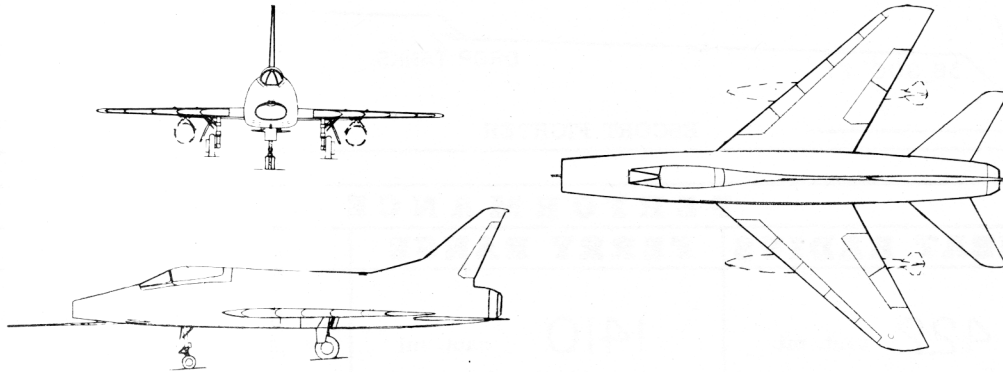


A-1  
YF-100/char

# Characteristics Summary

FIGHTER . . . . . YF-100



SABRE "45"

NORTH AMERICAN

Wing Area . . . . . 376 sq ft      Length . . . . . 46.2 ft  
 Span . . . . . 36.8 ft      Height . . . . . 14.4 ft

## AVAILABILITY

## PROCUREMENT

Number available

Number to be delivered in fiscal years

| ACTIVE | RESERVE | TOTAL |  |  |  |  |
|--------|---------|-------|--|--|--|--|
|        |         |       |  |  |  |  |

## STATUS

- One (1) aerodynamic and one (1) armament prototype model is being built.
- Contract Date: 14 Nov 51
- Mock-up Date: 14 Nov 51
- First Flight: May 53

Navy Equivalent: None

Mfr's Model: NA-180

## POWER PLANT

(1) XJ57-P-7  
 Pratt & Whitney

### ENGINE RATINGS

S.L.S. LB - RPM - MIN  
 Max: \*13,200-†5850/9630-5

Mil: 8450-†5850/9630-30

Nor: 7250-†5570/9440-Cont

\*With afterburner operating  
 †First figure represents RPM of the low pressure spool while the second is that of the high pressure spool.

## FEATURES

Crew: . . . . . 1  
 45° Sweepback-Wing and Tail  
 Ejection Seat  
 Cockpit Pressurization  
 Speed Brakes  
 Hydraulic Power-operated  
 Irreversible Controls with  
 Artificial Feel  
 Automatic Wing Slats  
 All-movable Horiz. Stabilizer  
 AN/APG-30 Radar Ranging  
 A-4 Gun Sight  
 Fuel Purging  
 N-9 Gun Camera  
 Jettisonable Canopy  
 16 foot Drag Chute  
 Revolver-Type Guns  
 Max Fuel Capacity: 1307 gal

## ARMAMENT

Guns: . . . 4(M-39) x 20 mm  
 Ammunition (tot): 1100 rds  
 Rockets: . . . . . None  
 Bombs: . . . . . None

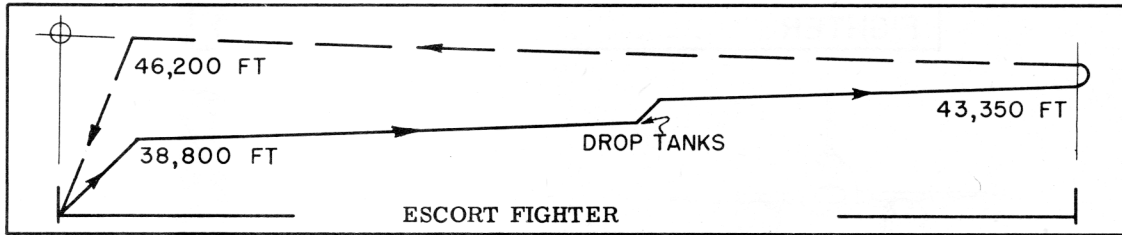
*Initial Issues*  
*Related: HNTSD, AdCN-25*  
*78655*

*Classification cancelled or changed to Unclassified*  
*AFSS AFTR Dec 2000*  
*BY: A. R. Johnson Report*  
*Signature and Grade 8 Dec 66*  
*4-6-503 Dir 5200 10*

*3rd Ed edn #1*

*537c-12000*

*Characteristics Summary Basic Mission* . . . . . YF-100



**PERFORMANCE**

| <b>COMBAT RADIUS</b>  | <b>FERRY RANGE</b>   | <b>S P E E D</b>   |
|---|--|--|
| 422 naut. mi<br>with 770 lb payload<br>at 522 knots avg.<br>in 2.01 hours.                              | 1410 naut. mi<br>with 1307 gal fuel<br>at 524 knots avg.<br>in 2.74 hours<br>at 28,195 lb T.O. wt. | COMBAT 573 knots at<br>43,350 ft alt, max power<br>MAX 634 knots at<br>zero ft alt, max power<br>BASIC 597 knots at<br>35,000 ft alt, max power          |
| <b>C L I M B</b>  | <b>C E I L I N G</b>   | <b>T A K E - O F F</b>   |
| 4400 fpm<br>sea level, take-off weight<br>military power  | 39,600 ft<br>100 fpm, take-off weight<br>military power  | ground run<br>2680 ft no assist   — ft assisted  |
| 12,500 fpm<br>sea level, combat weight<br>maximum power   | 52,600 ft<br>500 fpm, combat weight<br>maximum power   | over 50 ft height<br>4200 ft no assist   — ft assisted   |
| <b>L O A D</b>  | <b>W E I G H T S</b>   | <b>S T A L L I N G S P E E D</b>   |
| Ammunition: 1100 rds/20mm<br><br>Fuel: 1307 gal<br>protected 0 %<br>droppable 42.1 %<br>external 42.1 % | Empty..... 18,279 lb<br>Combat... 24,789 lb<br>Take - off 28,965 lb<br><br>limited by space        | 139 knots<br>power-off, landing config-<br>uration, take-off weight<br><b>TIME TO CLIMB</b><br>3.0 Min<br>S.L. to 35,000 ft, Combat<br>Weight, Max Power |

**N O T E S**

1. Performance Basis:
  - (a) Contractor's estimated data
2. Revision Basis: Initial Issue