Contents

1 Australian Aircraft **2**
CAC Sabre 3

2 British Aircraft **10**
Gloster Meteor 11
de Havilland Vampire 14
Hawker Sea Fury and Fury 44
Avro Vulcan 55
Hawker Siddeley Nimrod 60

3 Canadian Aircraft **65**
Canadair Sabre 66
Avro Canada CF-100 Canuck 74

4 Chinese Aircraft **77**
Shenyang JJ-2 and FT-2 78
Shenyang J-5 and F-5 81
Shenyang J-6 and F-6 87

5 European Aircraft **98**
Dassault/Dornier Alpha Jet 99

6 French Aircraft **103**
SNCASE Mistral 104
Dassault Ouragan 106
Dassault Mystère IV 108
Dassault Mirage III 110
Dassault Mirage 5 113

7 Italian Aircraft **119**
Aermacchi MB-326 120
Aermacchi MB-339 131

8 Soviet Aircraft **136**
Tupolev Tu-2 137
Yakovlev Yak-9 140
Ilyushin Il-10 144
Tupolev Tu-4 147
Mikoyan-Gurevich MiG-15 151
Ilyushin Il-28 157
Tupolev Tu-14 163
Mikoyan-Gurevich MiG-17 166
Tupolev Tu-16 173
Mikoyan-Gurevich MiG-19 178
Mikoyan-Gurevich MiG-21 185
Sukhoi Su-9 196
Sukhoi Su-11 198
Tupolev Tu-22M 200

9 US Aircraft **204**
North American F-51 Mustang 205
Vought F4U and AU Corsair 208
Douglas B-26 and A-26 Invader and Counter-Invader 217
Boeing B-29 Superfortress 226
Lockheed F-80/T-33 Shooting Star 231
Douglas AD/A-1 Skyraider 237
Lockheed P2V Neptune 245
Republic F-84 Thunderjet 247
McDonnell F2H Banshee 250
Convair B-36 Peacemaker 260
Boeing B-50 Superfortress 262
Grumman F9F Panther 267
North American F-86 Sabre 273
Lockheed F-94 296
Northrup F-89 Scorpion 299
Grumman F9F Cougar 304
Vought F7U Cutlass 312
Martin B-57 Canberra 315

North America F-100 Super Sabre 320
Boeing B-52 Stratofortress 328
Douglas A3D/A-3 Skywarrior 331
Douglas A4D/A-4 Skyhawk 338
Douglas B-66 Destroyer 346
Convair F-102 Delta Dagger 351
Vought F8U/F-8 Crusader 354
McDonnell F-101 Voodoo 371
Cessna T-37 Tweet 376
Lockheed F-104 Starfighter 378
Republic F-105 Thunderchief 387
Convair F-106 Delta Dart 395
McDonnell F4H/F-4 Phantom II 398
North American A3J/A-5 Vigilante 425
Grumman A-6 Intruder 434
Northrop F-5 Freedom Fighter 440
LTV A-7 Corsair II 444
General Dynamics F-111 Aardvark 455
Cessna A-37 Dragonfly 465
Fairchild A-10 Thunderbolt II 468
McDonnell Douglas F/A-18 Hornet 470
Rockwell B-1 Lancer 472

Chapter 1

Australian Aircraft

CAC Sabre

The Commonwealth Aircraft Corporation (CAC) Sabre is a day fighter and fighter-bomber derived from the North American F-86F Sabre with a lighter and more powerful Rolls-Royce Avon 20 engine replacing the General Electric J47 and two 30 mm ADEN cannons replacing the six .50 cal machine guns. Because of its engine, it is also known informally as the Avon Sabre.[1]

Versions

CAC Sabre Mk.30

The first version was the Mk.30. It had the early slatted wing from the A, E, and early F versions of the F-86.[2]

It served in the RAAF starting in 1954, replacing the Meteor F.8.

CAC Sabre Mk.31

The Mk.31 used the unslatted 6-3 wing from later F versions of the F-86, which gave better performance at higher speeds and altitudes, but was otherwise similar to the Mk.30. The Mk.31 was upgraded in 1960 with two additional weapon stations to allow it to carry missiles or bombs and fuel tanks simultaneously, like the Mk.32.[3]

The Mk.31 served in the RAAF from 1955 to 1971, when they were replaced by the Mirage III. All surviving Mk.30 aircraft were upgraded to the Mk.31 standard. The Mk.31 later served in the Malaysian and Indonesian air forces.

CAC Sabre Mk.32

The Mk.32 is a development of the Mk.31 with an Avon 26 engine, modifications to prevent surges when the guns were fired, and two additional weapon stations that allowed it to carry air-to-ground weapons and fuel tanks simultaneously, giving it a longer range when employed as a fighter-bomber. The Mk.32 competes with the Canadair Sabre 6 for the honor of being the very best day-fighter Sabre.[4]

The Mk.32 served in the RAAF from 1956 to 1971, when they were replaced by the Mirage III, and later in the Malaysian and Indonesian air forces.

Service

CAC Sabres served with the RAAF in the Malayan emergency, the Malaysian-Indonesian confrontation, and the Vietnam War in Thailand.

Armament and Stores

The CAC Sabres were armed with two 30 mm ADEN cannons each with 162 rounds.[5]

For additional endurance, all versions can carry 167 gallon (760L) fuel tanks on the outer station, and those with inner station can also carry 100 gallon (450L) on these.[6]

A typical air-to-air load would be two 167 gallon (760L) fuel tanks on the outer stations and, from 1960, two AIM-9Bs on the inner stations.

A typical air-to-ground load might be two 1000 lb bombs on the inner stations along with two 167 gallon tanks on the outer stations. Alternatively, the Mk.32 could carry twenty-four Hispano Sura 80R rockets, with three carried one below the other on each of the eight rocket stations, but at the price of not being able to use external fuel tanks.[7]

For ferry flights, in theory two 100 gallon (450L) fuel tanks could be carried on the inner stations and two 167 gallon (760L) fuel tanks to the outer ones. However, this did not actually improve the range as the increase drag more than compensated for the increase in fuel capacity.[8]

In 1960, the RAAF adopted the AIM-9B IRM for both the Mk.31 and Mk.32.

ADCs

- CAC Sabre Mk.30
- CAC Sabre Mk.31
- CAC Sabre Mk.31 (1960 Upgrade)
- CAC Sabre Mk.32

See Also

- Canadair Sabre

– North American F-86 Sabre

Notes

1. **Sources.**
   - Curtis, “North American F-86 Sabre”, 2000, Crowood.
   - Farquhar, “A Brief History of the CAC Avon Sabre” (Wayback). Development and RAAF service.
   - Webster, “The F-86 Sabre Family Tree”, APJ 25. This has ADCs for the Mk.31 and Mk.32.
   - Wikipedia on the ADEN cannon.
   - Wikipedia on the CAC Sabre.

   Photo Credit.

   - Bidgee (CC BY-SA 3.0)
2. **Mk.30.** The ADC for the Mk.30 is derived from that for the Mk.31.

   Wing. Essentially, the Mk.30 is a Mk.31 with the earlier slatted wing (Curtis, Wikipedia). The Mk.31 has the unslatted 6-3 wing. This situation is similar to the F-86F, which also had versions with the early slatted and unslatted 6-3 wings. The minimum speeds and turn drags of the Mk.31 match those of the F-86F-25 with the unslatted 6-3 wing. Therefore, I have created an ADC for the Mk.30 by modifying that of the Mk.31 with the minimum speeds and turn drag of the F-86F-25 with the slatted wing. As the F-86A/E/F with the early slatted wing are HTD, I have made the Mk.30 HTD too.
3. **Mk.31.** The ADC for the Mk.31 is adapted from Webster’s in APJ 25.
4. **Mk.32.** The ADC for the Mk.32 is adapted from Webster’s in APJ 25.

   Fuel. Curtis states that the “wet wing” Mk.32s had an internal fuel capacity of 422 gallons (1899L) and with an additional 60 gallons (270L) in the wing leading edges. The additional fuel corresponds to about 23 fuel points.
5. **Guns.** Two 30 mm ADEN guns with 162 rounds per gun (Wikipedia). At 1200 rounds per minute, this is 4.0 shots.
6. **FTs.** Curtis (p. 114) states that the Mk.32 could carry 100 gallon (450L) and 167 gallon (760L) FTs (perhaps on the inner pylons). Farquhar states that the Mk.32 could carry 100 gallon FTs on the inner pylons and 167 gallon FTs on the outer ones. Wikipedia states they could carry 200 gallon (900L) FTs on the outer pylons, but this seems to be a confusion between US and Imperial gallons, since 167 Imperial gallons are about 200 US gallons. I am assuming the capacity of the outer station tanks is unchanged in these different versions.
7. **Load Limits.** Webster gives weight limits of 1000 lb for both the inner and outer stations. However, Farquhar states that the Mk.32 could carry a 200 US gallon (167 gallon) fuel tanks on the outer pylons, and these weigh about 1400 lb. Curtis also states that the Mk.32 could carry these tanks, but does not specify on which station.

   The early F-86s (A/E/F-1/F-10/F-15/F-20) have load limits of 1400 lb on their outer stations; the later F-86s have the same load limits on their outer stations and 1000 lb limits on the inner stations. I have adopted these limits.

   Wikipedia gives the load limits of the F-86F and Mk.32 as 5300 lb and states they can both carry two 1000 lb bombs and two 200 US gallon FTs, which would be a total of about 4800 lb. I have increased the total loads to 3000 lb for the Mk.30/31 and 5000 lb for the Mk.32.

   Rockets. Webster gives the Mk.32 eight wing stations for up to three rockets each, usable in place of the normal four wing stations. Wikipedia states that twenty-four Hispano SURA 80 mm rockets could be carried. Up to four of these rockets can be stacked, one below each other, on a suitable weapon station, but it would seem that only three were mounted here. Farquhar states that eight or twenty-four HVARs could be carried. I’ve never seen HVARs stacked three per rail, so I suspect he is confusing HVARs with SURAs.
8. **Four Fuel Tanks.** Farquhar comments on lack of improvement in range from adding two 100 gallon tanks in addition to two 167 tanks. In game terms, the aircraft is 1/2 with two tanks but DT with four tanks.

CAC Sabre Mk.30

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.5	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	160
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5/0.5	1.0/1.0	1.0/1.0
HT	1.0/1.0	1.0/1.0	1.0/1.0
BT	1.0/1.5	1.5/2.0	1.5/2.0
ET	—	—	—

Automatic leading-edge slats. If speed ≤ 3.5, use higher drag.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 52	1/2 48	DT 42	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 6.0	3.0 – 5.0	—	6.5	—	0.5	—	0.5	—	—	EH+
VH	36–45	3.0 – 6.0	3.0 – 5.0	3.0 – 5.0	6.5	—	1.0	—	1.0	—	0.5	VH
HI	26–35	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	7.0	—	1.5	—	1.0	—	0.5	HI
MH	17–25	2.0 – 6.5	2.5 – 5.5	2.5 – 5.5	7.0	—	1.5	—	1.5	—	1.0	MH
ML	8–16	1.5 – 6.5	2.0 – 6.0	2.5 – 5.5	7.5	—	2.0	—	1.5	—	1.0	ML
LO	0–7	1.5 – 7.0	1.5 – 6.5	2.0 – 6.0	7.5	—	2.0	—	2.0	—	1.5	LO

Radar: APG-56

ECCM:	0
Arcs:	Limited
Search:	—
Track:	12–6
Lock-On:	6

ECM: IFF

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Two 30 mm Aden

To Hit:	6/3/2
Ammunition:	4.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	6/6

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 3,000

Station	Limit	Allowed Loads
1 and 2	1,400	BB FT

Load Notes:

1. May use 167 gal (760L) FTs.

Notes:

1. The Commonwealth Aircraft Corporation (CAC) Sabre Mk.30 is a day fighter and fighter-bomber. It is also known as the Avon Sabre. The Mk.30 is derived from the North American F-86F Sabre, has the early slatted wing, and uses the more powerful and lighter Rolls-Royce Avon 20 engine instead of the General Electric J47.
2. High transonic drag (HTD).

VPs: 11/7/4/2

CAC Sabre Mk.31

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.5	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	160
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.0	1.0
BT	1.5	2.0	2.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 52	1/2 48	DT 42	Dive Speed
EH+	46+	2.5 – 6.0	3.0 – 5.0	—	6.5
VH	36–45	2.5 – 6.0	2.5 – 5.0	3.0 – 5.0	6.5
HI	26–35	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	7.0
MH	17–25	2.0 – 6.5	2.5 – 5.5	2.5 – 5.5	7.0
ML	8–16	2.0 – 6.5	2.0 – 6.0	2.5 – 5.5	7.5
LO	0–7	1.5 – 7.0	1.5 – 6.5	2.0 – 6.0	7.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	0.5	—	—	EH+
VH	—	1.0	—	1.0	—	0.5	VH
HI	—	1.5	—	1.0	—	0.5	HI
MH	—	1.5	—	1.5	—	1.0	MH
ML	—	2.0	—	1.5	—	1.0	ML
LO	—	2.0	—	2.0	—	1.5	LO

Radar:	APG-56	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	Limited	DDS:	—
Search:	—	DJM:	—
Track:	12–6	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Two 30 mm Aden
To Hit:	6/3/2
Ammunition:	4.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	6/6
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 3,000

Station	Limit	Allowed Loads
1 and 2	1,400	BB FT

Load Notes:

1. May use 167 gal (760L) FTs.

Notes:

1. The Commonwealth Aircraft Corporation (CAC) Sabre Mk.31 is a day fighter and fighter-bomber derived from the F-86F Sabre. It is also known as the Avon Sabre. The Mk.31 a development of the Mk.30 and has the early slatted wing replaced by the unslatted 6-3 wing, but retains the Rolls-Royce Avon 20 engine. The original variant described here lacks IRMs, and has only two weapon stations.

VPs: 11/7/4/2

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CAC Sabre Mk.31 (1960 Upgrade)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.5	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	160
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.0	1.0
BT	1.5	2.0	2.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 52	1/2 48	DT 42	Dive Speed
EH+	46+	2.5 – 6.0	3.0 – 5.0	—	6.5
VH	36–45	2.5 – 6.0	2.5 – 5.0	3.0 – 5.0	6.5
HI	26–35	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	7.0
MH	17–25	2.0 – 6.5	2.5 – 5.5	2.5 – 5.5	7.0
ML	8–16	2.0 – 6.5	2.0 – 6.0	2.5 – 5.5	7.5
LO	0–7	1.5 – 7.0	1.5 – 6.5	2.0 – 6.0	7.5

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	0.5	—	0.5	—	—	EH+
—	1.0	—	1.0	—	0.5	VH
—	1.5	—	1.0	—	0.5	HI
—	1.5	—	1.5	—	1.0	MH
—	2.0	—	1.5	—	1.0	ML
—	2.0	—	2.0	—	1.5	LO

Radar:	APG-56
ECCM:	0
Arcs:	Limited
Search:	—
Track:	12–6
Lock-On:	6

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Two 30 mm Aden
To Hit:	6/3/2
Ammunition:	4.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	6/6

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 5,000

Station	Limit	Allowed Loads
1 and 4	1,400	BB FT
2 and 3	1,000	BB FT IRM

Load Notes:

1. May use 167 gal (760L) FTs on stations 1 and 4 and 100 gal (450L) FTs on stations 2 and 3.
2. May use AIM-9B IRMs.

Notes:

1. The Commonwealth Aircraft Corporation (CAC) Sabre Mk.31 is a day fighter and fighter-bomber derived from the F-86F. It is also known as the Avon Sabre. The Mk.31 is a development of the Mk.30 and has the early slatted wing replaced by the unslatted 6-3 wing, but retains the Rolls-Royce Avon 20 engine. This 1960 upgrade variant is fitted with two additional weapon stations for IRMs or, when used as a fighter-bomber, bombs.

VPs: 11/7/4/2

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CAC Sabre Mk.32

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.5	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	183
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.0	1.0
BT	1.5	2.0	2.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 52	1/2 48	DT 42	Dive Speed
EH+	46+	2.5 – 6.0	3.0 – 5.0	—	6.5
VH	36–45	2.5 – 6.0	2.5 – 5.0	3.0 – 5.0	6.5
HI	26–35	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	7.0
MH	17–25	2.0 – 6.5	2.5 – 5.5	2.5 – 5.5	7.0
ML	8–16	2.0 – 6.5	2.0 – 6.0	2.5 – 5.5	7.5
LO	0–7	1.5 – 7.0	1.5 – 6.5	2.0 – 6.0	7.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	0.5	—	—	EH+
VH	—	1.0	—	1.0	—	0.5	VH
HI	—	1.5	—	1.0	—	0.5	HI
MH	—	1.5	—	1.5	—	1.0	MH
ML	—	2.0	—	1.5	—	1.0	ML
LO	—	2.0	—	2.0	—	1.5	LO

Radar:	APG-56	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	Limited	DDS:	—
Search:	—	DJM:	—
Track:	12–6	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Two 30 mm Aden
To Hit:	6/3/2
Ammunition:	4.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	6/6
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 7
DT : ≥ 7

Weight Limit: 5,000

Station	Limit	Allowed Loads
1 and 4	1,400	BB FT
2 and 3	1,000	BB FT IRM
5–8 and 9–12	280	RK

Load Notes:

1. Either stations 1 to 4 or stations 5 to 12 can be used.
2. May use 167 gal (760L) FTs on stations 1 and 4 and 100 gal (450L) FTs on stations 2 and 3.
3. From 1960, may use AIM-9B IRMs.
4. From 1962, stations 5 to 12 may each carry three SURA 80R RKs.

Notes:

1. The Commonwealth Aircraft Corporation (CAC) Sabre Mk.32 is a day fighter and fighter-bomber. It is also known as the Avon Sabre. The Mk.32 a development of the Mk.31 and has more powerful Rolls-Royce Avon 26 engine in place of the the Avon 20 engine, but retains the unslatted 6-3 wing.

VPs: 12/8/4/2

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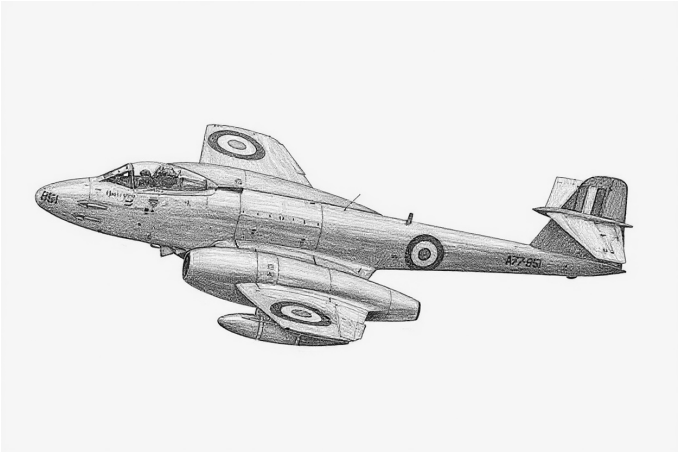
Chapter 2

British Aircraft

Gloster Meteor



The Gloster Meteor was the first British jet fighter and the only Allied jet to see combat in WW2. It entered service as a day fighter with the RAF in 1944 and continued to serve in various roles after the war. It was powered by two wing-mounted centrifugal-flow jet engines, had unswept wings, and was armed with four 20 mm guns.[1]

Versions

Meteor F.8

The F.8 was a post-WW2 development of the late-WW2 F.4. It had more powerful Rolls-Royce Derwent 8 engines, a lengthened fuselage, a new tail to solve center-of-gravity problems, improved visibility from the cockpit, and provided the capability to carry air-to-ground weapons.[2]

In common with many early jet fighters, it had short endurance and range compared to contemporary propeller-engined aircraft, and this was partially addressed by equipping it with a jettisonable, conformal ventral fuel tank.[3]

The unsophisticated aerodynamics of the Meteor led it to be outclassed by newer swept-wing fighters like the MiG-15 and F-86, and so the F.8 was the last fighter version produced. Subsequent versions were reconnaissance and night fighters.

It was introduced into RAF service in 1949 and served until it was replaced by the Canadair Sabre 4 and Hawker Hunter in the 1950s. It was also used by No. 77 Squadron RAAF in the Korean War, replacing their F-51Ds in April 1951 and serving until replaced by the CAC Sabre. Also, it served in the air forces of Belgium, Brazil, Denmark, Ecuador, and the Netherlands.[4]

Meteor FR.9

The FR.9 was a photoreconnaissance version of the F.8. It had an extended nose for a single camera that could be configured on the ground to be either overhead or oblique and retained the full combat capability of the F.8.[5]

It served in the RAF from 1950, the Ecuadorian Air Force, the Israeli IAF, and the Syrian Air Force.[6]

Armament and Stores

The internal armament of the Meteor was four 20 mm Hispano V cannons.[7]

A typical air-to-air load was the ventral 175-gallon fuel tank, perhaps with two 100-gallon fuel tanks under the wings to increase patrol time.[8]

A typical air-to-ground load was two 1000 lb bombs or eight or sixteen RP-3 rockets in addition to the ventral tank.[9]

Combat

The F.8 saw combat with the RAAF in the Korean War, mainly in the ground-attack role. In the Suez Crisis, the F.8 was used by the Egyptian, Syrian, and Israeli air forces, and the FR.9 by the RAF.

ADCs

ADCs are provided for:

- Meteor F.8
- Meteor FR.9

Notes

1. **Sources.**
   - Goebel. Air Vectors
   - Tempora Aviation Museum
   - Wikipedia on Meteor
   - Wikipedia on No 77 Squadron RAAF
   - Wikipedia on AI radar
   - Brown et al., "Swift to Destroy, An Illustrated History of 77 Squadron RAAF, 1942-2012"
   - Wilson, David, Lion Over Korea
   - White, Ian, "A Short History of Air Intercept Radar and the British Night-Fighter"

   Photo Credit.
   - Chris Phutully (CC BY 2.0)
2. **F.8 ADC.** ADCs for the F.8 appear in *Desert Falcons* and *Air Power Journal* 50. I have favored the latter.

3. **Ventral FT.** According to Wilson, the ventral fuel tank was regarded as a weakness during ground attack operations by No. 77 Squadron RAAF in Korea:
   - On 9 March 1952, Sergeant Cranston was killed whilst making a second rocket pass on a target in North Korea. Hit in the vulnerable ventral tank, the Meteor caught fire and crashed before Cranston could eject.
   - Another pilot managed to jettison his flaming tank.
4. **F.8 Service History and Combat.** From Wikipedia on Meteor.
5. **F.8 ADC.** An ADC for the FR.9 appears as a variant in the ADC in *Air Power Journal* 50 for the F.8.
6. **FR.9 Service History and Combat.** From Wikipedia on Meteor.
7. **Guns.** Four 20 mm Hispano Mk V (Wikipedia).
8. **FTs.** *Air Power Journal* 50 states the ventral tank has a weight of 1600 lb, 3.0/2.0 load points, and 70 fuel points. It also lists 100 gal (445L) FTs with a weight of 900 lb, 2.5/1.5 load points, and 39 fuel points.
9. **RKs.** A photo on page 29 of "Swift to Destroy" shows armorers with 60lb HE rockets.

   A photo on page 33 of "Swift to Destroy" shows an RAAF Meteor with the ventral tank and sixteen rockets (apparently RP-3) on dual rails. The caption states that dual rails were in short supply.

   A photo shows IAF Meteor with eight RP-3.

Meteor F.8

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	4.0	Restr. Arcs:	—
Climb Spd.:	2.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	164
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	0.5	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 42	DT 40	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.0	2.5 – 4.5	2.5 – 4.5	5.5
HI	26–35	2.0 – 5.5	2.5 – 5.0	2.5 – 4.5	5.5
MH	17–25	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.0
ML	8–16	1.0 – 5.5	1.5 – 5.5	1.5 – 5.0	6.0
LO	0–7	1.0 – 5.5	1.0 – 5.5	1.5 – 5.0	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.50	—	0.50	—	0.25	VH
HI	—	0.50	—	0.50	—	0.25	HI
MH	—	0.50	—	0.50	—	0.50	MH
ML	—	1.00	—	1.00	—	0.50	ML
LO	—	1.00	—	1.00	—	0.50	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Hispano V
To Hit:	6/4/3
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 6, DT : ≥ 6

Weight Limit: 3,600

Station	Limit	Allowed Loads
1 and 3	1,000	BB FT
2	1,600	FT
4–7 and 8–11	200	RK

Load Notes:

1. Either stations 1 and 3 or stations 4 to 11 can be used.
2. Stations 1 and 3 can each carry a 100 gal (450L) FT.
3. Ventral station 2 can only be used to carry a special jettisonable conformal 175 gal (800L) FT. While carried, the FT restricts the maximum speed to 4.0.
4. Stations 4 to 11 can each carry two RP-3 RKs or one HVAR RK.

Notes:

1. The Gloster Meteor F.8 is a fighter and fighter-bomber. It is a development of the WW2 F.4, with more powerful Rolls-Royce Derwent 8 engines, a lengthened fuselage and a new tail to solve center-of-gravity problems, improved visibility from the cockpit, an ejector seat, and the capability to carry air-to-ground weapons.
2. High transonic drag (HTD). Low roll rate (LRR).

VPs: 6/4/2/1

v3 0000000
0000-00-00T00:00:00

Meteor FR.9

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	4.0	Restr. Arcs:	—
Climb Spd.:	2.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	164
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	0.5	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 42	DT 40	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.0	2.5 – 4.5	2.5 – 4.5	5.5
HI	26–35	2.0 – 5.5	2.5 – 5.0	2.5 – 4.5	5.5
MH	17–25	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.0
ML	8–16	1.0 – 5.5	1.5 – 5.5	1.5 – 5.0	6.0
LO	0–7	1.0 – 5.5	1.0 – 5.5	1.5 – 5.0	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.50	—	0.50	—	0.25	VH
HI	—	0.50	—	0.50	—	0.25	HI
MH	—	0.50	—	0.50	—	0.50	MH
ML	—	1.00	—	1.00	—	0.50	ML
LO	—	1.00	—	1.00	—	0.50	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Hispano V
To Hit:	6/4/3
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 6, DT : ≥ 6

Weight Limit: 3,600

Station	Limit	Allowed Loads
1 and 3	1,000	BB FT
2	1,600	FT

Load Notes:

1. Stations 1 and 3 can each carry a 100 gal (450L) FT.
2. Ventral station 2 can only be used to carry a special jettisonable conformal 175 gal (800L) FT. While carried, the FT restricts the maximum speed to 4.0.

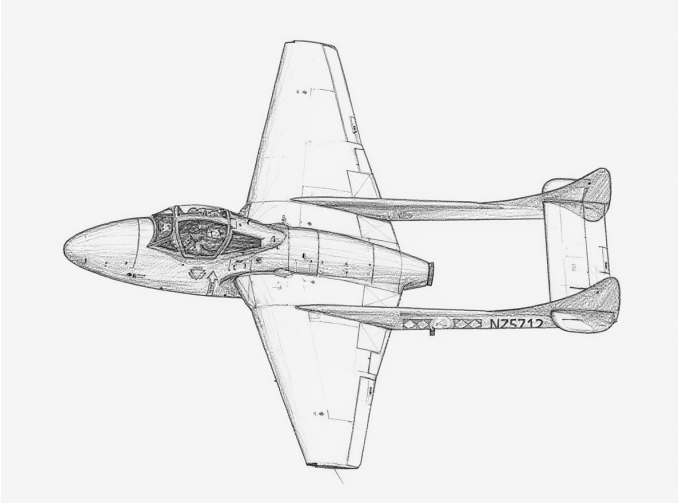
Notes:

1. The Gloster Meteor FR.9 is a photo-reconaissance aircraft. It is a development of the F.8, with a slightly longer nose incorporting a camera that could be configured on the ground to be either overhead or oblique.
2. High transonic drag (HTD). Low roll rate (LRR).

VPs: 8/5/3/1

v3 0000000
0000-00-00T00:00:00

de Havilland Vampire



The de Havilland Vampire was a first-generation British jet day fighter, fighter-bomber, night fighter, and trainer. It first flew in 1943 but did not enter service until after the end of WW2. It had a single engine, straight wings, and an innovative twin-boom tail. The wings, rear fuselage, and tail were aluminum for strength, but the forward fuselage was fabricated from molded plywood, spruce, and balsa, building on de Havilland's extensive experience with this technique, most notably in the Mosquito. Initially, the pilot was not provided with an ejector seat, although one was refitted to some export versions.

Its armament was four Hispano 20 mm cannons, the standard for British fighters at that time, mounted under the nose.

The Vampire entered service with the RAF in 1946. Its contemporary, the twin-engined Meteor, was more complex, expensive, and had less endurance on internal fuel. However, the Meteor crucially had a higher rate of climb, and this led to it being selected for the interceptor role, and the Vampire served mainly as a day fighter, fighter-bomber, and trainer.

Nevertheless, the Vampire had considerable success on the export market, perhaps because of its lower price and simplicity compared to the Meteor, and for many air forces, it was their first jet aircraft.

Versions

Vampire F.1

The initial F.1 version was a day fighter. The initial batch of F.1 aircraft had the less powerful Goblin 1 engine and lacked cockpit pressurization, but later F.1 aircraft had the more powerful Goblin 2 engine and pressurization. It could carry 100 imperial gallon (450L) fuel tanks under the outer wings, but had no provision for air-to-ground weapons other than their guns.

It served in the RAF, French AA, Swedish Flygvapnet, and the Dominican AMD/FARD.

Vampire F.3

The F.3 was similar to the F.1, but had significantly more internal fuel and a much improved pressurization system. Like the F.1, it could carry 100 imperial gallon (450L) fuel tanks, but had no provision for air-to-ground stores.

It served in the RAF, RCAF, and Mexican FAM.

Vampire FB.5

The FB.5 was the first fighter-bomber version. It was developed from the F.3 and featured clipped wings for better performance at low level, armor to protect the engine, provision for bombs in place of the fuel tanks, and rails under the inner wings for up to eight RP-3 or T-10 rockets.

It served in the RAF, the French AA, the Italian AMI, the Lebanese LAF, the RNZAF, and the SAAF. The aircraft for the French AA were license-built by SNCASE.

Vampire FB.6

The FB.6 was derived from the FB.5 but had the more powerful Goblin 3 engine. The "Late" version reflects the 1960 upgrade to install an ejection seat.

It was manufacturer by both de Havilland and Eidgenössische Konstruktionswerkstätte (F+W).

It served in the Swiss Flugwaffe from 1950 to 1990 (alongside de Havilland Vampire FB.6s), although from 1968 only as a trainer.

Vampire FB.9

The FB.9 was also derived from the FB.5 and had air conditioning for use in tropical zones. Most FB.9s retained the Goblin 2 engine of the FB.5, but Rhodesian FB.9s were fitted with the Goblin 3 for better performance.

It served in the RAF, RAAF, Jordanian RJAF, Lebanese LAF, RNZAF, SRAF/RRAF, and SAAF.

Vampire NF.10

The Vampire NF.10 was a night fighter version, derived from the FB.5 but with a new forward fuselage for the AI Mk X (SCR-720B) radar, side-by-side seating for the pilot and radar operator, and the Goblin 3 engine to compensate for the weight of the radar equipment. It was devel-

oped initially for export, but was taken up by the RAF to bridge the gap between the Mosquito NF.36 and the Meteor NF.11.

It served in the RAF.

Vampire T.11

The Vampire T.11 was a trainer version, derived from the FB.5 but with a new forward fuselage similar to that of the NF.11, with side-by-side seating for the instructor and pupil and dual controls. It retained full combat capability. RAF aircraft were refitted with ejection seats between 1954 and 1957.

It served in the RAF, Austrian Luftstreitkräfte, Chilean FACh, Indian IAF, Jordanian RJAF, Mexican FAM, and Swiss Air Force.

Vampire F.20

The Sea Vampire F.20 was an adaptation of the FB.5 for RN carrier operations. It had strengthened undercarriage, an arrestor hook, and more effective speed brakes, but no capacity to fold its wings.

It served in the RN FAA, but for trials and familiarization and not as a front-line fighter.

Vampire T.22

The Sea Vampire T.22 trainer was essentially a T.11 adapted to RN standards, but was not carrier-capable. It was flown exclusively from terrestrial air stations. RN aircraft were refitted with ejection seats in 1956 and 1957.

It served in the FAA as an advanced trainer.

Vampire F.30

The Vampire F.30 was derived from the Vampire F.2, which had trialed the Nene engine in the F.1 airframe. It was equipped with a Nene-2VH engine with 5,000 lb of thrust, significantly more than the Goblin 3 with 3,500 lb. This greater thrust required greater airflow than could be provided by the standard wing-root intakes, so the F.30 was delivered with additional intakes on the upper side of the fuselage behind the cockpit. To improve handling close to the critical Mach number, these were later moved to the lower side of the fuselage. The F.30 was license-built by de Havilland (Australia).

The F.30 served in the RAAF from 1949 until 1960, when it was replaced by the CAC Sabre.

Vampire FB.31

The Vampire FB.31 was derived from the F.30 with the air-to-ground improvements of the FB.5. It was license-built by de Havilland (Australia).

The FB.31 served in the RAAF from 1952 until 1960, when it was replaced by the CAC Sabre.

Vampire T.33 and T.33A

The Vampire T.33 and was a trainer largely similar to the Vampire T.11 (and notably using the Goblin 35 engine rather than the Nene). The ejection seats and canopy of the T.35 were refitted to the T.33 to give the T.33A. It was license-built by de Havilland (Australia).

The T.33 served in the RAAF from 1952 until 1970, when it was replaced by the Aermacchi MB-326H (CAC CA-30). The T.33A conversions took place some time after 1957.

Vampire T.34 and T.34A

The Vampire T.34 and T.34A were similar to the T.33 and T.33A, but for the RAN rather than the RAAF. It was license-built by de Havilland (Australia).

The T.34 served in the RAN from 1954 until 1970, when it was replaced by the Aermacchi MB-326H (CAC CA-30). The T.34A conversions took place some time after 1957.

Vampire T.35

The Vampire T.35 was a development of the T.33 and added ejection seats, a new canopy, and increased fuel capacity. The ejection seats and canopy were refitted to the T.33 and T.34 to give the T.33A and T.34A versions. It was license-built by de Havilland (Australia).

The T.35 served in the RAAF from 1957 until 1970, when it was replaced by the Aermacchi MB-326H (CAC CA-30).

Vampire FB.50 and FB.52

The Vampire FB.50 and FB.52 were licensed or export versions of the FB.6.

The FB.50 and FB.52 were built by de Havilland and HAL license-built the FB.52 for the Indian IAF.

The FB.50 served in the Swedish Flygvapnet and the Dominican AMD/FARD. The FB.52 served in the Egyptian EAF, Finnish Ilmavoimat, Indian IAF (from 1952 to at least 1971), Iraqi Air Force, Jordanian RJAF, Lebanese LAF, RNZAF, Norwegian Luftförsvaret, SRAF/RRAF, Saudi Arabian Air Force, SAAF, Syrian Air Force, and Venezuelan FAV.

Vampire FB.52A

The Vampire FB.52A was a version of the FB.52 for the Italian AMI. Unusually, the FB.52A had the Goblin 2 engine rather than the more powerful Goblin 3 engine used by many of the other fighter-bomber Vampires.

It was built by de Havilland and also under-license by FIAT and Macchi.

It served in the Italian AMI, the Egyptian EAF, and the Syrian Air Force.

Vampire NF.54

The Vampire NF.54 was the export version of the NF.10.

It served in the Italian AMI and the Indian IAF.

Vampire T.55

The Vampire T.55 was the export version of the T.11, and again later variants were fitted with ejection seats.

It was built by de Havilland and also license-built by HAL for the Indian IAF and F+W for the Swiss Flugwaffe.

A few IAF aircraft were adapted in 1959 for photo-reconnaissance and designated PR.55.

It served in the Austrian Luftstreitkräfte, Burmese Air Force, Chilean FACh, Egyptian EAF, Finnish Ilmavoimat, Indian IAF and INAS (from 1952 to 1989), Indonesian Air Force, Iraqi Air Force, Irish IAC, RNZAF, Norwegian Luftforsvaret, Portuguese Air Force, SAAF, Swedish Flygvapnet, Swiss Flugwaffe (late version from 1955 to 1990), and Venezuelan FAV.

Vampire T.55A

The Vampire T.55A was a conversion of the FB.50 with a forward fuselage like that of the T.55.

It served in the Swedish Flygvapnet.

Armament and Stores

The gun armament of all versions was four Hispano 20 mm cannons with 150 rounds per gun.

A typical air-to-air load was two 100 gal (450L) fuel tanks to increase endurance.

A typical air-to-ground load was eight RP-3 or T-10 rockets and then either two 500 lb bombs or fuel tanks, depending on the mission radius. On short-range missions, two 1,000-lb bombs could be carried but without rockets.

ADCs

- Vampire F.3
- Vampire FB.5
- Vampire FB.6
- Vampire FB.6 (Late)
- Vampire FB.9
- Vampire FB.9 (Goblin 3)
- Vampire NF.10
- Vampire T.11
- Vampire T.11 (Late)
- Sea Vampire F.20
- Sea Vampire T.22
- Sea Vampire T.22 (Late)
- Vampire F.30
- Vampire FB.31
- Vampire T.33
- Vampire T.33A
- Vampire T.34
- Vampire T.34A
- Vampire T.35
- Vampire FB.50
- Vampire FB.52
- Vampire FB.52A
- Vampire NF.54
- Vampire T.55
- Vampire T.55 (Late)
- Vampire T.55A

See Also

- SNCASE Mistral

Photo Credit

- de Havilland Vampire: Pseudopanax (Public domain)

Vampire F.1

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	122
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.0	6.0
HI	26–35	2.0 – 5.0	2.5 – 4.5	2.5 – 4.0	6.0
MH	17–25	1.5 – 4.5	2.0 – 4.0	2.0 – 4.0	6.0
ML	8–16	1.5 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0
LO	0–7	1.0 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	0.5	—	0.5	—	0.5	VH
—	0.5	—	0.5	—	0.5	HI
—	0.5	—	0.5	—	0.5	MH
—	0.5	—	0.5	—	0.5	ML
—	0.5	—	0.5	—	0.5	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Four 20 mm Hispano Mk V

To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 2	1,000	FT

Load Notes:

1. May use 450L FTs.

Notes:

1. The de Havilland Vampire F.1 is a day fighter. It has no provision for air-to-ground ordnance and unclipped wings. This ADC represents the full-specification variant, with cockpit pressurization and the Goblin 2 engine. It was designated J28A in service with the Swedish Flygvapnet.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 5/3/2/1

v3 0000000
0000-00-00T00:00:00

Vampire F.3

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	None

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.0	6.0
HI	26–35	2.0 – 5.0	2.5 – 4.5	2.5 – 4.0	6.0
MH	17–25	1.5 – 4.5	2.0 – 4.0	2.0 – 4.0	6.0
ML	8–16	1.5 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0
LO	0–7	1.0 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	0.5	—	0.5	—	0.5	VH
—	0.5	—	0.5	—	0.5	HI
—	0.5	—	0.5	—	0.5	MH
—	0.5	—	0.5	—	0.5	ML
—	0.5	—	0.5	—	0.5	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Four 20 mm Hispano Mk V

To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 5, DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 2	1,000	FT

Load Notes:

1. May use 450L FTs.

Notes:

1. The de Havilland Vampire F.3 is a day fighter. The F.3 version has no provision for air-to-ground ordnance, the Goblin 2 engine, and unclipped wings.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 5/3/2/1

v3 0000000
0000-00-00T00:00:00

Vampire FB.5

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	None

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.0	6.0
HI	26–35	2.0 – 5.0	2.5 – 4.5	2.5 – 4.0	6.0
MH	17–25	1.5 – 4.5	2.0 – 4.0	2.0 – 4.0	6.0
ML	8–16	1.5 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0
LO	0–7	1.0 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	0.5	—	0.5	—	0.5	VH
—	0.5	—	0.5	—	0.5	HI
—	0.5	—	0.5	—	0.5	MH
—	0.5	—	0.5	—	0.5	ML
—	0.5	—	0.5	—	0.5	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Hispano Mk V
To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3 / 1/2: < 5 / DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB FT
2–3 and 4–5	200	RK

Load Notes:

1. Stations 2 to 5 may each carry one or two RP-3 RKs.
2. May use 450L FTs.

Notes:

1. The de Havilland Vampire FB.5 is a day fighter and fighter-bomber. The FB.5 version has provision for air-to-ground ordnance, the Goblin 2 engine, and clipped wings.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 5/3/2/1

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Vampire FB.6

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	None

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.0	6.0
HI	26–35	2.0 – 5.0	2.5 – 4.5	2.5 – 4.0	6.0
MH	17–25	1.5 – 5.0	2.0 – 4.5	2.0 – 4.5	6.0
ML	8–16	1.5 – 5.0	1.5 – 4.5	1.5 – 4.5	6.0
LO	0–7	1.0 – 5.0	1.5 – 4.5	1.5 – 4.5	6.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	0.5	—	0.5	—	0.5	VH
—	0.5	—	0.5	—	0.5	HI
—	0.5	—	0.5	—	0.5	MH
—	0.5	—	0.5	—	0.5	ML
—	1.0	—	1.0	—	0.5	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Four 20 mm Hispano Mk V

To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB FT
2–3 and 4–5	200	RK

Load Notes:

1. Stations 2 to 5 may each carry one or two RP-3 RKs.
2. May use 450L FTs.

Notes:

1. The de Havilland Vampire FB.6 is a day fighter and fighter-bomber. The FB.6 version has provision for air-to-ground ordnance, the Goblin 3 engine, and clipped wings.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 5/3/2/1

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Vampire FB.6 (Late)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.0	6.0
HI	26–35	2.0 – 5.0	2.5 – 4.5	2.5 – 4.0	6.0
MH	17–25	1.5 – 5.0	2.0 – 4.5	2.0 – 4.5	6.0
ML	8–16	1.5 – 5.0	1.5 – 4.5	1.5 – 4.5	6.0
LO	0–7	1.0 – 5.0	1.5 – 4.5	1.5 – 4.5	6.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	0.5	—	0.5	—	0.5	VH
—	0.5	—	0.5	—	0.5	HI
—	0.5	—	0.5	—	0.5	MH
—	0.5	—	0.5	—	0.5	ML
—	1.0	—	1.0	—	0.5	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Four 20 mm Hispano Mk V

To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 5, DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB FT
2–3 and 4–5	200	RK

Load Notes:

1. Stations 2 to 5 may each carry one or two RP-3 RKs.
2. May use 450L FTs.

Notes:

1. The Vampire FB.6 is a day fighter and fighter-bomber. The “Late” variant described is the 1960 upgrade with an ejection seat.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 5/3/2/1

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Vampire FB.9

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.0	6.0
HI	26–35	2.0 – 5.0	2.5 – 4.5	2.5 – 4.0	6.0
MH	17–25	1.5 – 4.5	2.0 – 4.0	2.0 – 4.0	6.0
ML	8–16	1.5 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0
LO	0–7	1.0 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	0.5	—	0.5	—	0.5	ML
LO	—	0.5	—	0.5	—	0.5	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Four 20 mm Hispano Mk V

To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB FT
2–3 and 4–5	200	RK

Load Notes:

1. Stations 2 to 5 may each carry one or two RP-3 RKs.
2. May use 450L FTs.

Notes:

1. The de Havilland Vampire FB.9 is a day fighter and fighter-bomber. The FB.9 version has provision for air-to-ground ordnance, the Goblin 2 engine, clipped wings, and an air-conditioned cockpit for use in tropical climates.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 5/3/2/1

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Vampire FB.9 (Goblin 3)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.0	6.0	—	0.5	—	0.5	—	0.5	VH
HI	26–35	2.0 – 5.0	2.5 – 4.5	2.5 – 4.0	6.0	—	0.5	—	0.5	—	0.5	HI
MH	17–25	1.5 – 5.0	2.0 – 4.5	2.0 – 4.5	6.0	—	0.5	—	0.5	—	0.5	MH
ML	8–16	1.5 – 5.0	1.5 – 4.5	1.5 – 4.5	6.0	—	0.5	—	0.5	—	0.5	ML
LO	0–7	1.0 – 5.0	1.5 – 4.5	1.5 – 4.5	6.0	—	1.0	—	1.0	—	0.5	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Four 20 mm Hispano Mk V

To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 5, DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB FT
2–3 and 4–5	200	RK

Load Notes:

1. Stations 2 to 5 may each carry one or two RP-3 RKs.
2. May use 450L FTs.

Notes:

1. The de Havilland Vampire FB.9 is a day fighter and fighter-bomber. This "Goblin 3" version is a derivative of the base version, but is equipped with the more powerful Goblin 3 engine.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 5/3/2/1

Vampire NF.10

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	None

Crew: Pilot and Radar Operator

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.0	6.0
HI	26–35	2.0 – 5.0	2.5 – 4.5	2.5 – 4.0	6.0
MH	17–25	1.5 – 4.5	2.0 – 4.0	2.0 – 4.0	6.0
ML	8–16	1.5 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0
LO	0–7	1.0 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	0.5	—	0.5	—	0.5	ML
LO	—	0.5	—	0.5	—	0.5	LO

Radar:	AI Mk X
ECCM:	0
Arcs:	Limited
Search:	15–3
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Hispano Mk V
To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 5, DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 2	1,000	FT

Load Notes:

1. May use 450L FTs.

Notes:

1. The de Havilland Vampire NF.10 is a night fighter. The NF.10 version is derived from the FB.5, but has a new forward fuselage for the AI Mk X radar and two crew members.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 5/3/2/1

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Vampire T.11

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	None

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.0	6.0
HI	26–35	2.0 – 5.0	2.5 – 4.5	2.5 – 4.0	6.0
MH	17–25	1.5 – 4.5	2.0 – 4.0	2.0 – 4.0	6.0
ML	8–16	1.5 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0
LO	0–7	1.0 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	0.5	—	0.5	—	0.5	ML
LO	—	0.5	—	0.5	—	0.5	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Four 20 mm Hispano Mk V

