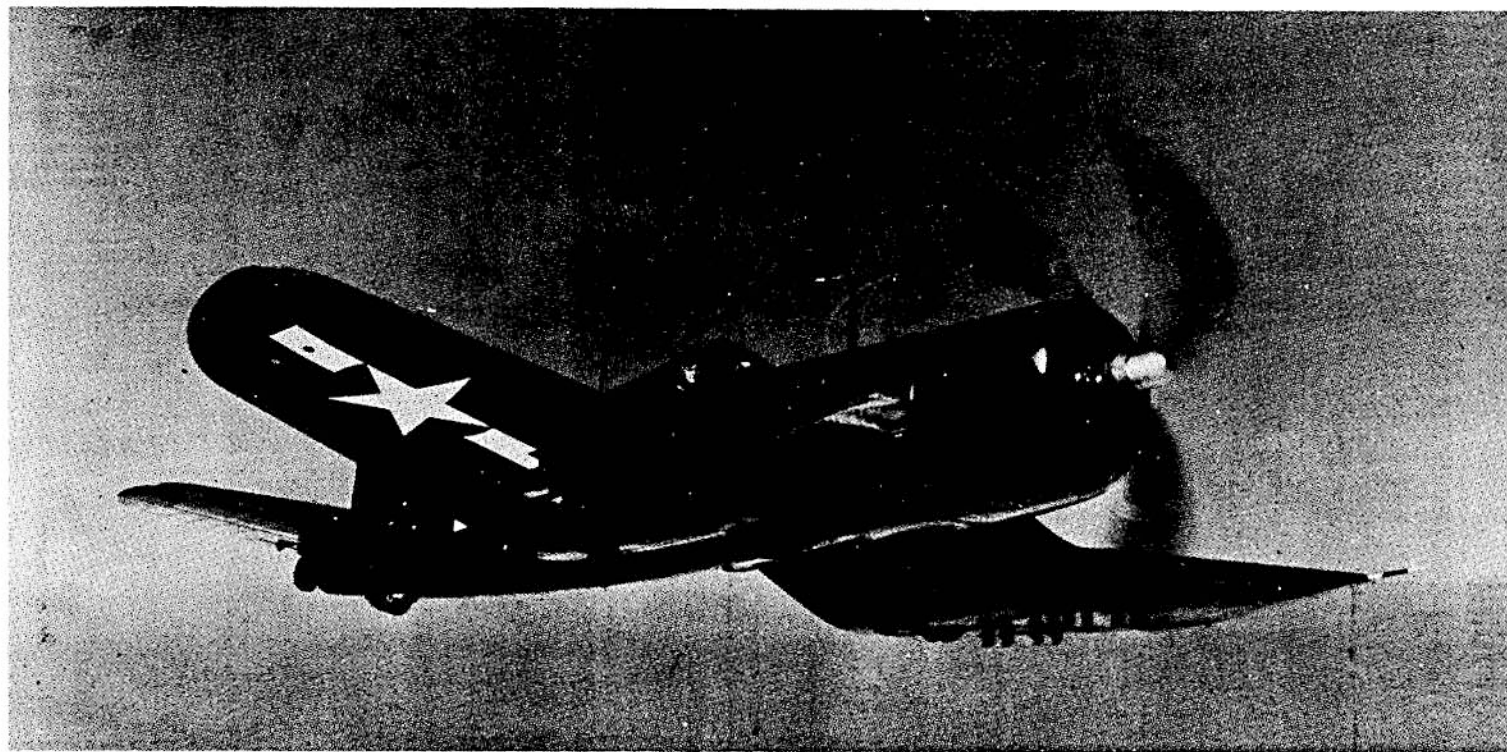
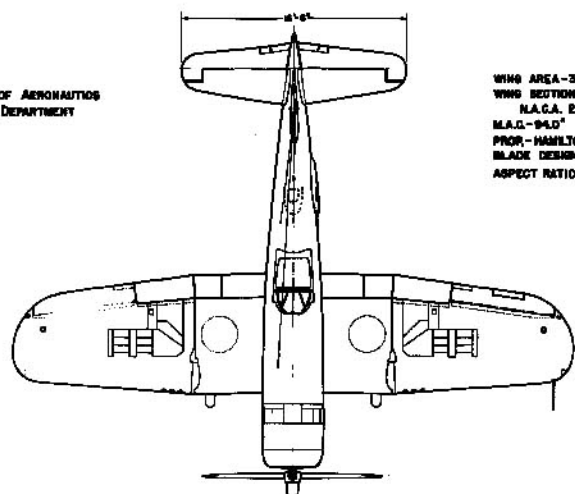


