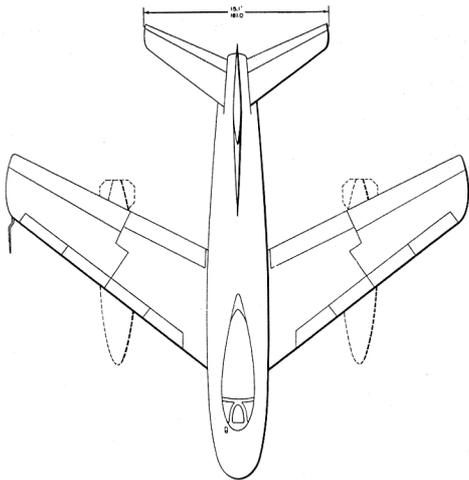


STANDARD AIRCRAFT CHARACTERISTICS

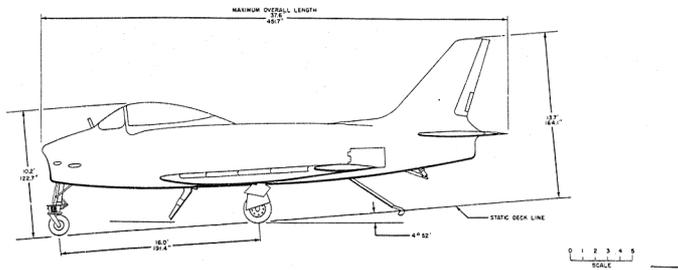
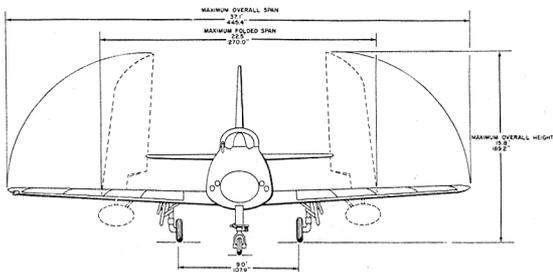
FJ - 2 "FURY"

NORTH AMERICAN

SECURITY INFORMATION-CONFIDENTIAL

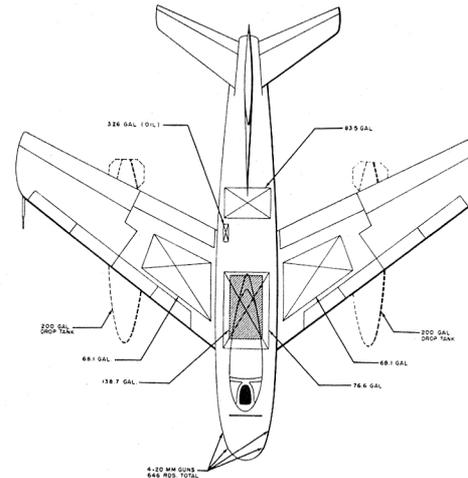


WING AREA 287.9
 MAC 37.03
 ASPECT RATIO 4.79
 WING SECTION* 0008 F1-81-84
 ROOT TAPER 0011 F1021-84
 TIP TAPER 0011 F1021-84
 * NORMAL TO QUARTER CHORD

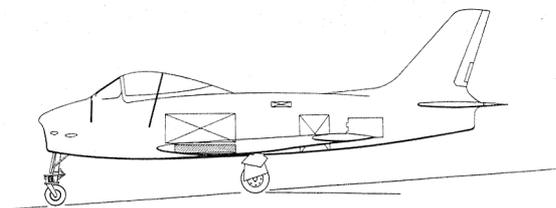
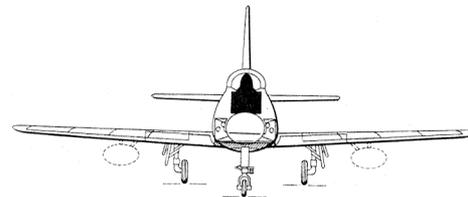


SECURITY INFORMATION-CONFIDENTIAL

- BULLET RESISTANT GLASS
- BOMB PLATE
- SELF-SEALING TANKS
- NON SELF-SEALING TANKS



PROTECTION
 1 PILOT FORWARD 88 LBS
 2 PILOT AFT 52 LBS
 3 SELF-SEALING CELL 62 LBS
 FUEL TANK CAPACITY
 MAXIMUM INTERNAL 435 GAL
 MAXIMUM 835 GAL



ARMAMENT & TANKAGE
 FJ-2
 CONFIDENTIAL

Standard Aircraft Characteristics NAVAER 1335B (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

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

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

DIMENSIONS

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

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

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)

PERFORMANCE SUMMARY

TAKE-OFF LOADING CONDITION		(1) FIGHTER 2-200 GAL. EXTERNAL TANKS			
TAKE-OFF WEIGHT	lb.	18,791			
Fuel	lb.	5,428			
Fayload	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