To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 5, DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB FT
2–3 and 4–5	200	RK

Load Notes:

1. Stations 2 to 5 may each carry one or two RP-3 RKs.
2. May use 450L FTs.

Notes:

1. The de Havilland Vampire T.11 is a trainer with a secondary light attack capability. The T.11 is derived from the FB.5, but has a new forward fuselage similar to that of the NF.10.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 5/3/2/1

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Vampire T.11 (Late)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.0	6.0
HI	26–35	2.0 – 5.0	2.5 – 4.5	2.5 – 4.0	6.0
MH	17–25	1.5 – 4.5	2.0 – 4.0	2.0 – 4.0	6.0
ML	8–16	1.5 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0
LO	0–7	1.0 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	0.5	—	0.5	—	0.5	ML
LO	—	0.5	—	0.5	—	0.5	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Four 20 mm Hispano Mk V

To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB FT
2–3 and 4–5	200	RK

Load Notes:

1. Stations 2 to 5 may each carry one or two RP-3 RKs.
2. May use 450L FTs.

Notes:

1. The de Havilland Vampire T.11 is a trainer with a secondary light attack capability. The T.11 is derived from the FB.5, but has a new forward fuselage similar to that of the NF.10. This "Late" version is refitted with ejection seats.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 5/3/2/1

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Sea Vampire F.20

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	2.0	2.0	2.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.0	6.0
HI	26–35	2.0 – 5.0	2.5 – 4.5	2.5 – 4.0	6.0
MH	17–25	1.5 – 4.5	2.0 – 4.0	2.0 – 4.0	6.0
ML	8–16	1.5 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0
LO	0–7	1.0 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	0.5	—	0.5	—	0.5	ML
LO	—	0.5	—	0.5	—	0.5	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Four 20 mm Hispano Mk V

To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB FT
2–3 and 4–5	200	RK

Load Notes:

1. Stations 2 to 5 may each carry one or two RP-3 RKs.
2. May use 450L FTs.

Notes:

1. The de Havilland Sea Vampire F.20 is a carrier-capable day fighter and fighter-bomber. It is an adaptation of the Vampire FB.5 for carrier operation, with an arrester hook, strengthed undercarriage, and more effective speed brakes.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 5/3/2/1

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Sea Vampire T.22

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	None

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.0	6.0
HI	26–35	2.0 – 5.0	2.5 – 4.5	2.5 – 4.0	6.0
MH	17–25	1.5 – 4.5	2.0 – 4.0	2.0 – 4.0	6.0
ML	8–16	1.5 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0
LO	0–7	1.0 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	0.5	—	0.5	—	0.5	ML
LO	—	0.5	—	0.5	—	0.5	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Four 20 mm Hispano Mk V

To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB FT
2–3 and 4–5	200	RK

Load Notes:

1. Stations 2 to 5 may each carry one or two RP-3 RKs.
2. May use 450L FTs.

Notes:

1. The de Havilland Sea Vampire T.22 is a trainer with a secondary light attack capability. It is derived from the Vampire T.11 and is not carrier-capable.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 5/3/2/1

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Sea Vampire T.22 (Late)

Crew: Pilot and Observer

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.0	6.0	—	0.5	—	0.5	—	0.5	VH
HI	26–35	2.0 – 5.0	2.5 – 4.5	2.5 – 4.0	6.0	—	0.5	—	0.5	—	0.5	HI
MH	17–25	1.5 – 4.5	2.0 – 4.0	2.0 – 4.0	6.0	—	0.5	—	0.5	—	0.5	MH
ML	8–16	1.5 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0	—	0.5	—	0.5	—	0.5	ML
LO	0–7	1.0 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0	—	0.5	—	0.5	—	0.5	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Four 20 mm Hispano Mk V

To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 5, DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB FT
2–3 and 4–5	200	RK

Load Notes:

1. Stations 2 to 5 may each carry one or two RP-3 RKs.
2. May use 450L FTs.

Notes:

1. The de Havilland Sea Vampire T.22 is a trainer with a secondary light attack capability. It is derived from the Vampire T.11 and is not carrier-capable. This "Late" version is refitted with ejection seats.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 5/3/2/1

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Vampire F.30

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.5
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 44	DT 40	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.5	3.0 – 5.0	3.0 – 4.5	6.0
HI	26–35	2.0 – 5.5	2.5 – 5.0	2.5 – 4.5	6.5
MH	17–25	1.5 – 5.5	2.0 – 5.0	2.0 – 5.0	6.5
ML	8–16	1.5 – 5.5	1.5 – 5.0	1.5 – 5.0	6.5
LO	0–7	1.0 – 5.5	1.5 – 5.0	1.5 – 5.0	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	1.0	ML
LO	—	1.5	—	1.0	—	1.0	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Four 20 mm Hispano Mk V

To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 2	1,000	FT

Load Notes:

1. May use 450L FTs.

Notes:

1. The Vampire F.30 a day fighter. It is a derivative of the de Havilland Vampire F.3 but with a more powerful Nene engine.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 6/4/2/1

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Vampire FB.31

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.5
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	None

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 48	1/2 44	DT 40	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	2.5 – 5.5	3.0 – 5.0	3.0 – 4.5	6.0	—	0.5	—	0.5	—	0.5	VH
HI	26–35	2.0 – 5.5	2.5 – 5.0	2.5 – 4.5	6.5	—	0.5	—	0.5	—	0.5	HI
MH	17–25	1.5 – 5.5	2.0 – 5.0	2.0 – 5.0	6.5	—	0.5	—	0.5	—	0.5	MH
ML	8–16	1.5 – 5.5	1.5 – 5.0	1.5 – 5.0	6.5	—	1.0	—	1.0	—	1.0	ML
LO	0–7	1.0 – 5.5	1.5 – 5.0	1.5 – 5.0	6.0	—	1.5	—	1.0	—	1.0	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Four 20 mm Hispano Mk V

To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 5, DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB FT
2–3 and 4–5	200	RK

Load Notes:

1. Stations 2 to 5 may each carry one or two RP-3 RKs.
2. May use 450L FTs.

Notes:

1. The Vampire FB.31 a day fighter and fighter-bomber. It is a derivative of the de Havilland Vampire FB.5 but with a more powerful Nene engine.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 6/4/2/1

Vampire T.33

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	None

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.0	6.0
HI	26–35	2.0 – 5.0	2.5 – 4.5	2.5 – 4.0	6.0
MH	17–25	1.5 – 4.5	2.0 – 4.0	2.0 – 4.0	6.0
ML	8–16	1.5 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0
LO	0–7	1.0 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	0.5	—	0.5	—	0.5	ML
LO	—	0.5	—	0.5	—	0.5	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Four 20 mm Hispano Mk V

To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB FT
2–3 and 4–5	200	RK

Load Notes:

1. Stations 2 to 5 may each carry one or two RP-3 RKs.
2. May use 450L FTs.

Notes:

1. The Vampire T.33 is a trainer with a secondary light attack capability. It is a license-built version of the de Havilland Vampire T.11.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 5/3/2/1

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Vampire T.33A

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.0	6.0
HI	26–35	2.0 – 5.0	2.5 – 4.5	2.5 – 4.0	6.0
MH	17–25	1.5 – 4.5	2.0 – 4.0	2.0 – 4.0	6.0
ML	8–16	1.5 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0
LO	0–7	1.0 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	0.5	—	0.5	—	0.5	ML
LO	—	0.5	—	0.5	—	0.5	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Four 20 mm Hispano Mk V

To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 5, DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB FT
2–3 and 4–5	200	RK

Load Notes:

1. Stations 2 to 5 may each carry one or two RP-3 RKs.
2. May use 450L FTs.

Notes:

1. The Vampire T.33A is a trainer with a secondary light attack capability. It is T.33 refitted with the canopy and ejection seat of the T.35.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 5/3/2/1

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Vampire T.34

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	None

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.0	6.0
HI	26–35	2.0 – 5.0	2.5 – 4.5	2.5 – 4.0	6.0
MH	17–25	1.5 – 4.5	2.0 – 4.0	2.0 – 4.0	6.0
ML	8–16	1.5 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0
LO	0–7	1.0 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	0.5	—	0.5	—	0.5	ML
LO	—	0.5	—	0.5	—	0.5	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Four 20 mm Hispano Mk V

To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB FT
2–3 and 4–5	200	RK

Load Notes:

1. Stations 2 to 5 may each carry one or two RP-3 RKs.
2. May use 450L FTs.

Notes:

1. The Vampire T.34 is a trainer with a secondary light attack capability. It is a development of the T.33 for RAN use.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 5/3/2/1

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Vampire T.34A

Crew: Pilot and Observer

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.0	6.0
HI	26–35	2.0 – 5.0	2.5 – 4.5	2.5 – 4.0	6.0
MH	17–25	1.5 – 4.5	2.0 – 4.0	2.0 – 4.0	6.0
ML	8–16	1.5 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0
LO	0–7	1.0 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	0.5	—	0.5	—	0.5	VH
—	0.5	—	0.5	—	0.5	HI
—	0.5	—	0.5	—	0.5	MH
—	0.5	—	0.5	—	0.5	ML
—	0.5	—	0.5	—	0.5	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Four 20 mm Hispano Mk V

To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 5, DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB FT
2–3 and 4–5	200	RK

Load Notes:

1. Stations 2 to 5 may each carry one or two RP-3 RKs.
2. May use 450L FTs.

Notes:

1. The Vampire T.34A is a trainer with a secondary light attack capability. It is T.34 refitted with the canopy and ejection seat of the T.35.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 5/3/2/1

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Vampire T.35

Crew: Pilot and Observer

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.0	6.0
HI	26–35	2.0 – 5.0	2.5 – 4.5	2.5 – 4.0	6.0
MH	17–25	1.5 – 4.5	2.0 – 4.0	2.0 – 4.0	6.0
ML	8–16	1.5 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0
LO	0–7	1.0 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	0.5	—	0.5	—	0.5	ML
LO	—	0.5	—	0.5	—	0.5	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Four 20 mm Hispano Mk V

To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB FT
2–3 and 4–5	200	RK

Load Notes:

1. Stations 2 to 5 may each carry one or two RP-3 RKs.
2. May use 450L FTs.

Notes:

1. The Vampire T.35 is a trainer with a secondary light attack capability. It is a development of the T.33 with a new canopy, ejection seats, and additional fuel.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 5/3/2/1

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Vampire FB.50

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.0	6.0
HI	26–35	2.0 – 5.0	2.5 – 4.5	2.5 – 4.0	6.0
MH	17–25	1.5 – 5.0	2.0 – 4.5	2.0 – 4.5	6.0
ML	8–16	1.5 – 5.0	1.5 – 4.5	1.5 – 4.5	6.0
LO	0–7	1.0 – 5.0	1.5 – 4.5	1.5 – 4.5	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	0.5	—	0.5	—	0.5	ML
LO	—	1.0	—	1.0	—	0.5	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Four 20 mm Hispano Mk V

To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB FT
2–3 and 4–5	200	RK

Load Notes:

1. Stations 2 to 5 may each carry one or two RP-3 RKs.
2. May use 450L FTs.

Notes:

1. The de Havilland Vampire FB.50 is a day fighter and fighter-bomber. The FB.50 version is an export version of the FB.6, with provision for air-to-ground ordnance, the Goblin 3 engine, and clipped wings. It was designated J28B/A28Bin service with the Swedish Flygvapnet.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 5/3/2/1

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Vampire FB.52

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	None

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.0	6.0
HI	26–35	2.0 – 5.0	2.5 – 4.5	2.5 – 4.0	6.0
MH	17–25	1.5 – 5.0	2.0 – 4.5	2.0 – 4.5	6.0
ML	8–16	1.5 – 5.0	1.5 – 4.5	1.5 – 4.5	6.0
LO	0–7	1.0 – 5.0	1.5 – 4.5	1.5 – 4.5	6.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	0.5	—	0.5	—	0.5	VH
—	0.5	—	0.5	—	0.5	HI
—	0.5	—	0.5	—	0.5	MH
—	0.5	—	0.5	—	0.5	ML
—	1.0	—	1.0	—	0.5	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Four 20 mm Hispano Mk V

To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 5, DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB FT
2–3 and 4–5	200	RK

Load Notes:

1. Stations 2 to 5 may each carry one or two RP-3 RKs.
2. May use 450L FTs.

Notes:

1. The de Havilland Vampire FB.52 is a day fighter and fighter-bomber. The FB.52 version is an export version of the FB.6, with provision for air-to-ground ordnance, the Goblin 3 engine, and clipped wings.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 5/3/2/1

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Vampire FB.52A

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	None

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.0	6.0
HI	26–35	2.0 – 5.0	2.5 – 4.5	2.5 – 4.0	6.0
MH	17–25	1.5 – 4.5	2.0 – 4.0	2.0 – 4.0	6.0
ML	8–16	1.5 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0
LO	0–7	1.0 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	0.5	—	0.5	—	0.5	VH
—	0.5	—	0.5	—	0.5	HI
—	0.5	—	0.5	—	0.5	MH
—	0.5	—	0.5	—	0.5	ML
—	0.5	—	0.5	—	0.5	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Four 20 mm Hispano Mk V

To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 5, DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB FT
2–3 and 4–5	200	RK

Load Notes:

1. Stations 2 to 5 may each carry one or two RP-3 RKs.
2. May use 450L FTs.

Notes:

1. The de Havilland Vampire FB.52A is a day fighter and fighter-bomber. The FB.52A version is an export version of the FB.6, with provision for air-to-ground ordnance, the Goblin 2 engine, and clipped wings.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 5/3/2/1

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Vampire NF.54

Crew: Pilot and Radar Operator

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	None

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.0	6.0
HI	26–35	2.0 – 5.0	2.5 – 4.5	2.5 – 4.0	6.0
MH	17–25	1.5 – 4.5	2.0 – 4.0	2.0 – 4.0	6.0
ML	8–16	1.5 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0
LO	0–7	1.0 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	0.5	—	0.5	—	0.5	ML
LO	—	0.5	—	0.5	—	0.5	LO

Radar:	AI Mk X
ECCM:	0
Arcs:	Limited
Search:	15–3
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Hispano Mk V
To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 5, DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 2	1,000	FT

Load Notes:

1. May use 450L FTs.

Notes:

1. The de Havilland Vampire NF.54 is a night fighter. The NF.54 is an export version of the NF.10, which is in turn derived from the FB.5, but has a new forward fuselage for the AI Mk X radar and two crew members.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 5/3/2/1

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Vampire T.55

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	None

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.0	6.0
HI	26–35	2.0 – 5.0	2.5 – 4.5	2.5 – 4.0	6.0
MH	17–25	1.5 – 4.5	2.0 – 4.0	2.0 – 4.0	6.0
ML	8–16	1.5 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0
LO	0–7	1.0 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	0.5	—	0.5	—	0.5	ML
LO	—	0.5	—	0.5	—	0.5	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Four 20 mm Hispano Mk V

To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB FT
2–3 and 4–5	200	RK

Load Notes:

1. Stations 2 to 5 may each carry one or two RP-3 RKs.
2. May use 450L FTs.

Notes:

1. The de Havilland Vampire T.55 is a trainer with a secondary light attack capability. The T.55 is an export version of the T.11. It was designated J28C/Sk28C/Sk28C-1 in service with the Swedish Flygvapnet.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 5/3/2/1

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Vampire T.55 (Late)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.0	6.0
HI	26–35	2.0 – 5.0	2.5 – 4.5	2.5 – 4.0	6.0
MH	17–25	1.5 – 4.5	2.0 – 4.0	2.0 – 4.0	6.0
ML	8–16	1.5 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0
LO	0–7	1.0 – 4.5	1.5 – 4.0	1.5 – 4.0	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	0.5	—	0.5	—	0.5	ML
LO	—	0.5	—	0.5	—	0.5	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Four 20 mm Hispano Mk V

To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 5, DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB FT
2–3 and 4–5	200	RK

Load Notes:

1. Stations 2 to 5 may each carry one or two RP-3 RKs.
2. May use 450L FTs.

Notes:

1. The de Havilland Vampire T.55 is a trainer with a secondary light attack capability. The T.55 is an export version of the T.11. This “Late” version is refitted with ejection seats. It was designated Sk28C-2 in service with the Swedish Flygvapnet.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 5/3/2/1

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Vampire T.55A

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.0	6.0
HI	26–35	2.0 – 5.0	2.5 – 4.5	2.5 – 4.0	6.0
MH	17–25	1.5 – 5.0	2.0 – 4.5	2.0 – 4.5	6.0
ML	8–16	1.5 – 5.0	1.5 – 4.5	1.5 – 4.5	6.0
LO	0–7	1.0 – 5.0	1.5 – 4.5	1.5 – 4.5	6.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	0.5	—	0.5	—	0.5	VH
—	0.5	—	0.5	—	0.5	HI
—	0.5	—	0.5	—	0.5	MH
—	0.5	—	0.5	—	0.5	ML
—	1.0	—	1.0	—	0.5	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Four 20 mm Hispano Mk V

To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB FT
2–3 and 4–5	200	RK

Load Notes:

1. Stations 2 to 5 may each carry one or two RP-3 RKs.
2. May use 450L FTs.

Notes:

1. The de Havilland Vampire T.55A is a trainer with a secondary light attack capability. It is a conversion of the FB.50 with the forward fuselage replaced by one similar to the late variant of the T.55. It was designated Sk28C-3 in service with the Swedish Flygvapnet.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 5/3/2/1

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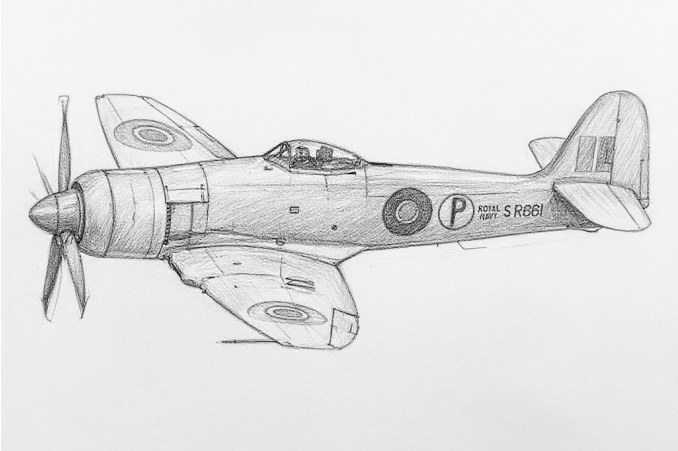
Hawker Sea Fury and Fury



The Hawker Sea Fury was a post-WW2 propeller-driven fighter bomber.

The Sea Fury was a descendant of the WW2 Hawker Tempest fighter bomber, which was designed to be a long-range fighter for use by the RAF in the war against Japan. After WW2 ended, the RAF no longer had an interest, but the RN acquired a version adapted for carrier operations as a replacement for its Seafires, which were not well suited to carrier operations, and Corsairs, which had to be returned to the US as the Lend-Lease program ended.

The Sea Fury was powered by a Centaur radial engine, armed with four 20 mm guns, and had a bubble canopy with an excellent view except under the nose.

Versions

Sea Fury F.10

The initial version of the Sea Fury was the F.10 day fighter.

It entered service in the RN in 1947, but seems to have been quickly replaced by the FB.11 version.

Sea Fury F.11

The FB.11 was derived from the F.10 and had added armor and weapon stations to perform better as a fighter-bomber.

It served in the RN from 1948 to 1956, RAN from 1948 to 1959, and RCN from 1948 to 1956. It was replaced in the RN by the Sea Hawk and Attacker starting in 1953, in the RAN by the Sea Venom in 1956, and in the RCN by the F2H Banshees starting in 1956. New and ex-RN FB.11s also served in the Burmese Air Force from 1958 to 1968, the Cuban Air Force from 1957, the Egyptian Air Force, and the Pakistan Air Force.

Sea Fury T.20

The T.20 was a two-seater trainer. To compensate for the weight of the additional cockpit, the armament was reduced to two 20 mm cannons.

It served with the RN. Some ex-RN aircraft were later used by the Burmese Air Force from 1958 to 1968 and by the Cuban Air Force from 1957.

Sea Fury F.50 and FB.50

The F.50 and FB.50 were export versions of the F.10 and FB.11 with minor changes. Some were license-built by Fokker.

The F.50 and FB.50 were used by the Royal Netherlands Navy from 1947 and were eventually replaced by Sea Hawks.

Fury and Fury FB.60

The Fury (with no version designation but sometimes referred to as the “Baghdad Fury”) and the FB.60 were export versions of the FB.11 with carrier-specific equipment removed.

The Fury was used by the Iraqi Air Force from 1946 until 1969, being replaced by the Su-7 starting in 1967. The FB.60 was used by the Pakistan Air Force from 1950 until 1960, being replaced by Sabres starting in 1955.

Fury Trainer and Fury T.61

The Fury Trainer (with no version designation) and the T.61 were export versions of the T.20 with carrier-specific equipment removed.

The Fury Trainer was used by the Iraqi Air Force. The T.61 was used by the Pakistan Air Force.

Armament and Stores

A typical air-to-ground load was two 500-lb or 1000-lb bombs or twelve RP-3 rockets. It could also carry two 90-gallon fuel tanks to extend its range.

Combat

The RN and RAN used the Sea Fury as a fighter-bomber in the Korean War. They also saw combat with the Netherlands Royal Navy in the Dutch East Indies, with the Cuban Air Force against Fidel Castro’s revolutionaries, and with the Cuban Revolutionary Air Force during the Bay of Pigs invasion.

ADCs

- Sea Fury F.10
- Sea Fury FB.11
- Sea Fury T.20
- Sea Fury F.50
- Sea Fury FB.50
- Sea Fury FB.60
- Sea Fury T.61
- Fury
- Fury Trainer

Photo Credit

- Hawker Sea Fury: Alan Wilson (CC BY-SA 2.0)

Sea Fury F.10

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	2.0	1.5	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.5, reduce power by 0.5.
If speed ≥ 4.5, reduce power by 1.0.

Cruise Spd. CL:	3.0	Restr. Arcs:	180L
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	70
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.25	0.25	0.25
HT	0.25	0.75	0.75
BT	0.75	0.75	0.75
ET	1.25	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 36	1/2 29	DT 21	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.0 – 4.0	—	—	5.5
HI	26–35	1.5 – 4.0	2.0 – 3.5	—	6.0
MH	17–25	1.5 – 4.5	1.5 – 4.0	1.5 – 3.5	6.0
ML	8–16	1.0 – 4.5	1.5 – 3.5	1.5 – 3.0	6.0
LO	0–7	1.0 – 4.0	1.0 – 3.5	1.5 – 3.0	5.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	—	—	—	VH
HI	—	0.5	—	0.5	—	—	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	1.0	—	0.5	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Hispano V
To Hit:	6/4/3
Ammunition:	5.5
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 3,400

Station	Limit	Allowed Loads
1 and 2	700	FT

Load Notes:

1. Stations 1 and 2 can each carry a 90 gal (400L) FT.

Notes:

1. The Hawker Sea Fury F.10 is a carrier-capable day fighter.
2. High transonic drag (HTD). Low bleed rate (LBR).

VPs: 6/4/2/1

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Sea Fury FB.11

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	2.0	1.5	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.5, reduce power by 0.5.
If speed ≥ 4.5, reduce power by 1.0.

Cruise Spd. CL:	3.0	Restr. Arcs:	180L
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	70
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.25	0.25	0.25
HT	0.25	0.75	0.75
BT	0.75	0.75	0.75
ET	1.25	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 36	1/2 29	DT 21	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.0 – 4.0	—	—	5.5
HI	26–35	1.5 – 4.0	2.0 – 3.5	—	6.0
MH	17–25	1.5 – 4.5	1.5 – 4.0	1.5 – 3.5	6.0
ML	8–16	1.0 – 4.5	1.5 – 3.5	1.5 – 3.0	6.0
LO	0–7	1.0 – 4.0	1.0 – 3.5	1.5 – 3.0	5.5

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	0.5	—	—	—	—	VH
—	0.5	—	0.5	—	—	HI
—	0.5	—	0.5	—	0.5	MH
—	1.0	—	0.5	—	0.5	ML
—	1.0	—	1.0	—	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Hispano V
To Hit:	6/4/3
Ammunition:	5.5
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 3,400

Station	Limit	Allowed Loads
1 and 4	1,000	BB
2 and 3	700	FT
5–7 and 8–10	200	RK

Load Notes:

1. Either stations 1 and 4 or stations 5 to 10 can be used.
2. Stations 2 and 3 can each carry a 90 gal (400L) FT.
3. Stations 5 to 10 can each carry two RP-3 RKs.

Notes:

1. The Hawker Sea Fury FB.11 is a carrier-capable day fighter and fighter-bomber. The FB.11 is a development of the original F.10 fighter with additional armor and underwing weapon stations to better carry out air-to-ground missions.
2. High transonic drag (HTD). Low bleed rate (LBR).

VPs: 7/5/2/1

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Sea Fury T.20

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	2.0	1.5	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.5, reduce power by 0.5.
If speed ≥ 4.5, reduce power by 1.0.

Cruise Spd. CL:	3.0	Restr. Arcs:	180L
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	70
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	None

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	1.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.25	0.25	0.25
HT	0.25	0.75	0.75
BT	0.75	0.75	0.75
ET	1.25	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 36	1/2 29	DT 21	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.0 – 4.0	—	—	5.5
HI	26–35	1.5 – 4.0	2.0 – 3.5	—	6.0
MH	17–25	1.5 – 4.5	1.5 – 4.0	1.5 – 3.5	6.0
ML	8–16	1.0 – 4.5	1.5 – 3.5	1.5 – 3.0	6.0
LO	0–7	1.0 – 4.0	1.0 – 3.5	1.5 – 3.0	5.5

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	0.5	—	—	—	—	VH
—	0.5	—	0.5	—	—	HI
—	0.5	—	0.5	—	0.5	MH
—	1.0	—	0.5	—	0.5	ML
—	1.0	—	1.0	—	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm Hispano V
To Hit:	6/4/3
Ammunition:	5.5
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	4/5*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 3,400

Station	Limit	Allowed Loads
1 and 4	1,000	BB
2 and 3	700	FT
5–7 and 8–10	200	RK

Load Notes:

1. Either stations 1 and 4 or stations 5 to 10 can be used.
2. Stations 2 and 3 can each carry a 90 gal (400L) FT.
3. Stations 5 to 10 can each carry two RP-3 RKs.

Notes:

1. The Hawker Sea Fury T.20 is a carrier-capable trainer.
2. High transonic drag (HTD). Low bleed rate (LBR).

VPs: 6/4/2/1

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Sea Fury F.50

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	2.0	1.5	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.5, reduce power by 0.5.
If speed ≥ 4.5, reduce power by 1.0.

Cruise Spd. CL:	3.0	Restr. Arcs:	180L
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	70
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.25	0.25	0.25
HT	0.25	0.75	0.75
BT	0.75	0.75	0.75
ET	1.25	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 36	1/2 29	DT 21	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.0 – 4.0	—	—	5.5
HI	26–35	1.5 – 4.0	2.0 – 3.5	—	6.0
MH	17–25	1.5 – 4.5	1.5 – 4.0	1.5 – 3.5	6.0
ML	8–16	1.0 – 4.5	1.5 – 3.5	1.5 – 3.0	6.0
LO	0–7	1.0 – 4.0	1.0 – 3.5	1.5 – 3.0	5.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	—	—	—	VH
HI	—	0.5	—	0.5	—	—	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	1.0	—	0.5	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Hispano V
To Hit:	6/4/3
Ammunition:	5.5
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 3,400

Station	Limit	Allowed Loads
1 and 2	700	FT

Load Notes:

1. Stations 1 and 2 can each carry a 90 gal (400L) FT.

Notes:

1. The Hawker Sea Fury F.50 is a carrier-capable day fighter. It is an export version of the F.10.
2. High transonic drag (HTD). Low bleed rate (LBR).

VPs: 6/4/2/1

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Sea Fury FB.50

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	2.0	1.5	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.5, reduce power by 0.5.
If speed ≥ 4.5, reduce power by 1.0.

Cruise Spd. CL:	3.0	Restr. Arcs:	180L
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	70
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.25	0.25	0.25
HT	0.25	0.75	0.75
BT	0.75	0.75	0.75
ET	1.25	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 36	1/2 29	DT 21	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.0 – 4.0	—	—	5.5
HI	26–35	1.5 – 4.0	2.0 – 3.5	—	6.0
MH	17–25	1.5 – 4.5	1.5 – 4.0	1.5 – 3.5	6.0
ML	8–16	1.0 – 4.5	1.5 – 3.5	1.5 – 3.0	6.0
LO	0–7	1.0 – 4.0	1.0 – 3.5	1.5 – 3.0	5.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	—	—	—	VH
HI	—	0.5	—	0.5	—	—	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	1.0	—	0.5	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Hispano V
To Hit:	6/4/3
Ammunition:	5.5
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 3,400

Station	Limit	Allowed Loads
1 and 4	1,000	BB
2 and 3	700	FT
5–7 and 8–10	200	RK

Load Notes:

1. Either stations 1 and 4 or stations 5 to 10 can be used.
2. Stations 2 and 3 can each carry a 90 gal (400L) FT.
3. Stations 5 to 10 can each carry two RP-3 RKs.

Notes:

1. The Hawker Sea Fury FB.50 is a carrier-capable day fighter and fighter-bomber. It is an export version of the FB.11.
2. High transonic drag (HTD). Low bleed rate (LBR).

VPs: 7/5/2/1

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Sea Fury FB.60

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	2.0	1.5	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.5, reduce power by 0.5.
If speed ≥ 4.5, reduce power by 1.0.

Cruise Spd. CL:	3.0	Restr. Arcs:	180L
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	70
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.25	0.25	0.25
HT	0.25	0.75	0.75
BT	0.75	0.75	0.75
ET	1.25	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 36	1/2 29	DT 21	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.0 – 4.0	—	—	5.5
HI	26–35	1.5 – 4.0	2.0 – 3.5	—	6.0
MH	17–25	1.5 – 4.5	1.5 – 4.0	1.5 – 3.5	6.0
ML	8–16	1.0 – 4.5	1.5 – 3.5	1.5 – 3.0	6.0
LO	0–7	1.0 – 4.0	1.0 – 3.5	1.5 – 3.0	5.5

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	0.5	—	—	—	—	VH
—	0.5	—	0.5	—	—	HI
—	0.5	—	0.5	—	0.5	MH
—	1.0	—	0.5	—	0.5	ML
—	1.0	—	1.0	—	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Hispano V
To Hit:	6/4/3
Ammunition:	5.5
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 3,400

Station	Limit	Allowed Loads
1 and 4	1,000	BB
2 and 3	700	FT
5–7 and 8–10	200	RK

Load Notes:

1. Either stations 1 and 4 or stations 5 to 10 can be used.
2. Stations 2 and 3 can each carry a 90 gal (400L) FT.
3. Stations 5 to 10 can each carry two RP-3 RKs.

Notes:

1. The Hawker Sea Fury FB.60 is a day fighter and fighter-bomber. It is an export version of the FB.11 with carrier-specific equipment removed.
2. High transonic drag (HTD). Low bleed rate (LBR).

VPs: 7/5/2/1

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Sea Fury T.61

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	2.0	1.5	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.5, reduce power by 0.5.
If speed ≥ 4.5, reduce power by 1.0.

Cruise Spd. CL:	3.0	Restr. Arcs:	180L
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	70
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	None

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	1.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.25	0.25	0.25
HT	0.25	0.75	0.75
BT	0.75	0.75	0.75
ET	1.25	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 36	1/2 29	DT 21	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.0 – 4.0	—	—	5.5
HI	26–35	1.5 – 4.0	2.0 – 3.5	—	6.0
MH	17–25	1.5 – 4.5	1.5 – 4.0	1.5 – 3.5	6.0
ML	8–16	1.0 – 4.5	1.5 – 3.5	1.5 – 3.0	6.0
LO	0–7	1.0 – 4.0	1.0 – 3.5	1.5 – 3.0	5.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	—	—	—	VH
HI	—	0.5	—	0.5	—	—	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	1.0	—	0.5	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm Hispano V
To Hit:	6/4/3
Ammunition:	5.5
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	4/5*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 3,400

Station	Limit	Allowed Loads
1 and 4	1,000	BB
2 and 3	700	FT
5–7 and 8–10	200	RK

Load Notes:

1. Either stations 1 and 4 or stations 5 to 10 can be used.
2. Stations 2 and 3 can each carry a 90 gal (400L) FT.
3. Stations 5 to 10 can each carry two RP-3 RKs.

Notes:

1. The Hawker Sea Fury T.61 is a trainer. It is a export version of the T.20 with carrier-specific equipment removed.
2. High transonic drag (HTD). Low bleed rate (LBR).

VPs: 6/4/2/1

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Fury

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	2.0	1.5	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.5, reduce power by 0.5.
If speed ≥ 4.5, reduce power by 1.0.

Cruise Spd. CL:	3.0	Restr. Arcs:	180L
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	70
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.25	0.25	0.25
HT	0.25	0.75	0.75
BT	0.75	0.75	0.75
ET	1.25	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 36	1/2 29	DT 21	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.0 – 4.0	—	—	5.5
HI	26–35	1.5 – 4.0	2.0 – 3.5	—	6.0
MH	17–25	1.5 – 4.5	1.5 – 4.0	1.5 – 3.5	6.0
ML	8–16	1.0 – 4.5	1.5 – 3.5	1.5 – 3.0	6.0
LO	0–7	1.0 – 4.0	1.0 – 3.5	1.5 – 3.0	5.5

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	0.5	—	—	—	—	VH
—	0.5	—	0.5	—	—	HI
—	0.5	—	0.5	—	0.5	MH
—	1.0	—	0.5	—	0.5	ML
—	1.0	—	1.0	—	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Hispano V
To Hit:	6/4/3
Ammunition:	5.5
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 3,400

Station	Limit	Allowed Loads
1 and 4	1,000	BB
2 and 3	700	FT
5–7 and 8–10	200	RK

Load Notes:

1. Either stations 1 and 4 or stations 5 to 10 can be used.
2. Stations 2 and 3 can each carry a 90 gal (400L) FT.
3. Stations 5 to 10 can each carry two RP-3 RKs.

Notes:

1. The Hawker Fury is a day fighter and fighter-bomber. It is an export version of the FB.11 with carrier-specific equipment removed.
2. High transonic drag (HTD). Low bleed rate (LBR).

VPs: 7/5/2/1

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Fury Trainer

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	2.0	1.5	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.5, reduce power by 0.5.
If speed ≥ 4.5, reduce power by 1.0.

Cruise Spd. CL:	3.0	Restr. Arcs:	180L
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	70
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	None

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	1.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.25	0.25	0.25
HT	0.25	0.75	0.75
BT	0.75	0.75	0.75
ET	1.25	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 36	1/2 29	DT 21	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.0 – 4.0	—	—	5.5
HI	26–35	1.5 – 4.0	2.0 – 3.5	—	6.0
MH	17–25	1.5 – 4.5	1.5 – 4.0	1.5 – 3.5	6.0
ML	8–16	1.0 – 4.5	1.5 – 3.5	1.5 – 3.0	6.0
LO	0–7	1.0 – 4.0	1.0 – 3.5	1.5 – 3.0	5.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	—	—	—	VH
HI	—	0.5	—	0.5	—	—	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	1.0	—	0.5	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm Hispano V
To Hit:	6/4/3
Ammunition:	5.5
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	4/5*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 3,400

Station	Limit	Allowed Loads
1 and 4	1,000	BB
2 and 3	700	FT
5–7 and 8–10	200	RK

Load Notes:

1. Either stations 1 and 4 or stations 5 to 10 can be used.
2. Stations 2 and 3 can each carry a 90 gal (400L) FT.
3. Stations 5 to 10 can each carry two RP-3 RKs.

Notes:

1. The Hawker Fury Trainer is a trainer. It is a export version of the T.20 with carrier-specific equipment removed.
2. High transonic drag (HTD). Low bleed rate (LBR).

VPs: 6/4/2/1

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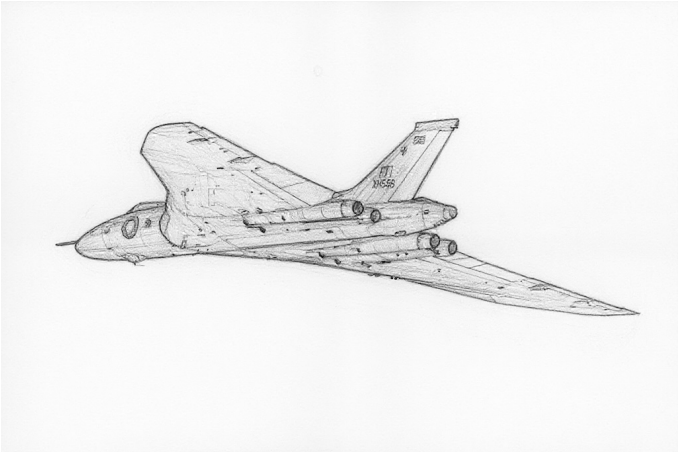
Avro Vulcan



The Avro Vulcan was a strategic bomber. It featured a tailless delta-wing configuration designed for high-speed subsonic flight at high altitude, and was the last and most advanced of the V-bombers.

Versions

Vulcan B.1

The initial B.1 version had the Rolls-Royce Olympus 101 engine (12,000 lbf) and lacked ECM systems, tail-warning radar, and in-flight refueling capability. It entered service with the RAF in 1956. Many were converted to B.1As in 1959 to 1963 and the remainder retired in 1966.

Vulcan B.1A

The B.1A version was an upgrade of the B.1 with a more powerful Rolls-Royce Olympus 104 engines (13,500 lbf), ECM systems and a tail-warning radar similar to those in the B.2, and in-flight refueling capability. The first modified aircraft became available in 1960 and all were retired in 1968.

Vulcan B.2

The B.2 version was built with a larger wing to accommodate the Olympus 200/300-series engine (17,000 to 20,000 lbf), ECM systems and a tail-warning radar in an extended tail cone, and in-flight refueling capability. It served with the RAF from 1960 to 1982.

Some B.2s were modified to permit the carriage of the Blue Steel nuclear stand-off missile semi-recessed in the bomb bay and the cancelled Skybolt air-launched nuclear ballistic missile on under-wing station. TFR was fitted starting in 1966 and an improved RWR the mid 1970s.

In 1982, for the *Black Buck* missions in the South Atlantic War, several B.2s were modified to permit the carriage of Shrike ARMs or an ALQ-101D ECM pod on the underwing pylons originally installed for Skybolt.

Vulcan B.2(MRR)

Several B.2s were converted to maritime radar-reconnaissance aircraft (MRR) in 1973 and served until 1982.

Vulcan K.2

The South Atlantic War consumed much of the remaining fatigue life of the RAF's fleet of Victor tankers. To compensate, several Vulcan B.2s were converted to single-point tankers and designated K.2. They served from 1982 to 1984.

Vulcan F.3

The F.3 is a hypothetical long-range interceptor. At least two options were considered in the 1970s: one with twelve AIM-54 Phoenix missiles and another with ten air-launched variants of the Sea Dart missile.

Armament and Stores

The bomb bay could accommodate twenty-one 1,000 lb bombs, one nuclear bomb (Blue Danube, Violet Club, Mark 5, Yellow Sun, Red Beard, and WE.177B), or (in modified B.2s from 1960), or one Blue Steel nuclear stand-off missile. The B.2s modified for the *Black Buck* missions could also carry AGM-45 Shrike ARMs on under-wing stations.

Combat

Vulcans only saw combat in the *Black Buck* missions in the South Atlantic War.

ADCs

ADCs are provided for:

- Vulcan B.2
- Vulcan B.2(MRR)
- Vulcan F.3 (Phoenix)
- Vulcan F.3 (Sea Dart)

Photo Credit

- Avro Vulcan: John5199 (CC BY 2.0)

Vulcan B.2

Power APs/DPs: ○○○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	2.0	1.5	1.5	8.0
N	0.0	0.0	0.0	4.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	-
Climb Spd.:	3.5	Blind Arcs:	60–
Visibility:	12	Internal Fuel:	3600
Size:	−2	AtA Refuel:	Yes
Vulnerability:	+2	Ejection Seat:	Std

Crew: Pilot, Copilot, Navigator, Radar Navigator, and Air Electronics Officer

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	1.5
HT	1.5	2.0	2.5
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 64	1/2 61	DT 59	Dive Speed
EH+	46+	3.5 – 6.5	3.5 – 6.0	4.0 – 6.0	6.5
VH	36–45	3.0 – 6.5	3.0 – 6.0	3.5 – 6.0	6.5
HI	26–35	2.5 – 6.5	2.5 – 6.0	3.0 – 6.0	6.5
MH	17–25	2.0 – 6.0	2.0 – 5.5	3.0 – 5.5	6.5
ML	8–16	1.5 – 6.0	2.0 – 5.5	2.5 – 5.5	7.0
LO	0–7	1.0 – 6.0	1.5 – 5.5	2.0 – 5.5	7.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	0.5	—	0.5	EH+
VH	—	1.0	—	1.0	—	0.5	VH
HI	—	1.0	—	1.0	—	1.0	HI
MH	—	1.0	—	1.0	—	1.0	MH
ML	—	1.5	—	1.0	—	1.0	ML
LO	—	1.5	—	1.5	—	1.5	LO

Radar:	H2S Mk.9A	**ECM:**	IFF
ECCM:	2	RWR:	B
Arcs:	150+	DDS:	A
Search:	Gr. Nav. (60)	DJM:	B2
Track:	Gr. Attack (40)	AJM:	B2
Lock-On:	6	BJM:	B2

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	Ballistic

Technology:

TFR-A

Load Point Limits: CL : <25, 1/2: <44, DT : ≥44

Weight Limit: 42,000

Station	Limit	Allowed Loads
1 and 3	1,000	ARM MDR EP
2	28,000	BB NAM FT

Load Notes:

1. Stations 1 and 3 are the under-wing stations. From 1982, each may carry two Shrike ARM or one ALQ-101D EP.
2. Station 2 is the internal bomb bay. Load options include (a) twenty-one 1000 lb BB in three groups of seven; (b) two auxiliary fuel tanks; (c) seven 1000 lb bombs and one auxiliary fuel tank; (d) one Blue Steel NAM. All bombs must be the same type and low-drag.
3. An auxiliary fuel tank has a weight of 14000, 14 load points, and 700 fuel points.
4. As an exception to the normal rules for load points, internal loads contribute 1 load point for each 1,000 of weight and internal fuel contributes 1 load point for each 50 fuel points. A return mission will typically require leaving the target with at least 1200 fuel points (24 load points).

Notes:

1. The Avro Vulcan B.2 is a strategic conventional and nuclear bomber.
2. High transonic drag (HTD). Low roll rate (LRR).
3. DDS capacity is 60 CH.
4. Tail Radar. Equiped with a Red Steer tail radar with ECCM of 2, arc of 60–, search of 40-8, track of 18-6. and lock-on of 7.
5. Only the pilot and copilot have ejection seats. The other crew members can bail out three game turns after declaring their intent to do so.
6. TFR from 1965.

VPs: 40/27/13/7

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Vulcan B.2(MRR)

Power APs/DPs: ○○○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	2.0	1.5	1.5	8.0
N	0.0	0.0	0.0	4.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	-
Climb Spd.:	3.5	Blind Arcs:	60–
Visibility:	12	Internal Fuel:	3600
Size:	−2	AtA Refuel:	Yes
Vulnerability:	+2	Ejection Seat:	Std

Crew: Pilot, Copilot, Navigator, Radar Navigator, and Air Electronics Officer

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	1.5
HT	1.5	2.0	2.5
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 64	1/2 61	DT 59	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 6.5	3.5 – 6.0	4.0 – 6.0	6.5	—	0.5	—	0.5	—	0.5	EH+
VH	36–45	3.0 – 6.5	3.0 – 6.0	3.5 – 6.0	6.5	—	1.0	—	1.0	—	0.5	VH
HI	26–35	2.5 – 6.5	2.5 – 6.0	3.0 – 6.0	6.5	—	1.0	—	1.0	—	1.0	HI
MH	17–25	2.0 – 6.0	2.0 – 5.5	3.0 – 5.5	6.5	—	1.0	—	1.0	—	1.0	MH
ML	8–16	1.5 – 6.0	2.0 – 5.5	2.5 – 5.5	7.0	—	1.5	—	1.0	—	1.0	ML
LO	0–7	1.0 – 6.0	1.5 – 5.5	2.0 – 5.5	7.0	—	1.5	—	1.5	—	1.5	LO

Radar:	H2S Mk.9A	**ECM:**	IFF
ECCM:	2	RWR:	B
Arcs:	150+	DDS:	A
Search:	Gr. Nav. (60)	DJM:	B2
Track:	Gr. Attack (40)	AJM:	B2
Lock-On:	6	BJM:	B2

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	Ballistic

Technology:

None

Load Point Limits: CL : <25, 1/2: <44, DT : ≥44

Weight Limit: 42,000

Station	Limit	Allowed Loads
1 and 3	1,000	ARM MDR EP
2	28,000	BB NAM FT

Load Notes:

1. Stations 1 and 3 are the under-wing stations. From 1982, each may carry two Shrike ARM or one ALQ-101D EP.
2. Station 2 is the internal bomb bay. Load options include (a) twenty-one 1000 lb BB in three groups of seven; (b) two auxiliary fuel tanks; (c) seven 1000 lb bombs and one auxiliary fuel tank; (d) one Blue Steel NAM. All bombs must be the same type and low-drag.
3. An auxiliary fuel tank has a weight of 14000, 14 load points, and 700 fuel points.
4. As an exception to the normal rules for load points, internal loads contribute 1 load point for each 1,000 of weight and internal fuel contributes 1 load point for each 50 fuel points. A return mission will typically require leaving the target with at least 1200 fuel points (24 load points).