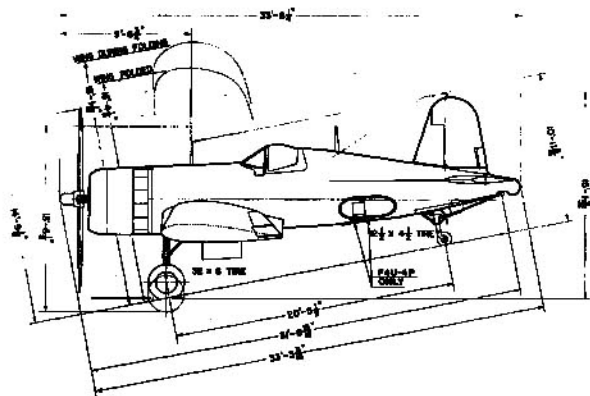
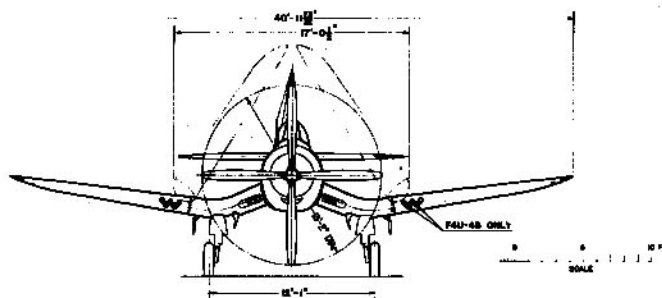


STANDARD AIRCRAFT CHARACTERISTICS
F4U-4B "CORSAIR"

BUREAU OF AERONAUTICS
NAVY DEPARTMENT



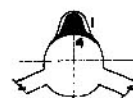
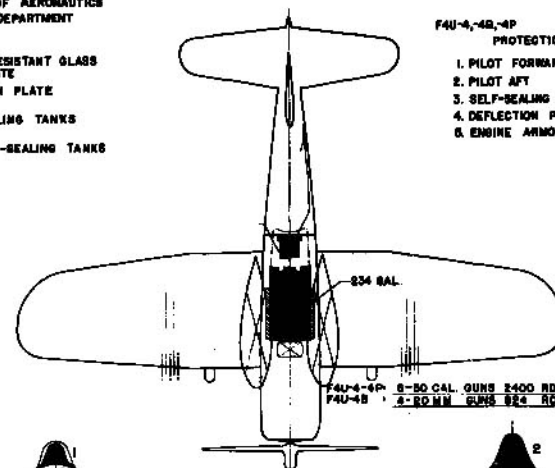
WING AREA-314 SQ. FT.
WING SECTION -
N.A.C.A. 23016-23008
M.A.D.-94.0°
PROP.-HAMILTON STD. C. 8.
BLACK DESIGN NO. 6871A-D
ASPECT RATIO 5.4



