



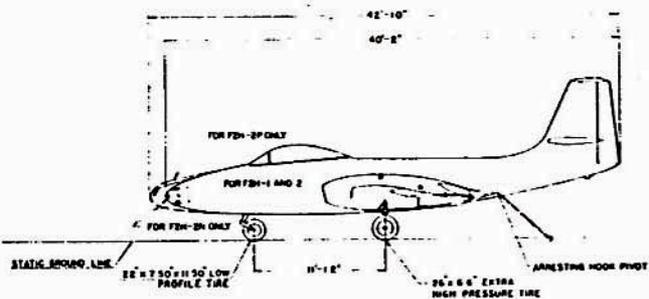
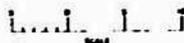
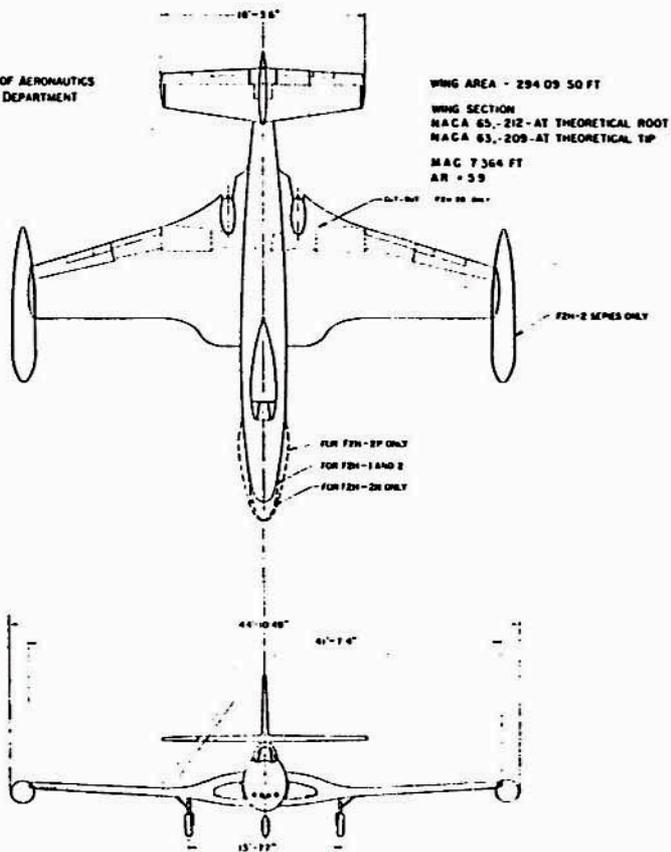
STANDARD AIRCRAFT CHARACTERISTICS

F2H-2B "BANSHEE"

MCDONNELL

Standard Aircraft Characteristics NAVAR 1335A (REV. 1-55)

