two, with RCM compartment aft of pilots cockpit. Structure is conventional all-metal. Hydraulically operated canopy. Folding wings. Slotted flaps. Split type dive brakes interlocked with landing flaps. Can carry incendiary and fragmentation clusters, smoke tanks.

DIMENSIONS

WING AREA.....496 sq.ft.
SPAN.....50'-1"
LENGTH.....41'-3"
HEIGHT.....11'-10"
TREAD.....14'-4"
PROP.CLEAR.....7"
M.A.C.....9'-11"

WEIGHTS

Loadings Lbs. L.F.
EMPTY.....15380.....
BASIC.....16162.....
DESIGN.....19450.....7.50
COMBAT.....19734.....7.35
MAX.T.O....25000.....*5.80
MAX.LAND

Carrier..17950.....
Shore...20600.....

Weights are actual with calculated changes.

* See Notes

FUEL AND OIL

GAL.	NO.TANKS	LOCATION
360	2	WING, SEAL
450	3	DROP

FUEL GRADE....115/145

FUEL SPEC.....AN-F-48

OIL

CAPACITY(GALS).....36
SPEC.....AN-O-8
GRADE.....1100-1120

ELECTRONICS

Range Rec.....R-23A/ARC-5
HF Comm.....AN/ARC-2
VHF Homing.....AN/ARR-2A
VHF Comm.....AN/ARC-1A
Altimeter.....AN/APN-1
Search Radar.....AN/APS-4
IFF.....AN/APX-2
Search Rec.....AN/APR-1
Pulse Analy.....AN/APA-11
Pan.Adapt.....AN/APA-38

POWER PLANT

NO. & MODEL.....(1)R-4360-4W
MFR.....P&W
SUPERCH.....1 stg, var.spd.
PROP.GEAR RATIO.....0.425
PROP.MFG.....Curtiss
PROP.DES.NO.....830-204-6
NO.BL./DIA.....4/14'-8"

RATINGS

	Bhp @	Rpm @	Alt.
T.O.	3000	2700	S.L.
MIL.	3000	2700	1500'
	2400	2700	13500'
NORM.	2500	2550	5000'
	2200	2550	14500'

SPEC. N-7039-C

ORDNANCE**GUNS**

No.	Size	Location	Rds.
4	20mm	Wing	800

BOMBS & ROCKETS

Type	Size	Location	No.
Bomb	2000#	External	3
Bomb	500#	External	3
Mine	2000#	External	3
Mine	1000#	External	3
D.B.	350#	External	3
Torp.	Mk-13	External	3
A.R.	11.75"	Wing	2
HVAR	5"	Wing	12

FIRE CONTROLS

Sighting system....Mk.1 Mod.2
Bomb Director.....AN/ASG-10A

Max.Bomb Load.....6000 Lbs.



PERFORMANCE SUMMARY				
LOADING CONDITION		(1)ATTACK 1-2000#Bomb AN/APS-4	(3)ATTACK 1-2000#Bomb 2-150GalTanks	
TAKE-OFF WEIGHT	lbs	21765	23796	
Fuel	lbs	2160	2160/1800	
Bombs	lbs	2000	2000	
	lbs			
Wing/Power Loading (A)	lbs/sq.ft./bhp	43.9/9.9	48.0/10.8	
Stall Speed--Power off	kn	84	88	
Stall Speed--Power off - No Fuel	kn	80	80	
Stall Speed--Power on	kn	81	84	
Maximum Speed/Alt (B)	kn/ft	267/16000	264/16000	
Take-off Distance, deck -- calm	ft	815	1000	
Take-off Distance, deck 25 kn.	ft	380	485	
Take-off Distance, Airport	ft			
Rate of climb -- sea level (B)	ft/min	1870	1570	
Service Ceiling (B)	ft	26800	24500	
Time-to-climb 10,000ft. (B)	min	6.0	7.0	
Time-to-climb 20,000ft. (B)	min	14.3	18.5	
Combat Range/V av 15,000 ft.	n.mi/kn	525/173	1020/177	
Combat Radius/V av	ft. n.mi/kn	175/175	490/175	
LOADING CONDITION		(2)COMBAT	(4)COMBAT	(5)COMBAT
GROSS WEIGHT	lbs	19,765	19734	19734
Engine power		Max.	Max.	Norm.
Fuel	lbs	2160	2160	2160
Bombs/Tanks				
Max. speed at sea level	kn	270	279	254
Max. speed	ft. kn	286/10500	293/10500	285/16000
Combat speed/Alt.	kn/ft	279/15000	288/15000	
Rate of climb SL	ft/min	3160	3170	2220
Ceiling for 500 fpm R/C	ft	25500	25650	25650
Time-tc-climb/Alt.	min/ft			