Notes:

1. The Avro Vulcan B.2(MRR) is a maritime radar reconnaissance aircraft.
2. High transonic drag (HTD). Low roll rate (LRR).
3. DDS capacity is 60 CH.
4. Tail Radar. Equiped with a Red Steer tail radar with ECCM of 2, arc of 60–, search of 40-8, track of 18-6. and lock-on of 7.
5. Only the pilot and copilot have ejection seats. The other crew members can bail out three game turns after declaring their intent to do so.

VPs: 40/27/13/7

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Vulcan F.3 (Phoenix)

Power APs/DPs: ○○○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	2.0	1.5	1.5	8.0
N	0.0	0.0	0.0	4.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	-
Climb Spd.:	3.5	Blind Arcs:	60–
Visibility:	12	Internal Fuel:	3600
Size:	−2	AtA Refuel:	Yes
Vulnerability:	+2	Ejection Seat:	Std

Crew: Pilot, Copilot, Navigator, Weapons System Officer, and Air Electronics Officer

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	1.5
HT	1.5	2.0	2.5
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings / Climb Capabilities

Alt. Band	Conf. Ceil.	CL 64	1/2 61	DT 59	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 6.5	3.5 – 6.0	4.0 – 6.0	6.5	—	0.5	—	0.5	—	0.5	EH+
VH	36–45	3.0 – 6.5	3.0 – 6.0	3.5 – 6.0	6.5	—	1.0	—	1.0	—	0.5	VH
HI	26–35	2.5 – 6.5	2.5 – 6.0	3.0 – 6.0	6.5	—	1.0	—	1.0	—	1.0	HI
MH	17–25	2.0 – 6.0	2.0 – 5.5	3.0 – 5.5	6.5	—	1.0	—	1.0	—	1.0	MH
ML	8–16	1.5 – 6.0	2.0 – 5.5	2.5 – 5.5	7.0	—	1.5	—	1.0	—	1.0	ML
LO	0–7	1.0 – 6.0	1.5 – 5.5	2.0 – 5.5	7.0	—	1.5	—	1.5	—	1.5	LO

Radar:	AWG-9	**ECM:**	IFF
ECCM:	3	RWR:	B
Arcs:	150+	DDS:	A
Search:	500–60	DJM:	B2
Track:	360–60	AJM:	B2
Lock-On:	7	BJM:	B2

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	Ballistic

Technology:

Look-Down Radar, Track-While-Scan (18), and Multi-Target (6)

Load Point Limits: CL : <25, 1/2: <44, DT : ≥44

Weight Limit: 42,000

Station	Limit	Allowed Loads
1–3 and 5–7	2,000	AHM
4	28,000	FT

Load Notes:

1. Stations 1 to 3 and 5 to 7 are underwing stations. Each may carry two AIM-54A AHMs.
2. Station 4 is the internal bomb bay. It may carry two auxiliary fuel tanks.
3. An auxiliary fuel tank has a weight of 14000, 14 load points, and 700 fuel points.
4. As an exception to the normal rules for load points, internal loads contribute 1 load point for each 1,000 of weight and internal fuel contributes 1 load point for each 50 fuel points.

Notes:

1. The Avro Vulcan F.3A is a long-range intercepter. This variant is equipped with AIM-54 Phoenix missiles and the AWG-9 radar from the F-14A.
2. High transonic drag (HTD). Low roll rate (LRR).
3. DDS capacity is 60 CH.
4. Only the pilot and copilot have ejection seats. The other crew members can bail out three game turns after declaring their intent to do so.

VPs: 40/27/13/7

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Vulcan F.3 (Sea Dart)

Crew: Pilot, Copilot, Navigator, Weapons System Officer, and Air Electronics Officer

Power APs/DPs: ○○○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	2.0	1.5	1.5	8.0
N	0.0	0.0	0.0	4.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	-
Climb Spd.:	3.5	Blind Arcs:	60–
Visibility:	12	Internal Fuel:	3600
Size:	−2	AtA Refuel:	Yes
Vulnerability:	+2	Ejection Seat:	Std

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	1.5
HT	1.5	2.0	2.5
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 64	1/2 61	DT 59	Dive Speed
EH+	46+	3.5 – 6.5	3.5 – 6.0	4.0 – 6.0	6.5
VH	36–45	3.0 – 6.5	3.0 – 6.0	3.5 – 6.0	6.5
HI	26–35	2.5 – 6.5	2.5 – 6.0	3.0 – 6.0	6.5
MH	17–25	2.0 – 6.0	2.0 – 5.5	3.0 – 5.5	6.5
ML	8–16	1.5 – 6.0	2.0 – 5.5	2.5 – 5.5	7.0
LO	0–7	1.0 – 6.0	1.5 – 5.5	2.0 – 5.5	7.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	0.5	—	0.5	EH+
VH	—	1.0	—	1.0	—	0.5	VH
HI	—	1.0	—	1.0	—	1.0	HI
MH	—	1.0	—	1.0	—	1.0	MH
ML	—	1.5	—	1.0	—	1.0	ML
LO	—	1.5	—	1.5	—	1.5	LO

Radar:	Fox Finder	**ECM:**	IFF
ECCM:	2	RWR:	B
Arcs:	150+	DDS:	A
Search:	300–40	DJM:	B2
Track:	300–30	AJM:	B2
Lock-On:	7	BJM:	B2

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	Ballistic

Technology:

Look-Down Radar and Track-While-Scan (6)

Load Point Limits: CL : <25, 1/2: <44, DT : ≥44

Weight Limit: 42,000

Station	Limit	Allowed Loads
1 and 7	1,000	RHM
2–3 and 5–6	2,000	RHM
4	28,000	FT

Load Notes:

1. Stations 1 to 3 and 5 to 7 are underwing stations. Stations 1 and 7 may each carry one Sea Dart RHM and the others each may carry two Sea Dark RHMs.
2. Station 4 is the internal bomb bay. It may carry two auxiliary fuel tanks.
3. An auxiliary fuel tank has a weight of 14000, 14 load points, and 700 fuel points.
4. As an exception to the normal rules for load points, internal loads contribute 1 load point for each 1,000 of weight and internal fuel contributes 1 load point for each 50 fuel points.

Notes:

1. The Avro Vulcan F.3A is a long-range intercepter. This variant is equipped with air-launched Sea Dart missiles and an early version of the Fox Hunter radar.
2. High transonic drag (HTD). Low roll rate (LRR).
3. DDS capacity is 60 CH.
4. Only the pilot and copilot have ejection seats. The other crew members can bail out three game turns after declaring their intent to do so.

VPs: 40/27/13/7

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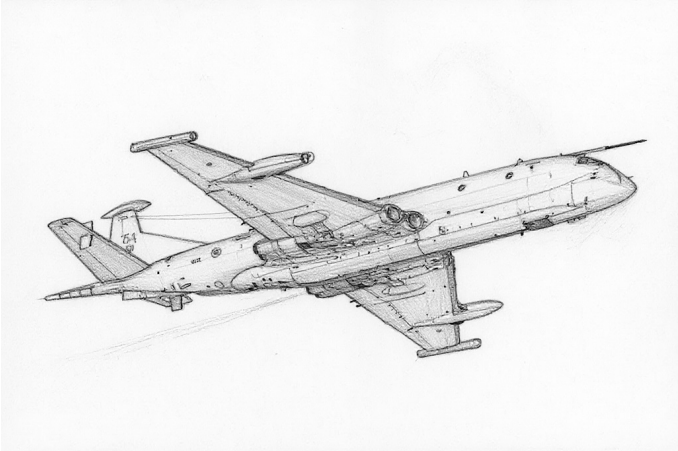
Hawker Siddeley Nimrod



The Hawker Siddeley Nimrod is a maritime patrol and signals intelligence aircraft. It was developed from the Comet jet airliner, and this line thus holds the distinction of being both the first jet airliner and the first jet maritime patrol aircraft.

Versions

Nimrod MR.1

The initial version was the MR.1 maritime patrol aircraft. The airframe of the MR.1 was developed from the Comet 4 jet airliner, with the addition of a large unpressurized pannier under the fuselage for sensors and weapons and the replacement of the original Rolls-Royce Avon turbojets with Rolls-Royce Spey turbofans to give longer endurance. The mission components, and in particular the ASV Mk 21 radar, were largely recycled from the Shackleton MR.3. The MR.1 entered service with the RAF in 1969.

Nimrod R.1

The Nimrod R.1 electronic and signals intelligence (ELINT and SIGINT) aircraft was developed from the MR.1. Signal detection equipment replaced the mission systems of the MR.1 and filled the weapons bays. The R.1 entered service with the RAF in 1974 and served until 2011. It was replaced by Boeing RC-135W Rivet Joint.

Nimrod MR.2 and MR.2P

Many of the MR.1 aircraft were upgraded to the MR.2 standard starting in 1975, gaining the much improved Searchwater radar and Yellow Gate ESM system. The remaining MR.1 aircraft were retired.

During the South Atlantic War, air-to-air refueling probes from Avro Vulcans were installed on several MR.2s to give the MR.2P version and the underwing stations were equipped with AIM-9G/L IRMs.

In 1990, some Nimrods were further equipped with decoy dispensers. In 2022, some gained TV/IR optics The MR.2 was retired in 2010.

Nimrod AEW.3

The Nimrod AEW.3 was a prototype airborne early-warning aircraft for the RAF. Development started in the 1970s and the project was cancelled in 1986s after significant technical problems, delays, and cost increases. The RAF acquired the Boeing E-3D Sentry for this role.

Nimrod MR.4

The Nimrod MR.4 was an advanced maritime patrol aircraft. It was based on existing MR.2 aircraft, but with new engines, wings, and systems. It was cancelled in 2010, when it was on the point of entering service. The RAF eventually acquired the Boeing P-8 Poseidon for this role.

Armament and Stores

The maritime patrol versions have three internal weapons bays for Mk.44, Mk.46, or Stingray torpedoes, Mk.11 conventional depth charges, Mk.57 nuclear depth charges, or auxiliary fuel tanks. During the South Atlantic War, they were also qualified to drop 1,000 lb bombs. During peacetime, one or two bays routinely carried air-droppable SAR equipment.

The two under-wing stations were originally intended to carry AS.12 or Martel missiles, but apparently they were not deployed. During the South Atlantic War, these stations were modified to each carry two AIM-9 Sidewinder missiles.

Combat

The Nimrod MR.2/2P and R.1 saw combat in the South Atlantic War, the Gulf War, the Invasion of Afghanistan, and the Invasion of Iraq. The R.1 further saw combat in the military intervention in Libya Civil War.

ADCs

ADCs are provided for:

- Nimrod MR.1
- Nimrod MR.2
- Nimrod MR.2P

Photo Credit

– Hawker Siddeley Nimrod: Dale Coleman (GFDL 1.2)

Nimrod MR.1

Crew: Pilot, Copilot, Flight Engineer, Navigator, Tactical Navigator, Air Electronics Officer, WSO, WSO, EWSO, EWSO, EWSO, and EWSO

Power APs/DPs: ○○○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	10.0
N	0.0	0.0	0.0	3.0
I	1.0	1.0	2.0	1.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	10	Internal Fuel:	4300
Size:	−2	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	1.5
HT	1.5	2.0	2.0
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings / Climb Capabilities

Alt. Band	Conf. Ceil.	CL 44	1/2 38	DT 32	Dive Speed	Climb CL AB	Climb CL Oth	Climb 1/2 AB	Climb 1/2 Oth	Climb DT AB	Climb DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	3.0 – 5.5	3.5 – 5.0	—	6.0	—	0.25	—	0.25	—	—	VH
HI	26–35	3.0 – 5.5	3.5 – 5.0	3.5 – 5.0	6.5	—	0.25	—	0.25	—	0.25	HI
MH	17–25	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	6.5	—	0.50	—	0.50	—	0.50	MH
ML	8–16	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	6.5	—	0.50	—	0.50	—	0.50	ML
LO	0–7	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.5	—	1.00	—	1.00	—	0.50	LO

Radar:	ASV Mk 21D
ECCM:	1
Arcs:	180+
Search:	Gr. Nav. (100)
Track:	Gr. Attack (50)
Lock-On:	6

ECM:	IFF
RWR:	B
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—

Bomb System: Ballistic

Technology:

TV/IR Optics

Load Point Limits: CL : <31 / 1/2: <51 / DT : ≥51

Weight Limit: 20,000

Station	Limit	Allowed Loads
1 and 5	1,500	IRM RG ASM
2–4	6,500	BB Torpedoes Depth Chargets ASM

Load Notes:

1. Stations 1 and 5 may each carry two AS.12 RGs or two Martel ARM or RG.
2. Stations 2 to 4 are the internal bomb bays. Each bay can carry three Mk.44 or Mk.46 torpedoes, six Mk.11 depth charges, one Mk.57 nuclear depth charge, or one 1500L fuel tank (weight 2500 and 125 fuel points).
3. As an exception to the normal rules for load points, internal loads contribute 1 load point for each 1,000 of weight and internal fuel contributes 1 load point for each 50 fuel points.

Notes:

1. The Hawker Siddeley Nimrod MR.1 is a maritime patrol aircraft.
2. Patrol Power. The Nimrod can shut down the outer two engines, reducing power APs, fuel consumption, and climb capability by one half and the cruise speed to 3.0.

VPs: 40/27/13/7

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Nimrod MR.2

Crew: Pilot, Copilot, Flight Engineer, Navigator, Tactical Navigator, Air Electronics Officer, WSO, WSO, EWSO, EWSO, EWSO, and EWSO

Power APs/DPs: ○○○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	10.0
N	0.0	0.0	0.0	3.0
I	1.0	1.0	2.0	1.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	10	Internal Fuel:	4300
Size:	−2	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	1.5
HT	1.5	2.0	2.0
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 38	DT 32	Dive Speed	Climb Capabilities CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	3.0 – 5.5	3.5 – 5.0	—	6.0	—	0.25	—	0.25	—	—	VH
HI	26–35	3.0 – 5.5	3.5 – 5.0	3.5 – 5.0	6.5	—	0.25	—	0.25	—	0.25	HI
MH	17–25	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	6.5	—	0.50	—	0.50	—	0.50	MH
ML	8–16	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	6.5	—	0.50	—	0.50	—	0.50	ML
LO	0–7	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.5	—	1.00	—	1.00	—	0.50	LO

Radar:	Searchwater	**ECM:**	IFF
ECCM:	3	RWR:	B
Arcs:	90+	DDS:	B
Search:	Gr. Nav. (200)	DJM:	—
Track:	Gr. Attack (100)	AJM:	—
Lock-On:	8	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	Ballistic

Technology:

TV/IR Optics

Load Point Limits: CL : <31, 1/2: <51, DT : ≥51

Weight Limit: 20,000

Station	Limit	Allowed Loads
1 and 5	1,500	IRM RG ASM
2–4	6,500	BB Torpedoes Depth Chargets ASM

Load Notes:

1. Stations 1 and 5 may each carry two AS.12 RGs, two Martel ARM or RG, two AIM-9 IRMs (from 1982), or two AGM-84 ASMs (from 1985).
2. Stations 2 to 4 are the internal bomb bays. Each bay can carry three Mk.46 torpedoes, three Stingray torpedoes (from 1982), six Mk.11 depth charges, one Mk.57 nuclear depth charge, eight 500 lb or four 1000 lb bombs (from 1982), or one 1500L fuel tank (weight 2500 and 125 fuel points).
3. As an exception to the normal rules for load points, internal loads contribute 1 load point for each 1,000 of weight and internal fuel contributes 1 load point for each 50 fuel points.

Notes:

1. The Hawker Siddeley Nimrod MR.2 is a maritime patrol aircraft.
2. Patrol Power. The Nimrod can shut down the outer two engines, reducing power APs, fuel consumption, and climb capability by one half and the cruise speed to 3.0.
3. Yellow Gate RWR D from 1985.
4. DDS and TV/IR Optics from 1991.

VPs: 50/33/17/8

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Nimrod MR.2P

Crew: Pilot, Copilot, Flight Engineer, Navigator, Tactical Navigator, Air Electronics Officer, WSO, WSO, EWSO, EWSO, EWSO, and EWSO

Power APs/DPs: ○○○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	10.0
N	0.0	0.0	0.0	3.0
I	1.0	1.0	2.0	1.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	10	Internal Fuel:	4300
Size:	−2	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	None

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	1.5
HT	1.5	2.0	2.0
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings / Climb Capabilities

Alt. Band	Conf. Ceil.	CL 44	1/2 38	DT 32	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	3.0 – 5.5	3.5 – 5.0	—	6.0	—	0.25	—	0.25	—	—	VH
HI	26–35	3.0 – 5.5	3.5 – 5.0	3.5 – 5.0	6.5	—	0.25	—	0.25	—	0.25	HI
MH	17–25	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	6.5	—	0.50	—	0.50	—	0.50	MH
ML	8–16	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	6.5	—	0.50	—	0.50	—	0.50	ML
LO	0–7	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.5	—	1.00	—	1.00	—	0.50	LO

Radar:	Searchwater
ECCM:	3
Arcs:	90+
Search:	Gr. Nav. (200)
Track:	Gr. Attack (100)
Lock-On:	8

ECM:	IFF
RWR:	B
DDS:	B
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—

Bomb System: Ballistic

Technology:

TV/IR Optics

Load Point Limits: CL : <31 / 1/2: <51 / DT : ≥51

Weight Limit: 20,000

Station	Limit	Allowed Loads
1 and 5	1,500	IRM RG ASM
2–4	6,500	BB Torpedoes Depth Chargets ASM

Load Notes:

1. Stations 1 and 5 may each carry two AS.12 RGs, two Martel ARM or RG, two AIM-9 IRMs (from 1982), or two AGM-84 ASMs (from 1985).
2. Stations 2 to 4 are the internal bomb bays. Each bay can carry three Mk.46 torpedoes, three Stingray torpedoes (from 1982), six Mk.11 depth charges, one Mk.57 nuclear depth charge, eight 500 lb or four 1000 lb bombs (from 1982), or one 1500L fuel tank (weight 2500 and 125 fuel points).
3. As an exception to the normal rules for load points, internal loads contribute 1 load point for each 1,000 of weight and internal fuel contributes 1 load point for each 50 fuel points.

Notes:

1. The Hawker Siddeley Nimrod MR.2P is a maritime patrol aircraft. It differs from the MR.2 version only in the addition of an air-to-air refueling probe.
2. Patrol Power. The Nimrod can shut down the outer two engines, reducing power APs, fuel consumption, and climb capability by one half and the cruise speed to 3.0.
3. Yellow Gate RWR D from 1985.
4. DDS and TV/IR Optics from 1991.

VPs: 55/37/18/9

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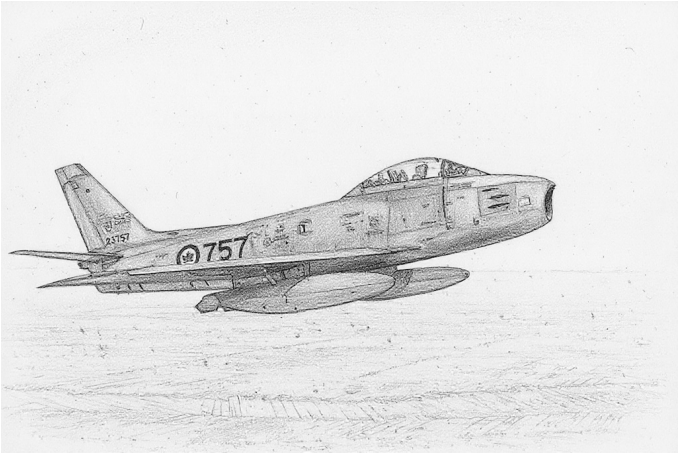
Chapter 3

Canadian Aircraft

Canadair Sabre



The Canadair Sabre was a day fighter derived from the North American F-86 Sabre. The initial versions were only lightly modified, but later versions incorporated the more powerful Orenda engine. All the production versions were fitted with the original F-86 armament of six .50 cal M3 guns.

Versions

Canadair Sabre Mk.1

The single Mk.1 prototype was very similar to the F-86A.

Canadair Sabre Mk.2

The Mk.2 was the first production version and was essentially a license-built F-86E with the original slatted wing.

They were used by the RCAF in Europe and the USAF. Later, they were passed on to the air forces of Greece and Turkey. In USAF service, they saw combat in the Korean War.

Canadair Sabre Mk.3

The Canadair Sabres began to diverge from the North American originals with the single Mk.3 prototype, which used an Avro Canada Orenda 3 engine with significantly more thrust than that of the Mk.2.

Canadair Sabre Mk.4

The Mk.4 was very similar to the Mk.2. Later Mk.4s had the slatted 6-3 wing.

They were used in small numbers by the RCAF and in larger numbers by the RAF, where they were known as the Sabre F.4 and served alongside the Meteor F.8. They were the first swept-wing fighter in British service. Starting in 1954, they began to be refitted with the 6-3 wing. As Hawker Hunters became available in 1956, the RAF Sabres were transferred to the Yugoslav and Italian air forces.

Canadair Sabre Mk.5

The Mk.5 was a development of the Mk.3 prototype with the improved Orenda 10 engine and the unslatted 6-3 wing.

They were initially used by the RCAF, again mainly in Europe, replacing the Mk.2s. A number were later transferred to the Luftwaffe.

Canadair Sabre Mk.6

The Mk.6 was a development of the Mk.5 with the even more powerful Orenda 14 engine. Later Mk.6s had the slatted 6-3 wing. The Mk.6 competes with the CAC Sabre Mk.32 for the honor of being the very best day-fighter Sabre.

They replaced Mk.5s in RCAF service and also were used in large numbers by the Luftwaffe. These were later sold on to the Columbia, South Africa, and Pakistan. In PAF service, the Mk.6 was known, confusingly, as the F-86E and fought in the 1971 war with India.

Armament and Stores

All the production versions were fitted with the original F-86 armament of six .50 cal M3 guns.

A typical air-to-air load was two 200-gallon (750L) FTs on the outer stations and, from 1960 on the Mk.6, two AIM-9B IRMs on the inner stations.

A typical air-to-ground load was two 1000-lb bombs carried on the inner stations along with two 200-gallon (750L) FTs on the outer stations. Alternatively, on the later versions, sixteen HVAR rockets might have been carried without fuel tanks.

For ferry flights, two 120-gallon (400L) FTs could be carried on the inner stations and two 200-gallon (750L) FTs to the outer ones.

Combat

The Mk.2 saw combat with the USAF in the Korean War. The Mk.6 saw combat with the Pakistan Air Force (as the F-86E) in the 1971 war with India.

ADCs

– Canadair Sabre Mk.2

- Canadair Sabre Mk.4
- Canadair Sabre Mk.4 (6-3 Wing)
- Canadair Sabre Mk.5
- Canadair Sabre Mk.6
- Canadair Sabre Mk.6 (Slatted 6-3 Wing)

See Also

- CAC Sabre
- North American F-86 Sabre

Photo Credit

- Canadair Sabre: Canadian Department of National Defence (Public Domain)

Canadair Sabre Mk.2

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	145
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5/0.5	1.0/1.0	1.0/1.0
HT	1.0/1.0	1.0/1.0	1.0/1.0
BT	1.0/1.5	1.5/2.0	1.5/2.0
ET	—	—	—

Automatic leading-edge slats. If speed ≤ 3.5, use higher drag.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 46	1/2 43	DT 40	Dive Speed
EH+	46+	3.0 – 5.5	—	—	6.5
VH	36–45	3.0 – 5.5	3.0 – 5.0	3.0 – 5.0	6.5
HI	26–35	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	7.0
MH	17–25	2.0 – 6.5	2.5 – 5.5	2.5 – 5.0	7.0
ML	8–16	1.5 – 6.5	2.0 – 6.0	2.5 – 5.5	7.5
LO	0–7	1.5 – 6.5	1.5 – 6.0	2.0 – 5.5	7.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	1.0	—	0.5	—	0.5	HI
MH	—	1.0	—	1.0	—	0.5	MH
ML	—	1.0	—	1.0	—	1.0	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	APG-30
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	6

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M3
To Hit:	6/3/0
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/4**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 7
DT : ≥ 7

Weight Limit: 2,800

Station	Limit	Allowed Loads
1 and 2	1,400	FT BB
3–6 and 7–10	280	RK

Load Notes:

1. Either stations 1 and 2 or 3 to 10 may be used.
2. Stations must be loaded symmetrically.
3. May use 120 gal (450L) FTs. May also use 200 gal (760L) FTs, but only for ferry flights and not for combat.
4. May use two HVAR RKs on each of stations 3 to 10.

Notes:

1. The Canadair Sabre Mk.2 is a day fighter. It is a licensed version of the North American F-86E-1 Sabre and uses the early slatted wing.
2. High transonic drag (HTD).

VPs: 8/5/3/1

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Canadair Sabre Mk.4

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	145
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5/0.5	1.0/1.0	1.0/1.0
HT	1.0/1.0	1.0/1.0	1.0/1.0
BT	1.0/1.5	1.5/2.0	1.5/2.0
ET	—	—	—

Automatic leading-edge slats. If speed ≤ 3.5, use higher drag.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 46	1/2 43	DT 40	Dive Speed
EH+	46+	3.0 – 5.5	—	—	6.5
VH	36–45	3.0 – 5.5	3.0 – 5.0	3.0 – 5.0	6.5
HI	26–35	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	7.0
MH	17–25	2.0 – 6.5	2.5 – 5.5	2.5 – 5.0	7.0
ML	8–16	1.5 – 6.5	2.0 – 6.0	2.5 – 5.5	7.5
LO	0–7	1.5 – 6.5	1.5 – 6.0	2.0 – 5.5	7.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	1.0	—	0.5	—	0.5	HI
MH	—	1.0	—	1.0	—	0.5	MH
ML	—	1.0	—	1.0	—	1.0	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	APG-30
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	6

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M3
To Hit:	6/3/0
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/4**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 2,800

Station	Limit	Allowed Loads
1 and 2	1,400	FT BB
3–6 and 7–10	280	RK

Load Notes:

1. Either stations 1 and 2 or 3 to 10 may be used.
2. Stations must be loaded symmetrically.
3. May use 120 gal (450L) FTs. May also use 200 gal (760L) FTs, but only for ferry flights and not for combat.
4. May use two HVAR RKs on each of stations 3 to 10.

Notes:

1. The Canadair Sabre Mk.4 is a day fighter. It is a licensed version of the North American F-86E-10 Sabre and uses the early slatted wing.
2. High transonic drag (HTD).

VPs: 8/5/3/1

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Canadair Sabre Mk.4 (6-3 Wing)

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	145
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.0	1.0
BT	1.5	2.0	2.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 46	1/2 43	DT 40	Dive Speed
EH+	46+	2.5 – 5.5	—	—	6.5
VH	36–45	2.5 – 6.0	2.5 – 5.0	3.0 – 5.0	6.5
HI	26–35	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	7.0
MH	17–25	2.0 – 6.5	2.5 – 5.5	2.5 – 5.0	7.0
ML	8–16	2.0 – 6.5	2.0 – 6.0	2.5 – 5.5	7.5
LO	0–7	2.0 – 6.5	1.5 – 6.0	2.0 – 5.5	7.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	1.0	—	0.5	—	0.5	HI
MH	—	1.0	—	1.0	—	0.5	MH
ML	—	1.0	—	1.0	—	1.0	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	APG-30
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	6

ECM:	
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M3
To Hit:	6/3/0
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/4**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 4,000

Station	Limit	Allowed Loads
1 and 4	1,000	BB FT
2 and 3	1,000	BB FT IRM
5–8 and 9–12	280	RK

Load Notes:

1. Either stations 1 to 4 or stations 5 to 12 can be used.
2. Stations 5 to 12 can each carry two RKs.

Notes:

1. The Canadair Sabre Mk.4 is a day fighter. It is licensed version of the North American F-86E-10 Sabre. This variant is refitted with the unslatted 6-3 wing.

VPs: 9/6/3/2

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Canadair Sabre Mk.5

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	145
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	1.0
HT	1.0	1.0	1.0
BT	1.5	1.5	2.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 51	1/2 48	DT 45	Dive Speed
EH+	46+	2.5 – 5.5	3.0 – 5.0	3.0 – 5.0	6.5
VH	36–45	2.5 – 6.0	2.5 – 5.5	3.0 – 5.0	6.5
HI	26–35	2.0 – 6.5	2.5 – 6.0	2.5 – 5.5	7.0
MH	17–25	2.0 – 6.5	2.5 – 6.5	2.5 – 6.0	7.0
ML	8–16	2.0 – 6.5	2.0 – 6.0	2.5 – 5.5	7.5
LO	0–7	2.0 – 7.0	1.5 – 6.0	2.0 – 5.5	7.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	1.0	—	0.5	—	0.5	EH+
VH	—	1.0	—	1.0	—	0.5	VH
HI	—	1.0	—	1.0	—	1.0	HI
MH	—	1.0	—	1.0	—	1.0	MH
ML	—	1.5	—	1.5	—	1.0	ML
LO	—	2.0	—	2.0	—	1.5	LO

Radar:	APG-30
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	7

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M3
To Hit:	6/3/0
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/4**

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3 / 1/2: < 7 / DT : ≥ 7

Weight Limit: 4,800

Station	Limit	Allowed Loads
1 and 4	1,400	FT
2 and 3	1,000	FT BB IRM
5–6 and 11–12	280	RK
7–8 and 9–10	280	RK

Load Notes:

1. Either stations 1 to 4 or stations 5 to 12 can be used.
2. Stations 5 to 12 can each carry two RKs.

Notes:

1. The Canadair Sabre Mk.5 is a day fighter. It is a development of the Mk.4 with a more powerful Orenda 10 engine replacing the General Electric J47 and the unslatted 6-3 wing.

VPs: 10/7/3/2

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Canadair Sabre Mk.6

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	145
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	1.0
HT	1.0	1.0	1.0
BT	1.5	1.5	2.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 54	1/2 51	DT 48	Dive Speed
EH+	46+	2.5 – 5.5	3.0 – 5.0	3.0 – 5.0	6.5
VH	36–45	2.5 – 6.0	2.5 – 5.5	3.0 – 5.0	6.5
HI	26–35	2.0 – 6.5	2.5 – 6.0	2.5 – 5.5	7.0
MH	17–25	2.0 – 6.5	2.5 – 6.5	2.5 – 6.0	7.0
ML	8–16	2.0 – 6.5	2.0 – 6.0	2.5 – 5.5	7.5
LO	0–7	2.0 – 7.0	1.5 – 6.0	2.0 – 5.5	7.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	1.0	—	0.5	—	0.5	EH+
VH	—	1.0	—	1.0	—	0.5	VH
HI	—	1.5	—	1.0	—	1.0	HI
MH	—	1.5	—	1.5	—	1.0	MH
ML	—	1.5	—	1.5	—	1.0	ML
LO	—	2.0	—	2.0	—	1.5	LO

Radar:	APG-30
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	7

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M3
To Hit:	6/3/0
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/4**

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3 / 1/2: < 7 / DT : ≥ 7

Weight Limit: 4,800

Station	Limit	Allowed Loads
1 and 4	1,400	FT
2 and 3	1,000	FT BB IRM
5–6 and 11–12	280	RK
7–8 and 9–10	280	RK

Load Notes:

1. Either stations 1 to 4 or stations 5 to 12 can be used.
2. Stations 5 to 12 can each carry two RKs.
3. From 1960, may use AIM-9B IRMs.

Notes:

1. The Canadair Sabre Mk.6 is a day fighter. It is a development of the Mk.5 with a more powerful Orenda 14 engine and the unslatted 6-3 wing.

VPs: 11/7/4/2

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Canadair Sabre Mk.6 (Slatted 6-3 Wing)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	145
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5/0.5	0.5/0.5	1.0/1.0
HT	1.0/1.0	1.0/1.0	1.0/1.0
BT	1.0/1.5	1.0/1.5	1.5/2.0
ET	—	—	—

Automatic leading-edge slats. If speed ≤ 3.5, use higher drag.

Speeds and Ceilings						Climb Capabilities						
Alt. Band	Conf. Ceil.	CL 54	1/2 51	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	2.5 – 5.5	3.0 – 5.0	3.0 – 5.0	6.5	—	1.0	—	0.5	—	0.5	EH+
VH	36–45	2.5 – 6.0	2.5 – 5.5	2.5 – 5.0	6.5	—	1.0	—	1.0	—	0.5	VH
HI	26–35	2.0 – 6.5	2.0 – 6.0	2.5 – 5.5	7.0	—	1.5	—	1.0	—	1.0	HI
MH	17–25	2.0 – 6.5	2.0 – 6.5	2.0 – 6.0	7.0	—	1.5	—	1.5	—	1.0	MH
ML	8–16	1.5 – 6.5	2.0 – 6.0	2.0 – 5.5	7.5	—	1.5	—	1.5	—	1.0	ML
LO	0–7	1.5 – 7.0	1.5 – 6.0	1.5 – 5.5	7.5	—	2.0	—	2.0	—	1.5	LO

Radar:	APG-30	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M3
To Hit:	6/3/0
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/4**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 4,800

Station	Limit	Allowed Loads
1 and 4	1,400	FT
2 and 3	1,000	FT BB IRM
5–6 and 11–12	280	RK
7–8 and 9–10	280	RK

Load Notes:

1. Either stations 1 to 4 or stations 5 to 12 can be used.
2. Stations 5 to 12 can each carry two RKs.
3. From 1960, may use AIM-9B IRMs.

Notes:

1. The Canadair Sabre Mk.6 is a day fighter. It is a development of the Mk.5 with a more powerful Orenda 14 engine. This variant has the slatted 6-3 wing in place of the unslatted 6-3 wing of the original Mk.6.

VPs: 11/7/4/2

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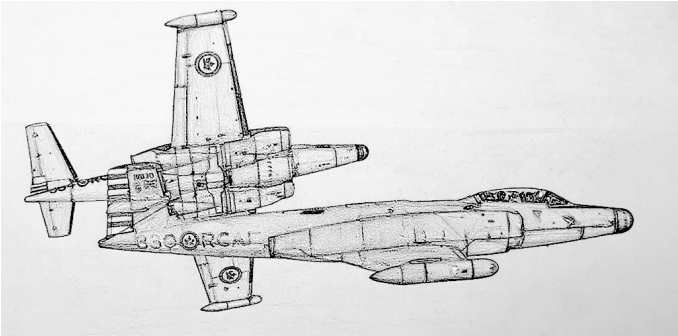
Avro Canada CF-100 Canuck



The Avro Canada CF-100 was a twin-engined, straight-wing, all-weather interceptor designed specifically for the RCAF to intercept Soviet bombers at long range over Canada. It was similar in many respects to the F-89 Scorpion and F-94 Starfire, but was larger than both.

Versions

Mk 3

The Mk 3 was the first production version. It was equipped with the APG-33 radar and Hughes E-1 fire-control system (which were also used on the F-94A/B) and armed with eight .50 cal M3 machine guns in a ventral pack.

It served in the RCAF from 1953 but was relegated to training duties shortly after the introduction of the Mk 4A.

Mk 4A

The Mk 4A was a development of the Mk 3, and had more powerful Orenda 9 engines. The radar and fire-control system were upgraded to the APG-40 and Hughes MG-2 (which were also used on the F-89D). The main armament was wing-tip pods each with 29 FFAR rockets, although it retained the ventral gun pack.

It served in the RCAF in Canada from 1953 and in Europe from 1956, and was retired as a fighter in 1962.

Mk 4B

The Mk 4B was similar to the Mk 4A, but used more powerful Orenda 11 engines.

It served in the RCAF in Canada from sometime after 1953 and in Europe from 1956, and was retired as a fighter in 1962.

Mk 5

The Mk 5 was a further development of the Mk 4B, with extended wings and horizontal stabilizers for better performance at high altitude. The gun pack, considered ineffective for attacking bombers, was omitted to save weight.

It served in the RCAF from 1955 to 1962, and began to be replaced by the CF-101 from 1961. The Belgian Air Force also flew Mk 5s from 1957 to 1964.

Armament and Stores

The internal armament depended on the version and was a mixture of .50 cal machine guns and FFAR air-to-air rockets.

The wing-tip rocket pods could be swapped for 1200L fuel tanks for ferry flights.

Combat

The CF-100 was not used in combat.

ADCs

- CF-100 Mk 4B
- CF-100 Mk 5

Photo Credit

- Avro Canada CF-100 Canuck: Canadian Department of National Defence (Public Domain)

CF-100 Mk 4B Canuck

Crew: Pilot and Radar Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	525
Size:	+0	AtA Refuel:	No
Vulnerability:	−1	Ejection Seat:	Early

Maneuver DPs:

LR/DR	2.0
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	1.5	1.5	1.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 42	1/2 41	DT 40	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	3.0 – 5.5	3.0 – 5.5	3.0 – 5.0	6.5	—	0.5	—	0.5	—	0.5	VH
HI	26–35	2.5 – 5.5	2.5 – 5.5	3.0 – 5.0	6.5	—	1.0	—	1.0	—	0.5	HI
MH	17–25	2.0 – 6.0	2.0 – 6.0	2.5 – 5.5	7.0	—	1.0	—	1.0	—	1.0	MH
ML	8–16	2.0 – 6.0	2.0 – 6.0	2.0 – 5.5	7.0	—	1.0	—	1.0	—	1.0	ML
LO	0–7	1.5 – 6.5	2.0 – 6.0	2.0 – 6.0	7.0	—	1.5	—	1.0	—	1.0	LO

Radar:	APG-40	**ECM:**	IFF
ECCM:	1	RWR:	—
Arcs:	180+	DDS:	—
Search:	80–10	DJM:	—
Track:	40–8	AJM:	—
Lock-On:	8	BJM:	—

Weapon Stations Diagram:

Guns:	Eight .50 cal M3
To Hit:	6/4/1
Ammunition:	5.5
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6**
Bomb System:	Manual

Technology:

CC Rocket Attack

Load Point Limits: CL : < 5 / 1/2: < 7 / DT : ≥ 7

Weight Limit: 4,400

Station	Limit	Allowed Loads
1 and 3	2,200	FT RP
2	0	GP RP

Load Notes:

1. Stations 1 and 3 are the wing-tip pods. They may carry RPs (each weight 500, load 3.0, and with 3.0 factors of air-to-air rockets) or 1200L FTs for ferry missions. The RPs and FTs may be jettisoned.
2. Station 2 is the internal weapons bay. These guns may be equipped either with a gun pack with eight .50 cal machine guns or a rocket pack. If the rocket pack is used, remove the guns and add 4 factors of air-to-air rockets. The rocket pack was tested but did not enter service.

Notes:

1. The Avro Canada CF-100 Mk 4B Canuck is an all-weather interceptor. The Mk 4B version is powered by two Orenda 11 engines and equipped with eight .50 cal M3 machine guns, two pods of FFARs, and a Hughes MG-2 fire-control system.
2. High transonic drag (HTD).
3. The configuration is considered to be CL with the wing-tip FTs or RPs if the internal fuel is 260 fuel points or less.

VPs: 12/8/4/2

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CF-100 Mk 5 Canuck

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.5	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	8	Internal Fuel:	525
Size:	+0	AtA Refuel:	No
Vulnerability:	−1	Ejection Seat:	Early

Crew: Pilot and Radar Officer

Maneuver DPs:

LR/DR	2.0
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 45	1/2 43	DT 40	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.5	3.0 – 5.5	3.0 – 5.0	6.0
HI	26–35	2.5 – 5.5	2.5 – 5.5	3.0 – 5.0	6.5
MH	17–25	2.0 – 6.0	2.0 – 6.0	2.5 – 5.5	6.5
ML	8–16	2.0 – 6.0	2.0 – 6.0	2.0 – 5.5	7.0
LO	0–7	1.5 – 6.0	2.0 – 5.5	2.0 – 5.5	7.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	1.0	—	1.0	—	0.5	HI
MH	—	1.0	—	1.0	—	1.0	MH
ML	—	1.5	—	1.0	—	1.0	ML
LO	—	1.5	—	1.5	—	1.0	LO

Radar:	APG-40
ECCM:	1
Arcs:	180+
Search:	80–10
Track:	40–8
Lock-On:	8

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	—
Bomb System:	Manual

Technology:

CC Rocket Attack

Load Point Limits: CL : < 5, 1/2: < 7, DT : ≥ 7

Weight Limit: 4,400

Station	Limit	Allowed Loads
1 and 2	2,200	FT RP

Load Notes:

1. Stations 1 and 2 are the wing-tip pods. They may carry RPs (each weight 500, load 3.0, and with 3.0 factors of air-to-air rockets) or 1200L FTs for ferry missions. The RPs and FTs may be jettisoned.

Notes:

1. The Avro Canada CF-100 Mk 5 Canuck is an all-weather interceptor. The Mk 5 version is a development of the Mk 4B with longer wings but without the .50 cal machine guns.
2. High transonic drag (HTD).
3. The configuration is considered to be CL with the wing-tip FTs or RPs if the internal fuel is 260 fuel points or less.

VPs: 13/9/4/2

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Chapter 4

Chinese Aircraft

Shenyang JJ-2 and FT-2

The Shenyang JJ-2 was a trainer, a licensed copy of the MiG-15UTI.

Many Soviet-built MiG-15bis fighters served in the PLAAF under the designation J-2, but unlike the JJ-2 the J-2 was not manufactured in China.

Versions

JJ-2 and FT-2

The Shenyang JJ-2 was a licensed copy of the MiG-15UTI trainer. The MiG-15UTI in turn was essentially a MiG-15 with a second cockpit and reduced armament. The FT-2 was the export version of the JJ-2. The NATO reporting name is Midget.

It was used extensively by the PLAAF and PLAN.

Armament and Stores

It is conceivable that the JJ-2 used the same stores as the MiG-15, especially 250L FTs.

Combat

The PLAN used the JJ-2 to attempt to intercept ROCAF overflights around 1960.

ADCs

- Shenyang JJ-2
- Shenyang FT-2

See Also

- Mikoyan-Gurevich MiG-15

Photo Credit

- MiG-15UTI: wallycacsabre (CC-BY-2.0)

Shenyang JJ-2

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.0	1.0
BT	1.5	2.0	2.0
ET	—	—	—

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	100
Size:	+1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 51	1/2 48	DT 44	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 5.5	3.0 – 5.0	—	6.0	—	0.5	—	0.5	—	—	EH+
VH	36–45	2.5 – 6.0	2.5 – 5.0	2.5 – 5.0	6.0	—	1.0	—	0.5	—	0.5	VH
HI	26–35	2.0 – 6.0	2.0 – 5.5	2.5 – 5.0	6.5	—	1.0	—	1.0	—	0.5	HI
MH	17–25	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	6.5	—	1.5	—	1.0	—	1.0	MH
ML	8–16	1.5 – 6.5	1.5 – 6.0	1.5 – 5.5	7.0	—	1.5	—	1.0	—	1.0	ML
LO	0–7	1.0 – 6.5	1.5 – 6.0	1.5 – 5.5	7.0	—	1.5	—	1.5	—	1.0	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: One 12.7 mm A-12.7

To Hit:	3/1/–
Ammunition:	3.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	1/1**

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 2; 1/2: < 5; DT : ≥ 5

Weight Limit: 1,600

Station	Limit	Allowed Loads
1 and 2	550	BB RK RP FT

Load Notes:

1. May use 250L, 300L, 400L, or 600L FTs. The larger tanks can be carried as an exception to the normal rules for load limits, but the turn rate is limited to HT if 300L or 400L tanks are used and to TT if 600L tanks are used.

Notes:

1. The Shenyang JJ-2 is a two-seat training aircraft. It is licensed version of the MiG-15UTI. The NATO reporting name for the aircraft is Midget.
2. High transonic drag (HTD). Low roll rate (LRR) if speed ≥ 5.0.
3. Hit rolls at high transonic speed or greater have a +1 modifier to the hit roll due to instability generated by the conventional horizontal stabilizers and elevators.

VPs: 7/5/2/1

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Shenyang FT-2

Crew: Pilot and Observer

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	100
Size:	+1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.0	1.0
BT	1.5	2.0	2.0
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 51	1/2 48	DT 44	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 5.5	3.0 – 5.0	—	6.0	—	0.5	—	0.5	—	—	EH+
VH	36–45	2.5 – 6.0	2.5 – 5.0	2.5 – 5.0	6.0	—	1.0	—	0.5	—	0.5	VH
HI	26–35	2.0 – 6.0	2.0 – 5.5	2.5 – 5.0	6.5	—	1.0	—	1.0	—	0.5	HI
MH	17–25	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	6.5	—	1.5	—	1.0	—	1.0	MH
ML	8–16	1.5 – 6.5	1.5 – 6.0	1.5 – 5.5	7.0	—	1.5	—	1.0	—	1.0	ML
LO	0–7	1.0 – 6.5	1.5 – 6.0	1.5 – 5.5	7.0	—	1.5	—	1.5	—	1.0	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: One 12.7 mm A-12.7

To Hit:	3/1/–
Ammunition:	3.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	1/1**

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 2; 1/2: < 5; DT : ≥ 5

Weight Limit: 1,600

Station	Limit	Allowed Loads
1 and 2	550	BB RK RP FT

Load Notes:

1. May use 250L, 300L, 400L, or 600L FTs. The larger tanks can be carried as an exception to the normal rules for load limits, but the turn rate is limited to HT if 300L or 400L tanks are used and to TT if 600L tanks are used.

Notes:

1. The Shenyang FT-2 is a two-seat training aircraft. It is the export version of the Shenyang JJ-2 and is a licensed version of the MiG-15UTI. The NATO reporting name for the aircraft is Midget.
2. High transonic drag (HTD). Low roll rate (LRR) if speed ≥ 5.0.
3. Hit rolls at high transonic speed or greater have a +1 modifier to the hit roll due to instability generated by the conventional horizontal stabilizers and elevators.

