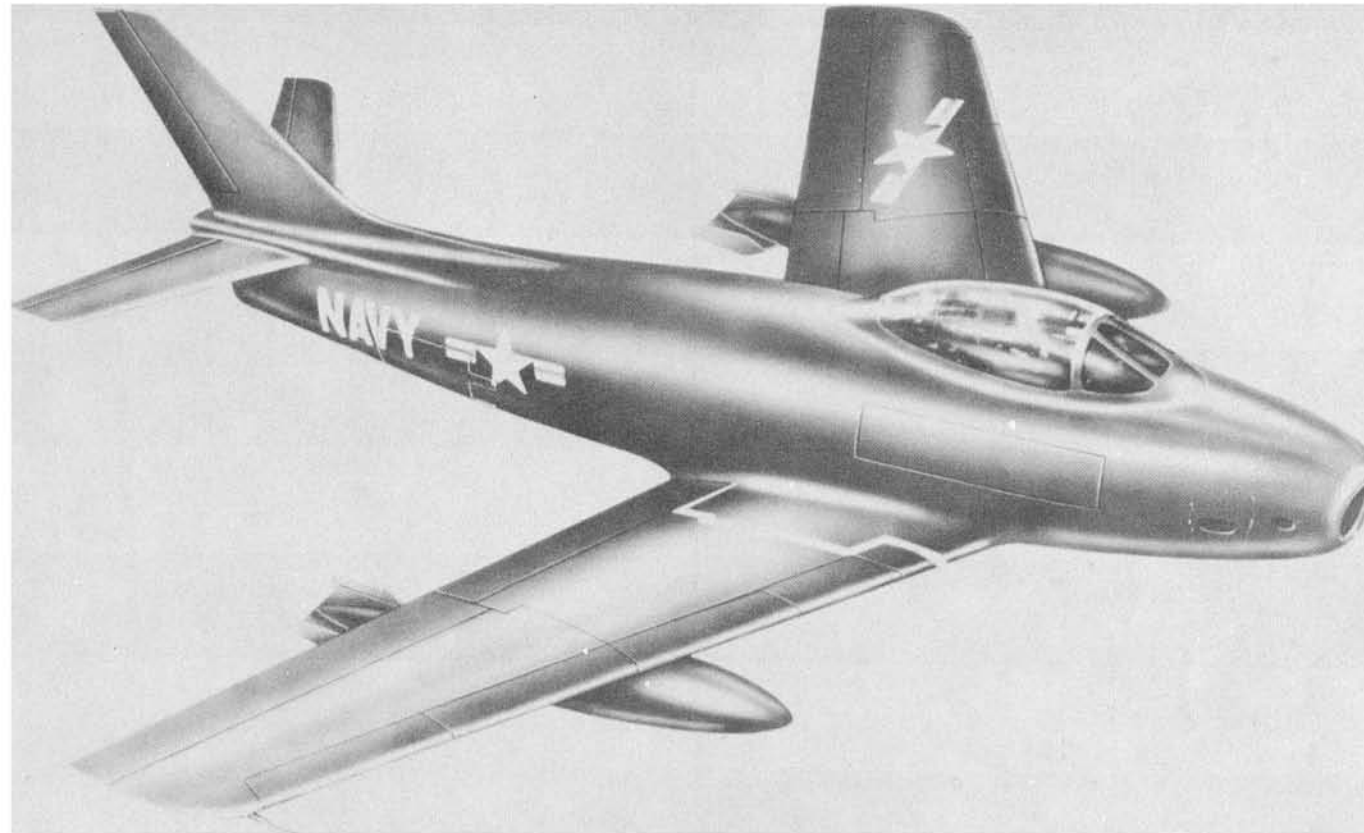


CONFIDENTIAL
DECLASSIFIED

SERVICE



STANDARD AIRCRAFT CHARACTERISTICS

FJ - 2 "FURY"