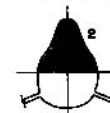
DESCRIPTIVE ARRANGEMENT

BUREAU OF AERONAUTICS
NAVY DEPARTMENT

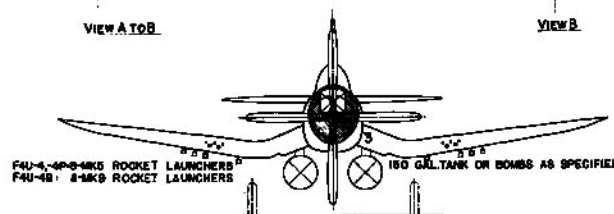
- BULLET RESISTANT GLASS
ARMOR PLATE
- DEFLECTION PLATE
- ▨ SELF-SEALING TANKS
- ⊠ NON SELF-SEALING TANKS



VIEW A TO B

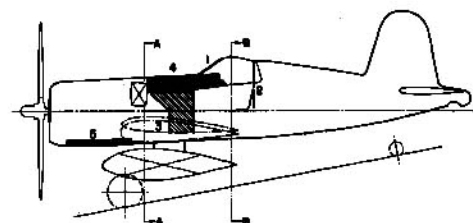


VIEW B



F4U-4-4P-48K5 ROCKET LAUNCHERS
F4U-4B 1-8-80 MM GUNS 2400 RDS. AMMUNITION
F4U-4B 1-8-80 MM GUNS 2400 RDS. AMMUNITION

0 5 10 F
SCALE



ARMAMENT & TANKS

F4U-4-4B-4P
PROTECTION

- | | |
|-----------------------|-----------|
| 1. PILOT FORWARD | 36.8 LBS. |
| 2. PILOT AFT | 60.8 LBS. |
| 3. SELF-SEALING CEELS | 177 LBS. |
| 4. DEFLECTION PLATE | 20 LBS. |
| 5. ENGINE ARMOR | 175 LBS. |

MISSION AND DESCRIPTION

This airplane is a conventionally powered, high performance, carrier or land based, general purpose fighter.

The primary mission is the destruction of enemy aircraft, airborne or grounded. This mission may be carried out on an offensive basis in which case the action would presumably be carried out over enemy held territory or on a defensive basis when interception of an incoming enemy attack becomes a necessity. A secondary mission of this type results from its flexibility in regard to ordnance carrying capabilities. Armed with bombs and/or rockets, within prescribed limits, it may be used to great advantage for destroying enemy ground installations.

The outstanding configuration characteristic of this low-wing monoplane is the inverted gull appearance of the wing coupled with great length of fuselage ahead of the cockpit canopy.

It is of conventional structure. The wing center section is a metal box-beam, with single-spar panels fabric covered aft of the spar. Wood ailerons, metal slotted flaps. Stabilizer of either conventional or metalite construction with fabric-covered movable surfaces. Quick-change power-plant with 13.5 gal. water tank. Folding wings.

DIMENSIONS

SPAN.....41'-0"
 LENGTH.....33'-8"
 HEIGHT.....14'-9"
 WING AREA.....314 sq. ft.
 M.A.C.....94"
 TREAD.....12'-1"

WEIGHTS

Loadings	Lbs.	L.F.
EMPTY.....	9132	
BASIC.....	9885	
DESIGN.....	10138	8.10
COMBAT.....	12283	7.15
MAX. T.O....	16160	5.60
MAX.LAND....	15000	

All weights are actual.

FUEL AND OIL

Gals. - No. Tanks - Location
 234.....1...Fuse.(protected)
 300.....2...Wing (drop)
 FUEL GRADE.....115/145
 FUEL SPEC.....AN-F-48

OIL

CAPACITY (Gals.).....23.5
 SPEC.....AN-O-8
 GRADE.....1100-1120

ELECTRONICS

TRANSMITTER.....RT-18/ARC-1
 RECEIVER, LF.....R-23A/ARC-5
 RECEIVER, VHF.....R-4A/ARR-2A
 IFF.....RT-22/APX-1

POWER PLANT

NO. & MODEL.....(1) R-2800-18W
 MFR.....P. & W.
 SUPERCH.....2 Stage, 2 Speed
 PROP.GEAR RATIO.....20:9
 PROP.MFR.....Ham. Std.
 PROP.DES.NO.....6501A-0
 NO.BL./DIA.....4/13'-2"

