

Source:

- * Richard Murray's F16 Model page, NASA TP-1538 wind tunnel data. (Dec. 1979)
<http://www.cds.caltech.edu/~murray/projects/afosr95-vehicles/models/f16/>
- * "Observers Aircraft" by William Green, 1987 Edition (ISBN 0-7232-3458-2)
- * General Dynamics F-16 Dash-1 (basic drag and weight data only)
- * Modern Air Combat by Bill Gunston and Mike Speck, 1983 (ISBN 0-86101-1627)

Drag due to Poly Tanks:

CD:	AOA	Clean	Tanks
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	0.0000	0.119	0.407
	0.4538	0.109	0.247

Wing profiles

configuration	LEF	TEF
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Take-off, wow	-2	20
Take-off, no wow	15	20
High speed course	-2	-2
Max manoeuvre	25	0
Approach, no wow	15	20
Landing, wow	-2	20

General Dynamics F-16A Block 15(+)

Geometric characteristics and performance data

Max speed: Mach 2.05 at 39,000 Ft

Ceiling: 60,000 Ft

Climb speed: 1033.5 Ft/Sec

* Wing

Area: 300 Sq Ft
 Wetted Area: 341.1 Sq Ft
 Span: 30 Ft 0 In
 Reff. Lenght: 47 Ft 6.24 In
 Aspect Ratio: 3.0
 Taper Ratio: 0.2275
 Mean Chord: 11.32 Ft
 Sweep(LE): 40 Degr
 Dihedral: 0 Degr
 Airfoil: NACA 64A204
 Incidence: 0 Degr
 Twist:
 at SS 54.0: 0 Degr
 at SS 180.0: 3 Degr
 Flaperon Area: 31.32 Sq Ft
 LEF Area: 36.71 Sq Ft

* Ventral Fin (Each)

Area: 8.03 Sq Ft
 Wetted Area: 15.3 Sq Ft
 Exposed Span: 27.5 In
 Reff. Lenght: 23.356 In
 Aspect Ratio: 0.472 (Theo)
 Taper Ratio: 0.760 (Theo)
 Mean Chord: 4.15 In
 Sweep(LE): 30 Degr
 Dihedral (Cant): 15 Degr Outbound
 Airfoil
 at Root: 3.886% Modified Wedge
 at Tip: Constant 0.03R

* Speed Brake

Area: 14.26 Sq Ft (3.565 Sq Ft Ea)
 (4 Element Clamshell)

* Horizontal Tail (Movable)

Area: 63.70 Sq Ft
 Wetted Area: 127.8 Sq Ft
 Semi Span: 5.80 Ft
 Reff. Lenght: 5.90 Ft
 Aspect Ratio: 1.33
 Taper Ratio: 0.390 (Theo)
 Mean chord: 4.725 In
 Sweep(LE): 40 Degr
 Dihedral: -10 Degr
 Airfoil
 at Root: 6% Biconvex
 at Tip: 3.5 Biconvex

* Landing Gear

Main Gear (MLG)
 Tire Size: 25.5*8-14 (18 Ply)
 Stroke: 10.5 In
 Static Rolling Radius: 11.0 In
 Nose Gear (NLG)
 Tire Size: 18*5.5-8 (18 Ply)
 Stroke: 10.0 In
 Static Rolling Radius: 7.5 In

* Propulsion

Engine: F-100-PW-200/220
 Thrust: 25,000 Lb Class

* Vertical Tail

Engine Compressor

Area:	54.75 Sq Ft	Face Dia:	34.8 In
Wetted Area:	128.7 Sq Ft	Engine Length:	191.16 In
Exposed Span:	2.30 Ft		
Reff. Length:	6.84 Ft	* Fuselage	
Aspect Ratio:	1.62	Wetted Area:	775.8 Sq Ft
Taper Ratio:	0.437	Inlet Area:	5.74 Sq Ft
Mean Chord:	5.47 In	Exit Area:	4.32 Sq Ft
Sweep(LE):	47.5 Degr	Chamber Area:	5.07 Sq Ft
Airfoil		Lenght:	49 Ft 5.9 In
at Root:	5.3% Biconvex	Reff. Length:	47.52 Ft
at Tip:	3.0% Bicobvex	Height:	16 Ft 8.5 In
Rudder Area:	11.65 Sq Ft		

Aircraft refference locations
(realtive to the centerpoint at the front of the nozzle):

	X	Y	Z
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Center of Garvity	201.3	0.0	0.0
Pilot's eyepoint	384.7	0.0	33.2
Radome tip	525.0	0.0	-13.0
Top vertical tail	0.0	0.0	127.5
Wingtip	128.0	+/-197.0	0.0
Nose landing gear	332.2	0.0	-73.0
Main landing gear	171.9	+/-46.7	-73.0
Ventral fin	111.1	+/-24.0	-51.3
Air intake	350.7	0.0	-41.0
Fueltank	171.3	+/-71.5	0.0