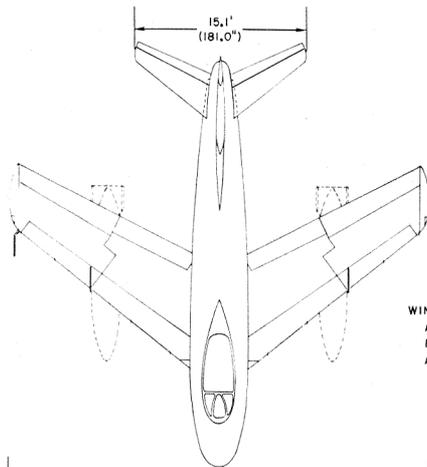




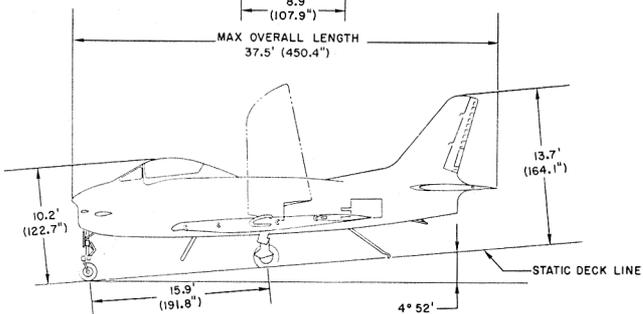
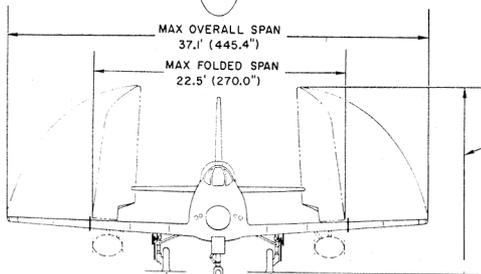
STANDARD AIRCRAFT CHARACTERISTICS

FJ-3/3M "FURY"

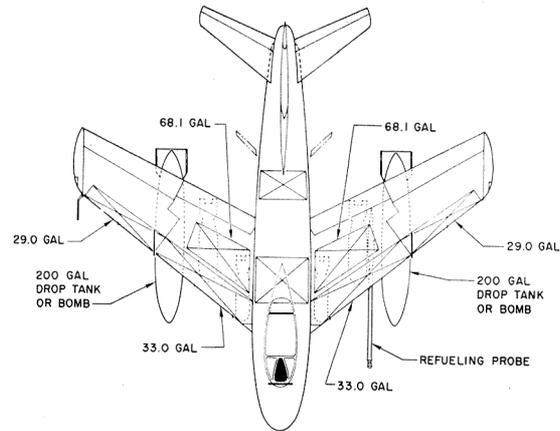
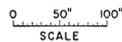
NORTH AMERICAN



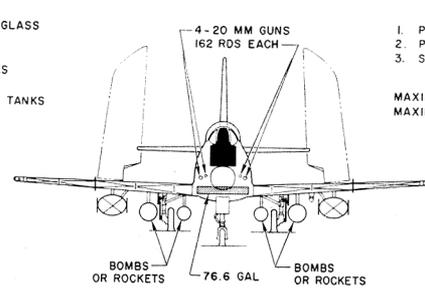
WING:
 AREA 302.310 SQ. FT.
 MAC 102.005
 ASPECT RATIO 4.559



DESCRIPTIVE ARRANGEMENT



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

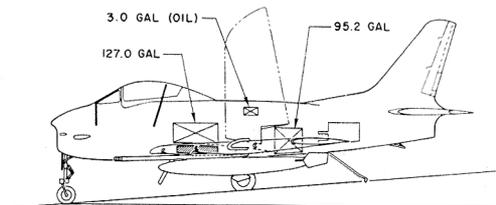


PROTECTION

| | |
|----------------------|---------|
| 1. PILOT FOREWARD | 88 LBS. |
| 2. PILOT AFT | 52 LBS. |
| 3. SELF-SEALING CELL | 82 LBS. |

FUEL TANK CAPACITY

| | |
|------------------|---------|
| MAXIMUM INTERNAL | 559 GAL |
| MAXIMUM | 959 GAL |



ARMAMENT & TANKAGE



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

POWER PLANT

NO. & MODEL.....(1) J65-W-4B
 MFR.....Wright Aero Corp.
 TYPE.....Axial Flow
 LENGTH.....124.6 in.
 DIAMETER.....39.0 in.
 AUGMENTATION.....None