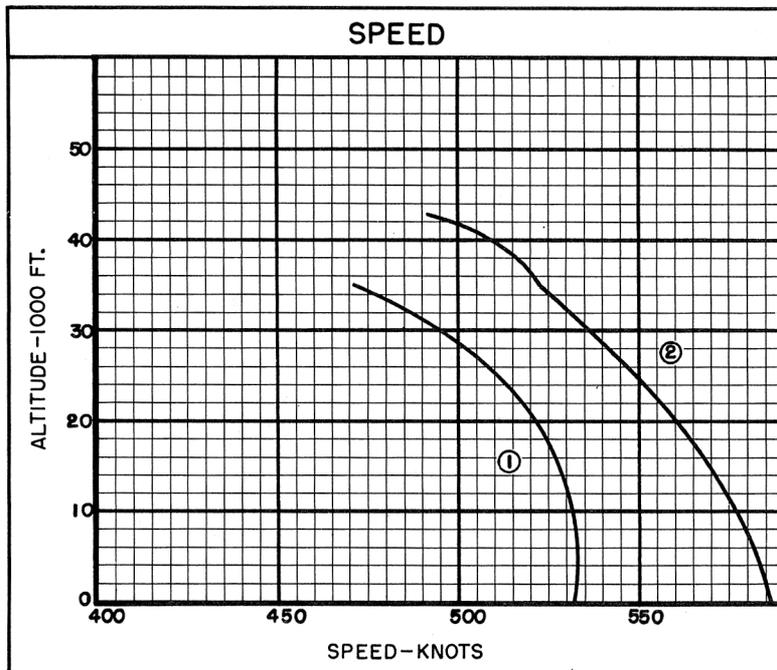
(A) Military Rated Thrust

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

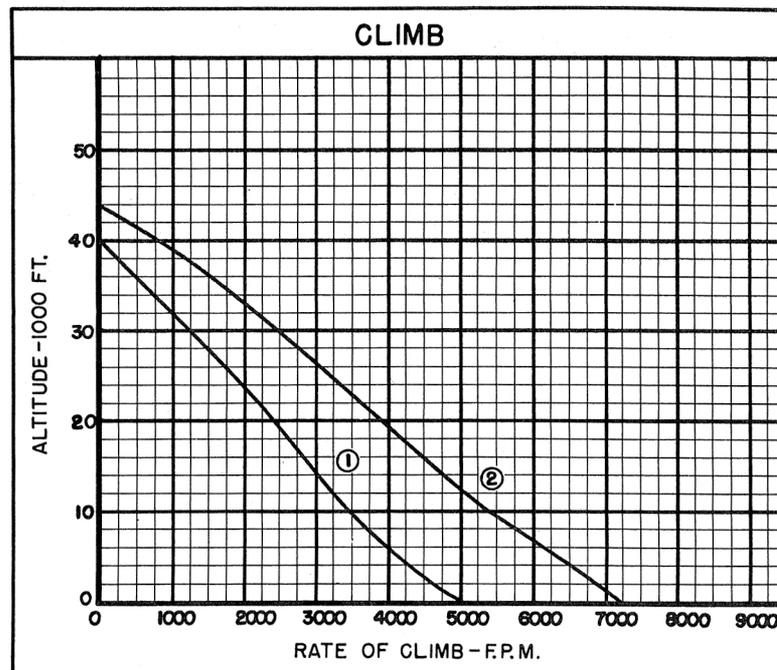
 Performance based on Flight Test

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

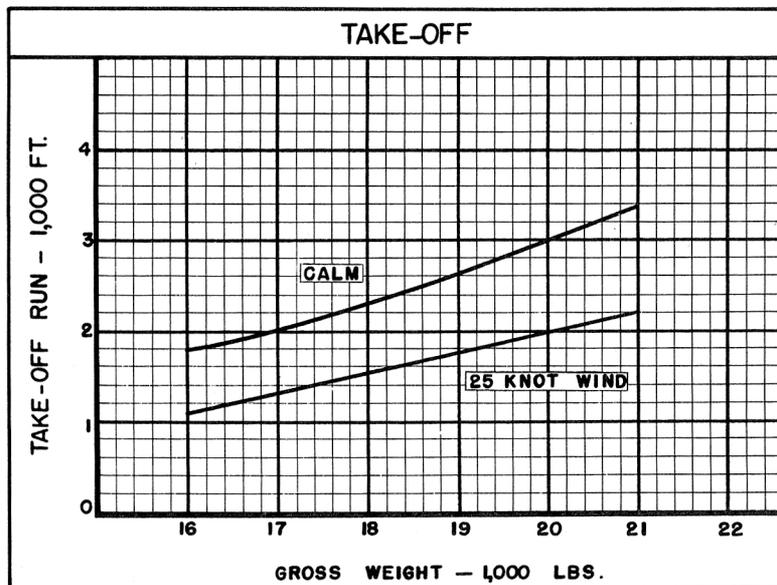
SPEED



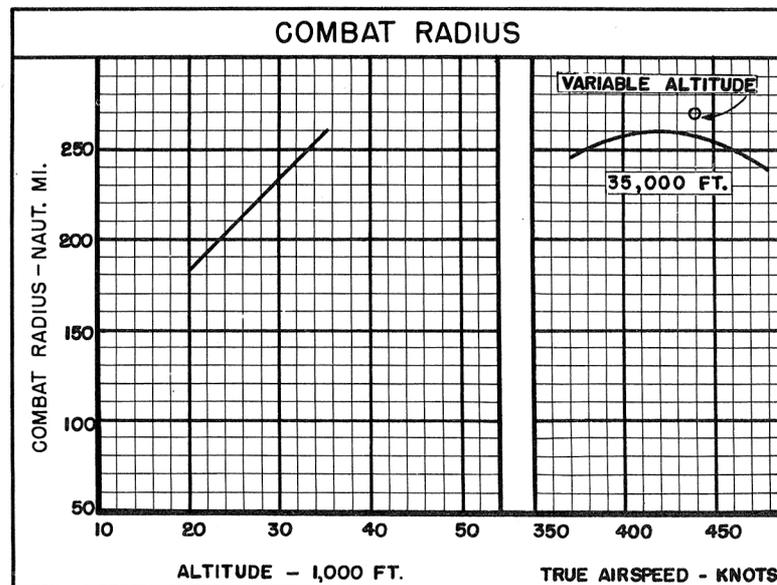
CLIMB



TAKE-OFF



COMBAT RADIUS



○ 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.