BUREAU OF AERONAUTICS
NAVY DEPARTMENT



DESCRIPTIVE ARRANGEMENT

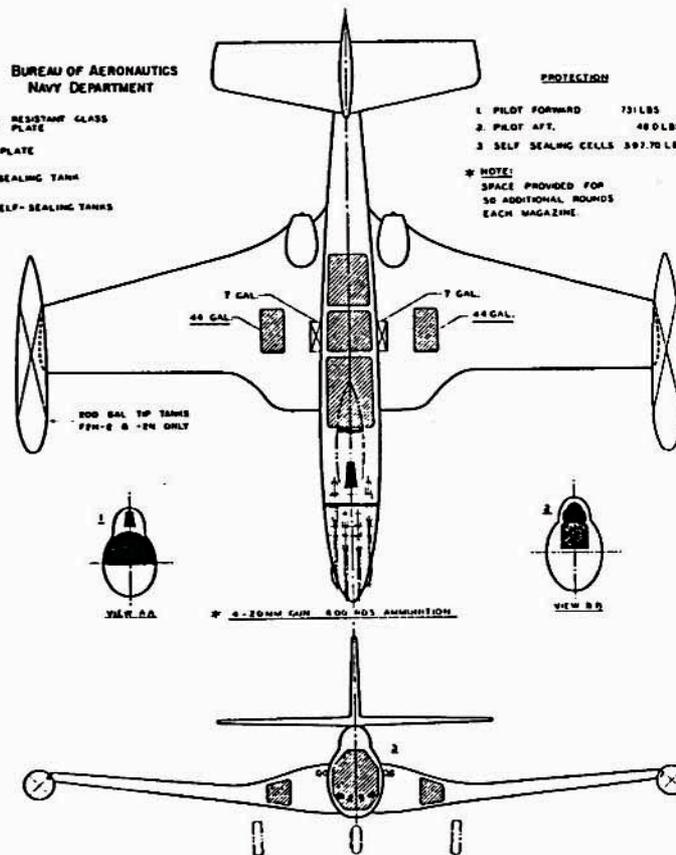
BUREAU OF AERONAUTICS
NAVY DEPARTMENT

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

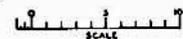
PROTECTION

1. PILOT FORWARD 731 LBS.
2. PILOT AFT. 480 LBS.
3. SELF SEALING CELLS 397.70 LBS.

* NOTE:
SPACE PROVIDED FOR
50 ADDITIONAL ROUNDS
EACH MAGAZINE



ARMAMENT & TANKS



Standard Aircraft Characteristics NAVAER 1337B (Rev. 1-55)

POWER PLANT

NO. & MODEL.....(2) J-34WE-34
 MFR.....Westinghouse
 TYPE.....11 Stg. Axial Comp.
 2 Stg. Turbine
 LENGTH.....120"
 DIAMETER.....50"
 AUGMENTATION.....None

RATINGS

	LBS.	RFM.	ALT.
T.O.	3,250	12,500	S.S.L.
MIL.	3,250	12,500	S.S.L.
NORM.	2,650	11,800	S.S.L.

SPEC. NO. WAGT-24C4D-2D

ORDNANCE

GUNS

NO.	SIZE	LOCATION	RDS.
4	20mm M-3	Nose	600

FIRE CONTROL

AFCS.....MK 6 MOD 1

EXTERNAL LOAD

TYPE	NO.	LOCATION	LOAD
MK 7	1	Left Wing	1,560
MK 8	1	Left Wing	3,250

Rack - MK 51 MOD 14

MAX. LOAD CAPACITY.....3,250 Lbs.

MISSION AND DESCRIPTION

The F2H-2B is a single-place carrier based fighter powered by two turbo-jet engines.

The airplane is of stressed metal skin construction with all surfaces being of the full cantilever type.

Equipment includes automatic pilot, ejection seat and cabin pressurization. The primary control system incorporates power actuation with artificial feel forces for aileron and elevator. Split trailing edge flaps and wing mounted speed brakes are provided.

The main differences affecting the performance of the F2H-2B over the F2H-2 are the incorporation of special store accommodations, slight decrease in available flap area, higher loadings and the use of JP-3 fuel.

DEVELOPMENT

First flight - - - - - July 1952

Service use - - - - - January 1953

DIMENSIONS

WING

AREA.....294 Sq. Ft.
 SPAN.....41' - 9"
 MAC.....7' - 4"
 LENGTH.....40' - 2"
 HEIGHT.....14' - 6"
 TREAD.....13' - 7"

WEIGHTS

LOADINGS	LBS.	L.F.
EMPTY.....	11,268	
BASIC.....	12,191	
DESIGN.....	16,400	6.4
COMBAT.....	18,126	
MAX.T.O. (Field)....	23,200	*4.0
(Cat.)....	23,200	4.0
MAX.LAND (Field)....	16,500	4.0
(Arrest)....	15,300	4.0

* Max. L.F. - 4.0

All weights are actual

FUEL AND OIL

NO. TANKS	TOTAL GAL.	LOCATION
3	789	Fuselage
2	88	Wing C.S.
2	*339	Wing Tip

* Max. capacity 400 gal. - limited by asymmetric loading.