RATINGS

| | <u>LBS.</u> | @ | <u>RPM</u> |
|-------|-------------|---|------------|
| MAX. | 7650 | | 8300 |
| MIL. | 7650 | | 8300 |
| NORM. | 6700 | | 8030 |

Sea Level Static

Spec. No. W.A.D. - N890A

MISSION AND DESCRIPTION

The primary mission of the FJ-3 airplane is the destruction of enemy aircraft in flight. The secondary mission is to attack enemy ground or waterborne installations by employment of gun fire, bombs, and/or other destructive agents.

The FJ-3 airplane is a single seat, carrier-based, day fighter capable of operating from an H4-1, H8, C7, and C11 catapult and a MK 5 or MK 7 arresting gear. Special features of this airplane are sweptback wing and tail, hydraulic speed brakes, hydraulic power-operated irreversible controls with artificial feel for the all-movable horizontal tail and ailerons.

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

Max. design dive speed - 590 kn. EAS at 5000 ft.

Max. design Mach No. - 1.18 at 25,000 ft.

The FJ-3 is basically an FJ-2 modified to incorporate the J65-W-4B engine and an inlet area of 470 square miles. The wing slats are replaced by a fuel carrying extended cambered leading edge.

DEVELOPMENT

First flight (J65-W-4B engine).....December 1955

Service use (J65-W-4B engine).....January 1956

WEIGHTS

| <u>LOADINGS</u> | <u>LBS.</u> | <u>L.F.</u> |
|-------------------|-------------|-------------|
| EMPTY | 12,205 | - |
| BASIC | 12,657 | - |
| DESIGN | 16,482 | 6.50 |
| COMBAT | 15,669 | 6.84 |
| MAX. T.O. (FIELD) | 23,919 | 3.80 |
| (CAT.) | 23,919 | - |
| MAX. LAND (FIELD) | 20,065 | - |
| (ARREST) | 14,916 | - |

All weights are actual.

FUEL AND OIL

| <u>GALS</u> | <u>NO. TANKS</u> | <u>LOCATION</u> |
|-------------|------------------|-----------------|
| 124.0 | 4 | Wing L.E. |
| 212.8 | 3 | Wing |
| 222.2 | 2 | Fuselage |
| 400.0 | 2 | External |

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

OIL

CAPACITY (Gals.).....3.0 or 4.2
 GRADE.....1010
 SPEC.....(applicable) MIL-O-6081

ORDNANCE

GUNS

| <u>NO.</u> | <u>SIZE</u> | <u>LOCATION</u> | <u>RDS.</u> |
|------------|-------------|-----------------|-------------|
| 4 | 20mm | Fwd. Fus. | 646 |

GUN CAMERA.....AN-N-6A
 FIRE CONTROL.....MK 16 - MOD 2
 SIGHT UNIT.....MK 11 - MOD 0

EXTERNAL STORES

Airplanes 136118 and subsequent

Inboard stations:

5-in. HVAR
 500 lb. G.P. bomb
 Aero 6 series rocket pack
 260 lb. frag. bomb
 250 lb. low drag bomb

Intermediate stations:

5-in. HVAR
 500 lb. G.P. bomb
 1000 lb. G.P. bomb
 250 lb. low drag bomb
 500 lb. low drag bomb
 1000 lb. low drag bomb
 Sidewinder
 Aero 6,7, and 9 series rocket pack
 260 lb. frag. bomb

DIMENSIONS

WING
 AREA.....302.3 sq. ft.
 SPAN.....37' - 1"
 ASPECT RATIO.....4.57
 SWEEPBACK.....35 deg.
 M.A.C.8' - 6"
 LENGTH.....37' - 7"
 HEIGHT.....13' - 8"
 TREAD.....9' - 0"

ELECTRONICS

UHF TRANSMTR-REC.....AN/ARC-27A
 UHF AUTO DIR FINDER.....AN/ARA-25
 IFF TRANSPONDR.....AN/APX-6B
 RADAR.....AN/APG-30 and
 AN/APG-30A
 RADIO COMPASS.....AN/ARN-14E
 PROVISIONS FOR GUNSIGHT
 ROLL STAB.....AN/ARN-21 and
 AN/APA-89