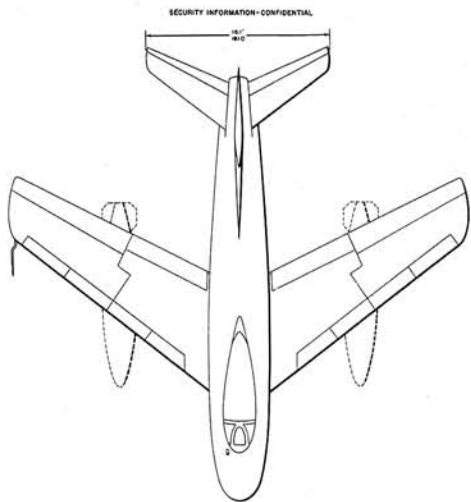
NORTH AMERICAN

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

1 OCTOBER 1955

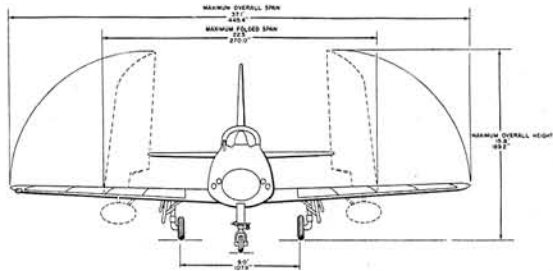
CONFIDENTIAL

FJ-2



SECURITY INFORMATION - CONFIDENTIAL

WING AREA 187.8
 WING SPAN 47.0
 ASPECT RATIO 4.78
 WING WEIGHT 1000 LBS
 WING AREA 187.8
 WING AREA 187.8
 * NORMAL TO QUARTER CHORD

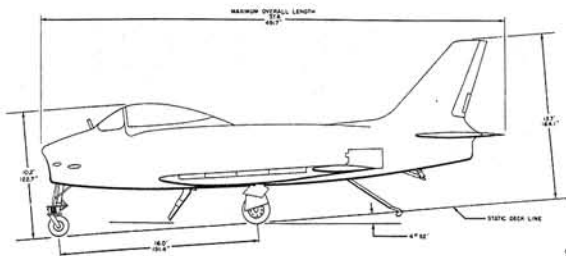


MAXIMUM OVERALL SPAN 47.0'

MAXIMUM WING SPAN 47.0'

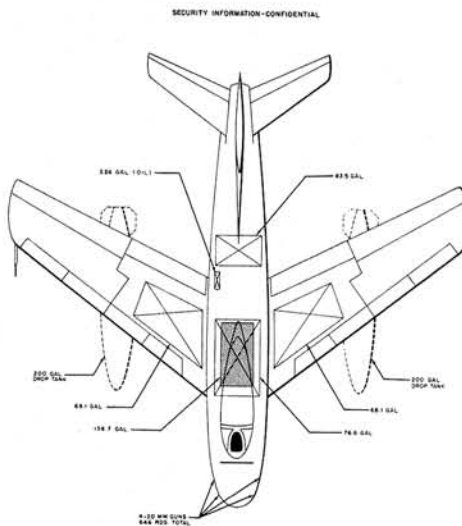
MAXIMUM WING CHORD 10.0'

MAXIMUM OVERALL HEIGHT 22.7'



MAXIMUM OVERALL LENGTH 47.0'

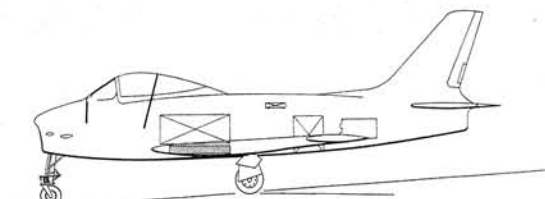
SCALE



SECURITY INFORMATION - CONFIDENTIAL

■ FULLY RESISTANT GLASS
 WINDOW PLATE
 □ SELF-SEALING TANKS
 ⊗ NON-SELF-SEALING TANKS

PROTECTION
 1 PILOT FORWARD 88 LBS
 2 PILOT AFT 82 LBS
 3 SELF-SEALING CELL 82 LBS
 FUEL TANK CAPACITY
 MAXIMUM INTERNAL 470 GAL
 MAXIMUM 820 GAL



ARMAMENT & TANKAGE
 FJ-2
 CONFIDENTIAL

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Standard Aircraft Characteristics NAVAR 1395B (Rev. 1-55)

POWER PLANT

NO. & MODEL.....(1) J47-GE-2
 MFR.....General Electric
 TYPE.....Axial Flow
 ENG. LENGTH.....148"
 ENG. DIAMETER.....40"

RATINGS

	<u>LBS.</u>	<u>RPM</u>	<u>ALT.</u>
T.O.	6,000	7,950	Static S.L.
MIL.	6,000	7,950	Static S.L.
NORM.	5,350	7,630	Static S.L.