FUEL GRADE.....JP-3
FUEL SPEC.....MIL-F-5624A

OIL

CAPACITY (Gals.).....6.5
GRADE.....1010
SPEC.....MIL-O-6081A

ELECTRONICS

RADIO VHF.....AN/ARC-1 or 1A
 VHF TRANS.REC.....AN/ARC-27
 (P.S.I. - Repl. for AN/ARC-1)
 UHF D.F.....AN/ARA-25
 (Planned Service Installation)
 RADIO COMPASS.....AN/ARN-6
 HOMING.....AN/ARR-2A
 RADIO ALTIMETER.....AN/AFN-1
 IFF.....AN/AFX-6
 RADAR.....AN/APG-30

PERFORMANCE SUMMARY

TAKE-OFF LOADING CONDITION		(1) MK-7 Plus WING TIP TANKS	(3) MK-8 Plus WING TIP TANKS		
TAKE-OFF WEIGHT	lb.	22,409	23,693		
Fuel internal/drop	lb.	5,701/2,297	5,701/1,854		
Payload	lb.	1,600	3,250		
Wing loading	lb./sq.ft.	76.2	80.5		
Stall speed - power-off	kn.	113.3	118.2		
Take-off run at S.L. - calm (A)	ft.	3,300	3,750		
Take-off run at S.L. 25 kn. wind (A)	ft.	2,150	2,500		
Take-off to clear 50 ft. - calm	ft.	--	--		
Max. speed/altitude (A)	kn./ft.	456/S.L.	472/S.L.		
Rate of climb at S.L. (A)	fpm.	3,900	3,900		
Time: S.L. to 20,000 ft. (A)	min.	7.5	7.5		
Time: S.L. to 30,000 ft. (A)	min.	15.1	15.1		
Service ceiling (100 fpm) (A)	ft.	36,500	36,500		
Combat range	n.mi.	1,050	1,010		
Average cruising speed	kn.	400	404		
Cruising altitude(s)	ft.	32,200/38,800	32,200/38,500		
Combat radius	n.mi.	500	480		
Average cruising speed	kn.	411	416		
Mission time	hrs.	2.5	2.35		
COMBAT LOADING CONDITION		(2) CLEAN Plus PYLON	(4) CLEAN Plus PYLON		
COMBAT WEIGHT	lb.	18,126	18,113		
Engine power		Military	Military		
Fuel	lb.	5,701	5,701		
Combat speed/combat altitude	kn./ft.	491/10,000	491/10,000		
Rate of climb/combat altitude	fpm/ft.	4,100/10,000	4,100/10,000		
Combat ceiling (500 fpm)	ft.	40,500	40,500		
Rate of climb at S.L.	fpm.	5,400	5,400		
Max. speed at S.L.	kn.	503	503		
Max. speed/altitude	kn./ft.	503/S.L.	503/S.L.		
LANDING WEIGHT	lb.	13,596	13,556		
Fuel	lb.	1,171	1,144		
Stall speed - power-off	kn.	88.2	89.4		
Stall speed - with approach power	kn.	85.8	86.3		