PERFORMANCE SUMMARY

| TAKE-OFF LOADING CONDITION | (1) GENERAL PURPOSE FIGHTER | (3) GENERAL PURPOSE FIGHTER 2-200 Gal. Ext. Fuel | (5) GENERAL PURPOSE FIGHTER 2-200 Gal. Ext. Fuel and 2-Sidewinders | (7) GROUND SUPPORT 2-200 Gal. Ext. Fuel; 2 Aero 6B and 2 Aero X7A rocket packages | (9) FERRY 2-200 Gal. Ext. Fuel | |
|---------------------------------------------|-----------------------------|-----------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-----------------------------------|---------------|
| TAKE-OFF WEIGHT | lb. | 17,189 | 20,287 | 21,024 | 21,876 | 20,287 |
| Fuel JP-5 | lb. | 3801 | 6521 | 6521 | 6521 | 6521 |
| Payload | lb. | 347 | 347 | 657 | 1494 | -- |
| Wing loading | lb./sq.ft. | 56.9 | 67.1 | 69.5 | 72.4 | 67.1 |
| Stall speed - power-off | kn. | 115.3 | 123.3 | 125.5 | 128 | 123.3 |
| Take-off run at S.L. - calm | ft. | 1760 | 2520 | 2750 | 2970 | 2550 |
| Take-off run at S.L. 25 kn. wind | ft. | 1140 | 1600 | 1730 | 1880 | 1600 |
| Take-off to clear 50 ft. - calm | ft. | 2750 | 3700 | 3950 | 4200 | 3700 |
| Max. speed/altitude (A) | kn./ft. | 592/S.L. | 552/10,000 | 539/15,000 | 500/20,000 | 552/10,000 |
| Rate of climb at S.L. (A) | fpm. | 7600 | 5750 | 5400 | 4850 | 5750 |
| Time: S.L. to 20,000 ft. (A) | min. | 3.1 | 4.2 | 4.5 | 5.0 | 4.2 |
| Time: S.L. to 30,000 ft. (A) | min. | 5.2 | 7.5 | 8.0 | 9.8 | 7.5 |
| Service ceiling (100 fpm) (A) | ft. | 49,000 | 44,000 | 42,200 | 39,600 | 44,100 |
| Combat range | n.mi. | 860 | 1550 | 1490 | 1035 | 1550 |
| Average cruising speed | kn. | 457 | 454 | 450 | 429 | 455 |
| Cruising altitude(s) | ft. | 43,300/45,700 | 40,500/45,500 | 40,100/45,000 | 38,500/44,300 | 40,500/45,500 |
| Combat radius/Mission time | n.mi./hr. | 200/1.2 | 560/2.8 | 515/2.6 | 245/1.5 (D) | - /3.3 |
| Average cruising speed | kn. | 459 | 455 | 447 | 440 | -- |
| CAP Loiter @ 40,000 ft./Mission time | hr./hr. | -- | -- | 1.8/2.9 (C) | -- | -- |
| IFR Radius/Mission time | n.mi./hr. | -- | 1075/5.4 (B) | 965/4.8 | -- | -- |
| COMBAT LOADING CONDITION | (2) 60% Internal Fuel | (4) Full Internal Fuel Tanks Off | (6) Full Internal Fuel SW's retained Tanks off | (8) Full Internal Fuel Rocket Packs retained Tanks off | | |
| COMBAT WEIGHT | lb. | 15,669 | 17,189 | 17,926 | 18,778 | |
| Engine power | | Military | Military | Military | Military | |
| Fuel | lb. | 2281 | 3801 | 3801 | 3801 | |
| Combat speed/combat altitude | kn./ft. | 541/35,000 | 537/35,000 | 532/35,000 | 510/35,000 | |
| Rate of climb/combat altitude | fpm/ft. | 4000/35,000 | 3600/35,000 | 3200/35,000 | 2100/35,000 | |
| Combat ceiling (500 fpm) | ft. | 49,000 | 47,200 | 45,700 | 42,300 | |
| Rate of climb at S.L. | fpm. | 8450 | 7600 | 7200 | 6375 | |
| Max. speed at S.L. | kn. | 592 | 592 | 582 | 520 | |
| Max. speed/altitude | kn./ft. | 592/S.L. | 592/S.L. | 582/S.L. | 534/20,000 | |
| LANDING WEIGHT | lb. | 14,165 | 14,330 | 14,771 | 14,789 | |
| Fuel | lb. | 777 | 942 | 956 | 963 | |
| Stall speed - power-off/with approach power | kn. | 104.7/102.7 | 105.2/103.2 | 106.9/104.9 | 107/105 | |
| Distance - ground run/over 50 ft. obstacle | ft./ft. | 3250/4450 | 3300/4500 | 3400/4650 | 3400/4650 | |

NOTES

PERFORMANCE BASIS: Contractor's and NATC flight test data.
RANGE and RADIUS based on flight test fuel consumption increased by 5%.

