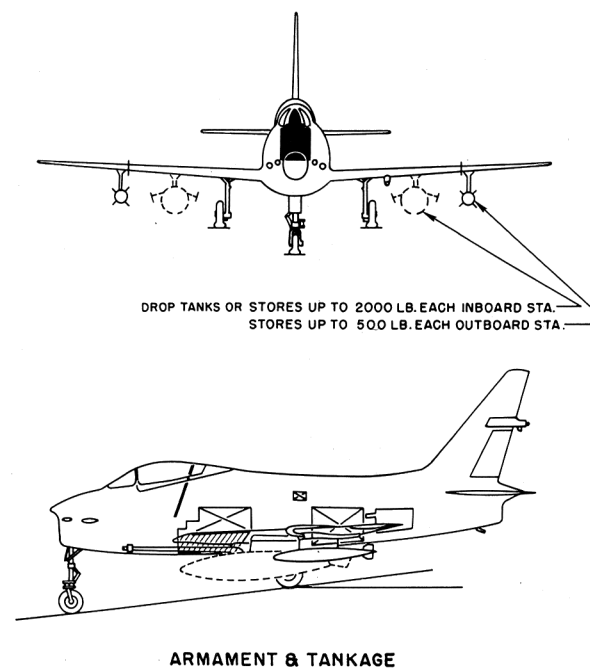
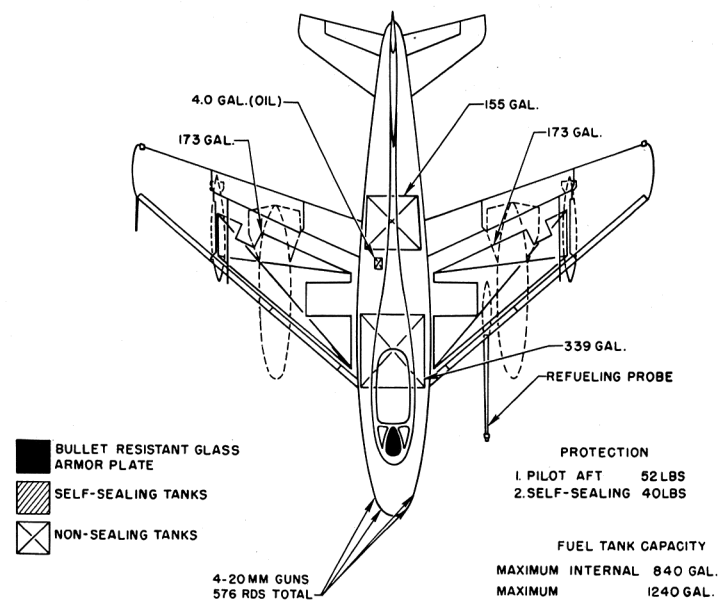
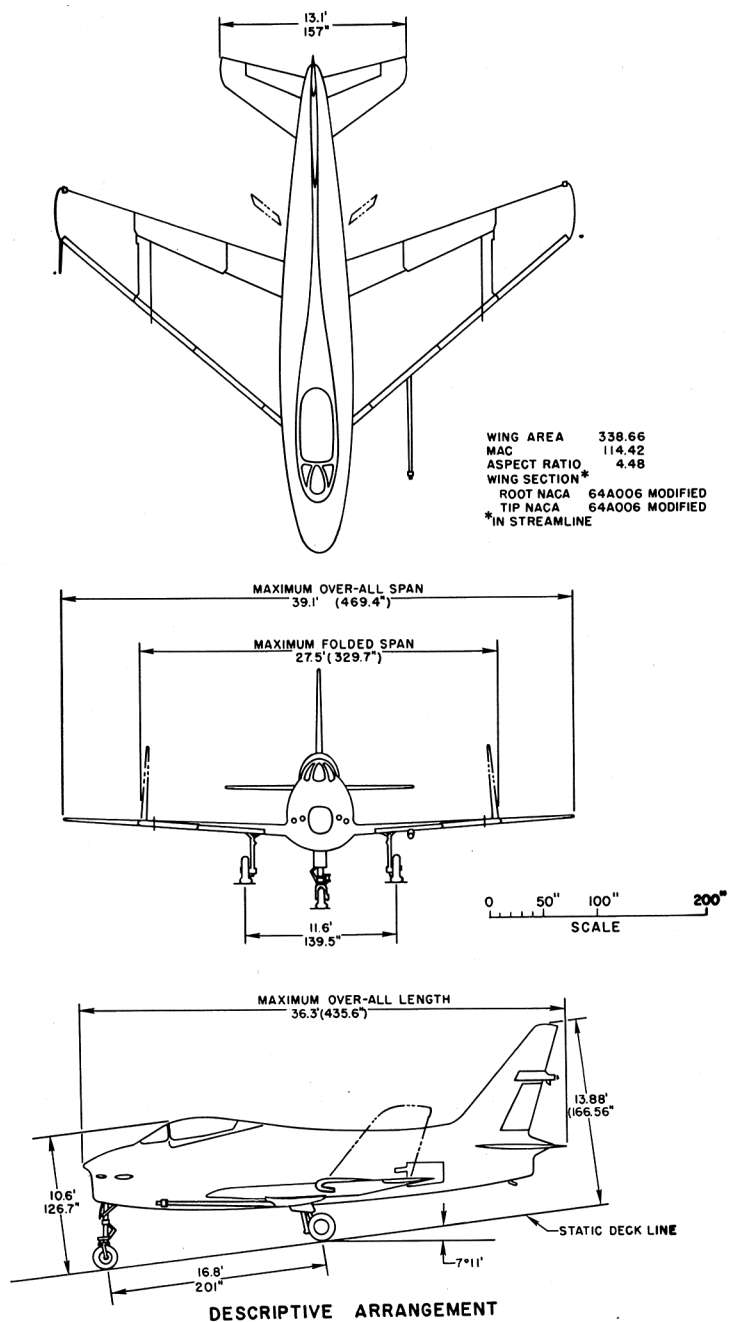