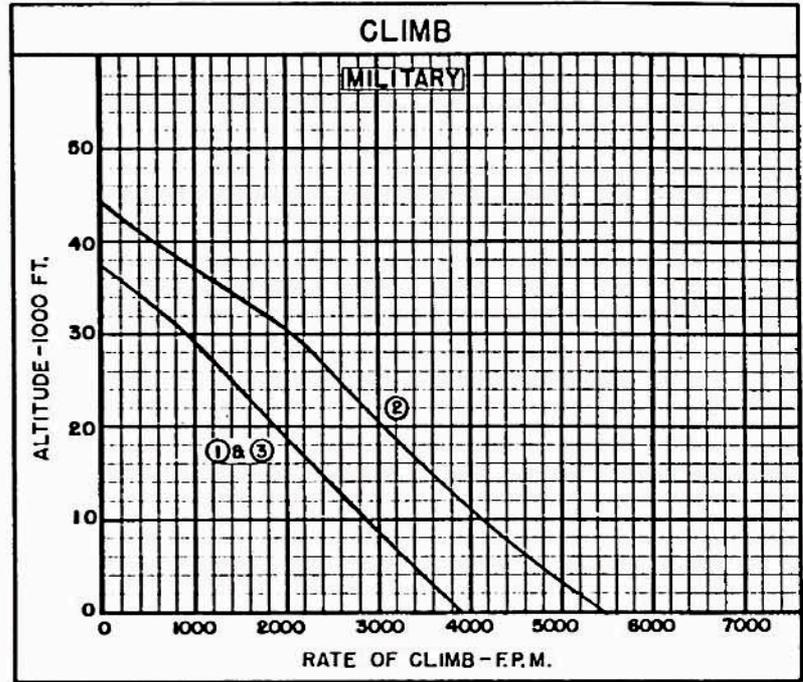
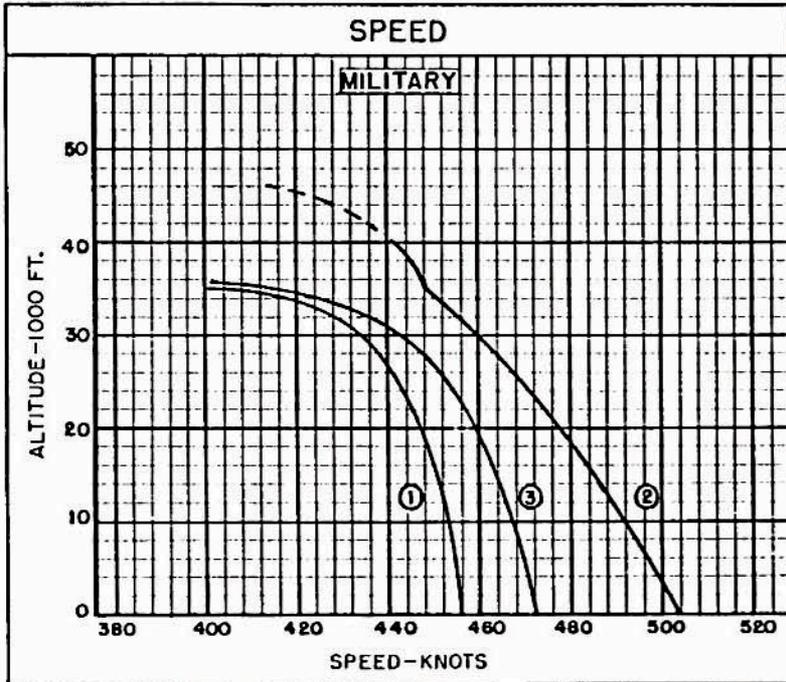
NOTES