SPEC. NO. E-610-B

MISSION AND DESCRIPTION

The FJ-2 airplane is a single-seat, carrier-based, day fighter capable of operating from an H8, H4-1, C7 and C11 catapult and a MK 5 or MK 7 arresting gear.

Special features are electrically operated flaps, hydraulically operated speed brakes, automatic wing leading edge slats, hydraulic power-operated irreversible controls with artificial feel for the all-movable horizontal tail and ailerons, and a conventional pilot-operated rudder.

The cockpit is provided with 5 psi differential pressurization, a jettisonable canopy, an ejection type seat, and anti-G suit provisions.

Design maximum dive speed is 590 knots EAS at 5,000 ft. Design maximum Mach No. is 1.15 at 30,000 ft.

DEVELOPMENT

Mock-up date - - - - - July 1951
 First flight - - - - - December 1951
 Service use to start - - - - - December 1952

WEIGHTS

<u>LOADINGS</u>	<u>LBS.</u>	<u>L.F.</u>
EMPTY.....	11,802.....	
BASIC.....	12,314.....	
DESIGN.....	16,482.....	6.5
COMBAT.....	15,813.....	6.5
MAX. TAKE OFF*.....	19,000.....	5.6
MAX. LANDING.....		
(arrest).....	16,000.....	6.5

* Max. anticipated weight.
 All weights are estimated.

FUEL AND OIL

<u>NO. TANKS</u>	<u>TOTAL GAL.</u>	<u>LOCATION</u>
3	213	Wing
2	222	Fuselage
2	400	Wing, Drop

FUEL GRADE.....JP-4
 FUEL SPEC.....MIL-O-6081

OIL

CAPACITY (GALS.).....3.2
 GRADE.....1010
 SPEC.....MIL-O-6081

ORDNANCE

GUNS

<u>NO.</u>	<u>SIZE</u>	<u>LOCATION</u>	<u>RDS.</u>
4	20mm	Fuselage Forward	600

FIRE CONTROL

A.F.C.S.....MK.16 MOD. 5
 Radar Ranging Equipment.....AN/APG-30

DIMENSIONS

WING
 AREA.....288 sq. ft.
 SPAN.....37' - 1"
 M.A.C.....8' - 1"
 SWEEPBACK (1/4 chord).....35°
 LENGTH.....37' - 7"
 HEIGHT.....13' - 7"
 TREAD.....9' - 0"

ELECTRONICS

UHF TRANSMTR-REC.....AN/ARC-27A
 UHF ADF.....AN/ARA-25
 ADF.....AN/ARN-6
 RADIO ALTIMETER...AN/APN-1 or AN/APN-22
 IFF TRANSPONDOR.....AN/APX-6
 RADAR.....AN/APG-30
 ADF.....AN/ARN-21
 (Replacement for AN/ARN-6)

Standard Aircraft Characteristics NAVAR-1335C (Rev. 1-55)

PERFORMANCE SUMMARY					
TAKE-OFF LOADING CONDITION		(1)	FIGHTER 2-200 GAL. EXTERNAL TANKS		
TAKE-OFF WEIGHT	lb.		18,791		
Fuel	lb.		5,428		
Payload	lb.		--		
Wing loading	lb./sq.ft.		65.3		
Stall speed - power-off	kn.		115		
Take-off run at S.L. - calm	ft.		2,600		
Take-off run at S.L. 25 kn. wind	ft.		1,645		
Take-off to clear 50 ft. - calm	ft.		3,950		
Max. speed/altitude (A)	kn./ft.		533/5,000		
Rate of climb at S.L. (A)	fpm.		5,000		
Time: S.L. to 20,000 ft. (A)	min.		5.6		
Time: S.L. to 30,000 ft. (A)	min.		11.0		
Service ceiling (100 fpm) (A)	ft.		39,100		
Combat range	n.mi.		860		
Average cruising speed	kn.		450		
Cruising altitude(s)	ft.		37,000/42,000		
Combat radius	n.mi.		270		
Average cruising speed	kn.		440		
Cycle time	hrs.		1.9		
COMBAT LOADING CONDITION		(2)	COMBAT		
COMBAT WEIGHT	lb.		15,813		
Engine power			Military		
Fuel	lb.		2,828		
Combat speed/combat altitude	kn./ft.		523/35,000		
Rate of climb/combat altitude	fpm/ft.		1,690/35,000		
Combat ceiling (500 fpm)	ft.		41,700		
Rate of climb at S.L.	fpm.		7,230		
Max. speed at S.L.	kn.		587		
Max. speed/altitude	kn./ft.		587/S.L.		
LANDING WEIGHT	lb.		14,125		
Fuel	lb.		885		
Stall speed - power-off	kn.		98.8		
Stall speed - with approach power	kn.		96.2		

NOTES

(A) Military Rated Thrust

 In radius problem, tanks dropped prior to entering combat. If retained during combat until empty, radius would increase by 27 nautical miles.