RATINGS

	Bhp. @	Rpm. @	Alt.
T.O.	2100	2800	SL
MIL.	2100	2800	1000'
	1900	2800	14000'
	1800	2800	23000'
NORMAL	1700	2600	7000'
	1630	2600	18000'
	1550	2600	26000'

SPEC NO. N-8082

ORDNANCE

GUNS			
No.	Size	Location	Rds.
4	20 mm.	Wing	924
MK. 8-6 Illuminated Sight			
BOMBS & ROCKETS			
Type	Size	Location	No.
HVAR	5"	Wing	8
AR	11.75"	Wing	2
BOMB	1000#	Wing	2
BOMB	500#	Wing	2
BOMB	250#	Wing	2
Bomb director.....AN/ASG-10			
Rocket launchers.....MK. 9			



PERFORMANCE SUMMARY

LOADING CONDITION	(1) Fighter 1-150 Gal. Tank External	(3) Rocket 2-11.75" AR 8-5" HVAR	(5) Escort 2-150 Gal. Tanks Ext.
TAKE-OFF WEIGHT	lbs 13401	15963	14462
Fuel	lbs 1404/900	1404	1404/1800
Bombs	lbs		
Wing/Power Loading (A) lbs/sq. ft. lbs/bhp	42.7/5.5	50.9/10.3	46.1/9.3
Stall Speed--Power off	kn 80.6	87.8	83.6
Stall Speed--Power off - No Fuel	kn 73.2	83.8	73.7
Stall Speed--Power on	kn 66.5	72.5	69.0
Maximum Speed/Alt (B)	kn/ft 346/31400	302/30600	325/31000
Take-off Distance, deck -- calm	ft 763	1308	942
Take-off Distance, deck 25kn.	ft 363	680	463
Take-off Distance, Airport	ft		
Rate of climb -- sea level (B)	ft/min 2540	1900	2350
Service Ceiling (B)	ft 38500	34900	36800
Time-to-climb 10000 ft. (B)	min 4.2	5.8	4.6
Time-to-climb 20000 ft. (B)	min 8.7	12.9	9.9
Combat Range/V av 15000 ft. n.mi/kn	1015/185	365/182	1310/180
Combat Radius/V av	ft. n.mi/kn 320/177	35/177	535/177
LOADING CONDITION	(2) Combat	(4) Combat	
GROSS WEIGHT	lbs 12283	12283	
Engine power	Maximum	Normal	
Fuel	lbs 1404	1404	
Bombs/Tanks			
Max. speed at sea level	kn 324	279	
Max. speed	kn 392/20500	371/31800	
Combat speed/Alt.	kn/ft 377/15000	319/15000	
Rate of climb SL	ft/min 4850	2960	
Ceiling for 500 fpm R/C	ft 38600	37200	
Time-to-climb/Alt.	min/ft 4.7/20000	7.4/20000	

NOTES

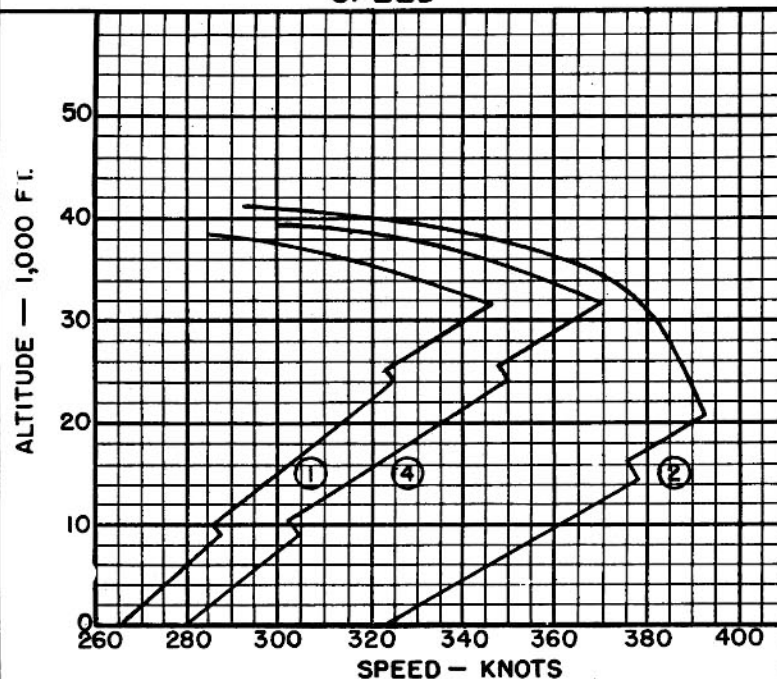
- (A) BHP at Maximum Critical Altitude
(B) Normal BHP