VPs: 7/5/2/1

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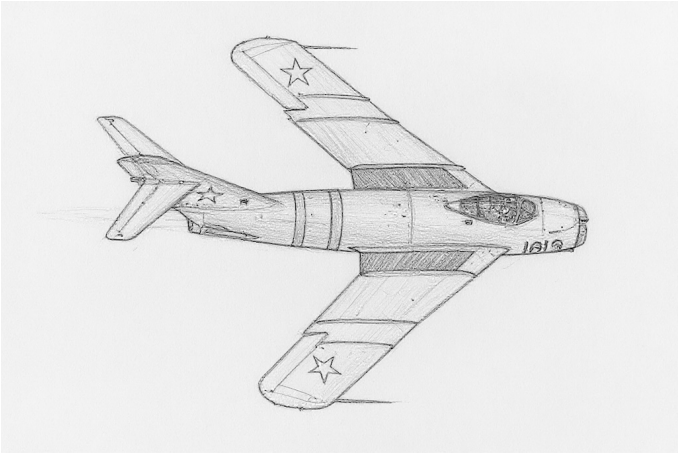
Shenyang J-5 and F-5



The Shenyang J-5 was a day fighter, interceptor, and trainer. The initial versions were licensed copies of the MiG-17F and PF, but the JJ-5 trainer was a subsequent independent development.

A number of Soviet-built MiG-17s served in the PLAAF as the J.4, but this version was not manufactured in China.

Versions

J-5 and F-5

The J-5 (also known as the Type 56 and the Dongfeng-101) was a licensed copy of the MiG-17F day fighter. It was produced from about 1956 until about 1969. The F-5 was the export version of the J-5. The NATO reporting name for both is Fresco-C.

The J-5 served with the PLAAF and PLAN, alongside the original MiG-17PF, from 1956 until about 1990. It was also exported to the air forces of Albania, Bangladesh, Cambodia, Indonesia, North Korea, Pakistan, Sri Lanka, Sudan, Vietnam, and Zambia.

J-5A

The J-5 was a licensed copy of the MiG-17PF interceptor. It was produced from about 1964 until about 1969. The J-5A was apparently not exported. The NATO reporting name for both is Fresco-D.

The J-5A served with the PLAAF, alongside the original MiG-17PF, from 1964 until about 1990.

JJ-5 and FT-5

The JJ-5 was a trainer developed by Shenyang and based on the J-5. It has a similar cockpit configuration to the MiG-15UTI, the non-afterburning Klimov VK-1A engine from the early MiG-17, and retained only the belly 23 mm cannon. The FT-5 was the export version of the JJ-5.

The J-5 served with the PLAAF and PLAN from 1968. It was also exported to the air forces of Albania, Bangladesh, North Korea, Pakistan, Sudan, Tanzania, Zambia, and Zimbabwe.

Armament and Stores

Typical load for an air-to-air missile would be fuel tanks for endurance or, from 1961, two AA-2 IRMs. A typical load for air-to-ground missions was two 250 kg bombs.

Combat

Chinese J-5s and J-5As saw combat against ROCAF aircraft in the late 1950s and early 1960s. Vietnamese F-5s (alongside original MiG-17Fs) were used by the VNAF during and after the Vietnam War.

ADCs

- Shenyang J-5
- Shenyang F-5
- Shenyang J-5A
- Shenyang JJ-5
- Shenyang FT-5

See Also

- Mikoyan-Gurevich MiG-17

Photo Credit

- MiG-17: Balon Greyjoy (Public Domain)

Shenyang J-5

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.0	2.0	3.0
M	1.5	1.5	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	180L
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	130
Size:	+1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	1.0
HT	1.0	1.0	1.0
BT	1.5	1.5	2.0
ET	2.0	2.0	—

No lag or displacement rolls if speed ≥ 5.0.

Speeds and Ceilings						Climb Capabilities						
Alt. Band	Conf. Ceil.	CL 54	1/2 50	DT 46	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 6.0	3.0 – 5.5	3.5 – 5.0	6.5	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	6.5	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	2.0 – 6.0	2.5 – 6.0	2.5 – 5.5	7.0	1.5	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	1.5 – 6.5	2.0 – 6.0	2.0 – 5.5	7.0	1.5	1.0	1.5	0.5	1.0	0.5	MH
ML	8–16	1.0 – 7.0	1.5 – 6.5	1.5 – 5.5	7.5	2.0	1.0	1.5	1.0	1.5	0.5	ML
LO	0–7	1.0 – 6.5	1.5 – 6.0	1.5 – 5.5	7.5	2.0	1.0	2.0	1.0	1.5	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Two 23 mm NR-23 One 37 mm N-37
To Hit:	4/2/1
Ammunition:	3.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	5/4
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 2,500

Station	Limit	Allowed Loads
1 and 2	700	BB RK RP FT IRM

Load Notes:

1. May use 250L, 300L, 400L, or 600L FTs. As an exception to the normal rules for load limits, 600L tanks can be carried, but the turn rate is limited to BT.
2. From 1961, may use AA-2 IRMs.

Notes:

1. The Shenyang J-5 is a day fighter. It is licensed version of the MiG-17F. The NATO reporting name for the aircraft is Fresco-C.
2. High transonic drag (HTD). Low roll rate (LRR) if speed ≥ 4.0.

VPs: 11/7/4/2

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Shenyang F-5

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.0	2.0	3.0
M	1.5	1.5	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	180L
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	130
Size:	+1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	1.0
HT	1.0	1.0	1.0
BT	1.5	1.5	2.0
ET	2.0	2.0	—

No lag or displacement rolls if speed ≥ 5.0.

Speeds and Ceilings						Climb Capabilities						
Alt. Band	Conf. Ceil.	CL 54	1/2 50	DT 46	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 6.0	3.0 – 5.5	3.5 – 5.0	6.5	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	6.5	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	2.0 – 6.0	2.5 – 6.0	2.5 – 5.5	7.0	1.5	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	1.5 – 6.5	2.0 – 6.0	2.0 – 5.5	7.0	1.5	1.0	1.5	0.5	1.0	0.5	MH
ML	8–16	1.0 – 7.0	1.5 – 6.5	1.5 – 5.5	7.5	2.0	1.0	1.5	1.0	1.5	0.5	ML
LO	0–7	1.0 – 6.5	1.5 – 6.0	1.5 – 5.5	7.5	2.0	1.0	2.0	1.0	1.5	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Two 23 mm NR-23 One 37 mm N-37
To Hit:	4/2/1
Ammunition:	3.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	5/4
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 2,500

Station	Limit	Allowed Loads
1 and 2	700	BB RK RP FT IRM

Load Notes:

1. May use 250L, 300L, 400L, or 600L FTs. As an exception to the normal rules for load limits, 600L tanks can be carried, but the turn rate is limited to BT.
2. From 1961, may use AA-2 IRMs.

Notes:

1. The Shenyang F-5 is a day fighter. It is the export version of the Shenyang J-5 and is a licensed version of the MiG-17F. The NATO reporting name for the aircraft is Fresco-C.
2. High transonic drag (HTD). Low roll rate (LRR) if speed ≥ 4.0.

VPs: 11/7/4/2

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Shenyang J-5A

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.0	2.0	3.0
M	1.5	1.5	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	180L
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	130
Size:	+1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	1.0
HT	1.0	1.0	1.0
BT	1.5	1.5	2.0
ET	2.0	2.0	—

No lag or displacement rolls if speed ≥ 5.0.

Speeds and Ceilings						Climb Capabilities						
Alt. Band	Conf. Ceil.	CL 54	1/2 50	DT 46	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 6.0	3.0 – 5.5	3.5 – 5.0	6.5	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	6.5	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	2.0 – 6.0	2.5 – 6.0	2.5 – 5.5	7.0	1.5	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	1.5 – 6.5	2.0 – 6.0	2.0 – 5.5	7.0	1.5	1.0	1.5	0.5	1.0	0.5	MH
ML	8–16	1.0 – 7.0	1.5 – 6.5	1.5 – 5.5	7.5	2.0	1.0	1.5	1.0	1.5	0.5	ML
LO	0–7	1.0 – 6.5	1.5 – 6.0	1.5 – 5.5	7.5	2.0	1.0	2.0	1.0	1.5	1.0	LO

Radar:	RP-1 Izumrud	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	Limited	DDS:	—
Search:	18–6	DJM:	—
Track:	6–6	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Three 23 mm NR-23
To Hit:	5/3/2
Ammunition:	3.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	RE
AtA/AtG:	5/5
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 2,500

Station	Limit	Allowed Loads
1 and 2	700	BB RK RP FT IRM

Load Notes:

1. May use 250L, 300L, 400L, or 600L FTs. As an exception to the normal rules for load limits, 600L tanks can be carried, but the turn rate is limited to BT.
2. From 1961, may use AA-2 IRMs.

Notes:

1. The Shenyang J-5A is an interceptor. It is a licensed version of the MiG-17PF. The NATO reporting name for the aircraft is Fresco-D and for the radar is Scan Odd.
2. High transonic drag (HTD). Low roll rate (LRR) if speed ≥ 4.0.

VPs: 12/8/4/2

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Shenyang JJ-5

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.5	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	180L
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	130
Size:	+1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	1.0
HT	1.0	1.0	1.0
BT	1.5	1.5	2.0
ET	2.0	2.0	—

No lag or displacement rolls if speed ≥ 5.0.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 54	1/2 50	DT 46	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 6.0	3.0 – 5.5	3.5 – 5.0	6.5	—	0.5	—	0.5	—	0.5	EH+
VH	36–45	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	6.5	—	0.5	—	0.5	—	0.5	VH
HI	26–35	2.0 – 6.0	2.5 – 6.0	2.5 – 5.5	7.0	—	0.5	—	0.5	—	0.5	HI
MH	17–25	1.5 – 6.5	2.0 – 6.0	2.0 – 5.5	7.0	—	1.0	—	0.5	—	0.5	MH
ML	8–16	1.0 – 7.0	1.5 – 6.5	1.5 – 5.5	7.5	—	1.0	—	1.0	—	0.5	ML
LO	0–7	1.0 – 6.5	1.5 – 6.0	1.5 – 5.5	7.5	—	1.0	—	1.0	—	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	One 23 mm NR-23
To Hit:	4/2/1
Ammunition:	3.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	3/2
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 5, DT : ≥ 5

Weight Limit: 2,500

Station	Limit	Allowed Loads
1 and 2	700	BB RK RP FT IRM

Load Notes:

1. May use 250L, 300L, 400L, or 600L FTs. As an exception to the normal rules for load limits, 600L tanks can be carried, but the turn rate is limited to BT.
2. From 1961, may use AA-2 IRMs.

Notes:

1. The Shenyang JJ-5 is a trainer. It is a development of the J-5, with a similar cockpit configure to the MiG-15UTI, the non-afterburning Klimov VK-1A engine from the early MiG-17, and retained only the belly 23 mm cannon.
2. High transonic drag (HTD). Low roll rate (LRR) if speed ≥ 4.0.

VPs: 11/7/4/2

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Shenyang FT-5

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.5	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	180L
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	130
Size:	+1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	1.0
HT	1.0	1.0	1.0
BT	1.5	1.5	2.0
ET	2.0	2.0	—

No lag or displacement rolls if speed ≥ 5.0.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 54	1/2 50	DT 46	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 6.0	3.0 – 5.5	3.5 – 5.0	6.5	—	0.5	—	0.5	—	0.5	EH+
VH	36–45	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	6.5	—	0.5	—	0.5	—	0.5	VH
HI	26–35	2.0 – 6.0	2.5 – 6.0	2.5 – 5.5	7.0	—	0.5	—	0.5	—	0.5	HI
MH	17–25	1.5 – 6.5	2.0 – 6.0	2.0 – 5.5	7.0	—	1.0	—	0.5	—	0.5	MH
ML	8–16	1.0 – 7.0	1.5 – 6.5	1.5 – 5.5	7.5	—	1.0	—	1.0	—	0.5	ML
LO	0–7	1.0 – 6.5	1.5 – 6.0	1.5 – 5.5	7.5	—	1.0	—	1.0	—	1.0	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	One 23 mm NR-23
To Hit:	4/2/1
Ammunition:	3.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	3/2
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 5, DT : ≥ 5

Weight Limit: 2,500

Station	Limit	Allowed Loads
1 and 2	700	BB RK RP FT IRM

Load Notes:

1. May use 250L, 300L, 400L, or 600L FTs. As an exception to the normal rules for load limits, 600L tanks can be carried, but the turn rate is limited to BT.
2. From 1961, may use AA-2 IRMs.

Notes:

1. The Shenyang FT-5 is a trainer. It is a development of the J-5, with a similar cockpit configure to the MiG-15UTI, the non-afterburning Klimov VK-1A engine from the early MiG-17, and retained only the belly 23 mm cannon. It is the export version of the JJ-5.
2. High transonic drag (HTD). Low roll rate (LRR) if speed ≥ 4.0.

VPs: 11/7/4/2

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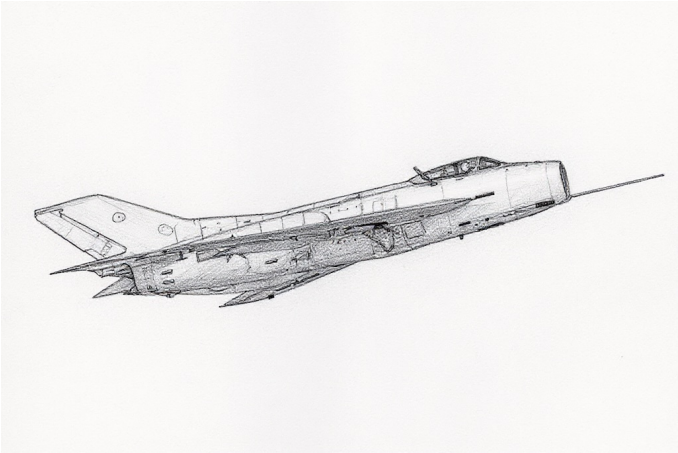
Shenyang J-6 and F-6



The Shenyang J-6 was a day fighter, interceptor, and trainer. It was derived from the MiG-19.

Versions

J-6 and F-6

The J-6 was a day fighter similar to the MiG-19S. It was manufactured starting in 1961 and continued at least into the 1980s. The F-6 was the export version.

The J-6 was a mainstay of the PLAAF and PLAN until replaced by more modern types in the late 1990s. The F-6 was exported to Albania, Bangladesh, Cambodia, Egypt, Iran, Iraq, Myanmar, North Korea, Pakistan, Sudan, Somalia, Tanzania, Vietnam, and Zambia.

The F-6 was used by the Pakistan Air Force from 1965 to 2002, and was modified with a more modern ejector seat, two additional weapon stations wired to carry AIM-9 IRMs, and the ability to carry a special ventral fuel tank.

J-6A

The J-6A was an interceptor similar to the MiG-19P. It was manufactured starting in 1958. From 1975, it could be equipped with PL-2 IRMs.

The J-6A served with the PLAAF.

J-6B

The J-6B was a missile-armed interceptor similar to the MiG-19PM and equipped with PL-1 BRMs.

The J-6B served with the PLAAF.

J-6C and F-6C

The J-6C was a later version of the J-6, with the brake parachute moved to a fairing at the base of the rudder and other minor changes. The F-6C was the export version.

The J-6C served with the PLAAF. The F-6C was exported to Somalia, Sudan, and Tanzania.

JJ-6 and FT-6

The Shenyang JJ-6 was a trainer. It was a modified version of the Shenyang J-6, with a second cockpit and only one cannon. The FT-6 was the export version.

The JJ-6 was used by the PLAAF. The FT-6 was used by Albania, Egypt, Pakistan, Somalia, Sudan, Tanzania, and Zambia.

Armament and Stores

The two internal 30 mm cannons were the primary air-to-air weapons in the early years. In later years, these were supplemented by PL-2 IRMs in the J-6A and PL-1 BRMs in the J-6B. F-6s in the Pakistan Air Force also carried AIM-9 IRMs.

For air-to-ground missions, typical loads would be 500 lb or 250 kg bombs and ORO-57 rocket pods.

Given the short endurance on internal fuel, 760L fuel tanks were carried on almost all missions.

Combat

Chinese PLAAF J-6s shot down a USAF F-104C that had strayed over Hainan Island in 1965. PLAAF J-6s engaged ROCAF F-104Gs during the 1967 Taiwan Strait Conflict

The F-6 saw combat with the Pakistan Air Force in the 1971 Indo-Pakistan War, with the VPAF from 1969 until the fall of South Vietnam in 1975, with the Tanzanian Air Force in the 1978-1979 Uganda-Tanzania War, with both sides in the Iran-Iraq War, with the Somali Air Force in border skirmishes with Ethiopia in 1981 and later during the Somali Rebellion, and with the Sudanese Air Force in the Second Sudanese Civil War in the 1980s and early 1990s.

ADCs

- Shenyang J-6
- Shenyang F-6
- Shenyang F-6 (PAF)
- Shenyang J-6A
- Shenyang J-6B
- Shenyang J-6C
- Shenyang F-6C
- Shenyang JJ-6

- Shenyang FT-6

See Also

- Mikoyan-Gurevich MiG-19

Photo Credit

- J-6: Alert5 (CC BY-SA 4.0)

Shenyang J-6

Crew: Pilot

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.5	3.0	2.5	5.0
M	2.5	2.0	2.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	180
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.0	2.0
ET	2.0	2.5	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 58	1/2 53	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 8.0	4.0 – 7.5	4.5 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 8.5	3.5 – 8.0	4.0 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 9.0	3.0 – 8.0	3.0 – 7.5	10.0	2.0	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 8.5	3.0 – 8.0	3.0 – 7.0	9.0	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	8–16	2.5 – 7.5	2.5 – 7.0	2.5 – 6.5	8.5	4.0	2.0	3.0	1.0	2.0	1.0	ML
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	8.0	5.0	2.0	4.0	1.0	3.0	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	A
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Three 30 mm NR-30
To Hit:	6/3/2
Ammunition:	2.5
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	6/9
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 3,900

Station	Limit	Allowed Loads
1 and 4	1,400	FT
2 and 3	550	BB RP RK DR

Load Notes:

1. May use 760L FTs on stations 1 and 4.
2. May use ORO-57K RPs or DRs each with two ORO-57K RPs on stations 2 and 3.

Notes:

1. The Shenyang J-6 is a day fighter. It is licensed version of the MiG-19S. The NATO reporting name for the aircraft is Farmer-C.
2. If a BT or ET is performed in the HI+ altitude bands, roll one die for each facing change after the first. On a 1 the aircraft suffers a maneuvering departure.

VPs: 16/11/5/3

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Shenyang F-6

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.5	3.0	2.5	5.0
M	2.5	2.0	2.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	180
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.0	2.0
ET	2.0	2.5	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 58	1/2 53	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 8.0	4.0 – 7.5	4.5 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 8.5	3.5 – 8.0	4.0 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 9.0	3.0 – 8.0	3.0 – 7.5	10.0	2.0	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 8.5	3.0 – 8.0	3.0 – 7.0	9.0	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	8–16	2.5 – 7.5	2.5 – 7.0	2.5 – 6.5	8.5	4.0	2.0	3.0	1.0	2.0	1.0	ML
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	8.0	5.0	2.0	4.0	1.0	3.0	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	A
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Three 30 mm NR-30
To Hit:	6/3/2
Ammunition:	2.5
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	6/9
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 3,900

Station	Limit	Allowed Loads
1 and 4	1,400	FT
2 and 3	550	BB RP RK DR

Load Notes:

1. May use 760L FTs on stations 1 and 4.
2. May use ORO-57K RPs or DRs each with two ORO-57K RPs on stations 2 and 3.

Notes:

1. The Shenyang F-6 is a day fighter. It is the export version of the Shenyang J-6 and a licensed version of the MiG-19S. The NATO reporting name for the aircraft is Farmer-C.
2. If a BT or ET is performed in the HI+ altitude bands, roll one die for each facing change after the first. On a 1 the aircraft suffers a maneuvering departure.

VPs: 16/11/5/3

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Shenyang F-6 (PAF)

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.5	3.0	2.5	5.0
M	2.5	2.0	2.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	180
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.0	2.0
ET	2.0	2.5	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 58	1/2 53	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 8.0	4.0 – 7.5	4.5 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 8.5	3.5 – 8.0	4.0 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 9.0	3.0 – 8.0	3.0 – 7.5	10.0	2.0	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 8.5	3.0 – 8.0	3.0 – 7.0	9.0	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	8–16	2.5 – 7.5	2.5 – 7.0	2.5 – 6.5	8.5	4.0	2.0	3.0	1.0	2.0	1.0	ML
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	8.0	5.0	2.0	4.0	1.0	3.0	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	A
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Three 30 mm NR-30
To Hit:	6/3/2
Ammunition:	2.5
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	6/9
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 3,900

Station	Limit	Allowed Loads
1 and 7	200	IRM
2 and 6	1,400	BB RP RK FT
3 and 5	550	BB RP RK
4	1,400	FT

Load Notes:

1. May use AIM-9 IRMs on stations 1 and 7.
2. May use 760L FTs on stations 2 and 6.
3. May use SNEB 68 mm RPs on stations 3 and 5.
4. May only use a special ventral conformal 750L FT on station 4. The fuel tank has a full weight of 1400, a load of 3.0/2.0, and a capacity of 65 fuel points.

Notes:

1. The Shenyang F-6 is a day fighter. It is the export version of the Shenyang J-6 and a licensed version of the MiG-19S. The "PAF" version is modified with two additional stations for AIM-9 IRMs, a ventral fuel tank, and an improved ejection seat. The NATO reporting name for the aircraft is Farmer-C.
2. If a BT or ET is performed in the HI+ altitude bands, roll one die for each facing change after the first. On a 1 the aircraft suffers a maneuvering departure.

VPs: 16/11/5/3

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Shenyang J-6A

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.5	3.0	2.5	5.0
M	2.5	2.0	2.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	180
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.0	2.0
ET	2.0	2.5	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 58	1/2 53	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 8.0	4.0 – 7.5	4.5 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 8.5	3.5 – 8.0	4.0 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 9.0	3.0 – 8.0	3.0 – 7.5	10.0	2.0	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 8.5	3.0 – 8.0	3.0 – 7.0	9.0	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	8–16	2.5 – 7.5	2.5 – 7.0	2.5 – 6.5	8.5	4.0	2.0	3.0	1.0	2.0	1.0	ML
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	8.0	5.0	2.0	4.0	1.0	3.0	1.0	LO

Radar:	RP-1 Izumrud
ECCM:	0
Arcs:	Limited
Search:	18–6
Track:	6–6
Lock-On:	7

ECM:	IFF
RWR:	A
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Two 30 mm NR-30
To Hit:	5/3/1
Ammunition:	2.5
Gunsight:	TT+0/HT+2/BT+3
Ranging:	RE
AtA/AtG:	5/6

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 7
DT : ≥ 7

Weight Limit: 3,900

Station	Limit	Allowed Loads
1 and 6	200	IRM
2 and 5	1,400	FT
3 and 4	550	BB RP RK DR

Load Notes:

1. May use 760L FTs on stations 1 and 4.
2. May use ORO-57K RPs or DRs each with two ORO-57K RPs on stations 2 and 3.
3. From 1975, may use PL-2 IRMs.

Notes:

1. The Shenyang J-6A is an interceptor. It is derived from the MiG-19P. The NATO reporting name for the aircraft is Farmer-D and for the radar is Scan Odd.
2. If a BT or ET is performed in the HI+ altitude bands, roll one die for each facing change after the first. On a 1 the aircraft suffers a maneuvering departure.

VPs: 16/11/5/3

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Shenyang J-6B

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.5	3.0	2.5	5.0
M	2.5	2.0	2.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	180
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.0	2.0
ET	2.0	2.5	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 58	1/2 53	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 8.0	4.0 – 7.5	4.5 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 8.5	3.5 – 8.0	4.0 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 9.0	3.0 – 8.0	3.0 – 7.5	10.0	2.0	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 8.5	3.0 – 8.0	3.0 – 7.0	9.0	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	8–16	2.5 – 7.5	2.5 – 7.0	2.5 – 6.5	8.5	4.0	2.0	3.0	1.0	2.0	1.0	ML
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	8.0	5.0	2.0	4.0	1.0	3.0	1.0	LO

Radar:	RP-1 Izumrud
ECCM:	0
Arcs:	Limited
Search:	18–6
Track:	6–6
Lock-On:	7

ECM:	IFF
RWR:	A
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+2/BT+3
Ranging:	RE
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 7
DT : ≥ 7

Weight Limit: 3,900

Station	Limit	Allowed Loads
1 and 6	1,400	FT
2–3 and 4–5	200	BRM RHM

Load Notes:

1. May use 760L FTs on stations 1 and 6.
2. May use PL-1 BRMs.

Notes:

1. The Shenyang J-6B is an interceptor. It is derived from the MiG-19PM. The NATO reporting name for the aircraft is Farmer-E and for the radar is Scan Odd.
2. If a BT or ET is performed in the HI+ altitude bands, roll one die for each facing change after the first. On a 1 the aircraft suffers a maneuvering departure.

VPs: 16/11/5/3

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Shenyang J-6C

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.5	3.0	2.5	5.0
M	2.5	2.0	2.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	180
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.0	2.0
ET	2.0	2.5	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 58	1/2 53	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 8.0	4.0 – 7.5	4.5 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 8.5	3.5 – 8.0	4.0 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 9.0	3.0 – 8.0	3.0 – 7.5	10.0	2.0	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 8.5	3.0 – 8.0	3.0 – 7.0	9.0	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	8–16	2.5 – 7.5	2.5 – 7.0	2.5 – 6.5	8.5	4.0	2.0	3.0	1.0	2.0	1.0	ML
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	8.0	5.0	2.0	4.0	1.0	3.0	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	A
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Three 30 mm NR-30
To Hit:	6/3/2
Ammunition:	2.5
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	6/9
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 3,900

Station	Limit	Allowed Loads
1 and 4	1,400	FT
2 and 3	550	BB RP RK DR

Load Notes:

1. May use 760L FTs on stations 1 and 4.
2. May use ORO-57K RPs or DRs each with two ORO-57K RPs on stations 2 and 3.

Notes:

1. The Shenyang J-6C is a day fighter. It is a slightly modified version of the Shenyang J-6. The NATO reporting name for the aircraft is Farmer-C.
2. If a BT or ET is performed in the HI+ altitude bands, roll one die for each facing change after the first. On a 1 the aircraft suffers a maneuvering departure.

VPs: 16/11/5/3

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Shenyang F-6C

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.5	3.0	2.5	5.0
M	2.5	2.0	2.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	180
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.0	2.0
ET	2.0	2.5	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 58	1/2 53	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 8.0	4.0 – 7.5	4.5 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 8.5	3.5 – 8.0	4.0 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 9.0	3.0 – 8.0	3.0 – 7.5	10.0	2.0	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 8.5	3.0 – 8.0	3.0 – 7.0	9.0	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	8–16	2.5 – 7.5	2.5 – 7.0	2.5 – 6.5	8.5	4.0	2.0	3.0	1.0	2.0	1.0	ML
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	8.0	5.0	2.0	4.0	1.0	3.0	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	A
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Three 30 mm NR-30
To Hit:	6/3/2
Ammunition:	2.5
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	6/9
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 3,900

Station	Limit	Allowed Loads
1 and 4	1,400	FT
2 and 3	550	BB RP RK DR

Load Notes:

1. May use 760L FTs on stations 1 and 4.
2. May use ORO-57K RPs or DRs each with two ORO-57K RPs on stations 2 and 3.

Notes:

1. The Shenyang F-6C is a day fighter. It is the export version of the Shenyang J-6C and a licensed version of the MiG-19S. The NATO reporting name for the aircraft is Farmer-C.
2. If a BT or ET is performed in the HI+ altitude bands, roll one die for each facing change after the first. On a 1 the aircraft suffers a maneuvering departure.

VPs: 16/11/5/3

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Shenyang JJ-6

Crew: Pilot and Observer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.5	3.0	2.5	5.0
M	2.5	2.0	2.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	180
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.0	2.0
ET	2.0	2.5	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 58	1/2 53	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 8.0	4.0 – 7.5	4.5 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 8.5	3.5 – 8.0	4.0 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 9.0	3.0 – 8.0	3.0 – 7.5	10.0	2.0	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 8.5	3.0 – 8.0	3.0 – 7.0	9.0	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	8–16	2.5 – 7.5	2.5 – 7.0	2.5 – 6.5	8.5	4.0	2.0	3.0	1.0	2.0	1.0	ML
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	8.0	5.0	2.0	4.0	1.0	3.0	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	A
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	One 30 mm NR-30
To Hit:	6/3/2
Ammunition:	2.5
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	4/3
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 3,900

Station	Limit	Allowed Loads
1 and 4	1,400	FT
2 and 3	550	BB RP RK DR

Load Notes:

1. May use 760L FTs on stations 1 and 4.
2. May use ORO-57K RPs or DRs each with two ORO-57K RPs on stations 2 and 3.

Notes:

1. The Shenyang JJ-6 is a trainer. It is a modified version of the Shenyang J-6, with a second cockpit and only one cannon.
2. If a BT or ET is performed in the HI+ altitude bands, roll one die for each facing change after the first. On a 1 the aircraft suffers a maneuvering departure.

VPs: 14/9/5/2

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Shenyang FT-6

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.5	3.0	2.5	5.0
M	2.5	2.0	2.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	180
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.0	2.0
ET	2.0	2.5	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 58	1/2 53	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 8.0	4.0 – 7.5	4.5 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 8.5	3.5 – 8.0	4.0 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 9.0	3.0 – 8.0	3.0 – 7.5	10.0	2.0	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 8.5	3.0 – 8.0	3.0 – 7.0	9.0	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	8–16	2.5 – 7.5	2.5 – 7.0	2.5 – 6.5	8.5	4.0	2.0	3.0	1.0	2.0	1.0	ML
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	8.0	5.0	2.0	4.0	1.0	3.0	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	A
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	One 30 mm NR-30
To Hit:	6/3/2
Ammunition:	2.5
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	4/3
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3 / 1/2: < 7 / DT : ≥ 7

Weight Limit: 3,900

Station	Limit	Allowed Loads
1 and 4	1,400	FT
2 and 3	550	BB RP RK DR

Load Notes:

1. May use 760L FTs on stations 1 and 4.
2. May use ORO-57K RPs or DRs each with two ORO-57K RPs on stations 2 and 3.

Notes:

1. The Shenyang FT-6 is a trainer. It is the export version of the Shenyang JJ-6.
2. If a BT or ET is performed in the HI+ altitude bands, roll one die for each facing change after the first. On a 1 the aircraft suffers a maneuvering departure.

VPs: 14/9/5/2

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Chapter 5

European Aircraft

Dassault/Dornier Alpha Jet

The Dassault/Dornier Alpha Jet is a two-seat advanced trainer and light attack aircraft. It was developed starting in 1967 and entered service in 1979.[1]

Versions

Alpha Jet E

The Alpha Jet E is the trainer version, with the E designation taken from *École* (school). It is equipped with two underwing and one centerline weapon stations, but in French and Belgian service these were intended only for weapons training. Some of its later users employed it as a light strike aircraft, despite its shortcomings compared to aircraft dedicated to this role.[2]

It initially served in the French Armée de l'air and the Belgian Air Force, but later with the air forces of Egypt, Morocco, Nigeria, Qatar, Togo, Côte d'Ivoire, and with private companies.[3]

Alpha Jet A

The Alpha Jet A is the attack version, with the A designation taken from *Appui Tactique* (tactical support). Although very similar to the E, the A has two additional underwing weapon stations, a more advanced weapon system, and can replace the rear crew member with an ECM suite.[4]

It initially served in the German Luftwaffe, replacing the Fiat G91R/3. After the end of the Cold War many of these aircraft were sold to the air forces of Portugal and Thailand.[5]

Armament and Stores

The Alpha Jet has no internal guns, but when armed would typically carry a gun pod on the centerline station, normally a CC420 30 mm DEFA pod for E models or a 27 mm Mauser pod for A models. The gun pod was originally not jettisonable, but this restriction was lifted by the 1989 upgrade of Luftwaffe Alpha Jet As.[6]

Typical stores would be SNEB 68 mm or CRV7 70 mm RPs or HE or cluster bombs.[7]

Combat

The Alpha Jet A does not seem to have seen combat, but the Alpha Jet E has in Moroccan and Nigerian service, in the former case against Polisario Front in the Western Sahara War and in the latter against the Boko Haram militant group.

ADCs

- Alpha Jet A
- Alpha Jet E

Notes

1. **Sources.**
   - Goebel, Air Vectors
   - Wikipedia on the Alpha Jet
   - Wikipedia on the DEFA cannon
   - Wikipedia on Gun Pods

   Photo Credit.
   - Tim Felce (CC CC BY 2.5)
2. **Alpha Jet E ADC.** *Air Strike* has an ADC for the E (as a variant of the A). The ADC here is based on Chris Perleberg's update incorporating the changes in APJ 21.
3. **Alpha Jet E Service and Combat.** Wikipedia.
4. **Alpha Jet A ADC.** *Air Strike* has an ADC for the E. The ADC here is based on Chris Perleberg's update incorporating the changes in APJ 21.
5. **Alpha Jet A Service.** Wikipedia.
6. **Gun Pods.**
   - For the A: Single Mauser 27 mm GP (Goebel) with 150 rounds (Wikipedia). The rate of fire is 1000-1700 RPM, which corresponds to 4.5 to 2.6 ammo points. An upgrade in 1989 which Luftwaffe As the ability to jettison the gun pod (Wikipedia).
   - For the E: Single DEFA 30 mm GP (Goebel) with 150 rounds (Wikipedia). The model is the DEFA 553 (Wikipedia on DEFA). The rate of fire is 1300 RPM, which corresponds to 3.5 ammo. It may have been a CC420 gun pod (Wikipedia on gun pods).
7. **Stores.**

   Stores include Matra 18 × 68 mm or CRV7 19 × 70 mm RPs, AIM-9s, Matra Magics, and Mavericks, bombs including the BL755 cluster bomb (Wikipedia). However, the Maverick capability seems to not have been implemented.

   Could carry FTs with capacities of 310L (82 US gal) or 450L (119 US gal) (Goebel).

   The ICE upgrade to the A was to provide compatibility with Mavericks, but this was cancelled in 1988 and a more austere upgrade from 1989 gave the AIM-9Ls and the ability to jettison the gun pod (Wikipedia).

   Goebel states: "The French qualified a film-camera pod".

Alpha Jet A

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	4.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	180
Size:	+1	AtA Refuel:	No
Vulnerability:	−1	Ejection Seat:	Std

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.0	1.5	1.5
BT	2.0	2.0	2.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 45	1/2 38	DT 32	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	2.5 – 5.5	3.0 – 5.0	—	7.0	—	0.5	—	0.5	—	—	VH
HI	26–35	2.5 – 6.0	2.5 – 5.5	2.5 – 5.0	7.0	—	1.0	—	0.5	—	0.5	HI
MH	17–25	2.0 – 6.0	2.0 – 5.5	2.5 – 5.0	7.0	—	1.0	—	1.0	—	0.5	MH
ML	8–16	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	7.0	—	1.0	—	1.0	—	1.0	ML
LO	0–7	1.0 – 6.0	1.5 – 5.5	1.5 – 5.0	7.0	—	2.0	—	1.5	—	1.0	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	A
DDS:	—
DJM:	B3
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—
Bomb System:	Ballistic

Technology:

None

Load Point Limits: CL : < 5
1/2: < 9
DT : ≥ 9

Weight Limit: 5,550

Station	Limit	Allowed Loads
1 and 5	750	FT BB BG RP IRM EP
2 and 4	1,350	BB BG RP DR EP
3	1,350	BB BG RP GP PP

Load Notes:

1. May use 310L and 450L FTs
2. May use 27 mm Mauser BK-27 or CC420 30 mm DEFA GPs. Prior to 1989, the GP cannot be jettisoned.
3. From 1989, may use AIM-9 and Matra 550 IRMs.

Notes:

1. The Dassault/Dornier Alpha Jet A is a light attack aircraft.
2. High transonic drag (HTD).
3. Either the observer or the RWR and DJM may be carried.

VPs: 12/8/4/2

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Alpha Jet E

Crew: Pilot and Observer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	4.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	180
Size:	+1	AtA Refuel:	No
Vulnerability:	−1	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.0	1.5	1.5
BT	2.0	2.0	2.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 45	1/2 38	DT 32	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.5	3.0 – 5.0	—	7.0
HI	26–35	2.5 – 6.0	2.5 – 5.5	2.5 – 5.0	7.0
MH	17–25	2.0 – 6.0	2.0 – 5.5	2.5 – 5.0	7.0
ML	8–16	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	7.0
LO	0–7	1.0 – 6.0	1.5 – 5.5	1.5 – 5.0	7.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	1.0	—	0.5	—	0.5	HI
MH	—	1.0	—	1.0	—	0.5	MH
ML	—	1.0	—	1.0	—	1.0	ML
LO	—	2.0	—	1.5	—	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5
1/2: < 9
DT : ≥ 9

Weight Limit: 5,550

Station	Limit	Allowed Loads
1 and 3	750	FT BB BG RP IRM EP
2	1,350	BB BG RP GP PP

Load Notes:

1. May use 310L and 450L FTs
2. May use 27 mm Mauser BK-27 or CC420 30 mm DEFA GPs. Prior to 1989, the GP cannot be jettisoned.
3. May use AIM-9 and Matra 550 IRMs.

Notes:

1. The Dassault/Dornier Alpha Jet E is a trainer with a secondary light attack capability.
2. High transonic drag (HTD).

VPs: 10/7/3/2

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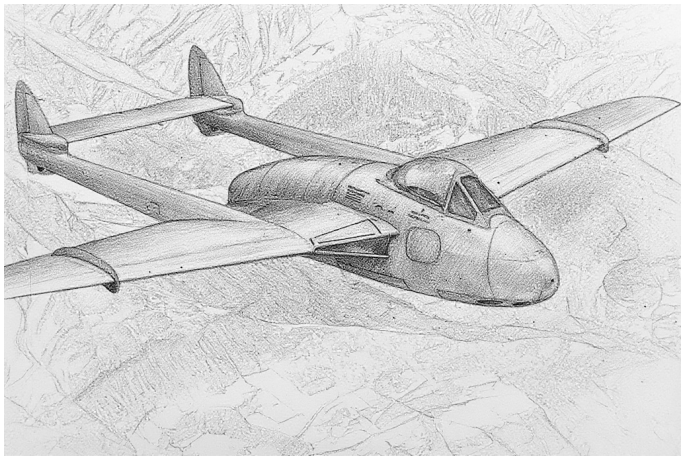
Chapter 6

French Aircraft

SNCASE Mistral



The SNCASE (Société nationale des constructions aéronautiques du Sud-Est) SE.535 Mistral was a day fighter and fighter-bomber. It was named for the strong wind that occurred frequently in Provence.

Versions

SE 535 Mistral

The SE 535 Mistral was a development of the Vampire FB.5 (previously license-built by SNCASE), but fitted with the more powerful Nene 104B motor (license-built by Hispano-Suiza) providing 5,000 lb of thrust compared to 3,000 lb for the Goblin 2 engine of the FB.5 and 3,500 lb for the Goblin 3 engine of the FB.6.

The Nene engine had been trialed in the Vampire F.2 with its need for greater airflow satisfied by additional “elephant ears” inlets on the upper side of the fuselage behind the cockpit. However, these intakes caused handling problems close to the critical Mach number. In the Vampire F.30, this was mitigated by moving the additional intakes to the underside of the fuselage. In contrast, the Mistral omitted them completely and instead opted for redesigned and enlarged wing-root inlets, and as a consequence had much more benign characteristics at high speed.

The Mistral also featured an ejection seat and air conditioning to facilitate its use in the French colonies in Africa.

It was not clear how much de Havilland was involved in the development of the Mistral, but nevertheless early prototypes of the Mistral were sometimes referred to as the Vampire FB.53.

The Mistral served in the French AA from 1953 until at least 1961.

Armament and Stores

Its gun armament was four 20 mm Hispano cannons with 150 rounds, as in the Vampire. Air-to-ground ordnance included rockets, HE bombs, and napalm bombs.

Combat

The Mistral saw combat with the French AA in the colonial wars in Tunisia and Algeria.

ADC

- Mistral

See Also

- de Havilland Vampire
- SNCASE Vampire

Photo Credit

- SNCASE Mistral: US Department of State (Public Domain)

Mistral

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.5
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	200
Size:	+1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 44	DT 40	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 5.5	3.0 – 5.0	3.0 – 4.5	6.0
HI	26–35	2.0 – 5.5	2.5 – 5.0	2.5 – 4.5	6.5
MH	17–25	1.5 – 5.5	2.0 – 5.0	2.0 – 5.0	6.5
ML	8–16	1.5 – 5.5	1.5 – 5.0	1.5 – 5.0	6.5
LO	0–7	1.0 – 5.5	1.5 – 5.0	1.5 – 5.0	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	1.0	ML
LO	—	1.5	—	1.0	—	1.0	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Hispano Mk V
To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 5, DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB FT
2–3 and 4–5	200	RK

Load Notes:

1. Stations 2 to 5 may each carry one or two RP-3 RKs.
2. May use 450L FTs.

Notes:

1. The SNCASE SE.535 Mistral is a day fighter and fighter bomber. It is derived from the SNCASE Vampire FB.5, but has a more powerfule Nene engine, an ejection seat, and air conditioning for use in hot climates.
2. High transonic drag (HTD). Rapid acceleration (RA) if speed ≤ 4.0.

VPs: 6/4/2/1

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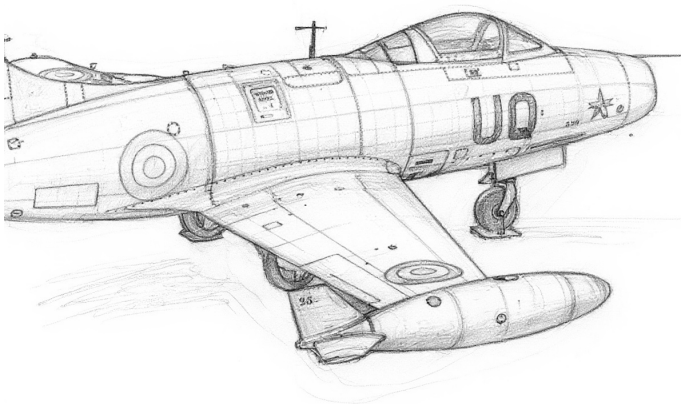
Dassault Ouragan



The Dassault Ouragan was a fighter-bomber and the first French-designed jet-powered combat aircraft enter service. Like many of its contemporaries, it had a single engine, an air-intake in the nose, swept wings and tail, and wing-tip fuel tanks. Its name means “hurricane” in French.

Versions

MD 450A and MD 450B

The initial 450A version used a non-afterburning Rolls-Royce Nene 102 engine. The subsequent 450A version used a similar Rolls-Royce Nene 104 engine license-built by Hispano-Suiza and had a revised undercarriage. However, the MD 450B was otherwise almost identical to the MD 450A.

The Ouragan entered service with the Armée de l’Air in 1952, replacing Vampires and other older aircraft. Its service life was short, and in 1955 it was replaced by the Mystère IV.

The Ouragan also served with the Indian Air Force from 1953 and was known as the Toofani (“hurricane” in Hindi). It was withdrawn from front-line services in 1965.

It also served with the Israeli Air Force from 1953 and served until the 1970s. In 1975, several were sold on to El Salvador, where they served until the late 1980s.

Armament and Stores

The principal armament was four 20 mm Hispano-Suiza cannons under the nose. Two 450L fuel tanks would often be carried for extended range. For air-to-ground missions, the Ouragan could also carry bombs, napalm tanks, 105 mm Brand T-10 rockets, and SNEB 68 mm rocket pods.

Combat

The Ouragan saw combat with the Israeli Air Force in the Suez Crisis and the 1967 War. In Indian service, it saw combat in the 1962 China-India War and the 1965 India-Pakistan War.

ADC

– Ouragan

Photo Credit

– Ouragan: Ad Meskens

Ouragan

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.0	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	220
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	1.0
HT	1.0	1.0	1.5
BT	1.0	1.5	1.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 42	1/2 38	DT 34	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	2.0 – 5.0	2.5 – 4.5	—	6.5	—	0.5	—	0.5	—	—	VH
HI	26–35	1.5 – 5.0	2.0 – 4.5	2.0 – 4.5	6.5	—	0.5	—	0.5	—	0.5	HI
MH	17–25	1.5 – 5.5	1.5 – 5.0	1.5 – 4.5	6.5	—	1.0	—	0.5	—	0.5	MH
ML	8–16	1.0 – 5.5	1.5 – 5.0	1.5 – 4.5	6.5	—	1.0	—	0.5	—	0.5	ML
LO	0–7	1.0 – 5.5	1.0 – 5.0	1.5 – 4.5	6.5	—	1.0	—	1.0	—	0.5	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Hispano Mk V
To Hit:	7/4/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 2,200

Station	Limit	Allowed Loads
1–4 and 7–10	150	RK
5 and 6	1,100	BB RP RK FT
11–12 and 13–14	200	RK

Load Notes:

1. Either stations 1 to 4 and 7 to 10 or 11 to 14 may be used.
2. Stations 1 to 4 and 7 to 10 may each carry one or two T-10 RKs (large RK).
3. May use 450L FTs.

Notes:

1. The Dassault MD 450A/B Ouragan is a fighter-bomber.
2. High transonic drag (HTD).

VPs: 7/5/2/1

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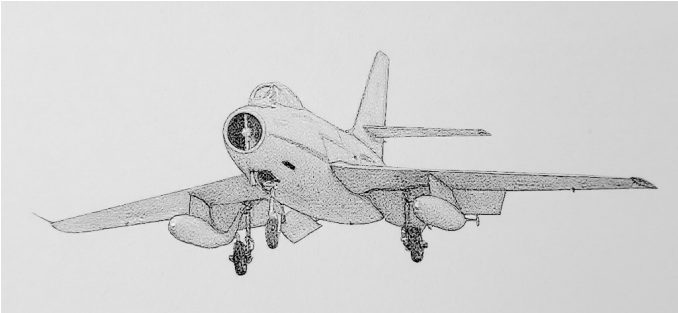
Dassault Mystère IV



The Mystère IV was a fighter-bomber. It resembled the earlier Mystère aircraft, but was a new design adapted for supersonic flight. It featured an air-intake in the nose, a single engine, and sharply swept wings and tail.