STANDARD AIRCRAFT CHARACTERISTICS
FJ-4 "FURY"
NORTH AMERICAN

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



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

POWER PLANT

NO. & MODEL (1) J65-W-16A
 MFR Wright Aero. Corp.
 TYPE Axial Flow
 LENGTH 128.0"
 DIAMETER 37.5"
 AUGMENTATION None

RATINGS

	<u>LBS</u>	<u>@</u>	<u>RPM</u>
T.O.	7700		8300
MIL.	7700		8300
NORM.	6780		8030

Sea Level Static

Spec. No. W.A.D. N890A

ORDNANCE

GUNS:

4-20mm/500 rds.
 Type - MK 12 Mod 3
 Feeder - MK 9 Mod 4 and 5
 Gun camera - AN-N-6A
 Fire Control System - MK 16 Mod 1
 sight unit - MK 8 Mod 8

STORES:

NO.

Sidewinder	4
Aero 6 rocket pkg.	4
Aero 7 rocket pkg.	4
Aero 10 rocket pkg.	4
5 in. HVAR	4
260 lb. frag. bomb	4
500 lb. L.D. or G.P.	4
1000 lb. G.P. bomb	2
1000 lb. L.D. bomb	2
2000 lb. L.D. bomb	2

MISSION AND DESCRIPTION

The primary mission of the FJ-4 airplane is the destruction of hostile aircraft in flight. The secondary mission is to attack hostile ground or water-borne installations by employment of gun fire.

The FJ-4 airplane is a single-seat, carrier-based, day fighter capable of operating from an H8 catapult and a MK 5 or MK 7 arresting gear. Special features of this airplane are swept-back wing and tail, hydraulic speed brakes, 6 percent thick machined skin wing, hydraulic power-operated irreversible controls with artificial feel for the all-movable horizontal tail and ailerons and wing flaps for landing.

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

Design maximum dive speed is 600 knots EAS.
 Design maximum Mach number is 1.345.

DEVELOPMENT

First Flight 28 October 1954
 Service Use (Fleet Delivery) 24 July 1956

DIMENSIONS

WING
 AREA 338.66 sq. ft.
 SPAN 39' - 1"
 M.A.C. 9' - 6"
 SWEEPBACK 35 deg.