(A) MILITARY RATED THRUST

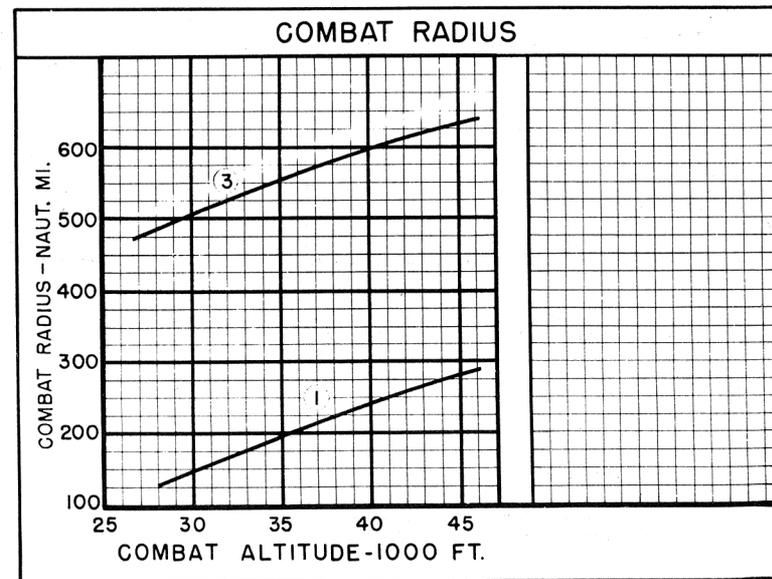
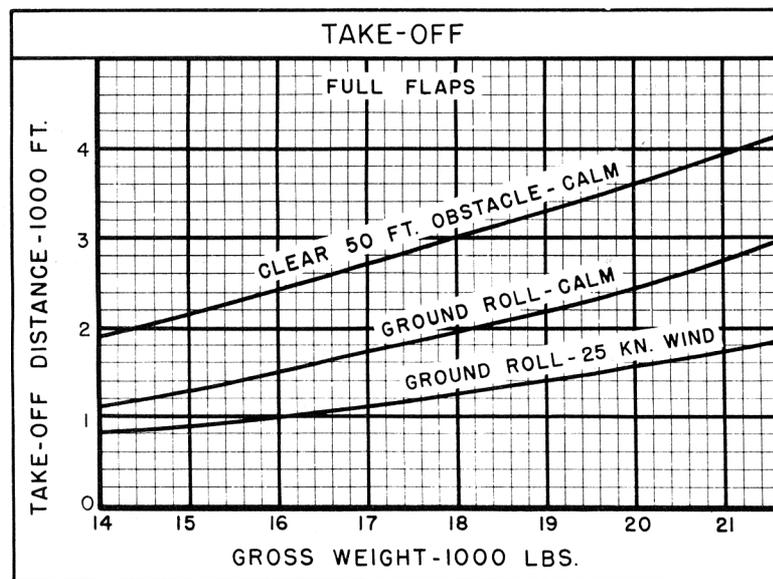
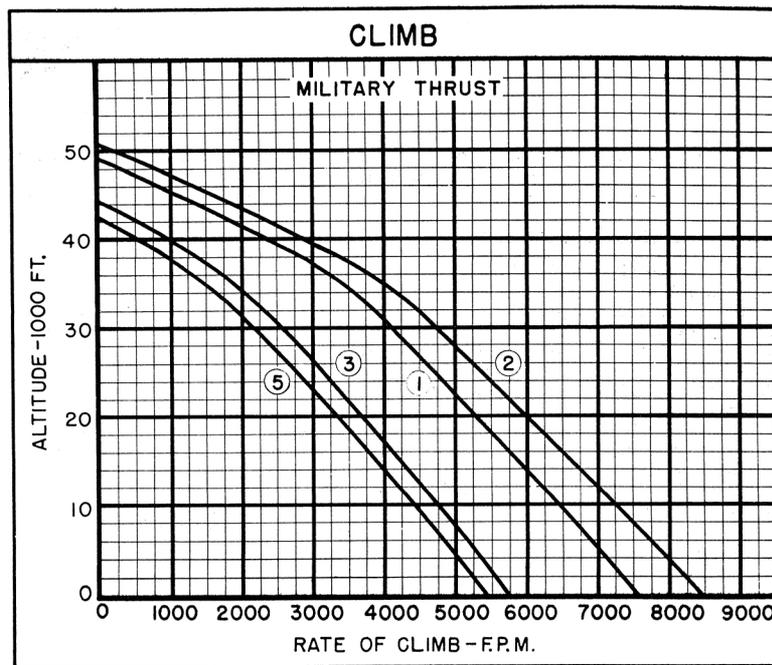
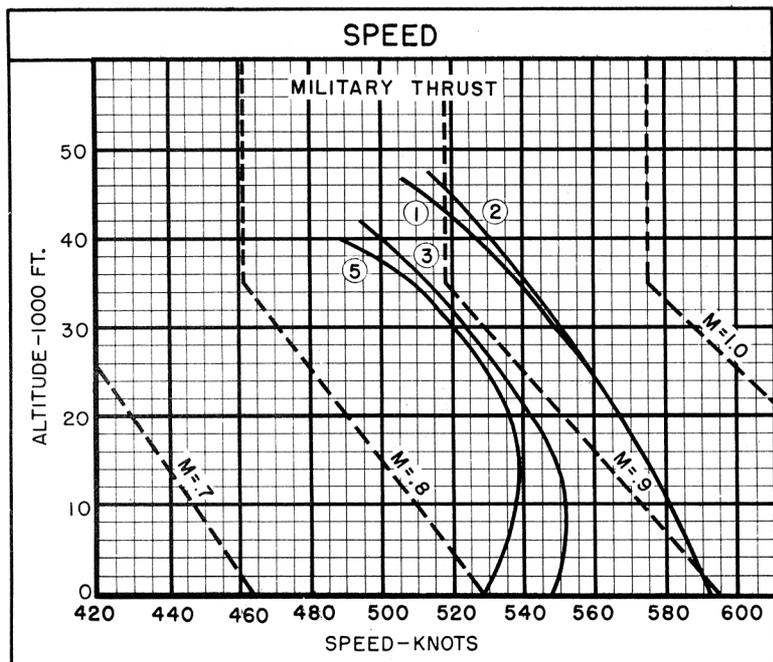
(B) IN-FLIGHT REFUELING: Outbound from A3D-2 tanker. 3490 lb. fuel transferred at 655 n.mi. out. If wing tanks are dropped just prior to combat, combat radius reduced 370 n.mi., mission time reduced 1.6 hr.