Versions

MD 454A

The MD 454A or Mystère IVA model was the only version to reach production. It featured a non-afterburning Rolls-Royce Tay engine (supplied by Rolls-Royce themselves or built under license by Hispano-Suiza) and two 30 mm DEFA cannons under the nose. It could reach supersonic speeds only in a dive.

The Mystère IVA entered service with the Armée de l'aire in 1955 and served first as an interceptor and then as a fighter-bomber. It also served with the Israeli Air Force from 1956 to 1971 and with Indian Air Force from 1957 to 1973.

Armament and Stores

The principal armament of the Mystère IVA was two 30 mm DEFA cannons under the nose. Two 450L fuel tanks would often be carried for extended range. For air-to-ground missions, the Mystère IVA could also carry bombs, napalm tanks, 105 mm Brand T-10 rockets, and SNEB 68 mm rocket pods.

Combat

Israeli Mystère IVAs saw combat in the 1956 and 1967 Arab-Israeli Wars. French aircraft also fought in the 1956 Suez Crisis. Indian aircraft fought in the 1965 and 1971 India-Pakistan Wars.

ADC

– Mystère IVA

Photo Credit

– Mystère IV: Anidaat (CC BY-SA 4.0)

Mystère IVA

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	150
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.0	1.0
BT	1.5	2.0	2.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 36	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	6.5
HI	26–35	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	7.0
MH	17–25	2.0 – 6.5	2.0 – 5.5	2.5 – 5.0	7.0
ML	8–16	1.5 – 6.5	2.0 – 6.0	2.0 – 5.5	7.0
LO	0–7	1.5 – 6.5	1.5 – 6.0	2.0 – 5.5	7.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	APG-30	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	Two 30 mm DEFA 552
To Hit:	6/3/2
Ammunition:	3.5
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	6/6
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 4,000

Station	Limit	Allowed Loads
1 and 4	1,500	BB RP
2 and 3	1,100	BB RP FT
5–8 and 9–12	200	RK

Load Notes:

1. Either stations 1 to 4 or stations 5 to 12 may be used.
2. If stations 1 or 4 are loaded with more than 1,100 lb, the maximum turn rate is reduced to HT.
3. Stations 5 to 12 may each carry one or two 105 mm T-10 RKs (large RK).
4. May use 450L FTs.

Notes:

1. The Dassault MD 454 Mystère IVA is a fighter-bomber.
2. High transonic drag (HTD).
3. Hit rolls at low transonic speed or greater have a +1 modifier to the hit roll due to instability.

VPs: 10/7/3/2

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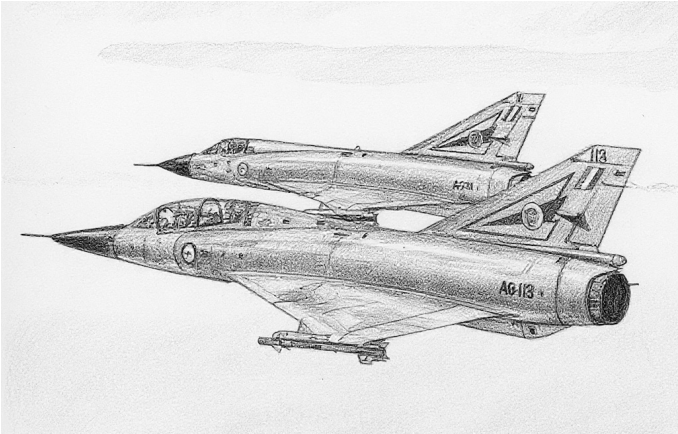
Dassault Mirage III



The Dassault Mirage III is a supersonic interceptor and multirole aircraft. [1]

Versions

Mirage IIIE

The IIIE has an improved Cyrano-II radar, an extended fuselage to give room for more fuel and improved avionics including a RWR, and a slightly more powerful Atar 09C-3 engine.[2]

The IIIE first flew in 1961 and entered service with the French Armée de l'aire in 1964.[3]

Mirage IIIEA

The IIIEA is a version for the IIIE for the Argentinian FAA.[4]

The IIIEA saw combat in the South Atlantic War.[5]

Armament and Stores

The gun armament is two 30 mm DEFA cannons each with 125 rounds.[6]

For air-to-air missions, the central station can carry an R.530 RHM or IRM, and the two outer wing stations can carry R.550 Magic IRMs.

To increase endurance, 500L, 900L, 1100L, 1300L, or 1700L fuel tanks could be carried, although only the 500L and 900L tanks could be carried at supersonic speeds. Not all tanks were available to all users. The original French 500L tanks were fixed, but jettisonable versions were later developed by Israel.[7]

Combat

Argentine FAA Mirage IIIEAs saw combat in the 1982 South Atlantic War.

ADCs

- Mirage IIIEA

See Also

- Dassault Mirage 5

Notes

1. **Sources.**
   - Goebel, Air Vectors (Wayback)
   - Kettle, "South Atlantic War", Clash of Arms Games, 2nd Edition, 2002.
   - Reid, "South African Air Force Mirage III and Cheetah: External fuel tanks," October 2023 (Revision 0)
   - Wikipedia on the Mirage III
   - Wikipedia on the DEFA cannon
   - Wikipedia on the R.530
   - Wikipedia on the R.550
   - Wikipedia on the Martel

   Photo Credit.
   - Curt Eddings (Public Domain)
2. **IIIEA ADC.** The ADC is based on those in *Air Power Journal* 20 and 44.

   RWR. Goebel states the E gained an RWR. I assume RWR-A.

   Station Limits. The station limits on the earlier ADCs need revision. The Mirage III can carry the TK-500 MRT, JL-100/JL-500 RPTs, of 1700L FTs on the inner-wing station and 1300L FTs on the centerline station (Kettle and Reid). In *Air Strike*, the TK-500 MRT has a weight of 1100 lb and can carry up to 2200 lb of bombs, for a total of 3300 lb, and the JL-100/JL-500 RPTs have a weight of 900/3000 lb. The 1300L FT from the IIIS weights 2540 lb and the 1700L FT from the IIIS in *Air Power Journal* 39 weighs 3340 lb.

   The ADC for the IIIE in *Air Power Journal* 20 has:
   - centerline: 1800 lb
   - inner wing: 3000 lb
   - outer wing: 550 lb

   The ADC for the IIIE in *Air Power Journal* 44 has:
   - centerline: 2600 lb
   - inner wing: 1850 lb
   - outer wing: 370 lb

   The ADC for the IIIS in *Air Power Journal* 39 has:
   - centerline: 2550 lb
   - inner wing: 260 lb (for Falcons)
   - inner wing: 1230 lb but can be overloaded to 2540 lb for 1300L FT (limited to HT) or 3340 lb for 1700L FT (limited to TT).
   - outer wing: 370 lb

   Kettle has these limits for the IIIEA (and also for the Dagger):
   - centerline: 1180 kg = 2600 lb
   - inner wing: 840 kg = 1850 lb, but capable of carrying 1300L FT (2540 lb)
   - outer wing: 168 kg = 370 lb

   From these, I synthesize for the IIIC/E
   - centerline: 2600 lb (able to carry the 1300L FT)
   - inner wing: 1230 lb but can be overloaded to 2540 lb for the 1300L FT or TK-500 MRT (limited to HT) or 3400 lb for the 1700L FT or JL-500 RPT (limited to TT).
   - outer wing: 370 lb
3. **IIIE Service History and Combat.** Wikipedia.
4. **IIIEA ADC.** The ADC is based on the IIIE with stores from Kettle. I assume it did not have the rocket motor.
5. **IIIEA Service History and Combat.** Wikipedia.
6. **Guns.** The internal guns are 30 mm DEFA 552A cannons with 125 rounds each (Wikipedia on Mirage III and DEFA). At 1,100–1,500 rounds per minute, this corresponds to 2.5–3.4 ammunition points. The ADCs give 3.0 ammunition points.
7. **FTs.** The ADC for the IIIE in *Air Power Journal* 44 lists:
   - 500L FT (1025 lb, 2.0/1.5 load points, and 43 fuel points).
   - 1300L FT (2450 lb, 4.0/2.5 load points, and 112 fuel points)
   - 1700L FT (3195 lb, 7.0/4.0 load points, and 146 fuel points) FTs. It comments that the 500L cannot be jettisoned and the 1300L and 1700L limit the speed to subsonic. When carrying the 1300L and 1700L FTs on the inner-wing stations, the turn rates are limited to HT and TT, respectively.

   The ADC for the IIIS in *Air Power Journal* 39 lists:
   - 625L FT (1230 lb, 3.0/2.0 load points, and 52 fuel points).
   - 1300L FT (2540 lb, 4.0/3.0 load points, and 108 fuel points). It can be carried on the inner-wing stations, but reduces the maximum turn rate to HT.
   - 1700L FT (3340 lb, 5.0/3.5 load points, and 142 fuel points). It can be carried on the inner-wing stations, but reduces the maximum turn rate to TT.

   Reid mentions the following French tanks for South African Mirage IIICZ. I assume they were also available for French IIEs:
   - 500L fixed/supersonic for stations 2 and 4.
   - 600L jettisonable/subsonic for stations 2, 3, and 4.
   - 1300L jettisonable/subsonic for stations 2, 3, and 4.
   - 1700L jettisonable/subsonic for stations 2 and 4.

Mirage IIIEA

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.0	1.5	5.0
M	1.5	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	6.0	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	285
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.25	1.75	1.75
HT	1.75	2.25	2.25
BT	2.25	2.75	3.25
ET	2.75	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 54	1/2 48	DT 40	Dive Speed
EH+	46+	4.5 – 14.0	—	—	15.0
VH	36–45	3.5 – 13.0	4.0 – 10.5	4.5 – 8.5	14.0
HI	26–35	3.0 – 11.0	3.5 – 10.0	4.0 – 8.0	13.0
MH	17–25	2.5 – 10.0	3.0 – 9.0	3.5 – 7.5	12.0
ML	8–16	2.0 – 9.0	2.5 – 8.0	2.5 – 6.5	11.0
LO	0–7	2.0 – 8.5	2.0 – 7.5	2.5 – 6.0	10.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	0.5	0.0	—	—	—	—	EH+
VH	1.0	0.5	1.0	0.0	0.5	0.0	VH
HI	2.0	1.0	1.0	0.5	1.0	0.5	HI
MH	2.0	1.0	1.0	0.5	1.0	0.5	MH
ML	4.0	2.0	3.0	1.0	2.0	1.0	ML
LO	4.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	Cyrano II	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	80–15	DJM:	—
Track:	50–12	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	Two 30 mm DEFA
To Hit:	6/3/2
Ammunition:	3.0
Gunsight:	TT+0/HT+0/BT+2
Ranging:	RE
AtA/AtG:	6/6
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5
1/2: < 9
DT : ≥ 9

Weight Limit: 8,800

Station	Limit	Allowed Loads
1 and 5	550	IRM
2 and 4	3,400	BB DR FT MRT
3	2,600	BB RHM FT DR

Load Notes:

1. Turns limited to HT/TT if more than 2600/1300 lb carried on either of stations 2 or 4.
2. May carry two BBs or DRs on station 3.
3. May carry Matra R.550 Magic IRMs on stations 1 and 5
4. May carry Matra R.530 RHMs on station 3.
5. May carry 1300L FTs on station 2, 3, and 4 and 1700L FTs on stations 2 and 4.
6. No supersonic flight while carrying FTs.

Notes:

1. The Dassault Mirage IIIEA is single-seat fighter, intercepter, and strike aircraft. The EA version was specifically built for the Argentine air force.
2. High bleed rate (HBR). Low transonic drag (LTD). Poor supersonic maneuverability (PSSM).

VPs: 22/15/7/4

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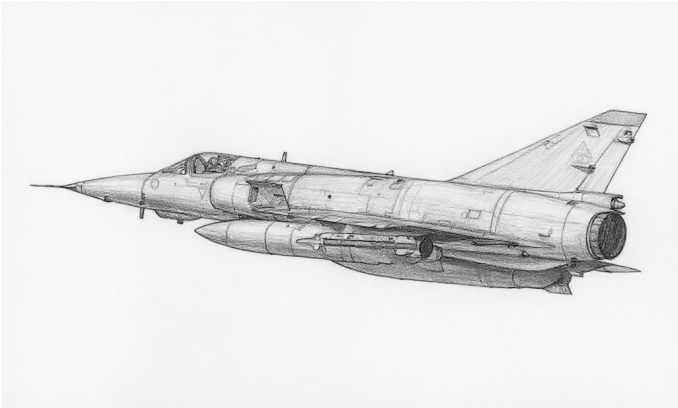
Dassault Mirage 5



The Dassault Mirage 5 (sometimes written as Mirage V) is a day fighter and strike aircraft. It first flew in 1967. Dassault developed it at the suggestion of the Israeli IAF, and to a large degree is a Mirage IIIE with the search radar and other all-weather avionics removed and with additional fuel and an additional pair of weapon stations. In some later versions, more compact electronics allowed all-weather capabilities to be restored.[1]

Versions

Mirage 5F

The Mirage 5F is the original version.[2]

These aircraft were originally built for Israel as the 5J. However, their delivery to Israel was blocked by the 1967 embargo, and they eventually entered service with the French Armée de l'air as the 5F and entered service around 1970.[3]

Mirage 5BA

The 5BA is a strike version for the Belgian Air Force. Changes included US avionics.[4]

The 5BA entered service in 1970, replacing F-84F Thunderstreaks, and was retired in 1993.[5]

Mirage 5BD

The 5BD is a two-seat trainer version for the Belgian Air Force, but it retains combat capability albeit without guns, like all two-seat versions of the Mirage 5.[6]

The 5BD entered service in 1970 and was retired in 1993.[7]

Mirage 5BR

The 5BR is a single-seat photoreconnaissance aircraft for the Belgian Air Force. It retains full combat capability.[8]

The 5BR entered service in 1970, replacing RF-84F Thunderstreaks, and was retired in 1993.[9]

Armament and Stores

The internal armament of the Mirage 5 is two 30 mm DEFA 552A cannons with 125 rounds each.[10]

The external weapon options are similar to the Mirage III, although RHMs are obviously not used on models without adequate radar.[11]

Combat

ADCs

- Mirage 5F
- Mirage 5BA
- Mirage 5BD
- Mirage 5BR

See Also

- Dassault Mirage III

Notes

1. **Sources.**
   - Goebel, Air Vectors (Wayback)
   - Mirage 5 Pilots Association, Home Page (Wayback)
   - Wikipedia on the Mirage 5
   - Wikipedia on the DEFA cannon
   - Wikipedia on the R.530
   - Wikipedia on the R.550
   - Wikipedia on the Martel
   - Wikipedia on the AS.30
   - Wikipedia on the Exocet
   - Wikipedia on the H-4 SOW
   - Wikipedia on the Haft-VIII Ra'ad
   - Wikipedia on the Haft-VIII Ra'ad-II

   Photo Credit.

   - Chris Lofting (GFDL 1.2)
2. **Mirage 5 ADF.** The original ADC for the Mirage 5, presumably the 5F version, appeared in *Air Strike*. Perleberg also has a version 2 ADC.

   The *Air Strike* errata sheet states that stations 3 and 5 can only carry BB.

   APJ 21 adds: ECCM 0; a standard ejection seat; LTD; PSSM; and allows the inner wing stations to be overloaded to 3000 lb.

   Perleberg's ADC allows the inner wing stations to be overloaded to 3300 lb with FT/RPT/MRT.

   The aircraft is limited to altitude 35 or less when DT, but the original *Air Strike* ADC has speed and climb data for the VH band (36–45) when DT. Perleberg removes this, and I follow him.

   The Mirage IIIE has the Cyrano-II search radar. When this was removed to create the Mirage 5, the simpler tracking/ranging AIDA-II radar used previously by the Étendard IV seems to have been installed.

   Jean-Baptiste Mouillet has commented that the 5F had no RWR and should have a manual bomb sight. However, the AIDA-II is noted as supplying both air-to-air and air-to-ground ranging, so I suspect a ballistic sight is more appropriate.
3. **Mirage 5F Service History.** The service history of the 5F is from Wikipedia.
4. **Mirage 5BA ADC.** The ADC for the 5BA is essentially that of the 5F, with some modifications to stores described below.
5. **Mirage 5BA Service History.** The service history of the 5BA is from the Mirage 5 Pilots Association and Wikipedia.
6. **Mirage 5BD ADC.** The ADC for the 5BD is essentially that of the 5BA, with the second crew added and the guns deleted. The Mirage IIIB lost its guns (Goebel), and I presume the 5BD did too.
7. **Mirage 5BD Service History.** The service history of the 5BD is from the Mirage 5 Pilots Association.
8. **Mirage 5BR ADC.** The ADC for the 5BR is essentially that of the 5BA with the addition of the camera nose. The Mirage IIIR retained its guns (Goebel), and I assume the 5BR did too. I assume the loss of the guns allows the aircraft to retain the same fuel capacity as the original 5BA.
9. **Mirage 5BR Service History.** The service history of the 5BR is from the Mirage 5 Pilots Association.
10. **Guns.** The internal guns are 30 mm DEFA 552A cannons with 125 rounds each (Wikipedia on Mirage V and DEFA). At 1,100–1,500 rounds per minute, this corresponds to 2.5–3.4 ammunition points. The ADCs give 3.0 ammunition points.
11. **Stores.** In the original *Air Strike* ADC, stations 1 to 5 are the same as on the Mirage III and stations 6 and 7 are under the rear fuselage. I have renumbered them conventionally from right to left.

    AAM. The *Air Strike* ADC states that it can use Matra R.530 RHMs on the centerline station, but I suspect this is only the air superiority variant with Agave radar. I suspect the 5F and others with the AIDA-II radar can only use IRMs. I have modified the ADC to reflect this.

    Belgian 5BA/5BD/5BR used Sidewinders (Mirage V Pilots Association). Belgium was not a user of the Matra R.530 or R.550 (Wikipedia on the R.530 and R.550).

    RPT/MTR. The JL100 RPT can carry 268L of fuel and 18 × 68 mm rockets. The TK500 MRT can carry 500L of fuel and 5 × 500 lb BB.

    BS. The original ADC of the 5F mentions BSes. Pakistani 5PA ROSE versions can carry the H-4 SOW BS. I can find no evidence that BSes were carried by others.

    RG. The original ADC of the 5F mentions RGs. I presume these refer to the AS.30/AS.30L RGs. The AS.30 was carried by Peruvian 5Ps (Wikipedia on AS.30), but can find no evidence that it was carried by others. I can also find no evidence that the AS.30L was carried by 5Fs or others.

    RS. The original ADC of the 5F mentions RSs. It is possible that Pakistani PAF Mirage 5Rs carry the Haft-VIII Ra'ad and Ra'ad-II cruise missile, which Pipes classifies as RS rather than ASM, but this did not exist when the original ADC was created. I do not know what this could refer to; perhaps the AJ-168 Martel?

    RK. The original ADC of the 5F mentions RKs. I can find no evidence that the 5 carried RKs.

    ASM. The original ADC of the 5F mentions ASMs. This may refer to the Pakistani 5PA3 which can carry the AM39 Exocet. I can find no evidence that other versions carried ASMs.

    ARM. The original ADC of the 5F mentions AS.37 ARMs. France was a user of the AS.37 Martel ARM (Wikipedia on the Martel), but I can find no evidence that the 5F carried it. Belgium was not a user of the AS.37 (Wikipedia on the Martel), so the 5BA/5BD/5BR most certainly did not.

Mirage 5F

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.0	1.5	5.0
M	1.5	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	6.0	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	325
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.75	1.75	1.75
HT	2.25	2.25	2.75
BT	2.75	3.25	3.25
ET	3.25	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 52	1/2 44	DT 35	Dive Speed
EH+	46+	4.5 – 13.5	—	—	14.0
VH	36–45	3.5 – 13.0	4.0 – 10.5	—	14.0
HI	26–35	3.0 – 11.0	3.5 – 10.0	4.0 – 8.0	13.0
MH	17–25	2.5 – 10.0	3.0 – 9.0	3.5 – 7.5	12.0
ML	8–16	2.0 – 9.0	2.5 – 8.0	2.5 – 6.5	11.0
LO	0–7	2.0 – 8.5	2.0 – 7.5	2.5 – 6.0	10.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
0.5	0.0	—	—	—	—	EH+
1.0	0.5	1.0	0.0	—	—	VH
2.0	1.0	1.0	0.5	1.0	0.5	HI
2.0	1.0	1.0	0.5	1.0	0.5	MH
4.0	2.0	3.0	1.0	2.0	1.0	ML
4.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	AIDA II	**ECM:**	IFF
ECCM:	0	RWR:	B
Arcs:	Limited	DDS:	—
Search:	—	DJM:	—
Track:	8–8	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	Two 30 mm DEFA
To Hit:	6/3/2
Ammunition:	3.0
Gunsight:	TT+0/HT+0/BT+2
Ranging:	RE
AtA/AtG:	6/6
Bomb System:	Ballistic

Technology:

None

Load Point Limits: CL : < 7 / 1/2: <10 / DT : ≥10

Weight Limit: 9,200

Station	Limit	Allowed Loads
1 and 7	550	BB BG RP RK IRM EP
2 and 4	3,400	BB BG RP RG RS RK GP DR FT RPT MRT
3 and 5	1,100	BB
4	2,600	BB BG RP RG RS RK GP PP EP WR WP FT IRM

Load Notes:

1. Turns limited to HT/TT if more than 2600/1300 lb carried on either of stations 2 or 6.
2. Stations 3 and 5 are under the rear fuselage.
3. May carry two BBs on station 4 without using a WR.
4. May carry AIM-9 and Matra 550 IRMs on stations 1 and 7
5. May carry Matra 530 IRMs on station 4.
6. May carry AS.30 RGs.
7. May carry TK-500 MRTs on stations 2 and 6.
8. May carry 500L, 600L, 1300L, or 1700L FTs on station 2 and 6 and 600L or 1300L FTs on station 4.
9. No supersonic flight while carrying 600L, 1300L, or 1700L FTs.

Notes:

1. The Dassault Mirage 5F is a single-seat day fighter-bomber aircraft originally built for the Israeli Air Force but which served in the French Armée de l'air.
2. High bleed rate (HBR). Low transonic drag (LTD). Poor supersonic maneuverability (PSSM).

VPs: 21/14/7/4

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Mirage 5BA

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.0	1.5	5.0
M	1.5	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Turn DPs:

	CL	1/2	DT
TT	1.75	1.75	1.75
HT	2.25	2.25	2.75
BT	2.75	3.25	3.25
ET	3.25	—	—

Cruise Spd. CL:	6.0	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	325
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 52	1/2 44	DT 35	Dive Speed
EH+	46+	4.5 – 13.5	—	—	14.0
VH	36–45	3.5 – 13.0	4.0 – 10.5	—	14.0
HI	26–35	3.0 – 11.0	3.5 – 10.0	4.0 – 8.0	13.0
MH	17–25	2.5 – 10.0	3.0 – 9.0	3.5 – 7.5	12.0
ML	8–16	2.0 – 9.0	2.5 – 8.0	2.5 – 6.5	11.0
LO	0–7	2.0 – 8.5	2.0 – 7.5	2.5 – 6.0	10.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
0.5	0.0	—	—	—	—	EH+
1.0	0.5	1.0	0.0	—	—	VH
2.0	1.0	1.0	0.5	1.0	0.5	HI
2.0	1.0	1.0	0.5	1.0	0.5	MH
4.0	2.0	3.0	1.0	2.0	1.0	ML
4.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	AIDA II	**ECM:**	IFF
ECCM:	0	RWR:	B
Arcs:	Limited	DDS:	—
Search:	—	DJM:	—
Track:	8–8	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	Two 30 mm DEFA
To Hit:	6/3/2
Ammunition:	3.0
Gunsight:	TT+0/HT+0/BT+2
Ranging:	RE
AtA/AtG:	6/6
Bomb System:	Ballistic

Technology:

None

Load Point Limits: CL : < 7
1/2: <10
DT : ≥10

Weight Limit: 9,200

Station	Limit	Allowed Loads
1 and 7	550	BB BG RP RK IRM EP
2 and 4	3,400	BB BG RP RK GP DR FT RPT MRT
3 and 5	1,100	BB
4	2,600	BB BG RP RK GP PP EP WR WP FT

Load Notes:

1. Turns limited to HT/TT if more than 2600/1300 lb carried on either of stations 2 or 4.
2. Stations 3 and 5 are under the rear fuselage.
3. May carry two BBs on station 4 without using a WR.
4. May carry AIM-9 IRMs on stations 1 and 7
5. May carry TK-500 MRTs on stations 2 and 6.
6. May carry 1300L or 1700L FTs on station 2 and 6 and a 1300L FT on station 4.
7. No supersonic flight while carrying 1300L or 1700L FTs.

Notes:

1. The Mirage 5BA is a single-seat day strike aircraft built for the Belgian Air Force.
2. High bleed rate (HBR). Low transonic drag (LTD). Poor supersonic maneuverability (PSSM).

VPs: 21/14/7/4

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Mirage 5BD

Crew: Pilot and Observer

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.0	1.5	5.0
M	1.5	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	6.0	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	325
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.75	1.75	1.75
HT	2.25	2.25	2.75
BT	2.75	3.25	3.25
ET	3.25	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 52	1/2 44	DT 35	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	4.5 – 13.5	—	—	14.0	0.5	0.0	—	—	—	—	EH+
VH	36–45	3.5 – 13.0	4.0 – 10.5	—	14.0	1.0	0.5	1.0	0.0	—	—	VH
HI	26–35	3.0 – 11.0	3.5 – 10.0	4.0 – 8.0	13.0	2.0	1.0	1.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 10.0	3.0 – 9.0	3.5 – 7.5	12.0	2.0	1.0	1.0	0.5	1.0	0.5	MH
ML	8–16	2.0 – 9.0	2.5 – 8.0	2.5 – 6.5	11.0	4.0	2.0	3.0	1.0	2.0	1.0	ML
LO	0–7	2.0 – 8.5	2.0 – 7.5	2.5 – 6.0	10.0	4.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	AIDA II
ECCM:	0
Arcs:	Limited
Search:	—
Track:	8–8
Lock-On:	7

ECM:	IFF
RWR:	B
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+0/BT+2
Ranging:	RE
AtA/AtG:	—

Bomb System: Ballistic

Technology:

None

Load Point Limits: CL : < 7 / 1/2: <10 / DT : ≥10

Weight Limit: 9,200

Station	Limit	Allowed Loads
1 and 7	550	BB BG RP RK IRM EP
2 and 4	3,400	BB BG RP RK GP DR FT RPT MRT
3 and 5	1,100	BB
4	2,600	BB BG RP RK GP PP EP WR WP FT

Load Notes:

1. Turns limited to HT/TT if more than 2600/1300 lb carried on either of stations 2 or 4.
2. Stations 3 and 5 are under the rear fuselage.
3. May carry two BBs on station 4 without using a WR.
4. May carry AIM-9 IRMs on stations 1 and 7
5. May carry TK-500 MRTs on stations 2 and 6.
6. May carry 1300L or 1700L FTs on station 2 and 6 and a 1300L FT on station 4.
7. No supersonic flight while carrying 1300L or 1700L FTs.

Notes:

1. The Mirage 5BA is a two-seat trainer and day strike aircraft built for the Belgian Air Force.
2. High bleed rate (HBR). Low transonic drag (LTD). Poor supersonic maneuverability (PSSM).

VPs: 21/14/7/4

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Mirage 5BR

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.0	1.5	5.0
M	1.5	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	6.0	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	325
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.75	1.75	1.75
HT	2.25	2.25	2.75
BT	2.75	3.25	3.25
ET	3.25	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 52	1/2 44	DT 35	Dive Speed
EH+	46+	4.5 – 13.5	—	—	14.0
VH	36–45	3.5 – 13.0	4.0 – 10.5	—	14.0
HI	26–35	3.0 – 11.0	3.5 – 10.0	4.0 – 8.0	13.0
MH	17–25	2.5 – 10.0	3.0 – 9.0	3.5 – 7.5	12.0
ML	8–16	2.0 – 9.0	2.5 – 8.0	2.5 – 6.5	11.0
LO	0–7	2.0 – 8.5	2.0 – 7.5	2.5 – 6.0	10.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
0.5	0.0	—	—	—	—	EH+
1.0	0.5	1.0	0.0	—	—	VH
2.0	1.0	1.0	0.5	1.0	0.5	HI
2.0	1.0	1.0	0.5	1.0	0.5	MH
4.0	2.0	3.0	1.0	2.0	1.0	ML
4.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	AIDA II	**ECM:**	IFF
ECCM:	0	RWR:	B
Arcs:	Limited	DDS:	—
Search:	—	DJM:	—
Track:	8–8	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	Two 30 mm DEFA
To Hit:	6/3/2
Ammunition:	3.0
Gunsight:	TT+0/HT+0/BT+2
Ranging:	RE
AtA/AtG:	6/6
Bomb System:	Ballistic

Technology:

None

Load Point Limits: CL : < 7
1/2: <10
DT : ≥10

Weight Limit: 9,200

Station	Limit	Allowed Loads
1 and 7	550	BB BG RP RK IRM EP
2 and 4	3,400	BB BG RP RK GP DR FT RPT MRT
3 and 5	1,100	BB
4	2,600	BB BG RP RK GP PP EP WR WP FT

Load Notes:

1. Turns limited to HT/TT if more than 2600/1300 lb carried on either of stations 2 or 4.
2. Stations 3 and 5 are under the rear fuselage.
3. May carry two BBs on station 4 without using a WR.
4. May carry AIM-9 IRMs on stations 1 and 7
5. May carry TK-500 MRTs on stations 2 and 6.
6. May carry 1300L or 1700L FTs on station 2 and 6 and a 1300L FT on station 4.
7. No supersonic flight while carrying 1300L or 1700L FTs.

Notes:

1. The Mirage 5BR is a single-seat photoreconnaissance and day strike aircraft built for the Belgian Air Force.
2. High bleed rate (HBR). Low transonic drag (LTD). Poor supersonic maneuverability (PSSM).
3. Oblique and overhead cameras installed in the nose.

VPs: 21/14/7/4

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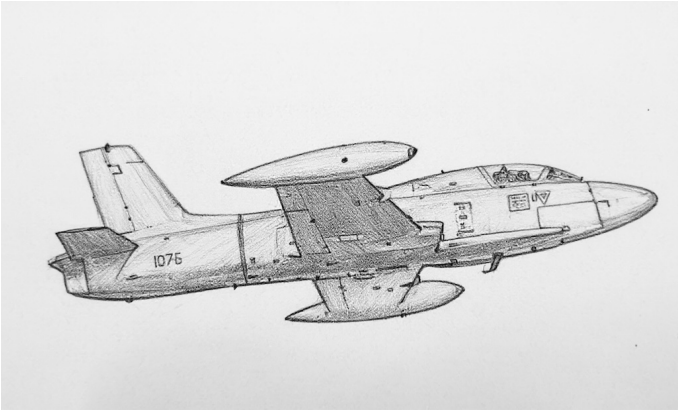
Chapter 7

Italian Aircraft

Aermacchi MB-326



The Aermacchi MB-326 was designed as a trainer but then developed into a light attack aircraft. It featured tandem seating, a single Viper 11 turbojet engine, a low wing with wing-tip fuel tanks, and excellent performance for an aircraft of its class and era.

Versions

MB-326

The initial MB-326 trainer (with no letter suffix) entered service with the Italian AMI in 1962. It had no provision for armament.

MB-326B/E/F/H

The MB-326B/E/F/H were the first combined trainer and light attack versions. They were largely similar and all featured the 2,500 lbf Viper 11 engine. They were equipped with six under-wing weapon stations for up to 2000 lb of stores, including gun pods, bombs, and rocket pods. Versions after the B could also carry under-wing fuel tanks.

The B was delivered to the Tunisian air force in 1965, the E to the Italian AMI for weapons training in 1968, the F to the Ghanaian air force in 1965, and the H to the Australian RAAF and RAN starting in 1967.

The H was also manufactured in Australia by the Commonwealth Aircraft Corporation (CAC) as the CA-30. It served in the Australian RAAF and RAN from 1967 to 2001 and was known informally as the “Macchi”. It replaced the Vampire T.33A, T.34A, and T.35 trainers.

MB-326G

The later MB-326G light attack version featured a more powerful 3,410 lbf Viper 20-540 engine and a strengthened wing, which gave better performance in general and allowed up to 4000 lb of stores to be carried.

The GB version was delivered to the Argentine COAN starting in 1969 and served until sometime after the 1982 South Atlantic War, when it became impossible to maintain because of the UK embargo of spares for the Viper engine.

The GB also was delivered to the Zairean air force in 1969 and the Zambian air force in 1971.

The GC version was delivered to the Brazilian air force starting in 1971. It was also manufactured under license by Embraer as the EMB-326. In Brazilian FAB service, the GC was known as the AT-26 or RT-26 Xavante and served from 1971 to 2010. A number of Brazilian GCs were transferred to the Argentine Navy after 1982 to replace losses in the South Atlantic War.

MB-326K and Impala Mk II

The MB-326K was a dedicated light attack aircraft and dispensed with the second crew member. It had two internal 30 mm DEFA cannon mounted in the fuselage, an armored, single-seat cockpit, an uprated 4,000 lbf Viper 632-43 engine, six stations for up to 4000 lb of stores, including gun pods, bombs, rocket pods, fuel tanks, a four-camera photo-reconnaissance pod, and R.550 Magic infrared-homing missiles.

The K was used by the South African SAAF starting sometime after 1971. It was also manufactured under license in South Africa from 1974 by the Atlas Aircraft Corporation, albeit with the earlier 3,140 lbf Viper 20-540 motor. Both variants of the K served in the SAAF as the Impala Mk.II. They later served in the Brazilian FAB from 2004 to 2009 as the AT-26A Xavante.

MB-326L

The MB-326L was a two-seater version of the K without the integrated guns.

It was used by the air forces of Ghana, Tunisia, the UAE, and Zaire from 1975. It was further developed into the MB-336.

MB-326M and Impala Mk I

Despite M coming after K and L in the alphabet, the M was delivered before both. It was largely similar to the G.

It was manufactured both by Aermacchi and under license in South Africa by the Atlas Aircraft Corporation.

Both versions served with the South African SAAF from 1966 as the Impala Mk I.

Armament and Stores

The E/F/H could use 300L under-wing FTs, whereas the G/K/L/M could use slightly larger 330L FTs.

All versions from the B onwards could carry a variety of bombs, rocket pods, and gun pods.

In Argentine COAN service, the MB-326GB would typically mount two single .50 cal gun pods plus four LAU-10 RPs (each with four Zuni rockets), four LAU-32 RPs (each with seven 70 mm rockets), four Matra-122 RPs (each with seven 68 mm), four Mk 81 250 lb bombs, or two Mk 82 500 lb bombs.

In RAAF service, the MB-326H could mount two SUU-11A/A 7.62 mm gun pods with a rate of fire of 2000 rpm per pod and 200 rounds per pod (3 ammo). It could also carry eight 25 kg practice bombs or, presumably in an emergency situation, 250 lb or 500 lb bombs. To increase its range or endurance, it could use 300L fuel tanks.

In Brazilian FAB service, the air-to-ground options for the AT-26 Xavante (G and K) included 250 lb and 500 lb bombs, 7.62 mm gun pods, and rocket pods with seven, nineteen, or thirty-seven 70 mm rockets.

In the SAAF service, the Impala Mk I and II (M and K) were typically armed with up to six Matra F2 rocket pods (each with six 68 mm rockets) or with 120 or 250 kg (250 and 500 lb) bombs and sometimes also equipped with a photographic reconnaissance pod or 330L fuel tanks. Although the outer pylons were apparently wired for IRMs, there is no evidence that they were carried.

Combat

In the SAAF service, the Impala Mk I and II saw combat in the South African Border War. They flew both daylight and nighttime *Maanskyn* (moonshine) missions.

Argentine CANA MB-326Gs were based on the mainland during the South Atlantic War and did not see combat.

ADCs

- MB-326B
- MB-326E
- MB-326F
- MB-326G
- MB-326H
- MB-326K
- MB-326K (Viper 20-540)
- MB-326L
- MB-326M

See Also

- Aermacchi MB-339

Photo Credit

- Atlas Impala II: Bob Adams (CC BY-SA 2.0)

MB-326B

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	120
Size:	+0	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Std

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	0.5	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 47	1/2 40	DT 35	Dive Speed
EH+	46+	3.0 – 5.0	—	—	6.0
VH	36–45	2.5 – 5.0	2.5 – 4.5	—	6.0
HI	26–35	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.0
MH	17–25	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.0
ML	8–16	1.5 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0
LO	0–7	1.0 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 4
1/2: < 6
DT : ≥ 6

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	750	BB BG RP RK GP EP
2 and 5	1,000	BB BG RP RK RG GP EP
3 and 4	1,000	BB BG RP RK RG GP EP PP

Load Notes:

1. PP may only be used on station 4.

Notes:

1. The Aermacchi MB-326B is a trainer with a secondary light attack capability.
2. High transonic drag (HTD).

VPs: 10/7/3/2

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MB-326E

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	120
Size:	+0	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Std

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	0.5	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 47	1/2 40	DT 35	Dive Speed
EH+	46+	3.0 – 5.0	—	—	6.0
VH	36–45	2.5 – 5.0	2.5 – 4.5	—	6.0
HI	26–35	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.0
MH	17–25	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.0
ML	8–16	1.5 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0
LO	0–7	1.0 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 4
1/2: < 6
DT : ≥ 6

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	750	BB BG RP RK GP EP
2 and 5	1,000	BB BG RP RK RG GP EP FT
3 and 4	1,000	BB BG RP RK RG GP EP PP

Load Notes:

1. May use 300L FTs.
2. PP may only be used on station 4.

Notes:

1. The Aermacchi MB-326E is a trainer with a secondary light attack capability. It is similar to the MB-326B, but has provision for external fuel tanks.
2. High transonic drag (HTD).

VPs: 10/7/3/2

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MB-326F

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	120
Size:	+0	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Std

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	0.5	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 47	1/2 40	DT 35	Dive Speed
EH+	46+	3.0 – 5.0	—	—	6.0
VH	36–45	2.5 – 5.0	2.5 – 4.5	—	6.0
HI	26–35	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.0
MH	17–25	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.0
ML	8–16	1.5 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0
LO	0–7	1.0 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 4
1/2: < 6
DT : ≥ 6

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	750	BB BG RP RK GP EP
2 and 5	1,000	BB BG RP RK RG GP EP FT
3 and 4	1,000	BB BG RP RK RG GP EP PP

Load Notes:

1. May use 300L FTs.
2. PP may only be used on station 4.

Notes:

1. The Aermacchi MB-326F is a trainer with a secondary light attack capability. It is similar to the MB-326B, but has provision for external fuel tanks.
2. High transonic drag (HTD).

VPs: 10/7/3/2

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MB-326G

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	120
Size:	+0	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Std

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	0.5	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 47	1/2 40	DT 35	Dive Speed
EH+	46+	3.0 – 5.0	—	—	6.0
VH	36–45	2.5 – 5.0	2.5 – 4.5	—	6.0
HI	26–35	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.0
MH	17–25	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.0
ML	8–16	1.5 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0
LO	0–7	1.0 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 4
1/2: < 6
DT : ≥ 6

Weight Limit: 4,000

Station	Limit	Allowed Loads
1 and 6	750	BB BG RP RK GP EP
2 and 5	1,000	BB BG RP RK RG GP EP FT
3 and 4	1,000	BB BG RP RK RG GP EP PP

Load Notes:

1. May use 330L FTs.
2. PP may only be used on station 4.

Notes:

1. The Aermacchi MB-326G is light attack aircraft. Minor versions are the GB and GC. It is derived from the MB-326F, but has the more powerful Viper 20-540 engine in place of the Viper 11 and greater load capacity. In Brazilian service it was known as the AT-26 or RT-26 Xavante.
2. High transonic drag (HTD).

VPs: 11/7/4/2

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MB-326H

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	120
Size:	+0	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Std

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	0.5	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 47	1/2 40	DT 35	Dive Speed
EH+	46+	3.0 – 5.0	—	—	6.0
VH	36–45	2.5 – 5.0	2.5 – 4.5	—	6.0
HI	26–35	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.0
MH	17–25	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.0
ML	8–16	1.5 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0
LO	0–7	1.0 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 4
1/2: < 6
DT : ≥ 6

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 6	750	BB BG RP RK GP EP
2 and 5	1,000	BB BG RP RK RG GP EP FT
3 and 4	1,000	BB BG RP RK RG GP EP PP

Load Notes:

1. May use 300L FTs.
2. PP may only be used on station 4.

Notes:

1. The Aermacchi MB-326H is a trainer with a secondary light attack capability. It is similar to the MB-326B, but has provision for external fuel tanks.
2. High transonic drag (HTD).

VPs: 10/7/3/2

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MB-326K

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	0.5	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	145
Size:	+0	AtA Refuel:	No
Vulnerability:	−1	Ejection Seat:	Std

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 47	1/2 40	DT 35	Dive Speed
EH+	46+	3.0 – 5.0	—	—	6.0
VH	36–45	2.5 – 5.0	2.5 – 4.5	—	6.0
HI	26–35	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.0
MH	17–25	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.0
ML	8–16	1.5 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0
LO	0–7	1.0 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Two 30 mm DEFA
To Hit:	6/3/2
Ammunition:	3.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	6/6
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 4
1/2: < 6
DT : ≥ 6

Weight Limit: 4,000

Station	Limit	Allowed Loads
1 and 6	750	BB BG RP RK GP EP IRM
2 and 5	1,000	BB BG RP RK RG GP EP FT
3 and 4	1,000	BB BG RP RK RG GP EP PP

Load Notes:

1. May use 330L FTs.
2. May use AIM-9 and R.550 IRMs
3. PP may only be used on station 4.

Notes:

1. The Aermacchi MB-326K is a light attack aircraft. It is derived from the MB-326G, but dispenses with the second crew member, has two internal DEFA 30 mm cannon, a more powerful Viper 632-43 engine, and the ability to carry IRMs. In SAAF service it was known as the Impala Mk II.
2. High transonic drag (HTD).

VPs: 12/8/4/2

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MB-326K (Viper 20-540)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	145
Size:	+0	AtA Refuel:	No
Vulnerability:	−1	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	0.5	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 47	1/2 40	DT 35	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 5.0	—	—	6.0	—	0.5	—	—	—	—	EH+
VH	36–45	2.5 – 5.0	2.5 – 4.5	—	6.0	—	0.5	—	0.5	—	—	VH
HI	26–35	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.0	—	0.5	—	0.5	—	0.5	HI
MH	17–25	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.0	—	1.0	—	0.5	—	0.5	MH
ML	8–16	1.5 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0	—	1.0	—	1.0	—	0.5	ML
LO	0–7	1.0 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0	—	1.0	—	1.0	—	1.0	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Two 30 mm DEFA
To Hit:	6/3/2
Ammunition:	3.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	6/6
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 4, 1/2: < 6, DT : ≥ 6

Weight Limit: 4,000

Station	Limit	Allowed Loads
1 and 6	750	BB BG RP RK GP EP
2 and 5	1,000	BB BG RP RK GP EP FT
3 and 4	1,000	BB BG RP RK GP EP PP

Load Notes:

1. May use 330L FTs.
2. PP may only be used on station 4.

Notes:

1. The Aermacchi MB-326K is a light attack aircraft. It is derived from the MB-326G, but dispenses with the second crew member, has two internal DEFA 30 mm cannon, and the ability to carry IRMs. This variant has the older and less powerful Viper 20-540 engine. In SAAF service it was known as the Impala Mk II and in Brazilian service as the AT-26A Xavante.
2. High transonic drag (HTD).

VPs: 12/8/4/2

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MB-326L

Crew: Pilot and Observer

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	120
Size:	+0	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	0.5	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 47	1/2 40	DT 35	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 5.0	—	—	6.0	—	0.5	—	—	—	—	EH+
VH	36–45	2.5 – 5.0	2.5 – 4.5	—	6.0	—	0.5	—	0.5	—	—	VH
HI	26–35	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.0	—	0.5	—	0.5	—	0.5	HI
MH	17–25	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.0	—	1.0	—	0.5	—	0.5	MH
ML	8–16	1.5 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0	—	1.0	—	1.0	—	0.5	ML
LO	0–7	1.0 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0	—	1.0	—	1.0	—	1.0	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 4
1/2: < 6
DT : ≥ 6

Weight Limit: 4,000

Station	Limit	Allowed Loads
1 and 6	750	BB BG RP RK GP EP IRM
2 and 5	1,000	BB BG RP RK RG GP EP FT
3 and 4	1,000	BB BG RP RK RG GP EP PP

Load Notes:

1. May use 330L FTs.
2. May use AIM-9 and R.550 IRMs
3. PP may only be used on station 4.

Notes:

1. The Aermacchi MB-326L is a trainer with a secondary light attack capability. It is derived from the MB-326K, but reverts to having a second crew member and no internal guns.
2. High transonic drag (HTD).