Performance is based on flight test of the F4U-4 airplanes. Range and radius are based on flight test fuel consumption data of the F4U-4 airplane increased by 5%.

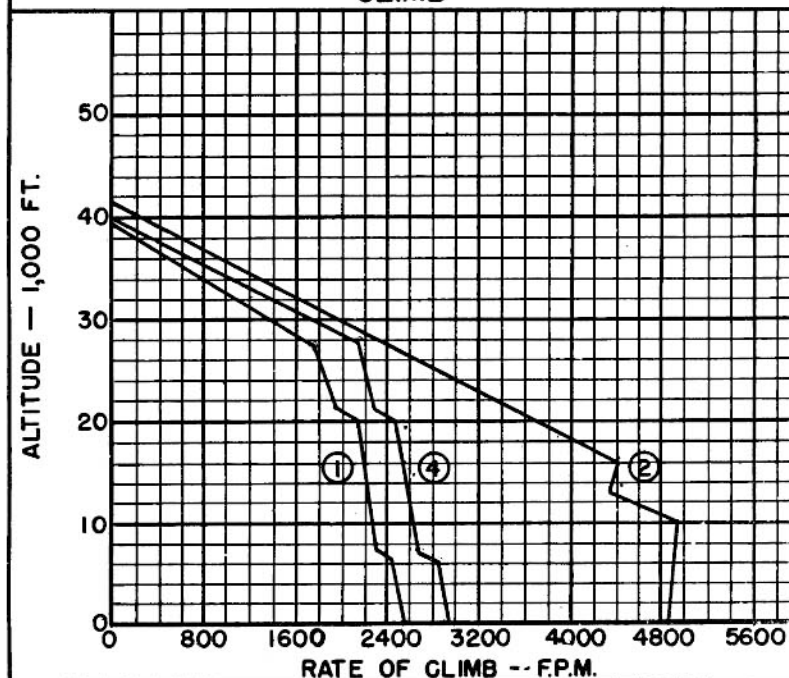
Combat Condition: Two capped pylons aboard. Rocket launchers not aboard. Addition of 8 MK5-1 launchers decreases Vmax at S.L. of Condition (2) to 317 knots and Vmax/ACA to 383 knots/20400 ft.