 Performance based on Flight Test

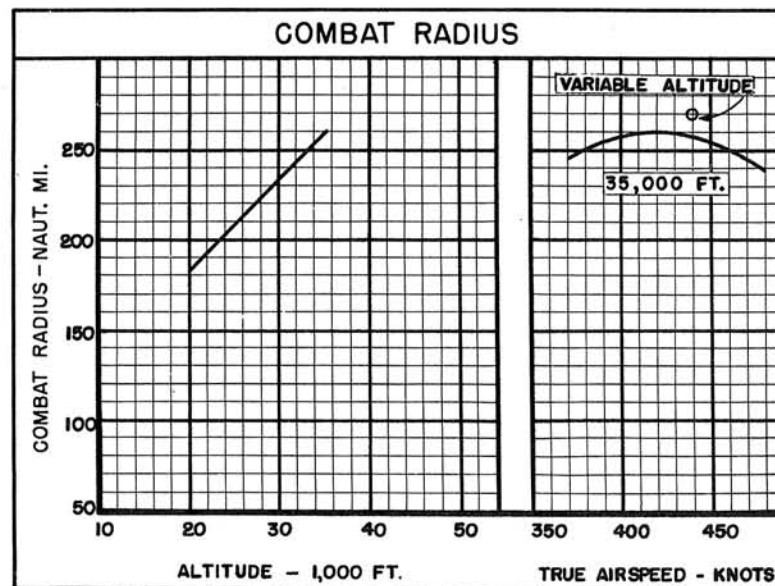
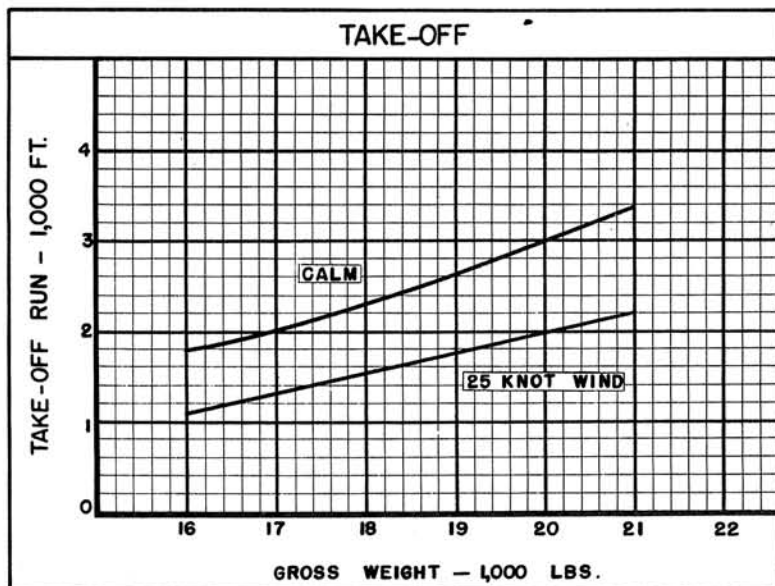
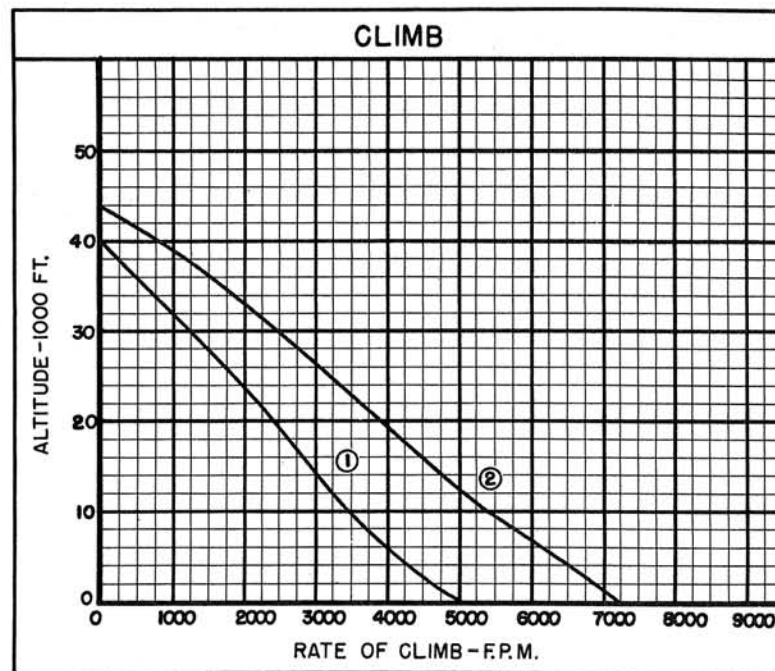
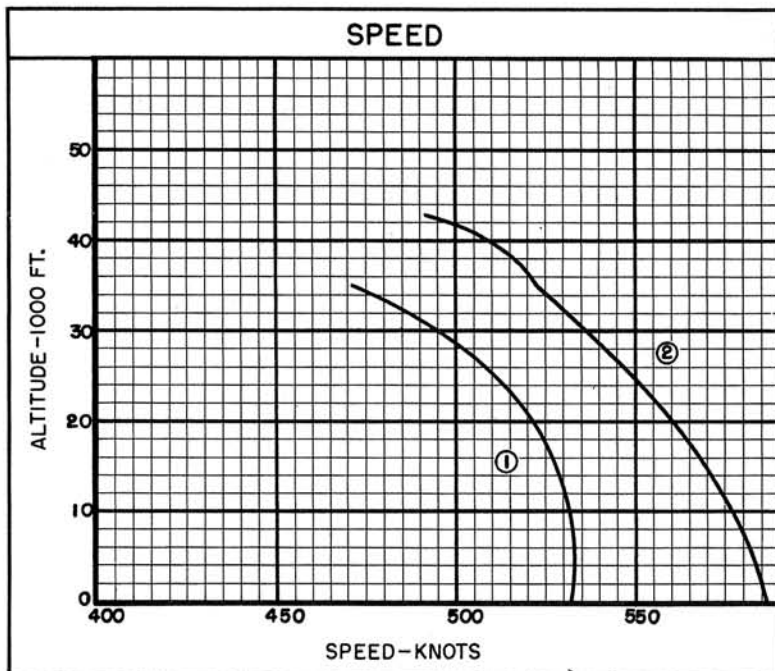
 Range and radius based on flight test fuel consumption increased by 5%.