VPs: 11/7/4/2

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MB-326M

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	120
Size:	+0	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Std

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	0.5	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 47	1/2 40	DT 35	Dive Speed
EH+	46+	3.0 – 5.0	—	—	6.0
VH	36–45	2.5 – 5.0	2.5 – 4.5	—	6.0
HI	26–35	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.0
MH	17–25	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.0
ML	8–16	1.5 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0
LO	0–7	1.0 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 4
1/2: < 6
DT : ≥ 6

Weight Limit: 4,000

Station	Limit	Allowed Loads
1 and 6	750	BB BG RP RK GP EP
2 and 5	1,000	BB BG RP RK GP EP FT
3 and 4	1,000	BB BG RP RK GP EP PP

Load Notes:

1. May use 330L FTs.
2. PP may only be used on station 4.

Notes:

1. The Aermacchi MB-326M is a trainer with a secondary light attack capability. It is similar to the MB-326G. In SAAF service it was known as the Impala Mk I.
2. High transonic drag (HTD).

VPs: 11/7/4/2

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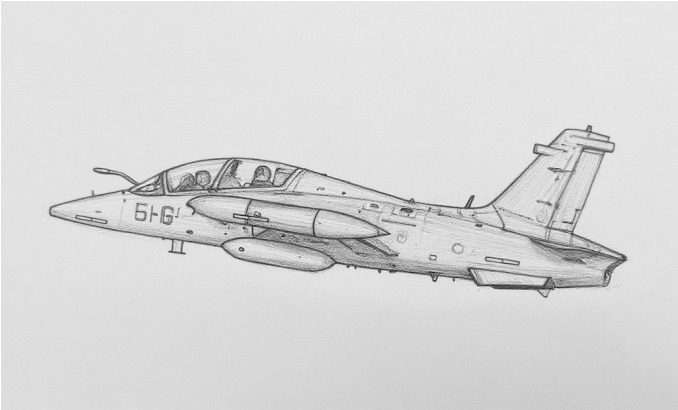
Aermacchi MB-339



The Aermacchi MB-339 is a trainer and light-attack aircraft. It was developed from the MB-326.

Versions

MB-339A

The MB-339A was developed from the MB-326K. It gained a new forward fuselage for two crew, with the rear one being elevated to give better visibility, a new tail, and deleted the internal guns. It kept the wing and the 4,000 lbf Viper 632-43 engine. The additional weight of the fuselage modifications reduced the stores capacity to 3,500 lb.

The MB-339A was used by the Italian AMI (one hundred and seven), the Argentine COAN (ten MB-339AA), the Ghanaian Air Force (four), the Malaysian RMAF (thirteen MB-339AN), the Peruvian Air Force (sixteen MB-339AP), and the Nigerian Air Force (twelve MB-339AN), and the UAE Air Force (seventeen).

MB-339C and MB-339CD

The MB-339C is largely similar to the A, but has updated flight controls and avionics, including a RWR. The CD version also has a

The MB-339C serves with the Italian AMI (thirty MB-33CD), the Eritrean Air Force (six MB-339CE), and the Malaysian RMAF (MB-339CM).

MB-339CB

The MB-339CB is largely similar to the C, but uses the more powerful 4,440 lbf Viper 680-43 engine.

The MB-339CB served with the RNZAF from 1991 to 2003 and then with the French AA from 2019 for DACT.

Armament and Stores

The MB-339 can be armed with gun pods (including ones with a 30 mm DEFA cannon and .50 cal machine guns), rocket pods, bombs, and is wired for AIM-9 Sidewinder and Matra R.550 Magic IRMs. It can use 330L FTs.

In Argentine COAN service, it was typically armed with two gun pods each with a 30 mm DEFA cannon and 120 rounds per gun and then either two LAU-10 RP (each with four Zuni rockets), two Matra-155 RPs (each with twelve 68 mm rockets), or two Mk 81 or Mk 82 BBs. The LAU-10 RPs were favored in the South Atlantic War.

Combat

Argentine COAN MB-339As saw combat in the 1982 South Atlantic War, flying out of BAM Malvinas (Port Stanley Airport). They were used for armed reconnaissance and close air support. Of the seven deployed to the Islands, one crashed in poor weather, one was shot down by a Blowpipe, two were destroyed on the ground by naval gunfire, one was unable to escape, and two escaped back to the mainland.

Eritrean MB-339Cs saw combat in the 1998-2000 Eritrean–Ethiopian War.

ADCs

- MB-339A
- MB-339C
- MB-339CD
- MB-339CB

See Also

- Aermacchi MB-326

Photo Credit

- MB-339CD: Jim van de Burgt (Public Domain)

MB-339A

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	120
Size:	+0	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Std

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	0.5	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 47	1/2 40	DT 35	Dive Speed
EH+	46+	3.0 – 5.0	—	—	6.0
VH	36–45	2.5 – 5.0	2.5 – 4.5	—	6.0
HI	26–35	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.0
MH	17–25	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.0
ML	8–16	1.5 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0
LO	0–7	1.0 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 4
1/2: < 6
DT : ≥ 6

Weight Limit: 3,500

Station	Limit	Allowed Loads
1 and 6	750	BB BG RP RK GP EP IRM
2 and 5	1,000	BB BG RP RK RG GP EP FT
3 and 4	1,000	BB BG RP RK RG GP EP PP

Load Notes:

1. May use 330L FTs.
2. May use AIM-9 and R.550 IRMs
3. PP may only be used on station 4.

Notes:

1. The Aermacchi MB-339A is a trainer and light-attack aircraft. It is derived from the MB-326K, but has a new forward cockpit for a second crew member and no internal guns.
2. High transonic drag (HTD).

VPs: 11/7/4/2

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MB-339C

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	120
Size:	+0	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Std

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	0.5	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 47	1/2 40	DT 35	Dive Speed
EH+	46+	3.0 – 5.0	—	—	6.0
VH	36–45	2.5 – 5.0	2.5 – 4.5	—	6.0
HI	26–35	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.0
MH	17–25	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.0
ML	8–16	1.5 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0
LO	0–7	1.0 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	C
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	—
Bomb System:	Computed

Technology:

None

Load Point Limits: CL : < 4
1/2: < 6
DT : ≥ 6

Weight Limit: 3,500

Station	Limit	Allowed Loads
1 and 6	750	BB BG RP RK GP EP IRM
2 and 5	1,000	BB BG RP RK RG GP EP FT
3 and 4	1,000	BB BG RP RK RG GP EP PP

Load Notes:

1. May use 330L FTs.
2. May use AIM-9 and R.550 IRMs
3. PP may only be used on station 4.

Notes:

1. The Aermacchi MB-339C is a trainer and light-attack aircraft. It is derived from the MB-339A, but has updated avionics and flight controls.
2. High transonic drag (HTD).

VPs: 11/7/4/2

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MB-339CD

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	120
Size:	+0	AtA Refuel:	Yes
Vulnerability:	−2	Ejection Seat:	Std

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	0.5	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 47	1/2 40	DT 35	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 5.0	—	—	6.0	—	0.5	—	—	—	—	EH+
VH	36–45	2.5 – 5.0	2.5 – 4.5	—	6.0	—	0.5	—	0.5	—	—	VH
HI	26–35	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.0	—	0.5	—	0.5	—	0.5	HI
MH	17–25	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.0	—	1.0	—	0.5	—	0.5	MH
ML	8–16	1.5 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0	—	1.0	—	1.0	—	0.5	ML
LO	0–7	1.0 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0	—	1.0	—	1.0	—	1.0	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	C
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	—

Bomb System: Computed

Technology:

None

Load Point Limits: CL : < 4
1/2: < 6
DT : ≥ 6

Weight Limit: 3,500

Station	Limit	Allowed Loads
1 and 6	750	BB BG RP RK GP EP IRM
2 and 5	1,000	BB BG RP RK RG GP EP FT
3 and 4	1,000	BB BG RP RK RG GP EP PP

Load Notes:

1. May use 330L FTs.
2. May use AIM-9 and R.550 IRMs
3. PP may only be used on station 4.

Notes:

1. The Aermacchi MB-339CD is a trainer and light-attack aircraft. It is derived from the MB-339C, but is equipped with a fixed refueling probe.
2. High transonic drag (HTD).

VPs: 11/7/4/2

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MB-339CB

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.5	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	120
Size:	+0	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Std

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	0.5	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 47	1/2 40	DT 35	Dive Speed
EH+	46+	3.0 – 5.0	—	—	6.0
VH	36–45	2.5 – 5.0	2.5 – 4.5	—	6.0
HI	26–35	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.0
MH	17–25	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.0
ML	8–16	1.5 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0
LO	0–7	1.0 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	C
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	—

Bomb System: Computed

Technology:

None

Load Point Limits: CL : < 4
1/2: < 6
DT : ≥ 6

Weight Limit: 3,500

Station	Limit	Allowed Loads
1 and 6	750	BB BG RP RK GP EP IRM
2 and 5	1,000	BB BG RP RK RG GP EP FT
3 and 4	1,000	BB BG RP RK RG GP EP PP

Load Notes:

1. May use 330L FTs.
2. May use AIM-9 and R.550 IRMs
3. PP may only be used on station 4.

Notes:

1. The Aermacchi MB-339CB is a trainer and light-attack aircraft. It is derived from the MB-339C, but has a more powerful Viper 680-43 engine.
2. High transonic drag (HTD).

VPs: 12/8/4/2

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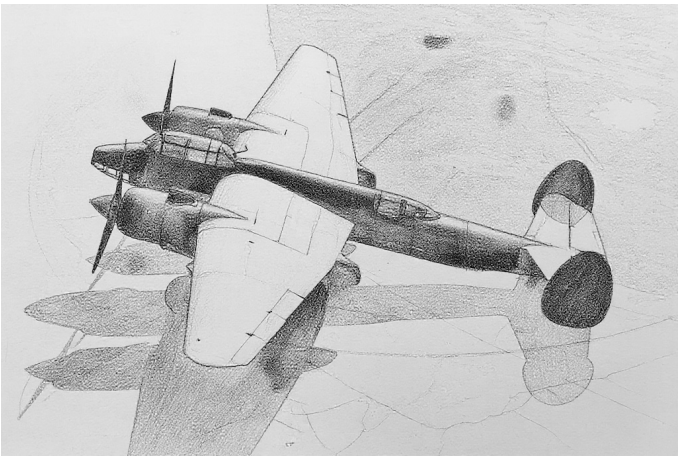
Chapter 8

Soviet Aircraft

Tupolev Tu-2



The Tupolev Tu-2 was a propeller-driven medium bomber that served in WW2 and after. Its NATO reporting name is Bat.

Versions

Tu-2

The Tu-2 was the initial version and entered service in small numbers with the Soviet VVS in 1942. Although well regarded, production was suspended in favor of fighters and the Pe-2 light bomber.

Tu-2S

In 1943, production restarted of the improved Tu-2S version. This version had improved and more powerful ASh-82FNs engines, a four-bladed propeller in place of the earlier three-bladed one, changes to the structure and systems, including elimination of the dive brakes to simplify production and improve robustness, removal of the fixed forward machine guns, and improved defensive armament in the form of three single 12.7 mm UBT machine guns.

The Tu-2S served in the VVS from early 1944 until 1955. It also served with the Bulgarian Air Force, Chinese PLAAF, Hungarian Air Force, North Korean KPAF, Polish Air Force and Navy, and Romanian Air Force. Indonesia later received a few ex-Chinese Tu-2S aircraft.

Tu-2P

The PLAAF developed the Tu-2P to intercept overflights by ROCAF aircraft. The RP-1 radar from the J-5A (MiG-17PF) was installed in the nose, and two 23 mm NR-23 cannons replaced the 20 mm cannons in the wings. Defensive armament was deleted. The radar was modified to eliminate the lower part of the scan, which reduced ground clutter at the cost of only being able to detect and track targets at the same or higher altitude.

Several PLAAF aircraft were converted in 1959.

Armament and Stores

The Tu-2S was armed with two fixed 20mm ShVaK cannons in the wing roots and three 12.7mm UBT defensive guns in single mounts operated by the navigator, the radio operator, and the ventral gunner. In the Tu-2P, the fixed guns were replaced by a pair of 23mm NR-23 cannons, and the defensive guns presumably removed.

A typical bomb load for the Tu-2S would be three 1,000 kg bombs (one carried internally and one under each wing), four 250 kg bombs (two carried internally and one under each wing), or nine 100 kg bombs (all carried internally).

Combat

The Tu-2S saw combat in WW2, with Chinese communist forces in the Chinese Civil War, with the PLAAF and KPAF in the Korean War, and with the PLAAF in the 1959 Tibetan Uprising and associated conflicts before and after.

The Tu-2P saw combat in November 1960 when three PLAAF aircraft attempted to intercept a ROCAF P2V. Two of the three flew into terrain, and the P2V escaped.

ADCs

- Tu-2S
- Tu-2P

Photo Credit

- Tu-2: SDASM Archives (Public Domain)

Tu-2S

Crew: Pilot, Navigator/Gunner, Radio Operator/Gunner, and Ventral Gunner

Power APs/DPs: ⊙⊙

	CL	1/2	DT	Fuel
FT	1.0	1.0	1.0	1.0
HT	0.5	0.5	0.5	0.5
N	0.0	0.0	0.0	0.2
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.0, reduce power by 0.5.

Cruise Spd. CL:	2.5	Restr. Arcs:	30–
Climb Spd.:	2.0	Blind Arcs:	—
Visibility:	7	Internal Fuel:	200
Size:	−1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.50	0.50	0.75
HT	0.75	1.00	1.00
BT	1.25	—	—
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 24	1/2 20	DT 14	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	—	—	—	—
HI	26–35	2.0 – 3.0	—	—	4.5
MH	17–25	1.5 – 3.0	2.0 – 3.0	—	4.5
ML	8–16	1.5 – 3.5	1.5 – 3.0	2.0 – 3.0	4.0
LO	0–7	1.5 – 3.0	1.5 – 3.0	2.0 – 3.0	4.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	—	—	—	—	—	VH
—	0.25	—	—	—	—	HI
—	0.25	—	0.25	—	—	MH
—	0.50	—	0.25	—	0.25	ML
—	0.50	—	0.50	—	0.25	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm ShVaK
To Hit:	5/3/0
Ammunition:	8.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	3/3*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 7
DT : ≥ 7

Weight Limit: 6,600

Station	Limit	Allowed Loads
1 and 3	2,200	BB
2	2,200	BB

Load Notes:

1. Stations 1 and 3 are under-wing stations. Load options for each are: (a) one 2,200 lb bombs or (b) one 550 lb bombs.
2. Station 2 is the internal bomb bay. Load options are: (a) one 2,200 lb bombs, (b) two 550 lb bombs, or (c) nine 220 lb bombs. Any bombs carried must be low-drag.
3. As an exception to the normal rules for load points, internal loads contribute 1 load point for each 1,000 of weight and internal fuel contributes 1 load point for each 50 fuel points. A return mission will typically require leaving the target with at least 65 fuel points (1.3 load points).

Notes:

1. The Tupolev Tu-2S is a light bomber. The NATO reporting name is Bat.
2. Low roll rate (LRR).
3. Articulated Guns. In addition to its fixed guns, the Tu-2 is equipped with three 12.7 mm UBT machine guns in rear-facing single mounts that are operated by the navigator, radio operator, and ventral gunner. The guns can fire into the 60– arc. They may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are 3/2/2 and the only modifiers are target size. The AtA damage rating is 2. The ammunition is 8.0.

VPs: 6/4/2/1

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Tu-2P

Crew: Pilot, Radar Operator, Navigator, and Radio Operator

Power APs/DPs: ⊙⊙

	CL	1/2	DT	Fuel
FT	1.0	1.0	1.0	1.0
HT	0.5	0.5	0.5	0.5
N	0.0	0.0	0.0	0.2
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.0, reduce power by 0.5.

Cruise Spd. CL:	2.5	Restr. Arcs:	30–
Climb Spd.:	2.0	Blind Arcs:	—
Visibility:	7	Internal Fuel:	200
Size:	−1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.50	0.50	0.75
HT	0.75	1.00	1.00
BT	1.25	—	—
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 24	1/2 20	DT 14	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	—	—	—	—
HI	26–35	2.0 – 3.0	—	—	4.5
MH	17–25	1.5 – 3.0	2.0 – 3.0	—	4.5
ML	8–16	1.5 – 3.5	1.5 – 3.0	2.0 – 3.0	4.0
LO	0–7	1.5 – 3.0	1.5 – 3.0	2.0 – 3.0	4.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	—	—	—	—	—	VH
—	0.25	—	—	—	—	HI
—	0.25	—	0.25	—	—	MH
—	0.50	—	0.25	—	0.25	ML
—	0.50	—	0.50	—	0.25	LO

Radar:	RP-1 Izumrud
ECCM:	0
Arcs:	Limited
Search:	18–6
Track:	6–6
Lock-On:	6

ECM:	
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Two 23 mm NR-23
To Hit:	4/2/1
Ammunition:	3.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	RE
AtA/AtG:	4/3
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 7
DT : ≥ 7

Weight Limit: 6,600

Station	Limit	Allowed Loads
1 and 3	2,200	BB
2	2,200	BB

Load Notes:

1. Stations 1 and 3 are under-wing stations. Load options for each are: (a) one 2,200 lb bombs or (b) one 550 lb bombs.
2. Station 2 is the internal bomb bay. Load options are: (a) one 2,200 lb bombs, (b) two 550 lb bombs, or (c) nine 220 lb bombs. Any bombs carried must be low-drag.
3. As an exception to the normal rules for load points, internal loads contribute 1 load point for each 1,000 of weight and internal fuel contributes 1 load point for each 50 fuel points. A return mission will typically require leaving the target with at least 65 fuel points (1.3 load points).

Notes:

1. The Tupolev Tu-2P is a night intercepter. A few Tu-2S were converted by the PLAAF by adding the radar from the J-5A (MiG-17PF) and replacing the 20 mm cannons with 23 mm NR-23 cannons. The NATO reporting name is Bat.
2. Low roll rate (LRR).
3. Modified Radar Scan. In level flight, the radar may detect and track targets at equal or higher altitude, regardless of the altitude of the target, but may not detect targets at lower altitude. In diving or climbing flight, it may only detect targets at higher altitude.
4. Gun Muzzle Flash. If the guns are fired at night, for the rest of the current game turn and during the following two game turns, the aircraft may not sight, may not conduct any attack that requires the target to be sighted, and is considered to be flying in adverse weather conditions.

VPs: 12/8/4/2

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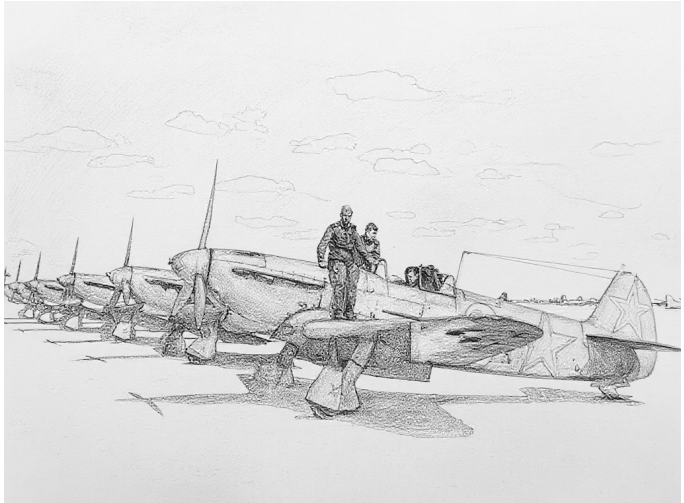
Yakovlev Yak-9



The Yakovlev Yak-9 was a propeller-driven fighter developed during WWII and which first entered service in 1942. After WWII, later versions were supplied to many Soviet allies. The NATO reporting name for the aircraft is “Frank.”

Versions

There were many versions of the Yak-9; these are the most relevant.

Yak-9

The first Yak-9 version was developed from the Yak-7B fighter. It was armed with one 20 mm ShVAK cannon firing through the spinner and one 12.7 mm UBS machine gun in the left wing. It entered service with the Soviet VVS in 1942.

Yak-9T

The Yak-9T was armed with a 37 mm NS-37 cannon in place of the 20 mm. The cockpit was moved backwards slightly to accommodate the cannon.

Yak-9D

The Yak-9D is a long-ranged escort fighter derived from the original Yak-9. It had additional fuel tanks in the wings, but otherwise was very similar.

Yak-9M and Yak-9U

The Yak-9M was also derived from the original Yak-9, but had the cockpit move backwards like the Yak-9T for commonality and a stronger construction, with the fuselage being skinned by plywood rather than fabric. It added a second 12.7 mm UBS machine gun in the right wing. The Yak-9U was an iteration of the Yak-9M with modifications to reduce defects during construction.

The Yak-9M entered service in the spring of 1994 and the Yak-9U followed before the end of WW2.

Yak-9P

The Yak-9P was a post-war development of the Yak-9U with completely metal wings.

The Yak-9U entered service with the VVS in 1946. It also served with many Soviet allies, including the Albanian Air Force, Bulgarian Air Force, Chinese PLAAF, Hungarian Air Force, North Korean KPAF (from 1949), Polish Air Force and Polish Navy, and the Yugoslav Air Force.

Armament and Stores

Most versions of the Yak-9 were armed with one 20 mm ShVAK cannon firing through the spinner and one or two 12.7 mm UBS machine guns in the wings.

Two 100 kg bombs could be carried under the wings.

Combat

Early versions of the Yak-9 fought in WW2. The Yak-9U/-9P were also used by the North Korean KPAF and saw extensive service in the first weeks of the Korean War.

ADCs

- Yak-9D
- Yak-9U
- Yak-9P

Photo Credit

- Yak-9D: USAAF photographer (Public Domain)

Yak-9D

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	2.0	1.5	1.5	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.5, reduce power by 0.5.

Cruise Spd. CL:	3.0	Restr. Arcs:	—
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	35
Size:	−1	AtA Refuel:	No
Vulnerability:	−1	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.25	0.25	0.25
HT	0.25	0.25	0.75
BT	0.75	0.75	—
ET	1.00	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 33	1/2 27	DT 19	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	—	—	—	—
HI	26–35	1.5 – 3.0	1.5 – 3.0	—	5.0
MH	17–25	1.0 – 3.5	1.5 – 3.0	1.5 – 3.0	5.0
ML	8–16	1.0 – 3.5	1.5 – 3.5	1.5 – 3.0	5.0
LO	0–7	1.0 – 3.5	1.0 – 3.5	1.5 – 3.0	5.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	—	—	—	—	—	VH
HI	—	0.25	—	0.25	—	—	HI
MH	—	0.50	—	0.25	—	0.25	MH
ML	—	1.00	—	0.50	—	0.50	ML
LO	—	1.00	—	1.00	—	0.50	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	One 20 mm ShVAK One 12.7 mm UBS
To Hit:	5/3/0
Ammunition:	6.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	2/2*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 1
1/2: < 3
DT : ≥ 3

Weight Limit: 450

Station	Limit	Allowed Loads
1 and 2	225	BB

Notes:

1. The Yakovlev Yak-9D is a propeller-driven, long-range day fighter. The NATO reporting name for aircraft is Frank.
2. High roll rate (HRR) if CL. High transonic drag (HTD). Low bleed rate (LBR).
3. The normal fuel load is 35 fuel points. These guns may be overloaded to 55 fuel points, but doing so reduces power by 0.5 and increases vulnerability to −2 until the fuel drops to 35 fuel points.

VPs: 4/3/1/1

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Yak-9U

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	2.0	1.5	1.5	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.5, reduce power by 0.5.

Cruise Spd. CL:	3.0	Restr. Arcs:	—
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	35
Size:	−1	AtA Refuel:	No
Vulnerability:	−1	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.25	0.25	0.25
HT	0.25	0.25	0.75
BT	0.75	0.75	—
ET	1.00	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 33	1/2 27	DT 19	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	—	—	—	—
HI	26–35	1.5 – 3.0	1.5 – 3.0	—	5.0
MH	17–25	1.0 – 3.5	1.5 – 3.0	1.5 – 3.0	5.0
ML	8–16	1.0 – 3.5	1.5 – 3.5	1.5 – 3.0	5.0
LO	0–7	1.0 – 3.5	1.0 – 3.5	1.5 – 3.0	5.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	—	—	—	—	—	VH
HI	—	0.25	—	0.25	—	—	HI
MH	—	0.50	—	0.25	—	0.25	MH
ML	—	1.00	—	0.50	—	0.50	ML
LO	—	1.00	—	1.00	—	0.50	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	One 20 mm ShVAK Two 12.7 mm UBS
To Hit:	5/3/0
Ammunition:	6.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	3/3*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 1
1/2: < 3
DT : ≥ 3

Weight Limit: 450

Station	Limit	Allowed Loads
1 and 2	225	BB

Notes:

1. The Yakovlev Yak-9U is a propeller-driven day fighter. The NATO reporting name for aircraft is Frank.
2. High roll rate (HRR) if CL. High transonic drag (HTD). Low bleed rate (LBR).

VPs: 4/3/1/1

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Yak-9P

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	2.0	1.5	1.5	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.5, reduce power by 0.5.

Cruise Spd. CL:	3.0	Restr. Arcs:	—
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	35
Size:	−1	AtA Refuel:	No
Vulnerability:	−1	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.25	0.25	0.25
HT	0.25	0.25	0.75
BT	0.75	0.75	—
ET	1.00	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 33	1/2 27	DT 19	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	—	—	—	—
HI	26–35	1.5 – 3.0	1.5 – 3.0	—	5.0
MH	17–25	1.0 – 3.5	1.5 – 3.0	1.5 – 3.0	5.0
ML	8–16	1.0 – 3.5	1.5 – 3.5	1.5 – 3.0	5.0
LO	0–7	1.0 – 3.5	1.0 – 3.5	1.5 – 3.0	5.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	—	—	—	—	—	VH
HI	—	0.25	—	0.25	—	—	HI
MH	—	0.50	—	0.25	—	0.25	MH
ML	—	1.00	—	0.50	—	0.50	ML
LO	—	1.00	—	1.00	—	0.50	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	One 20 mm ShVAK Two 12.7 mm UBS
To Hit:	5/3/0
Ammunition:	6.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	3/3*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 1
1/2: < 3
DT : ≥ 3

Weight Limit: 450

Station	Limit	Allowed Loads
1 and 2	225	BB

Notes:

1. The Yakovlev Yak-9P is a propeller-driven day fighter. The NATO reporting name for aircraft is Frank.
2. High roll rate (HRR) if CL. High transonic drag (HTD). Low bleed rate (LBR).

VPs: 4/3/1/1

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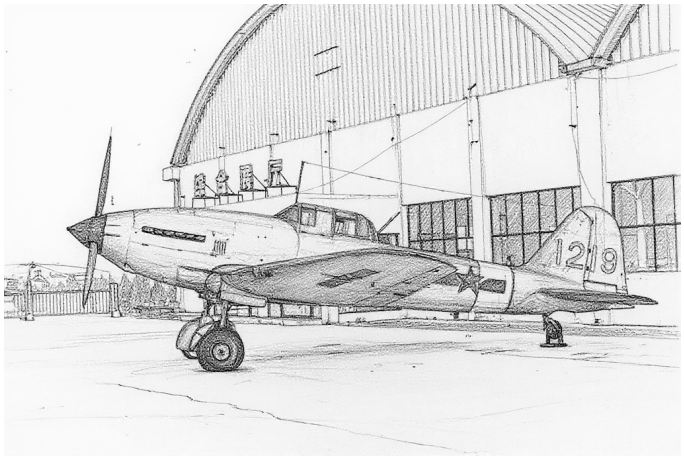
Ilyushin Il-10



The Ilyushin Il-10 was a propeller-driven ground-attack aircraft developed during WWII as a replacement for the famous Il-2 Sturmovik.

Versions

Like its predecessor, the Il-10 featured extensive armor for the crew and engine and a dorsal defensive gun to protect from attacks from the rear.

The initial Il-10 had two 23 mm VYa-23 cannons and two 7.62 mm ShKAS machine guns in the wings, with 150 and 750 rounds each, respectively, plus a 12.7 mm UBT machine gun with 150 rounds protecting the tail. Later versions had four 23 mm NR-23 cannons in the wings and a 20 mm B-20 cannon in the dorsal mount.

The Il-10 was also manufactured under license by Avia in Czechoslovakia.

The Il-10 entered service with the Soviet VVS in 1944 and was retired in 1956. After the war, it served with the Bulgarian Air Force, the Chinese PLAAF (from 1950 to 1972), the Czechoslovak Air Force, the Hungarian Air Force, the Indonesian Air Force (former Polish aircraft), the North Korean KPAF, the Polish Air Force, the Romanian Air Force, and the Yemen Air Force.

Armament and Stores

In addition to its gun armament, a typical weapon load would be four 100 kg bombs, two in the bomb bays and two on the wing stations, or two 250 kg bombs on the wings. Alternatively, the wing stations could carry a total of eight RS-82 or four RS-132 rockets (although apparently these rockets were not used in the Korean War).

Combat

The Il-10 was used by the North Korean KPAF and saw extensive service in the first weeks of the Korean War, before suffering large losses against USAF fighters. It was also used in combat by the PLAAF in 1955 during the First Taiwan Strait Crisis.

ADCs

- Il-10
- Il-10 (Late)

Photo Credit

- Il-10: Flavio Mucia (CC BY 2.0)

Il-10

Crew: Pilot and Gunner

Maneuver DPs:

LR/DR	2.5
VR	1.5

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	1.0	1.0	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 2.5, reduce power by 0.5.

Cruise Spd. CL:	2.0	Restr. Arcs:	—
Climb Spd.:	1.5	Blind Arcs:	0L
Visibility:	6	Internal Fuel:	58
Size:	+0	AtA Refuel:	No
Vulnerability:	+2	Ejection Seat:	None

Turn DPs:

	CL	1/2	DT
TT	0.25	0.25	0.25
HT	0.25	0.75	1.00
BT	0.75	1.00	—
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 24	1/2 19	DT 14	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	—	—	—	—
HI	26–35	—	—	—	—
MH	17–25	1.0 – 2.5	1.5 – 2.0	—	4.0
ML	8–16	1.0 – 3.0	1.5 – 2.5	1.5 – 2.0	4.0
LO	0–7	1.0 – 3.0	1.5 – 3.0	1.5 – 2.5	4.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	—	—	—	—	—	VH
HI	—	—	—	—	—	—	HI
MH	—	0.25	—	0.25	—	—	MH
ML	—	0.25	—	0.25	—	0.25	ML
LO	—	0.50	—	0.50	—	0.25	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Two 23 mm VYa-23, Two 7.62 mm ShKAS

To Hit:	4/2/0
Ammunition:	8.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/4

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 2, 1/2: < 4, DT : ≥ 4

Weight Limit: 1,550

Station	Limit	Allowed Loads
1 and 4	550	BB RK
2 and 3	225	BB

Load Notes:

1. Stations 1 and 4 could each be fitted with rails for four RS-82 or two RS-132 rockets, but these were not used in the Korean War.
2. Stations 2 and 3 are internal bays in each wing root.

Notes:

1. The Ilyushin Il-10 is a propeller-driven close-support aircraft. The NATO reporting name for the aircraft is Beast.
2. High transonic drag (HTD). Low bleed rate (LBR).
3. Articulated Gun. In addition to its fixed guns, the aircraft is equipped with one dorsal 12.7 mm UBT gun that can fire into the 60– arc. This gun may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are 2/1/1 and are modified only by the target size. The AtA damage rating is 1. The ammunition is 5.0.

VPs: 6/4/2/1

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Il-10
(Late)

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	1.0	1.0	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 2.5, reduce power by 0.5.

Cruise Spd. CL:	2.0	Restr. Arcs:	—
Climb Spd.:	1.5	Blind Arcs:	0L
Visibility:	6	Internal Fuel:	58
Size:	+0	AtA Refuel:	No
Vulnerability:	+2	Ejection Seat:	None

Crew: Pilot and Gunner

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.25	0.25	0.25
HT	0.25	0.75	1.00
BT	0.75	1.00	—
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 24	1/2 19	DT 14	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	—	—	—	—
HI	26–35	—	—	—	—
MH	17–25	1.0 – 2.5	1.5 – 2.0	—	4.0
ML	8–16	1.0 – 3.0	1.5 – 2.5	1.5 – 2.0	4.0
LO	0–7	1.0 – 3.0	1.5 – 3.0	1.5 – 2.5	4.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	—	—	—	—	—	VH
HI	—	—	—	—	—	—	HI
MH	—	0.25	—	0.25	—	—	MH
ML	—	0.25	—	0.25	—	0.25	ML
LO	—	0.50	—	0.50	—	0.25	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Four 23 mm NS-23

To Hit:	5/3/2
Ammunition:	8.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/5

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 2, 1/2: < 4, DT : ≥ 4

Weight Limit: 1,550

Station	Limit	Allowed Loads
1 and 4	550	BB RK
2 and 3	225	BB

Load Notes:

1. Stations 1 and 4 could each be fitted with rails for four RS-82 or two RS-132 rockets, but these were not used in the Korean War.
2. Stations 2 and 3 are internal bays in each wing root.

Notes:

1. The Ilyushin Il-10 is a propeller-driven close-support aircraft. This late variant has an improved gun armament of four 23 mm NS-23 cannons in the wings and one defensive dorsal 20 mm B-20 cannon. The NATO reporting name for the aircraft is Beast.
2. High transonic drag (HTD). Low bleed rate (LBR).
3. Articulated Gun. In addition to its fixed guns, the aircraft is equipped with one dorsal 20 mm B-20 gun that can fire into the 60– arc. This gun may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are 3/2/1 and are modified only by the target size. The AtA damage rating is 3. The ammunition is 6.0.

VPs: 6/4/2/1

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Tupolev Tu-4

The Tupolev Tu-4 was a propeller-driven strategic bomber. As it provided the Soviet Union for the first time with the ability to conduct a one-way strike on peripheral cities in the continental US, including Los Angeles and Chicago, it spurred the development and deployment of defensive interceptors and SAMs. This effort gained further urgency when the Soviet Union demonstrated its first nuclear bomb. The NATO reporting name for the Tu-4 is Bull.

Versions

Tu-4

The Tu-4 was largely reverse-engineered from Boeing B-29As that had made emergency landings in the USSR during WWII and were subsequently interned. It was, however, fitted with Soviet Shvetsov ASh-73 engines and auxiliary equipment. Furthermore, the .50 cal machine guns on the original B-29A were replaced by more powerful 23 mm NS-23 cannons, with two in each turret and two in the tail position. The RPB Kobal't attack radar was a copy of the B-29's APQ-13 radar; its NATO reporting name is Mushroom.

The Tu-4 entered service with the Soviet DA VS (Long-Range Aviation) in large numbers in 1949. In addition to service in the DA VS, a small number were used by the Chinese PLAAF from 1953.

Tu-4A

The Tu-4A version was a nuclear bomber and the counterpart of the Silverplate and Saddletree variants of the B-29A. Armament and armor were sacrificed to give longer range.

The Tu-4A served only in the Soviet DA VS.

Tu-4P

The Tu-4P version was a conversion carried out by the Chinese PLAAF to create a night fighter specifically to counter ROCAF intruders. The navigation radar was moved from its normal ventral position to a radome in place of the forward dorsal turret, creating a basic all-round air-search radar. The bomb bay was used as an air-intercept command post, and the guns were equipped with a basic infrared sight.

A few Tu-4P aircraft served with the PLAAF in 1960.

Armament and Stores

A typical bomb load for the conventional Tu-4 would be six 1,000 kg bombs in the internal bays.

The nuclear Tu-4A could carry the RDS-1, -3, and -5 nuclear bombs.

Combat

Only the Tu-4P saw combat.

ADCs

- Tu-4
- Tu-4A
- Tu-4P

See Also

- Boeing B-29 Superfortress

Photo Credit

- Tu-4: Pavel Adzhigildaev (CC BY-SA 3.0)

Tu-4

Crew: Pilot, Co-pilot, Bombardier, Flight Engineer, Navigator, Radio Operator, Radar Observer, Right Gunner, Left Gunner, Fire Control Officer, and Tail Gunner

Power APs/DPs: ⊙⊙⊙⊙

	CL	1/2	DT	Fuel
FT	0.5	0.5	0.5	2.0
HT	0.2	0.2	0.2	1.0
N	0.0	0.0	0.0	0.4
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.0, reduce power by 0.2.

Cruise Spd. CL:	2.0	Restr. Arcs:	—
Climb Spd.:	2.0	Blind Arcs:	—
Visibility:	10	Internal Fuel:	2900
Size:	−2	AtA Refuel:	No
Vulnerability:	+2	Ejection Seat:	None

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	1.0	—	—
HT	—	—	—
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 40	1/2 37	DT 32	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	1.5 – 3.5	1.5 – 3.5	—	4.5	—	0.25	—	0.10	—	—	VH
HI	26–35	1.0 – 4.0	1.5 – 4.0	1.5 – 3.5	4.5	—	0.50	—	0.25	—	0.10	HI
MH	17–25	1.0 – 3.5	1.0 – 3.5	1.0 – 3.5	4.5	—	0.50	—	0.25	—	0.25	MH
ML	8–16	1.0 – 3.5	1.0 – 3.5	1.0 – 3.0	4.0	—	0.50	—	0.25	—	0.25	ML
LO	0–7	1.0 – 3.0	1.0 – 3.0	1.0 – 3.0	3.5	—	0.50	—	0.25	—	0.25	LO

Radar:	RPB Kobal't
ECCM:	0
Arcs:	0+
Search:	Gr. Nav. (120)
Track:	Gr. Attack (60)
Lock-On:	6

ECM:	IFF
RWR:	A
DDS:	—
DJM:	—
AJM:	—
BJM:	A2

Weapon Stations Diagram:

Guns:	Ten 23 mm NS-23
To Hit:	2/1/1
Ammunition:	11.0
Gunsight:	—
Ranging:	—
AtA/AtG:	4/4
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : <12 / 1/2: <24 / DT : ≥24

Weight Limit: 20,000

Station	Limit	Allowed Loads
1 and 2	10,000	BB FT

Load Notes:

1. Stations 1 and 2 are the forward and rear internal bays. Each can carry up to (a) two 1,500 kg (3,300 lb) FAB-1500 M46 bombs, (b) six 500 kg (1,100 lb) FAB-500 M46 bombs, (c) twelve 250 kg (550 lb) FAB-250 M46 bombs, or (d) two special 2400L FTs. All bombs must be the same type.
2. As an exception to the normal rules for load points, internal loads contribute 1 load point for each 1,000 of weight and internal fuel contributes 1 load point for each 50 fuel points. A return mission will typically require leaving the target with at least 750 fuel points (15 load points).

Notes:

1. The Tupolev Tu-4 is a propeller-driven strategic conventional bomber. It is a reverse-engineered version of the Boeing B-29A. The NATO reporting name for the aircraft is Bull.
2. Low roll rate (LRR).
3. Flight Restrictions. VD, VC, and unloading are forbidden.
4. Articulated Guns. The guns can fire in any direction. They may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are modified only by the target size and a −1 modifier when firing into the 60– arc.

VPs: 24/16/8/4

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Tu-4A

Crew: Pilot, Copilot, Flight Engineer, Navigator, Bombardier, Weaponeer, Radio Operator, Radar Operator, Countermeasures Operator, and Tail Gunner

Power APs/DPs: ⊙⊙⊙⊙

	CL	1/2	DT	Fuel
FT	0.5	0.5	0.5	2.0
HT	0.2	0.2	0.2	1.0
N	0.0	0.0	0.0	0.4
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.0, reduce power by 0.2.

Cruise Spd. CL:	2.0	Restr. Arcs:	—
Climb Spd.:	2.0	Blind Arcs:	—
Visibility:	10	Internal Fuel:	2900
Size:	−2	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	1.0	—	—
HT	—	—	—
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 40	1/2 37	DT 32	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	1.5 – 3.5	1.5 – 3.5	—	4.5	—	0.25	—	0.10	—	—	VH
HI	26–35	1.0 – 4.0	1.5 – 4.0	1.5 – 3.5	4.5	—	0.50	—	0.25	—	0.10	HI
MH	17–25	1.0 – 3.5	1.0 – 3.5	1.0 – 3.5	4.5	—	0.50	—	0.25	—	0.25	MH
ML	8–16	1.0 – 3.5	1.0 – 3.5	1.0 – 3.0	4.0	—	0.50	—	0.25	—	0.25	ML
LO	0–7	1.0 – 3.0	1.0 – 3.0	1.0 – 3.0	3.5	—	0.50	—	0.25	—	0.25	LO

Radar:	RPB Kobal't
ECCM:	0
Arcs:	0+
Search:	Gr. Nav. (120)
Track:	Gr. Attack (60)
Lock-On:	6

ECM:	IFF
RWR:	A
DDS:	—
DJM:	—
AJM:	—
BJM:	A2

Weapon Stations Diagram:

Guns:	Two 23 mm NS-23
To Hit:	3/2/2
Ammunition:	11.0
Gunsight:	—
Ranging:	—
AtA/AtG:	4/4
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : <12, 1/2: <24, DT : ≥24

Weight Limit: 20,000

Station	Limit	Allowed Loads
1 and 2	10,000	BB FT

Load Notes:

1. Station 1 is the internal bomb bay. It can carry either (a) one RDS-1 nuclear bomb (weight 10,000), (b) one RDS-3 nuclear bomb (weight 8000), or (c) one RDS-5 nuclear bomb (weight unknown).
2. Station 2 is the rear internal bomb bay and can carry two special 2400L FTs.
3. Exceptionally, internal fuel also contributes 1 load point per 50 fuel points. A return mission will typically require leaving the target with at least 750 fuel points (15 load points).

Notes:

1. The Tupolev Tu-4 is a propeller-driven strategic nuclear bomber. It is a reverse-engineered version of the Boeing B-29A. The NATO reporting name for the aircraft is Bull.
2. Low roll rate (LRR).
3. Flight Restrictions. VD, VC, and unloading are forbidden.
4. Articulated Guns. The guns can only fire at targets in the 60– arc. They may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are modified only by the target size.

VPs: 24/16/8/4

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Tu-4P

Crew: Pilot, Co-pilot, Flight Engineer, Navigator, Radio Operator, Radar Operator, Intercept Officer, Intercept Officer, Plotter, Plotter, Fire Control Officer, Right Gunner, Left Gunner, and Tail Gunner

Power APs/DPs: ⊙⊙⊙⊙

	CL	1/2	DT	Fuel
FT	0.5	0.5	0.5	2.0
HT	0.2	0.2	0.2	1.0
N	0.0	0.0	0.0	0.4
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.0, reduce power by 0.2.

Cruise Spd. CL:	2.0	Restr. Arcs:	—
Climb Spd.:	2.0	Blind Arcs:	—
Visibility:	10	Internal Fuel:	2900
Size:	−2	AtA Refuel:	No
Vulnerability:	+2	Ejection Seat:	None

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	1.0	—	—
HT	—	—	—
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 40	1/2 37	DT 32	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	1.5 – 3.5	1.5 – 3.5	—	4.5	—	0.25	—	0.10	—	—	VH
HI	26–35	1.0 – 4.0	1.5 – 4.0	1.5 – 3.5	4.5	—	0.50	—	0.25	—	0.10	HI
MH	17–25	1.0 – 3.5	1.0 – 3.5	1.0 – 3.5	4.5	—	0.50	—	0.25	—	0.25	MH
ML	8–16	1.0 – 3.5	1.0 – 3.5	1.0 – 3.0	4.0	—	0.50	—	0.25	—	0.25	ML
LO	0–7	1.0 – 3.0	1.0 – 3.0	1.0 – 3.0	3.5	—	0.50	—	0.25	—	0.25	LO

Radar:	RPB Kobal't
ECCM:	0
Arcs:	All
Search:	120–8
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	A
DDS:	—
DJM:	—
AJM:	—
BJM:	A2

Weapon Stations Diagram:

Guns:	Eight 23 mm NS-23
To Hit:	2/1/1
Ammunition:	11.0
Gunsight:	—
Ranging:	—
AtA/AtG:	4/4

Bomb System: Manual

Technology:

None

Load Point Limits: CL : <12 / 1/2: <24 / DT : ≥24

Weight Limit: 20,000

Station	Limit	Allowed Loads

Load Notes:

1. No stores may be carried. The internal bomb bay is used to house an air-intercept control post.

Notes:

1. The Tupolev Tu-4P is a propeller-driven night intercepter converted from the Tu-4 bomber. The NATO reporting name is Bull.
2. Low roll rate (LRR).
3. Flight Restrictions. VD, VC, and unloading are forbidden.
4. Dorsal Radar. In level flight, the radar may detect targets at equal or higher altitude, regardless of the altitude of the target, but may not detect targets at lower altitude. In diving or climbing flight, it may only detect targets at higher altitude.
5. Articulated Guns. The guns can fire in any direction. They may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are modified only by the target size and a −1 modifier when firing into the 60− arc.

VPs: 24/16/8/4

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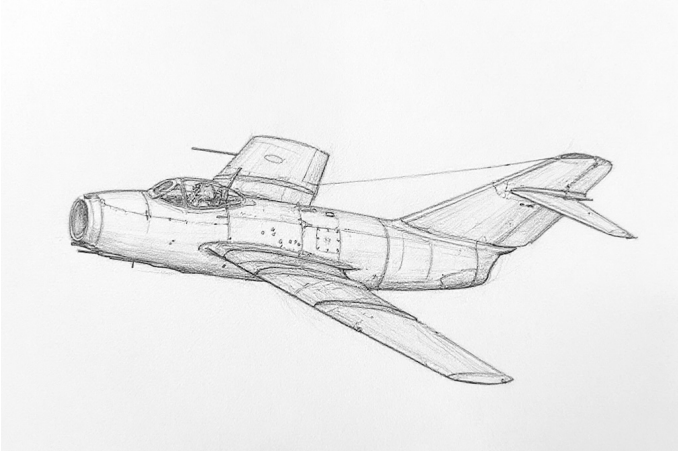
Mikoyan-Gurevich MiG-15



The Mikoyan-Gurevich MiG-15 was an early jet interceptor and day fighter. The MiG-15 was one of the first fighters to incorporate a swept wing and a swept tail to reduce the effects of compressibility and allow higher transonic speeds. However, it used conventional elevators rather than an all-flying tail, and so became difficult to control at high speeds. The NATO reporting name for the aircraft is "Fagot."