LENGTH 36' - 4"
 HEIGHT 13' - 11"
 TREAD 11' - 7"

WEIGHTS

<u>LOADINGS</u>	<u>LBS</u>	<u>L.F.</u>
EMPTY	13,210	
BASIC	13,721	
DESIGN	16,500	6.5
COMBAT	17,845	
MAX. TAKE-OFF	22,000	
MAX. LANDING (Fld.)	18,000	
MAX. LANDING (Carr.)	17,000	

All weights are actual.

FUEL AND OIL

<u>GALS.</u>	<u>NO. TANKS</u>	<u>LOCATION</u>
346	2	Wing
494	2	Fuselage

FUEL GRADE JP-4 or JP-5
 FUEL SPEC (applicable) MIL-F-5624

OIL

CAPACITY (Gals.) 4.0
 SPEC (applicable) MIL-L-7808

ELECTRONICS

UHF XMTR-RCVR AN/ARC-27A
 UHF AUTO DIR FINDER AN/ARA-25
 IFF TRANSPONDER AN/APX-6B
 RADAR AN/APG-30A
 OMNI-RANGE RCVR AN/ARN-14E
 COMPLETE PROVISIONS FOR AN/ARN-21

PERFORMANCE SUMMARY						
TAKE-OFF LOADING CONDITION	(1) GENERAL PURPOSE FIGHTER CLEAN	(3) GENERAL PURPOSE FIGHTER 4 SIDEWINDERS	(5) GENERAL PURPOSE FIGHTER TWO-200 GAL. TANKS 2 SIDEWINDERS	(7) GROUND SUPPORT FOUR-500 LB. S.L. BOMBS	(8) GROUND SUPPORT TWO-200 GAL. TANKS TWO AERO 68 ROCKET PACKAGES	
TAKE-OFF WEIGHT lb.	20,130	21,221	23,812	22,396	23,700	
Fuel - Internal/External (JP-5) lb.	5712/0	5712/0	5712/2720	5712/0	5712/2720	
Fayload lb.	370	370	680	2370	664	
Wing loading lb./sq.ft.	59.5	62.7	70.3	66.1	70.0	
Stall speed - power-off kn.	120.5	124.1	132.5	127.9	132.2	
Take-off run at S.L. - calm ft.	2900	3400	4600	3900	4550	
Take-off run at S.L. 25 kn. wind ft.	2150	2500	3350	2880	3330	
Take-off to clear 50 ft. - calm ft.	4250	4800	6370	5450	6300	
Max. speed/altitude (A) kn./ft.	591/S.L.	567/S.L.	536/10,000	567/S.L.	535/10,000	
Rate of climb at S.L. (A) fpm.	6650	6000	4550	5700	4600	
Time: S.L. to 20,000 ft. (A) min.	3.9	4.1	5.5	4.4	5.5	
Time: S.L. to 30,000 ft. (A) min.	6.3	7.0	9.8	7.5	9.7	
Service ceiling (100 fpm) (A) ft.	46,200	44,400	41,800	43,000	41,800	
Combat range n.mi.	1290	1185	1755	1220	1755	
Average cruising speed kn.	464	452	453	460	453	
Cruising altitude(s) ft.	43,400 - 47,000	41,900 - 45,000	38,800 - 46,000	40,500 - 44,500	38,800 - 45,000	
Combat radius/Mission Time n.mi./hr.	450/2.3	415/2.1	730/3.6	425/2.2	555/2.8	
Average cruising speed kn.	464	457	451	460	448	
CAP - Loiter Altitude/Loiter Time/Mission Time (B) ft./hr./hr.	35,000/1.4/2.4	35,000/1.2/2.2	35,000/2.7/3.8			
IFR - Radius/Mission Time (C) n.mi./hr.	--	--	1065/5.3			
COMBAT LOADING CONDITION	(2) CLEAN	(4) SIDEWINDERS RETAINED	(6) SIDEWINDERS RETAINED			
COMBAT WEIGHT lb.	17,845	18,936	20,712			
Engine power	Military	Military	Military			
Fuel lb.	3427	3427	5712			
Combat speed/combat altitude kn./ft.	548/35,000	536/35,000	534/35,000			
Rate of climb/combat altitude fpm/ft.	3000/35,000	2310/35,000	2070/35,000			
Combat ceiling (500 fpm) ft.	46,800	44,500	43,300			
Rate of climb at S.L. fpm.	7660	6890	6140			
Max. speed at S.L. kn.	591	568	572			
Max. speed/altitude kn./ft.	591/S.L.	569/10,000	572/5000			
LANDING WEIGHT lb.	15,333	15,811	15,751			
Fuel lb.	915	910	1061			
Stall speed - power-off/approach power kn./kn.	105/103	106.6/104.5	106.5/104.4			
Distance - ground roll/over 50' obstacle ft./ft.	4420/5650	4540/5780	4530/5770			