(C) One IFR from A3D-2 tanker at loiter altitude at the end of original loiter period will extend loiter and mission time 3.2 hr.

(D) For four (4) 500 lb. G.P. Bombs in lieu of 2 Aero 6B and 2 Aero X7A rocket packages, Combat Radius is 225 n.mi., Mission Time is 1.4 hr.

All loadings include guns and ammunition; Wing tanks are dropped when empty

Mission Time: any time where fuel is used and distance gained including CAP loiter, Combat and Refueling allowance time.



○ LOADING CONDITION COLUMN NUMBER

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

NOTES

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

GENERAL PURPOSE FIGHTER

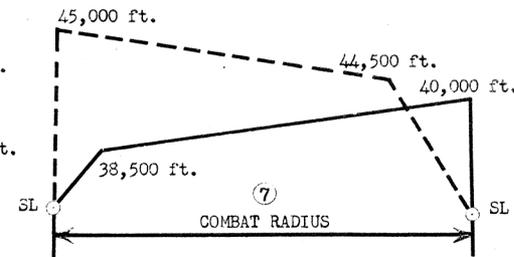
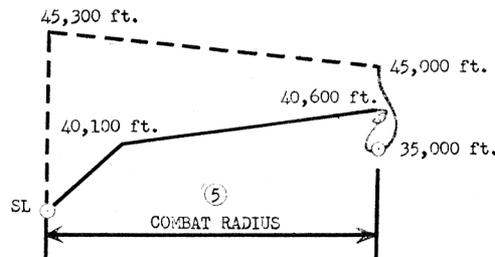
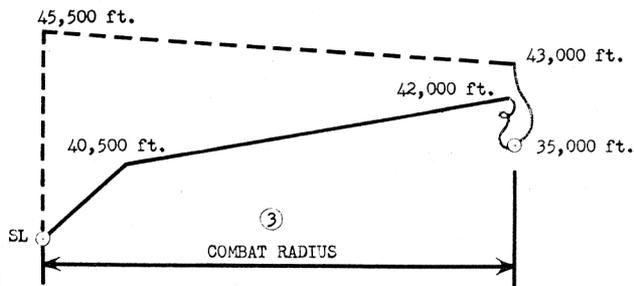
WARM-UP, TAKE-OFF ACCELERATE: 5 minutes at normal rated thrust at sea level.
 CLIMB: On course to optimum cruise altitude with military rated thrust.
 CRUISE-OUT: At altitudes and speeds for maximum range.
 DESCEND: To 35,000 feet (No fuel used, no distance gained).
 COMBAT: At 35,000 feet for 20 minutes at military rated thrust (Combat concluded at initial cruise-back altitude).
 CRUISE-BACK: At altitudes and speeds for maximum range.
 RESERVE: 20 minutes at speed for maximum endurance at sea level plus 5% of initial fuel load.

COMBAT AIR PATROL

WARM-UP, TAKE-OFF, ACCELERATE: 5 minutes at normal rated thrust at sea level.
 CLIMB: On course to optimum cruise altitude with military rated thrust.
 CRUISE-OUT: To patrol station 150 n.mi. from base at altitudes and speeds for maximum range.
 LOITER: On station at speed for maximum endurance at end cruise-out altitude.
 COMBAT: 20 minutes at maximum speed with military rated thrust (Combat concluded at initial cruise-back altitude).
 CRUISE-BACK: To base 150 n.mi. at altitudes and speeds for maximum range.
 RESERVE: 20 minutes at speed for maximum endurance at sea level plus 5% of initial fuel load.

GROUND SUPPORT FIGHTER

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



If JP-4 fuel is used, the following are applicable:

| | △ WEIGHT | △ RANGE | △ RADIUS | △ MISSION TIME |
|----------------------------------------------------------------|-----------|--------------|-------------|----------------|
| ① General Purpose Fighter, clean | - 167 lb. | - 70 n. mi. | - 35 n. mi. | - .15 hr. |
| ③ General Purpose Fighter, 2-200 gal. external tanks | - 287 lb. | - 100 n. mi. | - 50 n. mi. | - .22 hr. |
| ⑤ Combat Air Patrol, 2-200 gal. external tanks + 2 Sidewinders | - 287 lb. | - 95 n. mi. | - - | - .24 hr. |

with ③ loading and in-flight refueling, 155 lb. less fuel is received, the refueling point decreased by 45 n. mi., Combat Radius decreased by 60 n. mi. and Mission Time decreased by .26 hr.

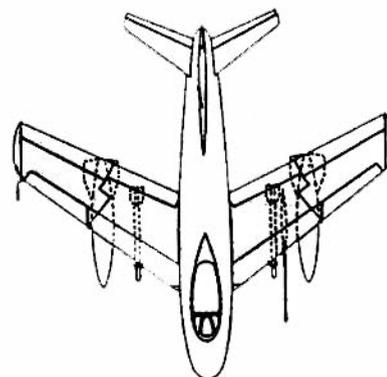
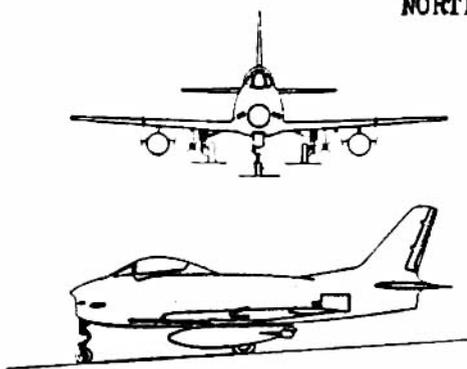
○ LOADING CONDITION COLUMN NUMBER

CHARACTERISTICS SUMMARY

GENERAL PURPOSE FIGHTER

FJ-3M

NORTH AMERICAN "FURY"



WING AREA 302.32 sq. ft.