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NAVAER-1335D (Rev. 1-55)

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

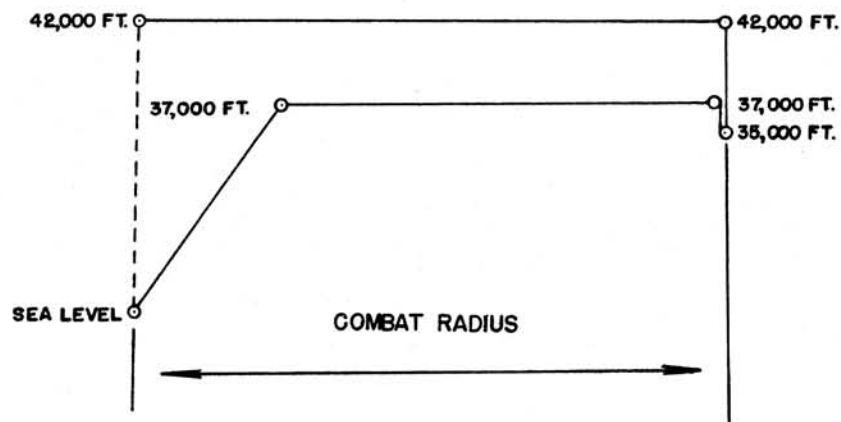


○ LOADING CONDITION COLUMN NUMBER

NOTES

GENERAL PURPOSE AND ESCORT FIGHTER COMBAT RADIUS PROBLEM (GAS TURBINE)

WARM-UP, TAXI, TAKE-OFF: 5 minutes at normal thrust.
 CLIMB: To cruise altitude at military thrust.
 CRUISE-OUT: At V for long range at cruise altitude.
 COMBAT: At 35,000 ft. 20 minutes at military thrust (external tanks dropped prior to combat)
 CRUISE-BACK: At V for long range at cruise altitude.
 RESERVE: Fuel for 20 minutes loiter at sea level at V for maximum endurance plus 5% initial fuel.



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