Versions

MiG-15

The initial MiG-15 was powered by the 5,000 lbf Klimov RD-45, an unauthorized copy of the Rolls-Royce Nene engine (which had been sold to the Soviet Union in small numbers with the agreement of the British Government). As it was initially intended to serve as an interceptor, it carried a very heavy gun armament of one 37 mm N-37 cannon with 40 rounds and two 23 mm NS-23 cannons with 80 rounds per gun, all under the nose. The NATO reporting name for the aircraft is "Fagot-A."

The MiG-15 entered service with the Soviet VVS in 1949 and the PVO in 1950, but was rapidly replaced by the MiG-15bis.

MiG-15bis

The MiG-15bis was the main production version and was an improvement on the original MiG-15 in a number of small but important ways. The engine was upgraded to the 5,950 lbf Klimov VK-1, a development of the RD-45. The NS-23 cannons were replaced by faster-firing NR-23 cannons. The MiG-15 formed the basis for the development of the MiG-17. The NATO reporting name for the aircraft is "Fagot-B."

The MiG-15bis entered service with the Soviet VVS and PVO in 1950. It also served dozens of Soviet allies in the following years, notably the Chinese PLAAF and PLAN and the North Korean KPAF.

MiG-15UTI

The MiG-15UTI was a two-seat training aircraft, with reduced fuel and armament. The NATO reporting name is Midget.

The MiG-15bis entered service with the Soviet VVS and PVO in 1950. Like the MiG-15bis, it also served with dozens of Soviet allies in the following years.

MiG-15P

The MiG-15P was a prototype all-weather interceptor, equipped with the RP-1 Izumrud radar (NATO reporting name "Scan Fix") and with its armament reduced to two 23 mm NR-23 cannons.

MiG-15ISh

The MiG-15ISh was a prototype attack version with pylons in the wings for bombs or rockets in addition to the stations for fuel tanks.

Armament and Stores

To counter its short endurance, the MiG-15 could use 250, 300, 400, or 600 liter fuel tanks on its under-wing stations. The larger tanks reduced maneuverability. It could also be armed with rockets or bombs, but given this does not seem to be common.

Combat

The MiG-15bis saw extensive combat, including in the Korean War with the VVS and PVO, the PLAAF, and the KPAF, and in clashes between the PLAAF and ROCAF, in the Suez Crisis with the EAF. They also performed many interceptions of aircraft during the Cold War.

When used as a fighter, it was limited by the slow rate of fire of its guns (400 rounds per minute for the N-37 and 800 for the NR-23), but a single hit on a fighter or fighter-bomber could often inflict fatal damage. As an interceptor in Korea, its combination of high speed and powerful armament allowed it to inflict heavy losses of USAF B-29 bombers engaged in daytime raids and effectively force them to operate under the cover of darkness.

ADCs

- MiG-15bis
- MiG-15UTI
- MiG-15P
- MiG-15ISh

See Also

- Shenyang JJ-2 and FT-2
- MiG-17

Photo Credit

- MiG-15: slezo (CC BY 2.0)

MiG-15bis

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	125
Size:	+1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.0	1.0
BT	1.5	2.0	2.0
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 51	1/2 48	DT 44	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 5.5	3.0 – 5.0	—	6.0	—	0.5	—	0.5	—	—	EH+
VH	36–45	2.5 – 6.0	2.5 – 5.0	2.5 – 5.0	6.0	—	1.0	—	0.5	—	0.5	VH
HI	26–35	2.0 – 6.0	2.0 – 5.5	2.5 – 5.0	6.5	—	1.0	—	1.0	—	0.5	HI
MH	17–25	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	6.5	—	1.5	—	1.0	—	1.0	MH
ML	8–16	1.5 – 6.5	1.5 – 6.0	1.5 – 5.5	7.0	—	1.5	—	1.0	—	1.0	ML
LO	0–7	1.0 – 6.5	1.5 – 6.0	1.5 – 5.5	7.0	—	1.5	—	1.5	—	1.0	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Two 23 mm NR-23, One 37 mm N-37

To Hit:	4/2/1
Ammunition:	3.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	5/4

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 2, 1/2: < 5, DT : ≥ 5

Weight Limit: 1,600

Station	Limit	Allowed Loads
1 and 2	550	BB RK RP FT

Load Notes:

1. May use 250L, 300L, 400L, or 600L FTs. The larger tanks can be carried as an exception to the normal rules for load limits, but the turn rate is limited to HT if 300L or 400L tanks are used and to TT if 600L tanks are used.

Notes:

1. The Mikoyan-Gurevich MiG-15bis is a day fighter. It is a development of the MiG-15 with a more powerful VK-1 engine. The NATO reporting name for the aircraft is Fagot-B.
2. High transonic drag (HTD). Low roll rate (LRR) if speed ≥ 5.0.
3. Hit rolls at high transonic speed or greater have a +1 modifier to the hit roll due to instability generated by the conventional horizontal stabilizers and elevators.

VPs: 8/5/3/1

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MiG-15P

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	125
Size:	+1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.0	1.0
BT	1.5	2.0	2.0
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 51	1/2 48	DT 44	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 5.5	3.0 – 5.0	—	6.0	—	0.5	—	0.5	—	—	EH+
VH	36–45	2.5 – 6.0	2.5 – 5.0	2.5 – 5.0	6.0	—	1.0	—	0.5	—	0.5	VH
HI	26–35	2.0 – 6.0	2.0 – 5.5	2.5 – 5.0	6.5	—	1.0	—	1.0	—	0.5	HI
MH	17–25	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	6.5	—	1.5	—	1.0	—	1.0	MH
ML	8–16	1.5 – 6.5	1.5 – 6.0	1.5 – 5.5	7.0	—	1.5	—	1.0	—	1.0	ML
LO	0–7	1.0 – 6.5	1.5 – 6.0	1.5 – 5.5	7.0	—	1.5	—	1.5	—	1.0	LO

Radar: RP-1 Izumrud

ECCM:	0
Arcs:	Limited
Search:	10–6
Track:	6–6
Lock-On:	5

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Two 23 mm NR-23

To Hit:	4/2/1
Ammunition:	3.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	RE
AtA/AtG:	4/3

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 2
1/2: < 5
DT : ≥ 5

Weight Limit: 1,600

Station	Limit	Allowed Loads
1 and 2	550	BB RK RP FT

Load Notes:

1. May use 250L, 300L, 400L, or 600L FTs. The larger tanks can be carried as an exception to the normal rules for load limits, but the turn rate is limited to HT if 300L or 400L tanks are used and to TT if 600L tanks are used.

Notes:

1. The Mikoyan-Gurevich MiG-15P is a prototype all-weather interceptor. It is a development of the MiG-15bis and is equipped with the RP-1 Izumrud radar. The NATO reporting name for the aircraft is Fagot and for the radar is Scan Fix.
2. High transonic drag (HTD). Low roll rate (LRR) if speed ≥ 5.0.
3. Hit rolls at high transonic speed or greater have a +1 modifier to the hit roll due to instability generated by the conventional horizontal stabilizers and elevators.

VPs: 9/6/3/2

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MiG-15UTI

Crew: Pilot and Observer

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	100
Size:	+1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.0	1.0
BT	1.5	2.0	2.0
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 51	1/2 48	DT 44	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 5.5	3.0 – 5.0	—	6.0	—	0.5	—	0.5	—	—	EH+
VH	36–45	2.5 – 6.0	2.5 – 5.0	2.5 – 5.0	6.0	—	1.0	—	0.5	—	0.5	VH
HI	26–35	2.0 – 6.0	2.0 – 5.5	2.5 – 5.0	6.5	—	1.0	—	1.0	—	0.5	HI
MH	17–25	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	6.5	—	1.5	—	1.0	—	1.0	MH
ML	8–16	1.5 – 6.5	1.5 – 6.0	1.5 – 5.5	7.0	—	1.5	—	1.0	—	1.0	ML
LO	0–7	1.0 – 6.5	1.5 – 6.0	1.5 – 5.5	7.0	—	1.5	—	1.5	—	1.0	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: One 12.7 mm A-12.7

To Hit:	3/1/–
Ammunition:	3.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	1/1**

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 2, 1/2: < 5, DT : ≥ 5

Weight Limit: 1,600

Station	Limit	Allowed Loads
1 and 2	550	BB RK RP FT

Load Notes:

1. May use 250L, 300L, 400L, or 600L FTs. The larger tanks can be carried as an exception to the normal rules for load limits, but the turn rate is limited to HT if 300L or 400L tanks are used and to TT if 600L tanks are used.

Notes:

1. The Mikoyan-Gurevich MiG-15UTI is a two-seat training aircraft. It is a development of the MiG-15bis with an additional cockpit and reduced fuel and armament. The NATO reporting name for the aircraft is Midget.
2. High transonic drag (HTD). Low roll rate (LRR) if speed ≥ 5.0.
3. Hit rolls at high transonic speed or greater have a +1 modifier to the hit roll due to instability generated by the conventional horizontal stabilizers and elevators.

VPs: 7/5/2/1

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MiG-15ISh

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	125
Size:	+1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.0	1.0
BT	1.5	2.0	2.0
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 51	1/2 48	DT 44	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 5.5	3.0 – 5.0	—	6.0	—	0.5	—	0.5	—	—	EH+
VH	36–45	2.5 – 6.0	2.5 – 5.0	2.5 – 5.0	6.0	—	1.0	—	0.5	—	0.5	VH
HI	26–35	2.0 – 6.0	2.0 – 5.5	2.5 – 5.0	6.5	—	1.0	—	1.0	—	0.5	HI
MH	17–25	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	6.5	—	1.5	—	1.0	—	1.0	MH
ML	8–16	1.5 – 6.5	1.5 – 6.0	1.5 – 5.5	7.0	—	1.5	—	1.0	—	1.0	ML
LO	0–7	1.0 – 6.5	1.5 – 6.0	1.5 – 5.5	7.0	—	1.5	—	1.5	—	1.0	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Two 23 mm NR-23, One 37 mm N-37

To Hit:	4/2/1
Ammunition:	3.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	5/4

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 2, 1/2: < 5, DT : ≥ 5

Weight Limit: 1,600

Station	Limit	Allowed Loads
1 and 4	550	BB RK RP FT
2 and 3	550	BB RK RP

Load Notes:

1. Can use 250L, 300L, 400L, or 600L FTs. The larger tanks can be carried as an exception to the normal rules for load limits, but the turn rate is limited to HT if 300L or 400L tanks are used and to TT if 600L tanks are used.
2. Stations 2 and 3 can carry two BB each.

Notes:

1. The Mikoyan-Gurevich MiG-15ISh is a prototype close-air-support aircraft. It is a development of the MiG-15bis with two additional tandem wing stations. The NATO reporting name for the aircraft is Fagot.
2. High transonic drag (HTD). Low roll rate (LRR) if speed ≥ 5.0.
3. Hit rolls at high transonic speed or greater have a +1 modifier to the hit roll due to instability generated by the conventional horizontal stabilizers and elevators.

VPs: 9/6/3/2

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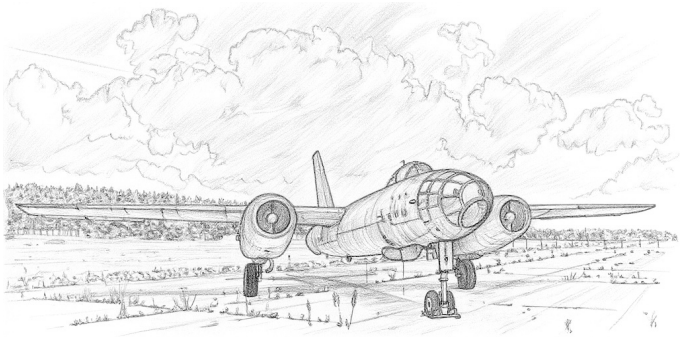
Ilyushin Il-28



The Ilyushin Il-28 was a conventional and nuclear tactical bomber and a long-range reconnaissance aircraft. The NATO reporting name for the aircraft is “Beagle”.

It was powered by two Klimov VK-1 engines in underwing pods. This engine was a development on the Klimov RD-45, an unauthorized copy of the Rolls-Royce Nene engine, and was also used in the MiG-15bis.

Versions

Il-28

The Il-28 was a conventional tactical bomber. It was armed with two fixed 23 mm NR-23 cannons and two more in a defensive tail mount. It could carry up to 3,000 kg (6,600 lb) of bombs in its internal bomb bay, but a normal load was 1,000 kg (2,200 lb).

The Il-28 entered service with the Soviet VVS in 1950 and AV MF (Naval Aviation) in 1951 and with the PLAAF in 1952. They were exported to many other countries, including Afghanistan, Algeria, Bulgaria, Cambodia, Czechoslovakia, East Germany, Egypt, Finland, Hungary, Indonesia, Iraq, Morocco, Nigeria, North Korea, North Vietnam, Romania, Somalia, Syria, and Yemen. They were built under license in Czechoslovakia. China later built a modified version as the Harbin H-5.

Il-28T

The Il-28T was a torpedo bomber. Its bomb bay was lengthened to allow the internal carriage of torpedoes and its wing moved slightly to compensate for the resulting change in the center of gravity. It was equipped with two 350L wing-tip fuel tanks to compensate for the reduced capacity of the in fuselage fuel tanks.

The IL-28T entered service with the Soviet AV MF in 1951.

Il-28R

The Il-28R was a long-range photo-reconnaissance aircraft. Its bomb bay was given over to cameras, flares, and additional fuel. It also was equipped with two 350L wing-tip fuel tanks. One of the forward-firing guns was replaced by reconnaissance equipment.

The IL-28R entered service with the VVS and AV MF in 1952.

Il-28N

The Il-28N was a nuclear tactical bomber. It could carry the RDS-4 nuclear bomb in its internal bomb bay. Like the Il-28R, it was equipped with two 350L wing-tip fuel tanks.

The IL-28N entered service with the VVS in about 1954.

Il-28REB

The Il-28REB was an electronic-countermeasures aircraft. Its primary role was to protect Il-28s on conventional and nuclear bombing missions. Like the Il-28R, it was equipped with two 350L wing-tip fuel tanks.

The IL-28REB entered service with the VVS in about 1954.

Armament and Stores

The Il-28 could carry up to 3,000 kg (6,600 lb) of bombs in its internal bay. Alternatively, the Il-28T could carry one Type 45 or two RAT-52 torpedoes. The Il-28N could carry a single RDS-4 nuclear bomb.

Combat

PLAAF Il-28s did not see combat in the Korean War, but were an implicit threat during the last year of the Korean War. They saw action in 1956 against Taiwan, bombing the Tachen Islands, and suffered losses to RoCAF F-84 and F-86s. They were also used in the 1959 Tibetan Uprising.

Egyptian Air Force Il-28s fought in the 1967 War, the War of Attrition, and the 1973 War.

Soviet VVS Il-28s saw combat in the Soviet-Afghan War.

ADCs

- Il-28
- Il-28T
- Il-28R
- Il-28N

Photo Credit

- Il-28: Bjoern Schwarz (CC BY 2.0)

Il-28

Crew: Pilot, Bombardier, and Gunner

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	-
Climb Spd.:	3.5	Blind Arcs:	-
Visibility:	8	Internal Fuel:	565
Size:	−1	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Early

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.5	1.5
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 40	1/2 36	DT 32	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	3.0 – 5.0	3.0 – 4.5	—	6.0	—	0.5	—	0.5	—	—	VH
HI	26–35	2.5 – 5.0	3.0 – 5.0	3.0 – 5.0	6.0	—	0.5	—	0.5	—	0.5	HI
MH	17–25	2.5 – 5.5	2.5 – 5.5	3.0 – 5.0	6.0	—	0.5	—	0.5	—	0.5	MH
ML	8–16	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.0	—	0.5	—	0.5	—	0.5	ML
LO	0–7	2.0 – 4.5	2.0 – 4.5	2.0 – 4.5	6.0	—	1.0	—	1.0	—	0.5	LO

Radar:	PSB-N
ECCM:	0
Arcs:	180+
Search:	Gr. Nav. (90)
Track:	Gr. Attack (45)
Lock-On:	6

ECM:	IFF
RWR:	A
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Two 23 mm NR-23
To Hit:	3/2/1
Ammunition:	6.0
Gunsight:	TT+1/HT+2
Ranging:	—
AtA/AtG:	4/3

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 5 / 1/2: < 9 / DT : ≥ 9

Weight Limit: 6,600

Station	Limit	Allowed Loads
1	6,600	BB

Load Notes:

1. Station 1 is the internal bomb bay. Load options are: (a) one FAB-3000 6,600 lb bomb, (b) one FAB-1000 2,200 lb bomb, (c) four FAB-500 1,100 lb bombs, (d) eight FAB-250 550 lb bombs, or (e) twelve FAB-100 225 lb bombs. All bombs carried must be low-drag.
2. As an exception to the normal rules for load points, internal loads contribute 1 load point for each 1,000 of weight.

Notes:

1. The Ilyushin Il-28 is a medium bomber. The NATO reporting name for the aircraft is Beagle.
2. High transonic drag (HTD). Low roll rate (LRR).
3. Bomb system is ballistic (−1) if doing level bombing from four or more altitude levels above the target.
4. Articulated Guns. In addition to its fixed guns, the aircraft has a tail mount with two 23 mm NR-23 guns that can fire into the 60– arc. These guns may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are 3/2/1 and no modifiers apply except target size. The AtA damage rating is 4. The ammunition is 6.0.
5. The tail gunner does not have an ejection seat and can only bail out.
6. RWR from 1960.

VPs: 12/8/4/2

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Il-28R

Crew: Pilot, Observer, and Gunner

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	-
Climb Spd.:	3.5	Blind Arcs:	-
Visibility:	8	Internal Fuel:	765
Size:	−1	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Early

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.5	1.5
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 40	1/2 36	DT 32	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.0	3.0 – 4.5	—	6.0
HI	26–35	2.5 – 5.0	3.0 – 5.0	3.0 – 5.0	6.0
MH	17–25	2.5 – 5.5	2.5 – 5.5	3.0 – 5.0	6.0
ML	8–16	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.0
LO	0–7	2.0 – 4.5	2.0 – 4.5	2.0 – 4.5	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	0.5	—	0.5	—	0.5	ML
LO	—	1.0	—	1.0	—	0.5	LO

Radar:	PSB-N
ECCM:	0
Arcs:	180+
Search:	Gr. Nav. (90)
Track:	Gr. Attack (45)
Lock-On:	6

ECM:	IFF
RWR:	A
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	One 23 mm NR-23
To Hit:	3/2/1
Ammunition:	6.0
Gunsight:	TT+1/HT+2
Ranging:	—
AtA/AtG:	3/2
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 7
DT : ≥ 7

Weight Limit: 0

Station	Limit	Allowed Loads
1	0	

Load Notes:

1. Station 1 is the internal bomb bay. These guns may only carry twelve parachute illumination flares.
2. Internal fuel includes two fixed 350L wing-tip fuel tanks and larger fuselage tanks. As an exception to the normal rules for load points, internal fuel above 565 fuel points contributes 1 load point for each 50 fuel points.

Notes:

1. The Ilyushin Il-28R is a photo-reconnaissance aircraft. It is a development of the Il-28 medium bomber. The NATO reporting name for the aircraft is Beagle.
2. High transonic drag (HTD). Low roll rate (LRR).
3. Articulated Guns. In addition to its fixed guns, the aircraft has a tail mount with two 23 mm NR-23 guns that can fire into the 60– arc. These guns may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are 3/2/1 and no modifiers apply except target size. The AtA damage rating is 4. The ammunition is 6.0.
4. The tail gunner does not have an ejection seat and can only bail out.
5. Overhead and left oblique cameras in the bomb bay
6. RWR from 1960.

VPs: 12/8/4/2

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Il-28T

Crew: Pilot, Bombardier, and Gunner

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	-
Climb Spd.:	3.5	Blind Arcs:	-
Visibility:	8	Internal Fuel:	565
Size:	−1	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Early

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.5	1.5
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 40	1/2 36	DT 32	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.0	3.0 – 4.5	—	6.0
HI	26–35	2.5 – 5.0	3.0 – 5.0	3.0 – 5.0	6.0
MH	17–25	2.5 – 5.5	2.5 – 5.5	3.0 – 5.0	6.0
ML	8–16	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.0
LO	0–7	2.0 – 4.5	2.0 – 4.5	2.0 – 4.5	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	0.5	—	0.5	—	0.5	ML
LO	—	1.0	—	1.0	—	0.5	LO

Radar:	PSB-N
ECCM:	0
Arcs:	180+
Search:	Gr. Nav. (90)
Track:	Gr. Attack (45)
Lock-On:	6

ECM:	IFF
RWR:	A
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	One 23 mm NR-23
To Hit:	3/2/1
Ammunition:	6.0
Gunsight:	TT+1/HT+2
Ranging:	—
AtA/AtG:	3/2

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 7
DT : ≥ 7

Weight Limit: 6,600

Station	Limit	Allowed Loads
1	6,600	BB MN TT TR

Load Notes:

1. Station 1 is the internal bomb bay. Load options are: (a) one FAB-3000 6,600 lb bomb, (b) one FAB-1000 2,200 lb bomb, (c) four FAB-500 1,100 lb bombs, (d) eight FAB-250 550 lb bombs, (e) twelve FAB-100 225 lb bombs, (f) naval mines, (g) one Type 45 torpedoes, or (h) two RAT-52 rocket torpedo. All bombs carried must be low-drag.
2. Internal fuel includes two fixed 350L wing-tip fuel tanks. As an exception to the normal rules for load points, internal fuel above 565 fuel points contributes 1 load point for each 50 fuel points.

Notes:

1. The Ilyushin Il-28T is a torpedo bomber. It is a development of the Il-28 medium bomber. The NATO reporting name for the aircraft is Beagle.
2. High transonic drag (HTD). Low roll rate (LRR).
3. Articulated Guns. In addition to its fixed guns, the aircraft has a tail mount with two 23 mm NR-23 guns that can fire into the 60– arc. These guns may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are 3/2/1 and no modifiers apply except target size. The AtA damage rating is 4. The ammunition is 6.0.
4. The tail gunner does not have an ejection seat and can only bail out.
5. RWR from 1960.

VPs: 12/8/4/2

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Il-28N

Crew: Pilot, Bombardier, and Gunner

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	-
Climb Spd.:	3.5	Blind Arcs:	-
Visibility:	8	Internal Fuel:	615
Size:	−1	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Early

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.5	1.5
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 40	1/2 36	DT 32	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.0	3.0 – 4.5	—	6.0
HI	26–35	2.5 – 5.0	3.0 – 5.0	3.0 – 5.0	6.0
MH	17–25	2.5 – 5.5	2.5 – 5.5	3.0 – 5.0	6.0
ML	8–16	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.0
LO	0–7	2.0 – 4.5	2.0 – 4.5	2.0 – 4.5	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	0.5	—	0.5	—	0.5	ML
LO	—	1.0	—	1.0	—	0.5	LO

Radar:	PSB-N	**ECM:**	IFF
ECCM:	0	RWR:	A
Arcs:	180+	DDS:	—
Search:	Gr. Nav. (90)	DJM:	—
Track:	Gr. Attack (45)	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Two 23 mm NR-23
To Hit:	3/2/1
Ammunition:	6.0
Gunsight:	TT+1/HT+2
Ranging:	—
AtA/AtG:	4/3
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5
1/2: < 9
DT : ≥ 9

Weight Limit: 6,600

Station	Limit	Allowed Loads
1	6,600	

Load Notes:

1. Station 1 is the internal bomb bay. It may only carry one RDS-4 nuclear bomb (weight 2650 and load 4.5).
2. Internal fuel includes two fixed 350L wing-tip fuel tanks. As an exception to the normal rules for load points, internal fuel above 565 fuel points contributes 1 load point for each 50 fuel points.

Notes:

1. The Ilyushin Il-28N is a tactical nuclear bomber. It is a development of the Il-28 medium bomber. The NATO reporting name for the aircraft is Beagle.
2. High transonic drag (HTD). Low roll rate (LRR).
3. Bomb system is ballistic (−1) if doing level bombing from four or more altitude levels above the target.
4. Articulated Guns. In addition to its fixed guns, the aircraft has a tail mount with two 23 mm NR-23 guns that can fire into the 60– arc. These guns may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are 3/2/1 and no modifiers apply except target size. The AtA damage rating is 4. The ammunition is 6.0.
5. The tail gunner does not have an ejection seat and can only bail out.
6. RWR from 1960.

VPs: 12/8/4/2

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Il-28REB

Crew: Pilot, EW Officer, and Gunner

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	-
Climb Spd.:	3.5	Blind Arcs:	-
Visibility:	8	Internal Fuel:	565
Size:	−1	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Early

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.5	1.5
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 40	1/2 36	DT 32	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.0	3.0 – 4.5	—	6.0
HI	26–35	2.5 – 5.0	3.0 – 5.0	3.0 – 5.0	6.0
MH	17–25	2.5 – 5.5	2.5 – 5.5	3.0 – 5.0	6.0
ML	8–16	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.0
LO	0–7	2.0 – 4.5	2.0 – 4.5	2.0 – 4.5	6.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	0.5	—	0.5	—	0.5	ML
LO	—	1.0	—	1.0	—	0.5	LO

Radar:	PSB-N
ECCM:	0
Arcs:	180+
Search:	Gr. Nav. (90)
Track:	Gr. Attack (45)
Lock-On:	6

ECM:	IFF
RWR:	A
DDS:	—
DJM:	—
AJM:	A4
BJM:	A2

Weapon Stations Diagram:

Guns:	Two 23 mm NR-23
To Hit:	3/2/1
Ammunition:	6.0
Gunsight:	TT+1/HT+2
Ranging:	—
AtA/AtG:	4/3

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 5
1/2: < 9
DT : ≥ 9

Weight Limit: 0

Station	Limit	Allowed Loads
1	0	

Load Notes:

1. Station 1 is the internal bomb bay. It cannot be used to carry stores.
2. Internal fuel includes two fixed 350L wing-tip fuel tanks. As an exception to the normal rules for load points, internal fuel above 565 fuel points contributes 1 load point for each 50 fuel points.

Notes:

1. The Ilyushin Il-28REB is a electronic-countermeasures aircraft. It is a development of the Il-28 medium bomber. The NATO reporting name for the aircraft is Beagle.
2. High transonic drag (HTD). Low roll rate (LRR).
3. Articulated Guns. In addition to its fixed guns, the aircraft has a tail mount with two 23 mm NR-23 guns that can fire into the 60– arc. These guns may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are 3/2/1 and no modifiers apply except target size. The AtA damage rating is 4. The ammunition is 6.0.
4. The tail gunner does not have an ejection seat and can only bail out.

VPs: 16/11/5/3

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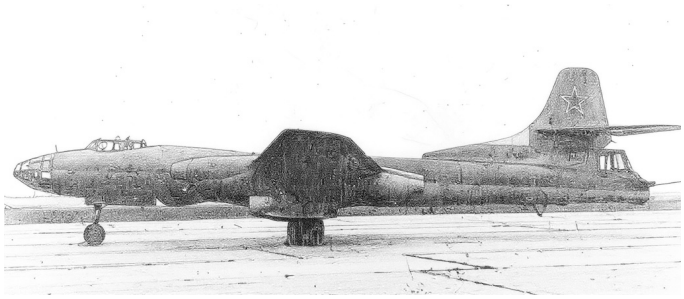
Tupolev Tu-14



The Tupolev Tu-14 was a conventional medium bomber and torpedo bomber. Its NATO reporting name is Bosun.

Versions

Tu-14

The Tu-14 was a conventional tactical bomber. It was developed in competition with the Ilyushin Il-28 and shares many features with that aircraft, including unswept wings, a swept tail, two Klimov VK-1 engines in pods under the wings, and a gun armament of two fixed 23 mm NR-23 guns and two more in a tail turret. It could carry 3,000 kg (6,600 lb) in its internal bomb bay.

However, the Tu-14 was not accepted for service by the VVS, which preferred the Il-28.

Tu-14T

The Tu-14T was a torpedo bomber, developed for Soviet AM VF. In contrast to the Tu-14 bomber version, the pilot and weapons officer are provided with ejection seats.

The Tu-14T served from 1952 to 1959 in Naval Aviation but did not serve in other branches and was not exported.

Armament and Stores

The Tu-14T could carry torpedoes, mines, or bombs in its internal bomb bay.

Combat

The Tu-14 did not see combat.

ADCs

- Tu-14
- Tu-14T

Photo Credit

- Tu-14: SDASM Archives (Public Domain)

Tu-14

Crew: Pilot, Weapons Officer, and Gunner

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	0.5	0.5	0.5	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	-
Climb Spd.:	3.5	Blind Arcs:	-
Visibility:	8	Internal Fuel:	750
Size:	−1	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	None

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	1.0
HT	1.0	1.0	—
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 38	1/2 32	DT 24	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.0	3.0 – 4.5	—	6.0
HI	26–35	2.5 – 5.0	3.0 – 4.5	—	6.0
MH	17–25	2.5 – 5.0	2.5 – 5.0	3.0 – 5.0	6.0
ML	8–16	2.0 – 5.5	2.5 – 5.0	2.5 – 5.0	6.5
LO	0–7	2.0 – 5.0	2.0 – 5.0	2.0 – 4.5	6.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	—	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	0.5	—	0.5	—	0.5	ML
LO	—	1.0	—	0.5	—	0.5	LO

Radar:	PSB-N
ECCM:	0
Arcs:	180+
Search:	Gr. Nav. (90)
Track:	Gr. Attack (45)
Lock-On:	6

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Two 23 mm NR-23
To Hit:	3/2/1
Ammunition:	6.0
Gunsight:	TT+1/HT+3
Ranging:	—
AtA/AtG:	4/3
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5
1/2: < 9
DT : ≥ 9

Weight Limit: 6,600

Station	Limit	Allowed Loads
1	6,600	BB

Load Notes:

1. Station 1 is the internal bomb bay. Load options are: (a) two FAB-1000 2,200 lb bombs, (b) four FAB-500 1,100 lb bombs, (c) six FAB-250 550 lb bombs, or (d) sixteen FAB-100 225 lb bombs. Any bombs carried must be low-drag.

Notes:

1. The Tupolev Tu-14 is a medium bomber. The NATO reporting name for the aircraft is Bosun.
2. High transonic drag (HTD).
3. Bomb system is ballistic (−1) if doing level bombing from four or more altitude levels above the target.
4. Articulated Guns. In addition to its fixed guns, the aircraft has a tail mount with two 23 mm NR-23 guns that can fire into the 60− arc. These guns may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are 3/2/1 and no modifiers apply except target size. The AtA damage rating is 4. The ammunition is 6.0.

VPs: 13/9/4/2

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Tu-14T

Crew: Pilot, Weapons Officer, and Gunner

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	0.5	0.5	0.5	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	-
Climb Spd.:	3.5	Blind Arcs:	-
Visibility:	8	Internal Fuel:	750
Size:	−1	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Early

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	1.0
HT	1.0	1.0	—
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 38	1/2 32	DT 24	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.0	3.0 – 4.5	—	6.0
HI	26–35	2.5 – 5.0	3.0 – 4.5	—	6.0
MH	17–25	2.5 – 5.0	2.5 – 5.0	3.0 – 5.0	6.0
ML	8–16	2.0 – 5.5	2.5 – 5.0	2.5 – 5.0	6.5
LO	0–7	2.0 – 5.0	2.0 – 5.0	2.0 – 4.5	6.5

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	0.5	—	0.5	—	—	VH
—	0.5	—	0.5	—	—	HI
—	0.5	—	0.5	—	0.5	MH
—	0.5	—	0.5	—	0.5	ML
—	1.0	—	0.5	—	0.5	LO

Radar:	PSB-N	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	Gr. Nav. (90)	DJM:	—
Track:	Gr. Attack (45)	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Two 23 mm NR-23
To Hit:	3/2/1
Ammunition:	6.0
Gunsight:	TT+1/HT+3
Ranging:	—
AtA/AtG:	4/3
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5 / 1/2: < 9 / DT : ≥ 9

Weight Limit: 6,600

Station	Limit	Allowed Loads
1	6,600	BB TP

Load Notes:

1. Station 1 is the internal bomb bay. Load options are: (a) two FAB-1000 2,200 lb bombs, (b) four FAB-500 1,100 lb bombs, (c) six FAB-250 550 lb bombs, (d) sixteen FAB-100 225 lb bombs, or (e) two anti-ship torpedoes. Any bombs carried must be low-drag.
2. Torpedoes can only be launched from T-level at a speed of 2.5 or less. Both may be launched at once.

Notes:

1. The Tupolev Tu-14T is a torpedo bomber. It is a development of the Tu-14 medium bomber. The NATO reporting name for the aircraft is Bosun.
2. High transonic drag (HTD).
3. Bomb system is ballistic (−1) if doing level bombing from four or more altitude levels above the target.
4. Tail Guns. In addition to its fixed guns, there aircraft has a tail mount with two 23 mm NR-23 guns that can fire into the 60– arc. These guns may return fire twice per game turn in response to gun attacks or conduct one attack. The hit roll is 3/2/1 and no modifiers apply except target size. The AtA damage rating is 4. The ammunition is 6.0.
5. The tail gunner does not have an ejection seat and can only bail out.

VPs: 15/10/5/3

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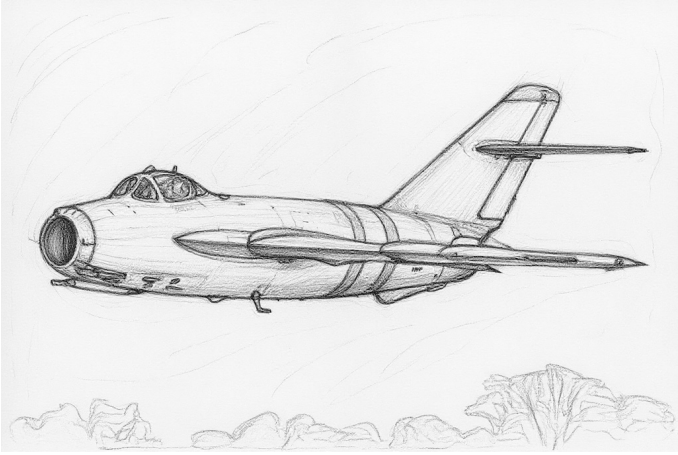
Mikoyan-Gurevich MiG-17



The Mikoyan-Gurevich MiG-17 was an early jet interceptor and day fighter, with limited capability as a fighter-bomber.

Versions

MiG-17

The MiG-17 day fighter was based on the MiG-15bis, but had a thinner but stiffer wing and tail surfaces for better control at higher Mach number and a longer fuselage, but retained conventional elevators. It maintained the Klimov VK-1A non-afterburning engine and the heavy armament of the MiG-15bis. The NATO reporting name is Fresco-A.

The MiG-17 entered service with the Soviet VVS in 1952. It was subsequently widely exported to dozens of Soviet allies, including notably the Chinese PLAAF and PLAN, the North Korean KPAF (after the Korean War), the North Vietnamese VPAF, the Egyptian and Syrian Air Forces.

MiG-17F

The MiG-17F had a VK-1F afterburning engine but was otherwise almost identical to the MiG-17. The afterburner gave a dramatic improvement in climb rate, which was important in an interceptor. The MiG-17F was the first Soviet operational aircraft to be equipped with an afterburner. The NATO reporting name is Fresco-C.

The Polish PZL-Mielec Lim-5 and Chinese Shenyang J-5/F-5 were licensed versions of the MiG-17F.

The MiG-17F entered service with the Soviet VVS in 1953. Like the preceding MiG-17, it was subsequently widely exported to dozens of Soviet allies, including notably the Chinese PLAAF and PLAN, the North Korean KPAF (after the Korean War), the North Vietnamese VPAF, the Egyptian and Syrian Air Forces.

MiG-17P

The MiG-17P all-weather interceptor was derived from the original MiG-17 and the prototype MiG-15P. It had an RP-1 Izumrud (Scan Odd) radar mounted in front of the air intake and kept the non-afterburning engine. The NATO reporting name is Fresco-B.

The MiG-17P entered service with the Soviet PVO and AV MF in 1953.

MiG-17PF

The MiG-17PF all-weather interceptor was a development of the MiG-17P. It gained the VK-1F afterburning engine and had an armament of three NR-23 guns. The NATO reporting name is Fresco-D.

The Polish PZL-Mielec Lim-5P and Chinese Shenyang J-5A/F-5A were licensed versions of the MiG-17PF.

The MiG-17PF served with the Soviet PVO from 1953. It also served with the Bulgarian Air Force, the Chinese PLAAF (both as original versions and as J-5As), the Hungarian Air Force, and the Polish Air Force (from 1955).

MiG-17PFU

The MiG-17PFU all-weather interceptor was a further development of the MiG-17PF. The major change was the replacement of the gun armament with four Kalingrad K-5 (AA-1 Alkali) BRMs guided by the RP-2 Izumrud radar. The NATO reporting name was Fresco-E.

The MiG-17PFU served with the Soviet PVO from 1956.

Armament and Stores

The primary air-to-air armament of the MiG-17 was its cannon. The K-13 (AA-2 Atoll) IRM became available in 1961, but it was not widely used as by then the MiG-17 was typically transitioning to a ground-attack role. The MiG-17PFU was armed with Kalingrad K-5 (AA-1 Alkali) BRMs.

To counter its short endurance, the MiG-17 could use 250, 300, 400, or 600 liter fuel tanks on its under-wing stations. The 600 liter tanks reduced maneuverability. It could also be armed with 250 kg bombs or, from 1955, with ORO-57 rocket pods each with eight 57 mm rockets.

Combat

A number of US reconnaissance flights were shot down by PVO MiG-17P/PFs between 1953 and 1970.

Chinese PLAAF MiG-17s clashed with ROCAF F-86s in the Second Taiwan Strait Crisis in 1958. They also intercepted ROCAF reconnaissance flights over mainland China.

From 1965 to 1972, the MiG-17/17F saw combat with the VPAF in the Vietnam War, initially embarrassing much more modern adversaries with its small size, maneuverability, and cannon armament. The MiGs were largely used as interceptors, but in 1972 two attacked USS Higbee and USS Oklahoma City as they carried out a naval gunfire support mission.

During the 1967 War, the War of Attrition, and the 1973 War, Egyptian and Syrian MiG-17/17F aircraft served in a ground-attack role.

In the late 1960s and the 1970s, MiG-17/17Fs were widely used in ground-attack roles as governments in Africa and Asia countered insurgencies.

ADCs

- MiG-17
- MiG-17F
- MiG-17P
- MiG-17PF
- MiG-17PFU

See Also

- Shenyang J-5 and F-5

Photo Credit

- MiG-17: Balon Greyjoy (Public Domain)

MiG-17

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.5	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	180L
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	130
Size:	+1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	1.0
HT	1.0	1.0	1.0
BT	1.5	1.5	2.0
ET	2.0	2.0	—

No lag or displacement rolls if speed ≥ 5.0.

Speeds and Ceilings						Climb Capabilities						
Alt. Band	Conf. Ceil.	CL 54	1/2 50	DT 46	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 6.0	3.0 – 5.5	3.5 – 5.0	6.5	—	0.5	—	0.5	—	0.5	EH+
VH	36–45	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	6.5	—	0.5	—	0.5	—	0.5	VH
HI	26–35	2.0 – 6.0	2.5 – 6.0	2.5 – 5.5	7.0	—	0.5	—	0.5	—	0.5	HI
MH	17–25	1.5 – 6.5	2.0 – 6.0	2.0 – 5.5	7.0	—	1.0	—	0.5	—	0.5	MH
ML	8–16	1.0 – 7.0	1.5 – 6.5	1.5 – 5.5	7.5	—	1.0	—	1.0	—	0.5	ML
LO	0–7	1.0 – 6.5	1.5 – 6.0	1.5 – 5.5	7.5	—	1.0	—	1.0	—	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Two 23 mm NR-23 One 37 mm N-37
To Hit:	4/2/1
Ammunition:	3.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	5/4
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 2,500

Station	Limit	Allowed Loads
1 and 2	700	BB RK RP FT IRM

Load Notes:

1. May use 250L, 300L, 400L, or 600L FTs. As an exception to the normal rules for load limits, 600L tanks can be carried, but the turn rate is limited to BT.
2. From 1961, may use AA-2 IRMs.

Notes:

1. The Mikoyan-Gurevich MiG-17 is an day fighter. It is a development of the MiG-15bis, with new wings and tail surfaces and a modified fuselage. It uses the non-afterburning VK-1A engine. The NATO reporting name for the aircraft is Fresco-A.
2. High transonic drag (HTD). Low roll rate (LRR) if speed ≥ 4.0.

VPs: 11/7/4/2

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MiG-17F

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.0	2.0	3.0
M	1.5	1.5	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	180L
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	130
Size:	+1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	1.0
HT	1.0	1.0	1.0
BT	1.5	1.5	2.0
ET	2.0	2.0	—

No lag or displacement rolls if speed ≥ 5.0.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 54	1/2 50	DT 46	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 6.0	3.0 – 5.5	3.5 – 5.0	6.5	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	6.5	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	2.0 – 6.0	2.5 – 6.0	2.5 – 5.5	7.0	1.5	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	1.5 – 6.5	2.0 – 6.0	2.0 – 5.5	7.0	1.5	1.0	1.5	0.5	1.0	0.5	MH
ML	8–16	1.0 – 7.0	1.5 – 6.5	1.5 – 5.5	7.5	2.0	1.0	1.5	1.0	1.5	0.5	ML
LO	0–7	1.0 – 6.5	1.5 – 6.0	1.5 – 5.5	7.5	2.0	1.0	2.0	1.0	1.5	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Two 23 mm NR-23 One 37 mm N-37
To Hit:	4/2/1
Ammunition:	3.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	5/4
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 2,500

Station	Limit	Allowed Loads
1 and 2	700	BB RK RP FT IRM

Load Notes:

1. May use 250L, 300L, 400L, or 600L FTs. As an exception to the normal rules for load limits, 600L tanks can be carried, but the turn rate is limited to BT.
2. From 1961, may use AA-2 IRMs.

Notes:

1. The Mikoyan-Gurevich MiG-17F is a day fighter. It is a development of the MiG-17 and uses the afterburning VK-1F engine. The NATO reporting name for the aircraft is Fresco-C.
2. High transonic drag (HTD). Low roll rate (LRR) if speed ≥ 4.0.

VPs: 11/7/4/2

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MiG-17P

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.5	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	180L
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	130
Size:	+1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	1.0
HT	1.0	1.0	1.0
BT	1.5	1.5	2.0
ET	2.0	2.0	—

No lag or displacement rolls if speed ≥ 5.0.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 54	1/2 50	DT 46	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 6.0	3.0 – 5.5	3.5 – 5.0	6.5	—	0.5	—	0.5	—	0.5	EH+
VH	36–45	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	6.5	—	0.5	—	0.5	—	0.5	VH
HI	26–35	2.0 – 6.0	2.5 – 6.0	2.5 – 5.5	7.0	—	0.5	—	0.5	—	0.5	HI
MH	17–25	1.5 – 6.5	2.0 – 6.0	2.0 – 5.5	7.0	—	1.0	—	0.5	—	0.5	MH
ML	8–16	1.0 – 7.0	1.5 – 6.5	1.5 – 5.5	7.5	—	1.0	—	1.0	—	0.5	ML
LO	0–7	1.0 – 6.5	1.5 – 6.0	1.5 – 5.5	7.5	—	1.0	—	1.0	—	1.0	LO

Radar:	RP-1 Izumrud
ECCM:	0
Arcs:	Limited
Search:	18–6
Track:	6–6
Lock-On:	6

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Two 23 mm NR-23 One 37 mm N-37
To Hit:	4/2/1
Ammunition:	3.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	RE
AtA/AtG:	5/4
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 2,500

Station	Limit	Allowed Loads
1 and 2	700	BB RK RP FT IRM

Load Notes:

1. May use 250L, 300L, 400L, or 600L FTs. As an exception to the normal rules for load limits, 600L tanks can be carried, but the turn rate is limited to BT.
2. From 1961, may use AA-2 IRMs.

Notes:

1. The Mikoyan-Gurevich MiG-17P is an interceptor. It is a development of the MiG-17 and uses the same non-afterburning VK-1A engine, but is equipped with the RP-1 Izumrud radar. The NATO reporting name for the aircraft is Fresco-B and for the radar is Scan Odd.
2. High transonic drag (HTD). Low roll rate (LRR) if speed ≥ 4.0.

VPs: 12/8/4/2

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MiG-17PF

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.0	2.0	3.0
M	1.5	1.5	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	180L
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	130
Size:	+1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	1.0
HT	1.0	1.0	1.0
BT	1.5	1.5	2.0
ET	2.0	2.0	—

No lag or displacement rolls if speed ≥ 5.0.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 54	1/2 50	DT 46	Dive Speed
EH+	46+	3.0 – 6.0	3.0 – 5.5	3.5 – 5.0	6.5
VH	36–45	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	6.5
HI	26–35	2.0 – 6.0	2.5 – 6.0	2.5 – 5.5	7.0
MH	17–25	1.5 – 6.5	2.0 – 6.0	2.0 – 5.5	7.0
ML	8–16	1.0 – 7.0	1.5 – 6.5	1.5 – 5.5	7.5
LO	0–7	1.0 – 6.5	1.5 – 6.0	1.5 – 5.5	7.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	1.5	0.5	1.0	0.5	1.0	0.5	HI
MH	1.5	1.0	1.5	0.5	1.0	0.5	MH
ML	2.0	1.0	1.5	1.0	1.5	0.5	ML
LO	2.0	1.0	2.0	1.0	1.5	1.0	LO

Radar:	RP-1 Izumrud
ECCM:	0
Arcs:	Limited
Search:	18–6
Track:	6–6
Lock-On:	6

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Three 23 mm NR-23
To Hit:	5/3/2
Ammunition:	3.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	RE
AtA/AtG:	5/5
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 2,500

Station	Limit	Allowed Loads
1 and 2	700	BB RK RP FT IRM

Load Notes:

1. May use 250L, 300L, 400L, or 600L FTs. As an exception to the normal rules for load limits, 600L tanks can be carried, but the turn rate is limited to BT.
2. From 1961, may use AA-2 IRMs.