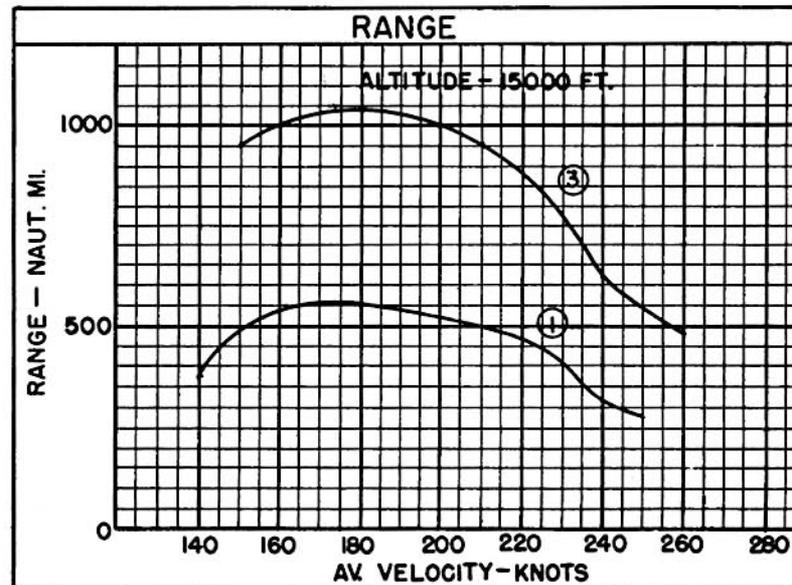
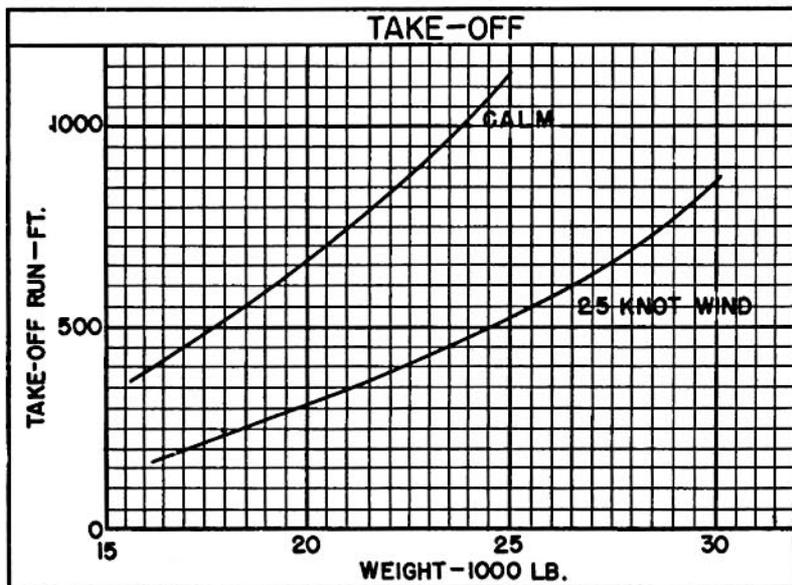
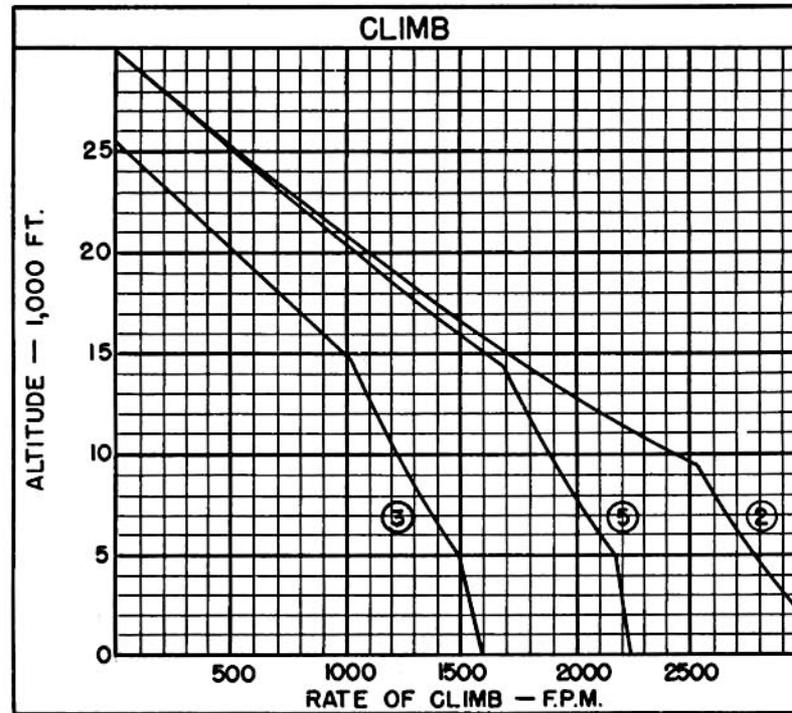
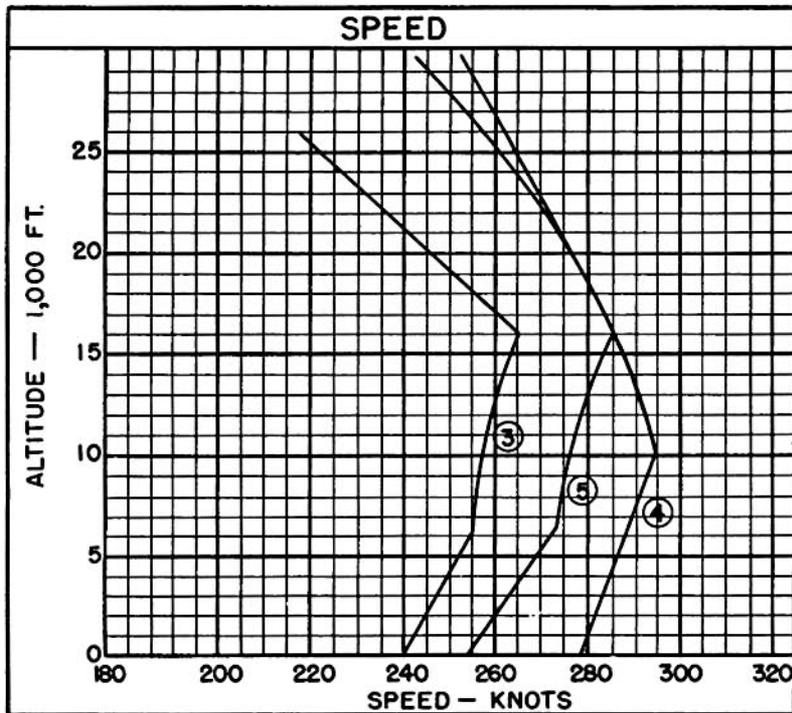
NOTES