NOTES CONTINUED ON LAST PAGE

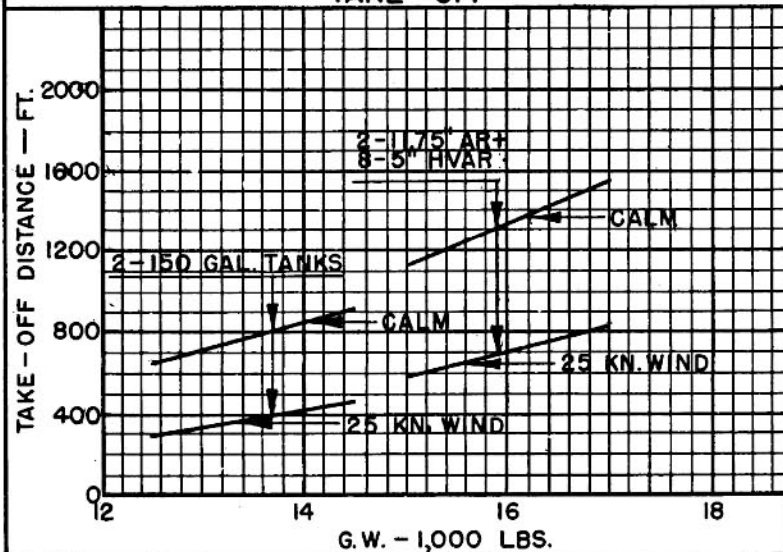
SPEED



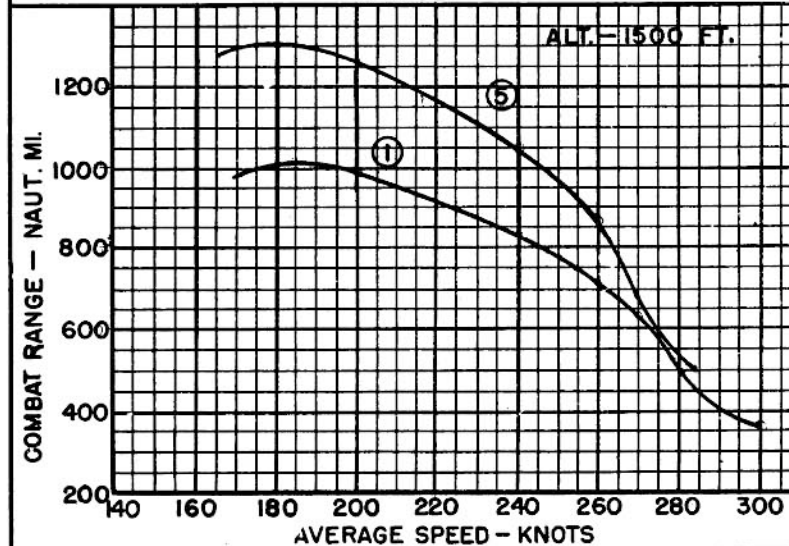
CLIMB



TAKE-OFF



RANGE



○ LOADING CONDITION COLUMN NUMBER

NOTES

Clean Condition: Same as Combat Condition except pylons removed. At combat power, $V_{max}/SL = 332$ knots and $V_{max}/ACA = 402$ knots/20600 ft.

Fuel Transfer: Provisions are incorporated for fuel transfer from droppable to main tanks after take-off.

Spotting: 200 ft. length is required to spot 30 airplanes on the 96 ft. wide deck immediately aft of the forward ramp on the CV-9 Class carriers.

Two wing pylon (capped when not in use) aboard in all conditions. Rocket launchers carried in rocket condition only.

FIGHTER COMBAT RADIUS FORMULA NO. F-1-CONDITIONS NOS. -(1), (3), & (5) RADIUS=CLIMB/CRUISE-OUT=CRUISE BACK

WARM-UP	RENDEZVOUS	CLIMB	CRUISE-OUT	DROP BOMBS	COMBAT	CRUISE BACK	RESERVE
20 min.	20 min. at	to	at		20 min.		60 min.
	sea level	15000 ft.	15000 ft.		at 15000 ft.	at 1500 ft.	at
TAKE-OFF	at	at	Vel. for	FIRE	10 min. WEP.	170 kts.TAS	Vel. for
1 min.	60% N.S.P.	N.R.P.	Max. Range	ROCKETS	10 min.Mil.Pr.		Max. Range
	Auto Lean.	Auto Lean.	Auto. Lean.		and descend	Auto. Lean.	Auto. Lean.

Engine ratings from Flight Test:

	Bhp.	Rpm.	Alt.
T.O.	2100	2800	S.L.
Mil.	2100	2800	3000'
	1900	2800	19000'
	1800	2800	25500'
Norm.	1700	2600	6800'
	1630	2600	20000'
	1550	2600	28000'