WING SPAN 37' - 1"

LENGTH 37' - 7"

HEIGHT 13' - 8"

| AVAILABILITY | | | PROCUREMENT | | | |
|------------------|---------|-------|-------------------------------------|--|--|--|
| NUMBER AVAILABLE | | | NUMBER DELIVERED IN FISCAL YEARS | | | |
| ACTIVE | RESERVE | TOTAL | | | | |
| | | | | | | |

STATUS

First Flight (J65-W-2 Engine)..... 3 July 1953
 (J65-W-4 Engine)..... 28 October 1955
 (J65-W-4B Engine)..... 16 December 1955

Service Use March 1954
 Service Use (J65-W-4B Engine)..... January 1956

ENGINES

(1) Wright J-65-W-4B

| | LBS | RPM | ALT |
|-------|------|------|-----|
| T.O. | 7650 | 8300 | SSL |
| MIL. | 7650 | 8300 | SSL |
| NORM. | 6700 | 8030 | SSL |

FEATURES

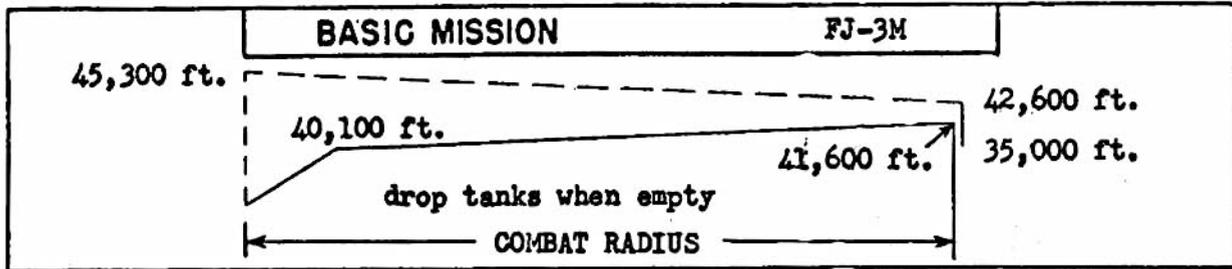
Crew - 1
 Hydraulic Speed Brakes
 Cambered L. E. Wing
 Cockpit Pressurization
 Ejection Type Seat
 Jettisonable Canopy
 Anti "G" Suit Provision
 Refueling Provisions
 (A3D-1, -2)
 Max. Fuel Cap. 959 gal.

ARMAMENT

Guns: (4) 20mm MK. 12
 Mod 0 - 646 rds
 Fire Control System:
 MK. 16 Mod 0
 External Stores:
 Sidewinders
 Rocket Packages
 5-in. HVAR
 Streamlined Bombs
 G.P. Bombs
 Fragmentation Bombs

NAVAR 1519 A (REV. 1-49)

CHARACTERISTICS SUMMARY



| PERFORMANCE | | |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| COMBAT RADIUS | COMBAT RANGE | SPEED |
| 515 naut. mi. 447 knots avg. 2.6 hr. Mission time General Purpose Fighter: Armament: (4) 20mm Guns (2) Sidewinders | 1490 naut. mi. 450 knots avg. - - hours | 582 knots at S.L. 564 knots at 20,000 ft. 532 knots at 35,000 ft. Combat Weight Military Power |
| CLIMB | CEILING | TAKE OFF |
| 5400 ft./min. Sea Level, T. O. wt. Military Power | 42,200 ft. 100 ft./min., T. O. wt. Military Power | 2750 ft. Calm |
| 7200 ft./min. Sea Level, Combat wt. Military Power | 45,700 ft. 500 ft./min., Combat wt. Military Power | 1730 ft. 25 knot wind |
| LOAD | WEIGHTS | STALLING SPEED |
| Fuel 959 gal. fixed 559 drop 400 JP-5 Fuel | Empty 12,205 lbs. *Combat 17,926 lbs. Take-off 21,024 lbs. *Sidewinders retained | 125.5 knots Power Off Flaps down, T. O. wt. TIME TO CLIMB 35,000 ft. in 7.0 min. Combat Wt., Max. Power |

| NOTES |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>PERFORMANCE BASIS: Data based on flight test.</p> <p>RANGE AND RADIUS based on flight test fuel consumption data increased by 5%.</p> <p>COMBAT AIR PATROL - 150 n.mi. radius: 1.8 hrs. Loiter and 2.9 hrs. Mission time; Loiter with one Rendezvous IFR - 5.0 hrs.</p> <p>Same configuration (General Purpose Fighter) - IFR - 965 n.mi. radius, 4.8 hrs. mission time</p> |

NAVAER-1519B (Rev. 10-51)