- (A) BHP at Maximum Critical Altitude
(B) Normal BHP

Performance is based on calculations and AM-1 flight test data.

Range and radius are based on engine specification fuel consumption data; increased by 5%.

Addition of twelve 5" HVAR to Col.(1) increases Take-off Weight to 23499 lbs. and reduces Vmax at S.L. by 6 knots, range by 64 nautical miles, and increases take-off (25 knot) by 85 ft.



○ LOADING CONDITION COLUMN NUMBER

NOTES

Maximum take-off weight of 25000 lbs. is based on 11X36X12 ply tires rated at 12500 lbs. Future tires 11X36X14 ply rated at 14000#, with increased braking capacity, will permit maximum take-off weights of 28000 lbs.

Attack Combat Radius Formula No. B-1

<u>WARM-UP</u>	<u>RENDEZVOUS</u>	<u>CLIMB</u>	<u>CRUISE-OUT</u>	<u>DROP TANKS</u>	<u>COMBAT</u>	<u>CRUISE-BACK</u>	<u>RESERVE</u>
20 min.	20 min. at	to	at	<u>DESCEND</u>	15 min. at		60 min. at
20% N.Pr.	Sea Level	15000 ft.	15000 ft.	to 1500 ft.	1500 ft.	at 1500 ft.	V for
<u>TAKE-OFF</u>	at 60%	at Normal	180 kts.TAS	<u>DROP BOMBS</u>	5 min.combat	170 kts. TAS	Max. Range
1 min.	N. Pr.	S.L. Pr.	Auto Lean	<u>FIRE</u>	and 10 min.		
at T.O.Pr.	Auto Lean	Auto Rich		<u>ROCKETS</u>	N. Pr.	Auto Lean	Auto Lean