(A) Military Thrust

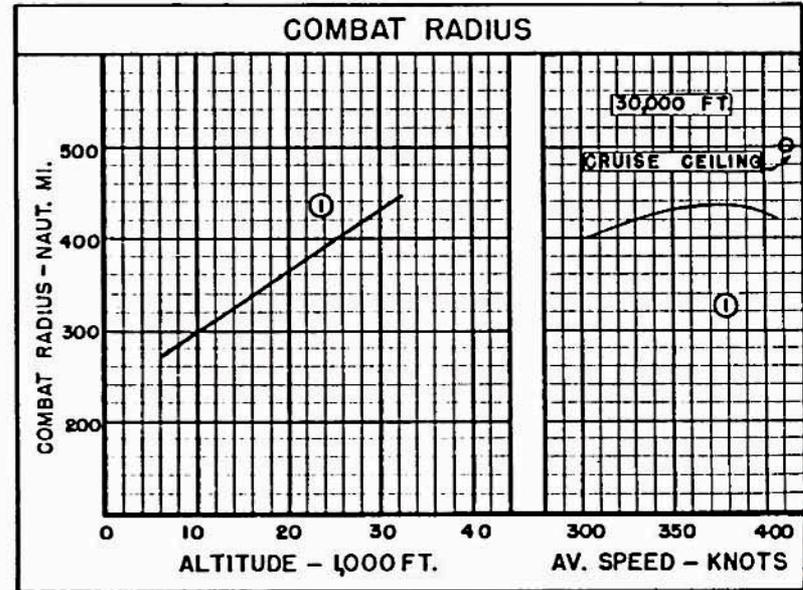
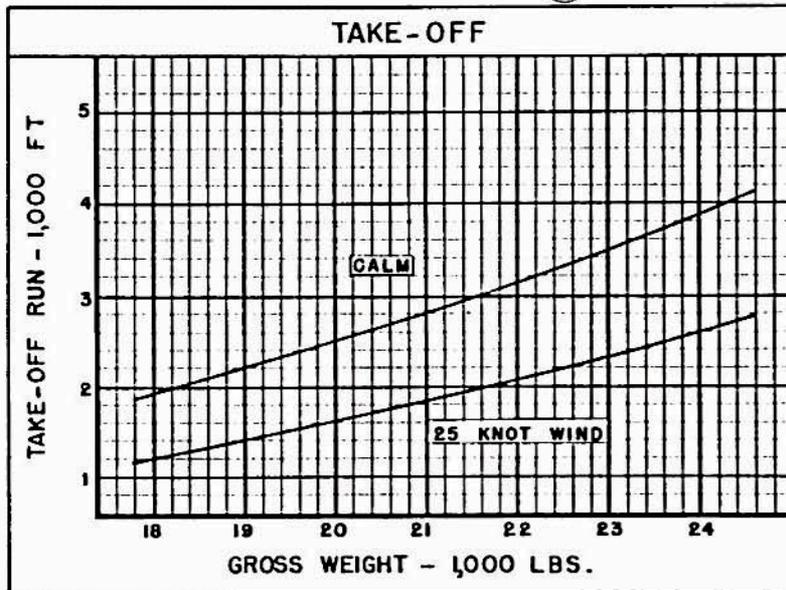
Performance Basis: NATESTCEN flight test and contractors estimates substantiated by NATESTCEN flight tests.

Range and radius are based on NATESTCEN fuel consumption increased by 5%.

SPOTTING: A total of 109 airplanes (wings folded) can be accommodated in a landing spot on the flight and hangar decks of a CVA-19 class angled deck carrier.



○ LOADING CONDITION COLUMN NUMBER



Standard Aircraft Characteristics NAVAER 1335E (Rev. 1-55)

NOTES

MISSION TIME = Total time to climb-out, cruise-out, combat, climb-back, cruise back.

HIGH ALTITUDE ATTACK

WARM-UP, TAKE-OFF, ACCELERATE TO CLIMB SPEED: 5 minutes Normal Rated Thrust at Sea Level.

CLIMB: To cruise ceiling at Military Rated Thrust.

CRUISE-OUT: At airspeeds for long range at cruise altitude.

DESCEND: To 10,000 ft. No distance gained, no fuel used. (drop wing tip tanks)

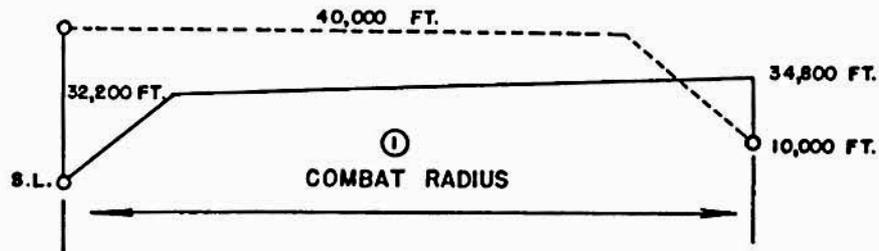
COMBAT: 5 minutes Military Rated Thrust at 10,000 ft.

DROP STORE

CLIMB: To 40,000 ft. at Military Rated Thrust.

CRUISE-BACK: At airspeeds for long range at 40,000 foot altitude.

RESERVE: 5 percent initial fuel plus 20 minutes at maximum endurance speed at Sea Level.



Rate-of-climb at Sea Level, Military Thrust, one engine inoperative, flaps and gear up with MK-7 store and wing tip tanks.

<u>GROSS WEIGHT</u>	<u>RATE-OF-CLIMB</u>
16,000	1,730
18,000	1,440
20,000	1,190
22,000	1,000

○ LOADING CONDITION COLUMN NUMBER