NOTES

PERFORMANCE BASIS: Contractor and NATC Flight Test data.
 RANGE and RADIUS based on contractor and NATC Flight Test data.

(A) MILITARY RATED THRUST

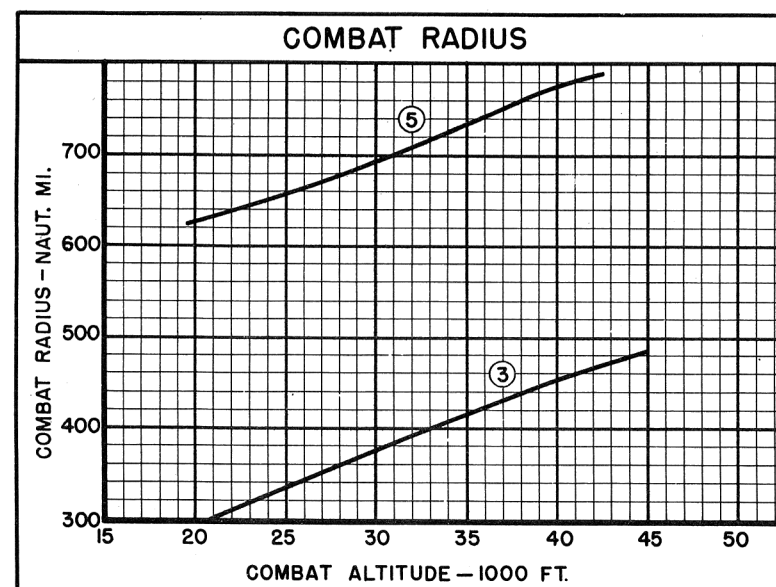
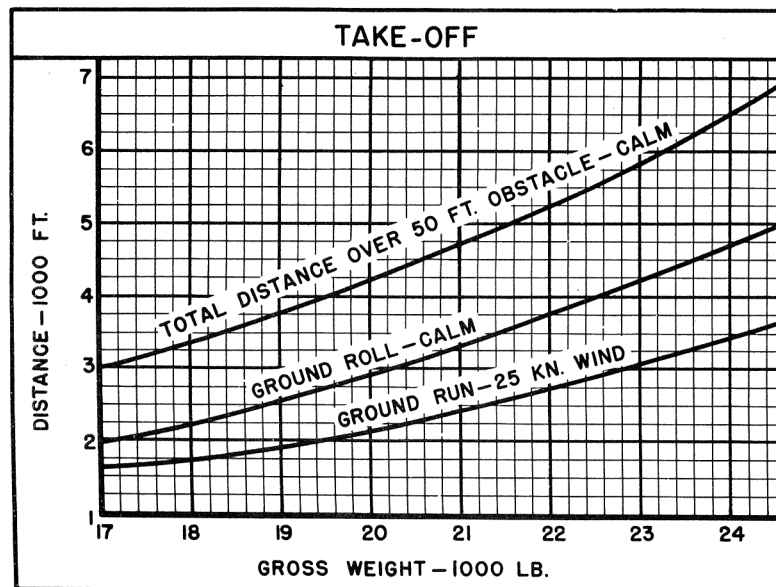
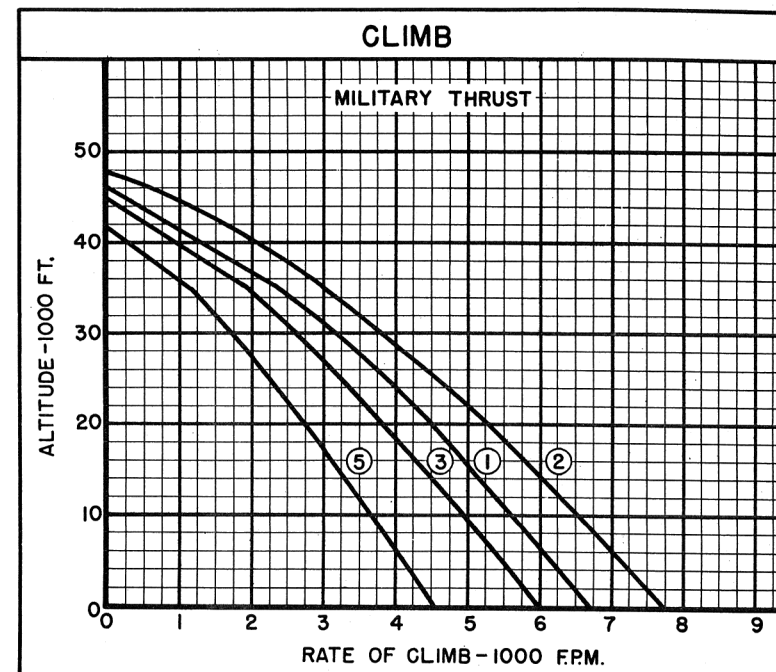
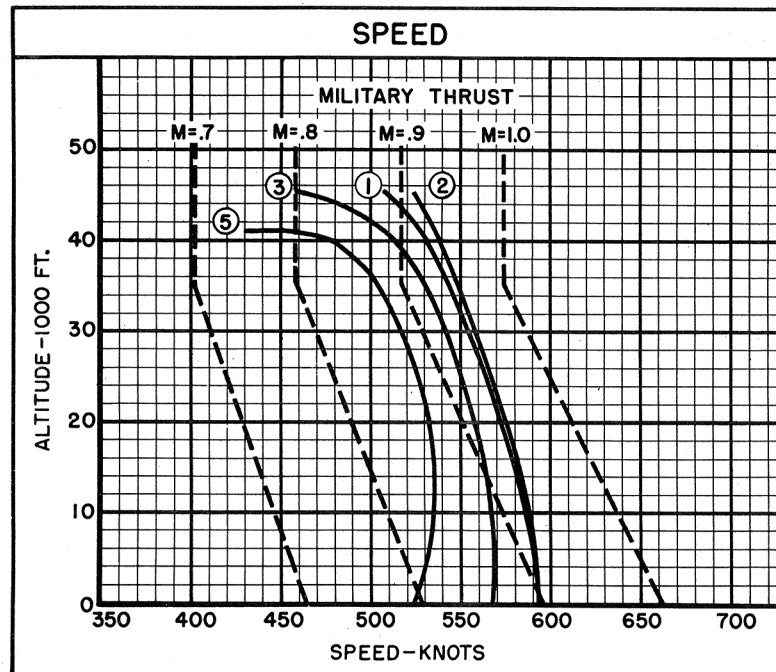
(B) COMBAT AIR PATROL - 150 n.mi. radius.

(C) IN-FLIGHT REFUELING from FJ-4B Buddy Tanker - outbound only.
 Transfer 3163 lbs. at 35,000 ft. and 437 n.mi. out.

MISSION TIME: Any time where fuel is used and distance gained plus
 Combat time and Loiter time.

SPOTTING: A total of 78 airplanes can be accommodated in a landing
 spot on the flight and hangar decks of a CVA-19 class angled deck
 carrier.

NAVAER-1335D (Rev. 1-55)



○ LOADING CONDITION COLUMN NUMBER

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

NOTES

LOADING
(All data based on JP-4)

Clean
4 Sidewinders
Two-200 Gal. Tanks, 2 Sidewinders

TAKE-OFF
WEIGHT

19,878
20,969
23,450

GENERAL PURPOSE FIGHTER
△ COMBAT RADIUS △ MISSION TIME

-43 n.mi.
-40 n.mi.
-50 n.mi.
-.19 hr.
-.18 hr.
-.22 hr.

COMBAT AIR PATROL
△ LOITER TIME

-.20 hr.
-.18 hr.
-.24 hr.

GENERAL PURPOSE FIGHTER

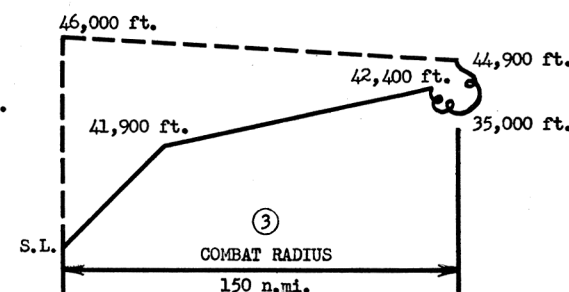
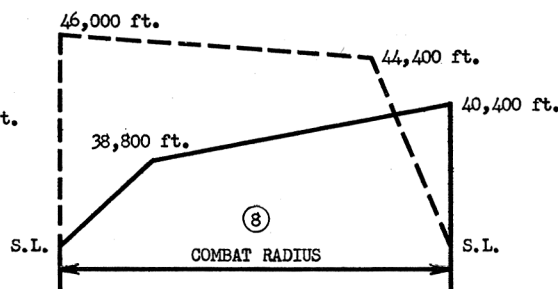
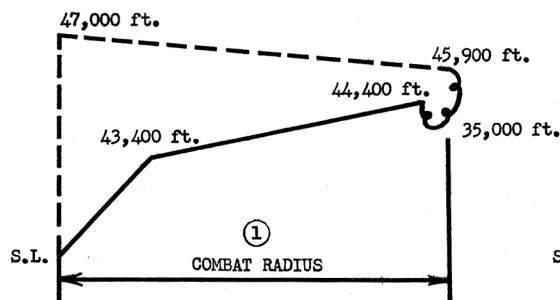
WARM-UP, TAKE-OFF AND ACCELERATE: 5 minutes at normal rated thrust at sea level.
CLIMB: On course to cruise altitude with military rated thrust.
CRUISE-OUT: At altitudes and speeds for maximum range.
DESCEND: To 35,000 ft. (no distance gained, no fuel used).
COMBAT FUEL ALLOWANCE: At 35,000 ft. with military rated thrust for 20 minutes (Assume aircraft at initial return cruise altitude at end of combat).
CRUISE-BACK: At altitudes and speeds for maximum range.
RESERVE: 5% of initial fuel load plus 20 minutes at speed for maximum endurance at sea level.

GROUND SUPPORT

WARM-UP, TAKE-OFF AND ACCELERATE: 5 minutes at normal rated thrust at sea level.
CLIMB: On course to cruise altitude with military rated thrust.
CRUISE-OUT: At altitudes and speeds for maximum range.
DESCEND: To sea level (no distance gained, no fuel used).
LOITER: At sea level for 10 minutes at speed for maximum endurance.
COMBAT FUEL ALLOWANCE: At sea level for 10 minutes at military rated thrust.
CLIMB: On course to cruise altitude with military rated thrust.
CRUISE-BACK: At altitudes and speeds for maximum range.
RESERVE: 5% of initial fuel load plus 20 minutes at speed for maximum endurance at sea level.

COMBAT AIR PATROL

WARM-UP, TAKE-OFF AND ACCELERATE: 5 minutes at normal rated thrust at sea level.
CLIMB: On course to cruise altitude with military rated thrust.
CRUISE-OUT: To point 150 n.mi. from base at altitudes and speeds for maximum range.
LOITER: On station at altitude and speed for maximum endurance.
DESCEND: To 35,000 ft. (no distance gained, no fuel used).
COMBAT FUEL ALLOWANCE: At 35,000 ft. with military rated thrust for 20 minutes (Assume aircraft at initial return cruise altitude at end of combat).
CRUISE-BACK: At altitudes and speeds for maximum range.
RESERVE: 5% of initial fuel load plus 20 minutes at speed for maximum endurance at sea level.



○ LOADING CONDITION COLUMN NUMBER

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