Notes:

1. The Mikoyan-Gurevich MiG-17PF is an interceptor. It is a development of the MiG-17P and uses the same afterburning VK-1F engine, but is equipped with the RP-1 Izumrud radar. The NATO reporting name for the aircraft is Fresco-D and for the radar is Scan Odd.
2. High transonic drag (HTD). Low roll rate (LRR) if speed ≥ 4.0.

VPs: 12/8/4/2

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MiG-17PFU

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.0	2.0	3.0
M	1.5	1.5	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	180L
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	130
Size:	+1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	1.0
HT	1.0	1.0	1.0
BT	1.5	1.5	2.0
ET	2.0	2.0	—

No lag or displacement rolls if speed ≥ 5.0.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 52	1/2 48	DT 45	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 5.5	3.0 – 5.5	3.5 – 5.0	6.5	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	2.5 – 5.5	3.0 – 5.5	3.0 – 5.0	6.5	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	2.0 – 5.5	2.5 – 6.0	2.5 – 5.5	7.0	1.5	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	1.5 – 6.0	2.0 – 6.0	2.0 – 5.5	7.0	1.5	1.0	1.5	0.5	1.0	0.5	MH
ML	8–16	1.0 – 6.5	1.5 – 6.5	1.5 – 5.5	7.5	2.0	1.0	1.5	1.0	1.5	0.5	ML
LO	0–7	1.0 – 6.0	1.5 – 6.0	1.5 – 5.5	7.5	2.0	1.0	2.0	1.0	1.5	1.0	LO

Radar:	RP-2 Izumrud
ECCM:	0
Arcs:	Limited
Search:	18–6
Track:	6–6
Lock-On:	6

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	—

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 5, DT : ≥ 5

Weight Limit: 2,500

Station	Limit	Allowed Loads
1 and 7	700	BB RK RP FT
3–4 and 5–6	200	BRM RHM

Load Notes:

1. May use 250L, 300L, 400L, or 600L FTs. As an exception to the normal rules for load limits, 600L tanks can be carried, but the turn rate is limited to BT.
2. May use AA-1 BRMs and RHMs.

Notes:

1. The Mikoyan-Gurevich MiG-17PFU is an interceptor. It is a development of the MiG-17PF with AA-1 missiles replacing the cannons. The NATO reporting name for the aircraft is Fresco-E and for the radar is Scan Odd.
2. High transonic drag (HTD). Low roll rate (LRR) if speed ≥ 4.0.

VPs: 12/8/4/2

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Tupolev Tu-16

The Tupolev Tu-16 is a conventional and nuclear strategic bomber. It has a swept wing and tail and two large Mikulin AM-3 engines in the wing roots. It is defended by six 23 mm AM-23 guns mounted in pairs in a tail turret, rear ventral turret, and forward dorsal turret, and also has a fixed forward-firing single 23 mm AM-23 gun.

The initial Tu-16 version is a conventional strategic bomber, and was the Soviet Union's first long-range jet bomber.

The Tu-16A is an adaptation of the Tu-16 for carrying nuclear weapons, including the Soviet Union's first hydrogen bomb, the RDS-37.

The Tu-16KS and Tu-16K were naval strike version, with improved search radar and the ability to carry KS-1 Komet (AS-1 Kennel) and KSR-2/KSR-11 (AS-5 Kelt) cruise missiles.

The Tu-16 entered service in 1954 with DA (Long-Range Aviation) and AVMF (Naval Aviation). The Tu-16A followed shortly thereafter. The Tu-16KS and Tu-16K entered service in 1954 and 1962 with AVMF.

The Tu-16 was exported to China (where is was also produced under license as the Xi'an H-6/B-6), Egypt, Indonesia, and Iraq.

Egyptian Tu-16s suffered heavy losses on the ground at the start of the 1967 War, but were more active in the 1973 War.

Iraqi Tu-16s saw combat in the Iran-Iraq War.

ADCs are provided for:

- Tu-16
- Tu-16A
- Tu-16KS
- Tu-16K

Tu-16

Crew: Pilot, Copilot, Bombardier, Navigator, Gunner, and Gunner

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	10.0
N	0.0	0.0	0.0	4.0
I	1.0	1.0	2.0	1.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	-
Climb Spd.:	3.5	Blind Arcs:	-
Visibility:	10	Internal Fuel:	3750
Size:	−2	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	1.5
HT	1.5	2.0	2.0
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 44	1/2 38	DT 32	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	3.0 – 5.5	3.5 – 5.0	—	6.0	—	0.25	—	0.25	—	—	VH
HI	26–35	3.0 – 5.5	3.5 – 5.0	3.5 – 5.0	6.5	—	0.25	—	0.25	—	0.25	HI
MH	17–25	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	6.5	—	0.50	—	0.50	—	0.50	MH
ML	8–16	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	6.5	—	0.50	—	0.50	—	0.50	ML
LO	0–7	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.5	—	1.00	—	1.00	—	0.50	LO

Radar:

ECCM:	1
Arcs:	180+
Search:	Gr. Nav. (120)
Track:	Gr. Attack (90)
Lock-On:	6

ECM: IFF

RWR:	A
DDS:	A
DJM:	—
AJM:	A4
BJM:	—

Weapon Stations Diagram:

Guns: One 23 mm AM-23

To Hit:	2/1/1
Ammunition:	10.0
Gunsight:	TT+1/HT+2
Ranging:	—
AtA/AtG:	4/3*

Bomb System: Ballistic

Technology:

None

Load Point Limits: CL : <11, 1/2: <19, DT : ≥19

Weight Limit: 20,000

Station	Limit	Allowed Loads
1	19,800	BB

Load Notes:

1. Station 1 is the internal bomb bay. Load options include (a) one FAB-9000 (20,000 lb) bomb, (b) six FAB-1000 2,200 lb bombs, (c) twelve FAB-500 1,100 lb bombs, or (d) sixteen FAB-250 550 lb bombs. All bombs must be the same type and low-drag.
2. In the late 1960s, some Tu-16s were modified to allow them to carry (a) nine FAB-1000 2,200 lb bombs, (b) eighteen FAB-500 1,100 lb bombs, or (c) twenty-four FAB-250 550 lb bombs.

Notes:

1. The Tupolev Tu-16 is a strategic conventional bomber. The NATO reporting name for the aircraft is Badger-A, and for the tail radar is Bee Hind.
2. DDS capacity is 60 CH and 20 FL or 80 CH.
3. Tail Radar. Equiped with a PRS-1 Argon tail radar that allows an attempt at RE radar ranging when firing at targets in the 30– arc. The lock-on roll is 7–.
4. Articulated Guns. In addition to its fixed guns, the aircraft has six 23 mm AM-23 guns, two in the forward dorsal twin turret, two in the rear ventral twin turret turret, and two in the tail turret. They can fire in any direction. They may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are 2/1/1 and are modified only by the target size, a −1 modifier when firing into the 60– arc, and possibly a −1 modifier for RE radar ranging with the tail radar. The AtA damage rating is 4. The ammunition is 10.0.

VPs: 30/20/10/5

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Tu-16A

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	10.0
N	0.0	0.0	0.0	4.0
I	1.0	1.0	2.0	1.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	-
Climb Spd.:	3.5	Blind Arcs:	-
Visibility:	10	Internal Fuel:	3750
Size:	−2	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot, Copilot, Bombardier, Navigator, Gunner, and Gunner

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	1.5
HT	1.5	2.0	2.0
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 38	DT 32	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.5	3.5 – 5.0	—	6.0
HI	26–35	3.0 – 5.5	3.5 – 5.0	3.5 – 5.0	6.5
MH	17–25	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	6.5
ML	8–16	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	6.5
LO	0–7	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.25	—	0.25	—	—	VH
HI	—	0.25	—	0.25	—	0.25	HI
MH	—	0.50	—	0.50	—	0.50	MH
ML	—	0.50	—	0.50	—	0.50	ML
LO	—	1.00	—	1.00	—	0.50	LO

Radar:

ECCM:	1
Arcs:	180+
Search:	Gr. Nav. (120)
Track:	Gr. Attack (90)
Lock-On:	6

ECM: IFF

RWR:	A
DDS:	A
DJM:	—
AJM:	A4
BJM:	—

Weapon Stations Diagram:

Guns: One 23 mm AM-23

To Hit:	2/1/1
Ammunition:	10.0
Gunsight:	TT+1/HT+2
Ranging:	—
AtA/AtG:	4/3*

Bomb System: Ballistic

Technology:

None

Load Point Limits: CL : <11, 1/2: <19, DT : ≥19

Weight Limit: 20,000

Station	Limit	Allowed Loads
1	19,800	BB

Load Notes:

1. Station 1 is the internal bomb bay. It can carry up to one RDS-37 nuclear bomb (weight 12,000 lb).

Notes:

1. The Tupolev Tu-16A is a strategic nuclear bomber. It is derived from the Tu-16 conventional bomber. The NATO reporting name for the aircraft is Badger-A, and for the tail radar is Bee Hind.
2. DDS capacity is 60 CH and 20 FL or 80 CH.
3. Tail Radar. Equiped with a PRS-1 Argon tail radar that allows an attempt at RE radar ranging when firing at targets in the 30– arc. The lock-on roll is 7–.
4. Articulated Guns. In addition to its fixed guns, the aircraft has six 23 mm AM-23 guns, two in the forward dorsal twin turret, two in the rear ventral twin turret turret, and two in the tail turret. They can fire in any direction. They may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are 2/1/1 and are modified only by the target size, a –1 modifier when firing into the 60– arc, and possibly a –1 modifier for RE radar ranging with the tail radar. The AtA damage rating is 4. The ammunition is 10.0.

VPs: 30/20/10/5

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Tu-16KS

Crew: Pilot, Copilot, Bombardier, Navigator, Gunner, and Gunner

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	10.0
N	0.0	0.0	0.0	4.0
I	1.0	1.0	2.0	1.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	-
Climb Spd.:	3.5	Blind Arcs:	-
Visibility:	10	Internal Fuel:	3750
Size:	−2	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	1.5
HT	1.5	2.0	2.0
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 38	DT 32	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.5	3.5 – 5.0	—	6.0
HI	26–35	3.0 – 5.5	3.5 – 5.0	3.5 – 5.0	6.5
MH	17–25	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	6.5
ML	8–16	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	6.5
LO	0–7	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.25	—	0.25	—	—	VH
HI	—	0.25	—	0.25	—	0.25	HI
MH	—	0.50	—	0.50	—	0.50	MH
ML	—	0.50	—	0.50	—	0.50	ML
LO	—	1.00	—	1.00	—	0.50	LO

Radar:

ECCM:	1
Arcs:	180+
Search:	Gr. Nav. (345)
Track:	Gr. Attack (345)
Lock-On:	7

ECM: IFF

RWR:	B
DDS:	A
DJM:	—
AJM:	A4
BJM:	—

Weapon Stations Diagram:

Guns: One 23 mm AM-23

To Hit:	2/1/1
Ammunition:	10.0
Gunsight:	TT+1/HT+2
Ranging:	—
AtA/AtG:	4/3*

Bomb System: Ballistic

Technology:

None

Load Point Limits: CL : <11, 1/2: <19, DT : ≥19

Weight Limit: 20,000

Station	Limit	Allowed Loads
1 and 2	10,000	BB WR FT ASM

Load Notes:

1. Stations 1 and 2 may each carry one AS-1 Kennel ASM.

Notes:

1. The Tupolev Tu-16KS is a maritime strike aircraft. It is derived from the Tu-16 conventional bomber. The NATO reporting name for the aircraft is Badger-B, and for the tail radar is Bee Hind.
2. DDS capacity is 60 CH and 20 FL or 80 CH.
3. Tail Radar. Equiped with a PRS-1 Argon tail radar that allows an attempt at RE radar ranging when firing at targets in the 30– arc. The lock-on roll is 7–.
4. Articulated Guns. In addition to its fixed guns, the aircraft has six 23 mm AM-23 guns, two in the forward dorsal twin turret, two in the rear ventral twin turret turret, and two in the tail turret. They can fire in any direction. They may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are 2/1/1 and are modified only by the target size, a –1 modifier when firing into the 60– arc, and possibly a –1 modifier for RE radar ranging with the tail radar. The AtA damage rating is 4. The ammunition is 10.0.

VPs: 34/23/11/6

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Tu-16K

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	10.0
N	0.0	0.0	0.0	4.0
I	1.0	1.0	2.0	1.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	-
Climb Spd.:	3.5	Blind Arcs:	-
Visibility:	10	Internal Fuel:	3750
Size:	−2	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot, Copilot, Bombardier, Navigator, Gunner, and Gunner

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	1.5
HT	1.5	2.0	2.0
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 38	DT 32	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.5	3.5 – 5.0	—	6.0
HI	26–35	3.0 – 5.5	3.5 – 5.0	3.5 – 5.0	6.5
MH	17–25	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	6.5
ML	8–16	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	6.5
LO	0–7	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.25	—	0.25	—	—	VH
HI	—	0.25	—	0.25	—	0.25	HI
MH	—	0.50	—	0.50	—	0.50	MH
ML	—	0.50	—	0.50	—	0.50	ML
LO	—	1.00	—	1.00	—	0.50	LO

Radar:

ECCM:	1
Arcs:	180+
Search:	Gr. Nav. (345)
Track:	Gr. Attack (345)
Lock-On:	7

ECM: IFF

RWR:	B
DDS:	A
DJM:	—
AJM:	A4
BJM:	—

Weapon Stations Diagram:

Guns: One 23 mm AM-23

To Hit:	2/1/1
Ammunition:	10.0
Gunsight:	TT+1/HT+2
Ranging:	—
AtA/AtG:	4/3*

Bomb System: Ballistic

Technology:

None

Load Point Limits: CL : <11, 1/2: <19, DT : ≥19

Weight Limit: 20,000

Station	Limit	Allowed Loads
1 and 2	10,000	BB WR FT ARM ASM

Load Notes:

1. Stations 1 and 2 may each carry one AS-5 Kelt ASM or ARM.

Notes:

1. The Tupolev Tu-16K is a maritime strike aircraft. It is derived from the Tu-16K. The NATO reporting name for the aircraft is Badger-G, and for the tail radar is Bee Hind.
2. DDS capacity is 60 CH and 20 FL or 80 CH.
3. Tail Radar. Equiped with a PRS-1 Argon tail radar that allows an attempt at RE radar ranging when firing at targets in the 30– arc. The lock-on roll is 7–.
4. Articulated Guns. In addition to its fixed guns, the aircraft has six 23 mm AM-23 guns, two in the forward dorsal twin turret, two in the rear ventral twin turret turret, and two in the tail turret. They can fire in any direction. They may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are 2/1/1 and are modified only by the target size, a –1 modifier when firing into the 60– arc, and possibly a –1 modifier for RE radar ranging with the tail radar. The AtA damage rating is 4. The ammunition is 10.0.

VPs: 34/23/11/6

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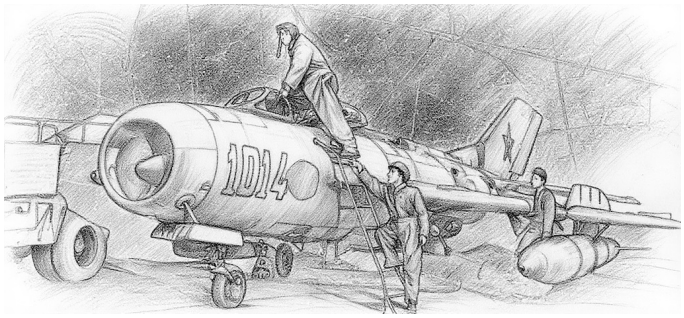
Mikoyan-Gurevich MiG-19



The Mikoyan-Gurevich MiG-19 was a day fighter and interceptor. Its NATO reporting name is Farmer.

Versions

MiG-19

The initial MiG-19 day fighter was significantly different in design from its predecessor, the MiG-17, as it had twin Mikulin RD-9 engines. It was the first Soviet production aircraft capable of supersonic speed in level flight. The initial versions were the only versions with a conventional (not an all-flying) tail. The armament was three 23mm NR-23 cannons, two in the wings and one under the nose. Its NATO reporting name is Farmer-A.

The MiG-19 entered service with the Soviet VVS in 1955.

MiG-19S and MiG-19SF

The MiG-19S was an improved version of the MiG-19. It incorporated an all-flying tail and updated avionics.

The early versions of the MiG-19S kept the armament of three 23 mm NR-23 guns used in the initial MiG-19, but later versions switched to three 30 mm NR-30 guns. The NR-30 has slightly better rate of fire and muzzle velocity compared to the NR-23 and fires a much heavier shell. To a large degree, it combines the dogfight characteristics of the NR-23 with the anti-bomber characteristics of the N-37.

The MiG-19SF has slightly more powerful engines, but is otherwise very similar to the late MiG-19S.

The NATO reporting name of the MiG-19S/SF is Farmer-C.

The MiG-19S was built under license in Czechoslovakia as the Aero S-105 and in China as the Shenyang J-6/F-6.

The MiG-19S entered service with the Soviet VVS in 1956. It later served with the Afghan Air Force, the Albanian Air Force, the Bulgarian Air Force, the Chinese PLAAF, the Czechoslovak Air Force, the East German Air Force, the Egyptian Air Force, the Indonesian Air Force, the Iraqi Air Force, and the Pakistan Air Force (in addition to Shenyang F-6s).

MiG-19P

The MiG-19P was an all-weather interceptor. It was based on the MiG-19S, but had a modified nose and cockpit incorporating the RP-1 Izumrud (Scan Odd) radar and had only the guns in the wing roots. Again, the early versions had two 23 mm NR-23 guns, but later versions had two 30 mm NR-30 guns. In addition to underwing fuel tanks, it often carried two underwing rocket pods for use against bombers. Its NATO reporting name is Farmer-B.

The MiG-19P was built under license in China as the Shenyang J-6A.

The MiG-19P entered service with the Soviet PVO, VVS, and AV-MF in 1956. It later served with the Bulgarian Air Force, the Chinese PLAAF, the Czechoslovak Air Force, the Iraqi Air Force, the Polish Air Force, and the Romanian Air Force.

MiG-19PM

The MiG-19PM was also an all-weather interceptor. It was essentially a MiG-19P with the guns removed, provision for four Kaliningrad K-5 (AA-1 Alkali) beam-riding missiles, and the radar modified to support the missiles. Its NATO reporting name is Farmer-E.

The MiG-19PM was built under license and in China as the Shenyang J-6B.

The MiG-19PM entered service with the Soviet PVO in 1957. It later served with the Albanian Air Force, the Bulgarian Air Force, the Chinese PLAAF, the Czechoslovak Air Force, the East German Air Force, the Hungarian Air Force, the Iraqi Air Force, the Polish Air Force, and the Romanian Air Force.

Armament and Stores

The cannon-armed MiG-19s were equipped with either all 23 mm NR-23 or all 30 mm NR-30 cannons. Using homogeneous weapons was considered an improvement over the mixture of two 23 mm NR-23 and one 37 mm N-37 cannons in the MiG-15 and MiG-17, as the different calibers of these earlier guns had very different ballistic characteristics and so the shell streams diverged at long range.

Like most of its contemporaries, the MiG-19 suffered from short range on internal fuel, and this was mitigated by the use of under-wing 760L FTs.

The MiG-19 was potentially better suited to ground attack than the earlier MiG-15 or MiG-17, as it had four under-wing stations and so could carry both FTs and air-to-ground ordnance. However, this does not seem to have been exploited heavily except by the Pakistan Air Force. A typical air-to-ground load would be four ORO-57K RPs (on DRs) with a total of thirty-two 57 mm rockets along with two FTs.

Combat

A US reconnaissance flight was shot down by PVO MiG-19s in 1960. However, Soviet MiG-19s were not able to intercept U-2 overflights.

Egyptian MiG-19s were used for ground-attack missions in 1962 during the North Yemen Civil War. Egyptian and Syrian MiG-19s saw combat in the lead-up to and during the 1967 War. In Egyptian service, it also saw combat in the War of Attrition.

ADCs

- MiG-19S (Early)
- MiG-19S (Late)
- MiG-19SF
- MiG-19P (Early)
- MiG-19P (Late)
- MiG-19PM

See Also

- Shenyang J-6 and F-6

Photo Credit

- MiG-19: Revista Cer Senin Nr. 4/2016 (Public Domain)

MiG-19S (Early)

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.5	3.0	2.5	5.0
M	2.5	2.0	2.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	180
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.0	2.0
ET	2.0	2.5	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 58	1/2 53	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 8.0	4.0 – 7.5	4.5 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 8.5	3.5 – 8.0	4.0 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 9.0	3.0 – 8.0	3.0 – 7.5	10.0	2.0	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 8.5	3.0 – 8.0	3.0 – 7.0	9.0	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	8–16	2.5 – 7.5	2.5 – 7.0	2.5 – 6.5	8.5	4.0	2.0	3.0	1.0	2.0	1.0	ML
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	8.0	5.0	2.0	4.0	1.0	3.0	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	A
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Three 23 mm NR-23
To Hit:	5/3/2
Ammunition:	3.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	5/5
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 3,900

Station	Limit	Allowed Loads
1 and 4	1,400	FT
2 and 3	550	BB RP RK DR

Load Notes:

1. May use 760L FTs on stations 1 and 4.
2. May use ORO-57K RPs on stations 2 and 3. From 1957, may use DRs each with two ORO-57K RPs on stations 2 and 3.

Notes:

1. The Mikoyan-Gurevich MiG-19S is a day fighter. It is an improved version of the original MiG-19 with an all-flying tail. This early variant has three 23 mm NR-23 cannons. The NATO reporting name for the aircraft is Farmer-C.
2. If a BT or ET is performed in the HI+ altitude bands, roll one die for each facing change after the first. On a 1 the aircraft suffers a maneuvering departure.

VPs: 16/11/5/3

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MiG-19S (Late)

Crew: Pilot

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.5	3.0	2.5	5.0
M	2.5	2.0	2.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	180
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.0	2.0
ET	2.0	2.5	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 58	1/2 53	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 8.0	4.0 – 7.5	4.5 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 8.5	3.5 – 8.0	4.0 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 9.0	3.0 – 8.0	3.0 – 7.5	10.0	2.0	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 8.5	3.0 – 8.0	3.0 – 7.0	9.0	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	8–16	2.5 – 7.5	2.5 – 7.0	2.5 – 6.5	8.5	4.0	2.0	3.0	1.0	2.0	1.0	ML
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	8.0	5.0	2.0	4.0	1.0	3.0	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	A
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Three 30 mm NR-30
To Hit:	6/3/2
Ammunition:	2.5
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	6/9
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 3,900

Station	Limit	Allowed Loads
1 and 4	1,400	FT
2 and 3	550	BB RP RK DR

Load Notes:

1. May use 760L FTs on stations 1 and 4.
2. May use ORO-57K RPs on stations 2 and 3. From 1957, may use DRs each with two ORO-57K RPs on stations 2 and 3.

Notes:

1. The Mikoyan-Gurevich MiG-19S is a day fighter. It is an improved version of the original MiG-19 with an all-flying tail. This late variant has three 30 mm NR-30 cannons in place of the three 23 mm NR-23 cannons of the early version. The NATO reporting name for the aircraft is Farmer-C.
2. If a BT or ET is performed in the HI+ altitude bands, roll one die for each facing change after the first. On a 1 the aircraft suffers a maneuvering departure.

VPs: 16/11/5/3

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MiG-19P (Early)

Crew: Pilot

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.5	3.0	2.5	5.0
M	2.5	2.0	2.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	180
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.0	2.0
ET	2.0	2.5	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 58	1/2 53	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 8.0	4.0 – 7.5	4.5 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 8.5	3.5 – 8.0	4.0 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 9.0	3.0 – 8.0	3.0 – 7.5	10.0	2.0	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 8.5	3.0 – 8.0	3.0 – 7.0	9.0	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	8–16	2.5 – 7.5	2.5 – 7.0	2.5 – 6.5	8.5	4.0	2.0	3.0	1.0	2.0	1.0	ML
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	8.0	5.0	2.0	4.0	1.0	3.0	1.0	LO

Radar:	RP-1 Izumrud	**ECM:**	IFF
ECCM:	0	RWR:	A
Arcs:	Limited	DDS:	—
Search:	18–6	DJM:	—
Track:	6–6	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	Two 23 mm NR-23
To Hit:	4/2/1
Ammunition:	3.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	RE
AtA/AtG:	4/3*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 3,900

Station	Limit	Allowed Loads
1 and 6	200	IRM
2 and 5	1,400	FT
3 and 4	550	BB RP RK DR

Load Notes:

1. May use 760L FTs on stations 1 and 4.
2. May use ORO-57K RPs on stations 2 and 3. From 1957, may use DRs each with two ORO-57K RPs on stations 2 and 3.
3. From 1961, may use AA-2 IRMs.

Notes:

1. The MiG-19P is an interceptor. It is similar from the MiG-19S day fighter, but has the RP-1 Izumrud radar and omits the gun under the fuselage. This early variant has two 23 mm NR-23 cannons. The NATO reporting name for the aircraft is Farmer-B and for the radar is Scan Odd.
2. If a BT or ET is performed in the HI+ altitude bands, roll one die for each facing change after the first. On a 1 the aircraft suffers a maneuvering departure.

VPs: 16/11/5/3

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MiG-19P (Late)

Crew: Pilot

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.5	3.0	2.5	5.0
M	2.5	2.0	2.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	180
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.0	2.0
ET	2.0	2.5	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 58	1/2 53	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 8.0	4.0 – 7.5	4.5 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 8.5	3.5 – 8.0	4.0 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 9.0	3.0 – 8.0	3.0 – 7.5	10.0	2.0	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 8.5	3.0 – 8.0	3.0 – 7.0	9.0	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	8–16	2.5 – 7.5	2.5 – 7.0	2.5 – 6.5	8.5	4.0	2.0	3.0	1.0	2.0	1.0	ML
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	8.0	5.0	2.0	4.0	1.0	3.0	1.0	LO

Radar:	RP-1 Izumrud	**ECM:**	IFF
ECCM:	0	RWR:	A
Arcs:	Limited	DDS:	—
Search:	18–6	DJM:	—
Track:	6–6	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	Two 30 mm NR-30
To Hit:	5/3/1
Ammunition:	2.5
Gunsight:	TT+0/HT+2/BT+3
Ranging:	RE
AtA/AtG:	5/6
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 3,900

Station	Limit	Allowed Loads
1 and 6	200	IRM
2 and 5	1,400	FT
3 and 4	550	BB RP RK DR

Load Notes:

1. May use 760L FTs on stations 1 and 4.
2. May use ORO-57K RPs on stations 2 and 3. From 1957, may use DRs each with two ORO-57K RPs on stations 2 and 3.
3. From 1961, may use AA-2 IRMs.

Notes:

1. The MiG-19P is an interceptor. It is similar from the MiG-19S day fighter, but has the RP-1 Izumrud radar and omits the gun under the fuselage. This late variant has two 30 mm NR-30 cannons in place of the two 23 mm NR-23 cannons of the early version. The NATO reporting name for the aircraft is Farmer-B and for the radar is Scan Odd.
2. If a BT or ET is performed in the HI+ altitude bands, roll one die for each facing change after the first. On a 1 the aircraft suffers a maneuvering departure.

VPs: 16/11/5/3

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MiG-19PM

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.5	3.0	2.5	5.0
M	2.5	2.0	2.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	180
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.0	2.0
ET	2.0	2.5	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 58	1/2 53	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 8.0	4.0 – 7.5	4.5 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 8.5	3.5 – 8.0	4.0 – 7.0	10.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 9.0	3.0 – 8.0	3.0 – 7.5	10.0	2.0	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 8.5	3.0 – 8.0	3.0 – 7.0	9.0	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	8–16	2.5 – 7.5	2.5 – 7.0	2.5 – 6.5	8.5	4.0	2.0	3.0	1.0	2.0	1.0	ML
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	8.0	5.0	2.0	4.0	1.0	3.0	1.0	LO

Radar:	RP-1 Izumrud
ECCM:	0
Arcs:	Limited
Search:	18–6
Track:	6–6
Lock-On:	7

ECM:	IFF
RWR:	A
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+2/BT+3
Ranging:	RE
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 7
DT : ≥ 7

Weight Limit: 3,900

Station	Limit	Allowed Loads
1 and 6	1,400	FT
2–3 and 4–5	200	BRM RHM

Load Notes:

1. May use 760L FTs on stations 1 and 6.
2. May use AA-1 BRMs and RHMs.

Notes:

1. The MiG-19PM is an interceptor. It is a development of the MiG-19P with AA-1 missiles replacing the cannons. The NATO reporting name for the aircraft is Farmer-E and for the radar is Scan Odd.
2. If a BT or ET is performed in the HI+ altitude bands, roll one die for each facing change after the first. On a 1 the aircraft suffers a maneuvering departure.

VPs: 16/11/5/3

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Mikoyan-Gurevich MiG-21

- MiG-21F
- MiG-21F-13
- MiG-21PF
- MiG-21PFM
- MiG-21FL
- MiG-21S
- MiG-21M
- MiG-21SM
- MiG-21MF
- MiG-21bis

MiG-21F

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	3.0	3.0	2.5	5.0
M	2.0	2.0	1.5	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	6.0	Restr. Arcs:	180L 60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	200
Size:	+0	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.5	2.5
ET	2.5	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 58	1/2 56	DT 54	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 11.0	3.5 – 10.0	4.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 12.0	3.0 – 11.0	3.5 – 10.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	2.5 – 10.0	3.0 – 9.0	3.0 – 8.0	11.0	2.0	1.0	2.0	0.5	1.5	0.5	HI
MH	17–25	2.0 – 9.0	2.5 – 8.0	2.5 – 7.5	10.0	2.0	1.0	2.0	1.0	1.5	0.5	MH
ML	8–16	2.0 – 7.5	2.0 – 7.5	2.5 – 7.0	8.0	3.0	1.5	3.0	1.0	2.0	1.0	ML
LO	0–7	1.5 – 6.5	2.0 – 6.5	2.0 – 6.5	7.0	4.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	SRD-5MN Baza-6	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	Limited	DDS:	—
Search:	—	DJM:	—
Track:	10–6	AJM:	—
Lock-On:	5	BJM:	—

Weapon Stations Diagram:

Guns:	Two 30 mm NR-30
To Hit:	5/3/1
Ammunition:	2.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	RE
AtA/AtG:	5/6
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 5, DT : ≥ 5

Weight Limit: 2,200

Station	Limit	Allowed Loads
1 and 3	550	BB RP RK DR
2	1,100	FT

Notes:

1. The Mikoyan-Gurevich MiG-21F is a day fighter. This is the first production version with two NR-30 cannons, but without a search radar or missile armament. The NATO reporting name for the aircraft is Fishbed-B and for the radar is High Fix.
2. The thick front canopy gives a +1 modifier to sighting rolls for targets in the 180+ arc.

VPs: 14/9/5/2

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MiG-21F-13

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	3.0	3.0	2.5	5.0
M	2.0	2.0	1.5	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	6.0	Restr. Arcs:	180L 60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	200
Size:	+0	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.5	2.5
ET	2.5	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 58	1/2 56	DT 54	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 11.0	3.5 – 10.0	4.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 12.0	3.0 – 11.0	3.5 – 10.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	2.5 – 10.0	3.0 – 9.0	3.0 – 8.0	11.0	2.0	1.0	2.0	0.5	1.5	0.5	HI
MH	17–25	2.0 – 9.0	2.5 – 8.0	2.5 – 7.5	10.0	2.0	1.0	2.0	1.0	1.5	0.5	MH
ML	8–16	2.0 – 7.5	2.0 – 7.5	2.5 – 7.0	8.0	3.0	1.5	3.0	1.0	2.0	1.0	ML
LO	0–7	1.5 – 6.5	2.0 – 6.5	2.0 – 6.5	7.0	4.0	2.0	3.0	1.0	2.0	1.0	LO

Radar: SRD-5ND Kvant

ECCM:	0
Arcs:	Limited
Search:	—
Track:	10–6
Lock-On:	5

ECM: IFF

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: One 30 mm NR-30

To Hit:	4/2/1
Ammunition:	2.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	RE
AtA/AtG:	4/3

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 5, DT : ≥ 5

Weight Limit: 2,200

Station	Limit	Allowed Loads
1 and 3	550	BB RP RK DR IRM
2	1,100	FT

Load Notes:

1. From 1961, may use AA-2 IRMs.

Notes:

1. The Mikoyan-Gurevich MiG-21F-13 is a day fighter. This is an improved version of the MiG-21F, with provision for AA-2 IRMs, but with only one NR-30 gun and still without a search radar. The NATO reporting name for the aircraft is Fishbed-C and for the radar is High Fix.
2. The thick front canopy gives a +1 modifier to sighting rolls for targets in the 180+ arc.

VPs: 16/11/5/3

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MiG-21PF

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	3.0	3.0	2.5	5.0
M	2.0	2.0	1.5	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	6.0	Restr. Arcs:	180L 60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	225
Size:	+0	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.5	2.5
ET	2.5	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 58	1/2 56	DT 54	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 11.0	3.5 – 10.0	4.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 12.0	3.0 – 11.0	3.5 – 10.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	2.5 – 10.0	3.0 – 9.0	3.0 – 8.0	11.0	2.0	1.0	2.0	0.5	1.5	0.5	HI
MH	17–25	2.0 – 9.0	2.5 – 8.0	2.5 – 7.5	10.0	2.0	1.0	2.0	1.0	1.5	0.5	MH
ML	8–16	2.0 – 7.5	2.0 – 7.5	2.5 – 7.0	8.0	3.0	1.5	3.0	1.0	2.0	1.0	ML
LO	0–7	1.5 – 6.5	2.0 – 6.5	2.0 – 6.5	7.0	4.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	RP-21 Sapfir	**ECM:**	IFF
ECCM:	0	RWR:	A
Arcs:	180+	DDS:	—
Search:	30–6	DJM:	—
Track:	18–6	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+2/BT+3
Ranging:	RE
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 2,200

Station	Limit	Allowed Loads
1 and 3	550	BB RP RK DR BRM IRM
2	1,100	FT

Load Notes:

1. May use AA-1 BRMs and AA-2 IRMs.

Notes:

1. The Mikoyan-Gurevich MiG-21PF is an all-weather interceptor. It is equipped with the RP-21 radar, a more powerful engine than the MiG-21F versions, and the ability to use AA-1 BRMs and AA-2 IRMs. The NATO reporting name for the aircraft is Fishbed-D and the radar is Spin Scan-A.
2. The thick front canopy gives a +1 modifier to sighting rolls for targets in the 180+ arc.

VPs: 18/12/6/3

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MiG-21PFM

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	3.0	3.0	2.5	5.0
M	2.0	2.0	1.5	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	6.0	Restr. Arcs:	180L 60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	220
Size:	+0	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0/1.5	1.0/1.5	1.0/1.5
HT	1.5/2.0	1.5/2.0	2.0/2.5
BT	2.0/2.5	2.5/3.0	2.5/3.0
ET	2.5/3.0	—	—

Selectable combat flaps. If selected and speed ≤ 4.5, use higher drag and reduce minimum speeds by 0.5.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 58	1/2 56	DT 54	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 11.0	3.5 – 10.0	4.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 12.0	3.0 – 11.0	3.5 – 10.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	2.5 – 10.0	3.0 – 9.0	3.0 – 8.0	11.0	2.0	1.0	2.0	0.5	1.5	0.5	HI
MH	17–25	2.0 – 9.0	2.5 – 8.0	2.5 – 7.5	10.0	2.0	1.0	2.0	1.0	1.5	0.5	MH
ML	8–16	2.0 – 7.5	2.0 – 7.5	2.5 – 7.0	8.0	3.0	1.5	3.0	1.0	2.0	1.0	ML
LO	0–7	1.5 – 6.5	2.0 – 6.5	2.0 – 6.5	7.0	4.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	RP-21M Sapfir	**ECM:**	IFF
ECCM:	0	RWR:	A
Arcs:	180+	DDS:	—
Search:	30–6	DJM:	—
Track:	18–6	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+2/BT+3
Ranging:	RE
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 2,200

Station	Limit	Allowed Loads
1 and 3	550	BB RP RK DR BRM IRM
2	1,100	FT GP

Load Notes:

1. May use AA-1 BRMs and AA-2 IRMs.
2. Station 2 may carry a GP-9 gunpod.

Notes:

1. The Mikoyan-Gurevich MiG-21PFM is an all-weather interceptor. It is a development of the MiG-21PF with blown flaps, improved RP-21M radar, the capability to carry the GP-9 gun pod, and from 1966 the capability to carry the Kh-66 ASM. The NATO reporting name for the aircraft is Fishbed-F and for the radar is Spin Scan-A.
2. The thick front canopy gives a +1 modifier to sighting rolls for targets in the 180+ arc.

VPs: 18/12/6/3

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MiG-21FL

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	3.0	3.0	2.5	5.0
M	2.0	2.0	1.5	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	6.0	Restr. Arcs:	180L 60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	220
Size:	+0	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.5	2.5
ET	2.5	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 58	1/2 56	DT 54	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 11.0	3.5 – 10.0	4.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 12.0	3.0 – 11.0	3.5 – 10.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	2.5 – 10.0	3.0 – 9.0	3.0 – 8.0	11.0	2.0	1.0	2.0	0.5	1.5	0.5	HI
MH	17–25	2.0 – 9.0	2.5 – 8.0	2.5 – 7.5	10.0	2.0	1.0	2.0	1.0	1.5	0.5	MH
ML	8–16	2.0 – 7.5	2.0 – 7.5	2.5 – 7.0	8.0	3.0	1.5	3.0	1.0	2.0	1.0	ML
LO	0–7	1.5 – 6.5	2.0 – 6.5	2.0 – 6.5	7.0	4.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	R1L	**ECM:**	IFF
ECCM:	0	RWR:	A
Arcs:	180+	DDS:	—
Search:	30–6	DJM:	—
Track:	18–6	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+2/BT+3
Ranging:	RE
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 2,200

Station	Limit	Allowed Loads
1 and 3	550	BB RP RK DR FT IRM
2	1,100	FT GP

Load Notes:

1. From 1961, may use AA-2 IRMs.
2. Station 2 may carry a GP-9 gunpod.

Notes:

1. The Mikoyan-Gurevich MiG-21FL is an all-weather interceptor. This is an export version developed from the MiG-21PF, but with the less powerful engine from the MiG-21F, no capability to use the AA-1 missile, and a downgraded version of the RP21 designated R1L. The NATO reporting name for the aircraft is Fishbed-D.
2. The thick front canopy gives a +1 modifier to sighting rolls for targets in the 180+ arc.

VPs: 18/12/6/3

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MiG-21S

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	5.0
M	1.5	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	6.0	Restr. Arcs:	180L 60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	220
Size:	+0	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0/1.5	1.0/1.5	1.0/1.5
HT	1.5/2.0	1.5/2.0	2.0/2.5
BT	2.5/3.0	2.5/3.0	2.5/3.0
ET	2.5/3.0	3.0/3.5	—

Selectable combat flaps. If selected and speed ≤ 4.5, use higher drag and reduce minimum speeds by 0.5.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 56	1/2 50	DT 44	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	4.0 – 11.0	4.5 – 10.0	—	12.0	1.0	0.5	1.0	0.5	—	—	EH+
VH	36–45	3.5 – 12.0	4.0 – 11.0	5.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 10.5	3.5 – 9.0	4.0 – 8.0	12.0	2.0	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 9.0	3.0 – 8.0	3.0 – 7.0	10.0	3.0	1.0	2.0	1.0	1.5	0.5	MH
ML	8–16	2.0 – 8.5	2.5 – 7.5	2.5 – 6.5	9.0	4.0	1.0	3.0	1.0	1.5	0.5	ML
LO	0–7	2.0 – 8.0	2.0 – 7.0	2.5 – 6.0	8.5	4.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	RP-22 Saphir
ECCM:	0
Arcs:	180+
Search:	48–12
Track:	30–8
Lock-On:	7

ECM:	IFF
RWR:	A
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+2/BT+3
Ranging:	RE
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5 / 1/2: < 7 / DT : ≥ 7

Weight Limit: 4,400

Station	Limit	Allowed Loads
1 and 5	550	BB RP RK EP FT BRM IRM RHM
2 and 4	1,100	BB RP RK FT DR IRM
3	1,100	EP PP FT GP

Load Notes:

1. May use AA-1 BRMs, AA-2 IRMs, and AA-2C RHMs.
2. Station 3 may carry a GP-9 gun pod.

Notes:

1. The Mikoyan-Gurevich MiG-21S is an all-weather interceptor. It is equipped with the RP-22 radar and is able to use the AA-2 IRMs and RHMs and AA-1 BRMs. It has internal guns, but is able to mount a GP-9 gun pod. The NATO reporting name for the aircraft is Fishbed-J and for the radar is Jay Bird.
2. The thick front canopy gives a +1 modifier to sighting rolls for targets in the 180+ arc.

VPs: 22/15/7/4

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MiG-21M

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	5.0
M	1.5	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	6.0	Restr. Arcs:	180L 60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	220
Size:	+0	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Std

Turn DPs:

	CL	1/2	DT
TT	1.0/1.5	1.0/1.5	1.0/1.5
HT	1.5/2.0	1.5/2.0	2.0/2.5
BT	2.5/3.0	2.5/3.0	2.5/3.0
ET	2.5/3.0	3.0/3.5	—

Selectable combat flaps. If selected and speed ≤ 4.5, use higher drag and reduce minimum speeds by 0.5.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 56	1/2 50	DT 44	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	4.0 – 11.0	4.5 – 10.0	—	12.0	1.0	0.5	1.0	0.5	—	—	EH+
VH	36–45	3.5 – 12.0	4.0 – 11.0	5.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 10.5	3.5 – 9.0	4.0 – 8.0	12.0	2.0	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 9.0	3.0 – 8.0	3.0 – 7.0	10.0	3.0	1.0	2.0	1.0	1.5	0.5	MH
ML	8–16	2.0 – 8.5	2.5 – 7.5	2.5 – 6.5	9.0	4.0	1.0	3.0	1.0	1.5	0.5	ML
LO	0–7	2.0 – 8.0	2.0 – 7.0	2.5 – 6.0	8.5	4.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	RP-21MA Sapfir	**ECM:**	IFF
ECCM:	0	RWR:	A
Arcs:	180+	DDS:	—
Search:	35–8	DJM:	—
Track:	24–8	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	23 mm GSh-23
To Hit:	7/4/2
Ammunition:	2.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	RE
AtA/AtG:	5/5
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5, 1/2: < 7, DT : ≥ 7

Weight Limit: 4,400

Station	Limit	Allowed Loads
1 and 5	550	BB RP RK EP FT IRM
2 and 4	1,100	BB RP RK FT DR IRM
3	1,100	EP PP FT

Load Notes:

1. From 1961, may use AA-2 IRMs.

Notes:

1. The Mikoyan-Gurevich MiG-21M is an all-weather interceptor. It is an export version of the MiG-21S, with the RP-21MA radar instead of the RP-22 and armed with an internal GSh-23L gun and AA-2 IRMs. The NATO reporting name for the aircraft is Fishbed-J and for the radar is Spin Scan-B.
2. The thick front canopy gives a +1 modifier to sighting rolls for targets in the 180+ arc.

VPs: 22/15/7/4

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MiG-21SM

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	3.5	2.5	2.5	6.0
M	1.5	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	6.0	Restr. Arcs:	180L 60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	220
Size:	+0	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0/1.5	1.0/1.5	1.0/1.5
HT	1.5/2.0	1.5/2.0	2.0/2.5
BT	2.5/3.0	2.5/3.0	2.5/3.0
ET	2.5/3.0	3.0/3.5	—

Selectable combat flaps. If selected and speed ≤ 4.5, use higher drag and reduce minimum speeds by 0.5.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 56	1/2 50	DT 44	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	4.0 – 11.0	4.5 – 10.0	—	12.0	1.0	0.5	1.0	0.5	—	—	EH+
VH	36–45	3.5 – 12.0	4.0 – 11.0	5.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 10.5	3.5 – 9.0	4.0 – 8.0	12.0	2.0	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 9.0	3.0 – 8.0	3.0 – 7.0	10.0	3.0	1.0	2.0	1.0	1.5	0.5	MH
ML	8–16	2.0 – 8.5	2.5 – 7.5	2.5 – 6.5	9.0	4.0	1.0	3.0	1.0	1.5	0.5	ML
LO	0–7	2.0 – 8.0	2.0 – 7.0	2.5 – 6.0	8.5	4.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	RP-22 Saphir	**ECM:**	IFF
ECCM:	0	RWR:	A
Arcs:	180+	DDS:	—
Search:	48–12	DJM:	—
Track:	30–8	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	23 mm GSh-23
To Hit:	7/4/2
Ammunition:	2.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	RE
AtA/AtG:	5/5
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5 / 1/2: < 7 / DT : ≥ 7

Weight Limit: 4,400

Station	Limit	Allowed Loads
1 and 5	550	BB RP RK EP FT IRM RHM
2 and 4	1,100	BB RP RK FT DR IRM
3	1,100	EP PP FT

Load Notes:

1. From 1961, may use AA-2 IRMs. From 1966, may use AA-2C RHMs.

Notes:

1. The Mikoyan-Gurevich MiG-21SM is an all-weather interceptor. It is an improved version of the MiG-21S, with a new engine and an internal GSh-21L cannon. The NATO reporting name for the aircraft is Fishbed-J and for the radar is Jay Bird.
2. The thick front canopy gives a +1 modifier to sighting rolls for targets in the 180+ arc.

VPs: 24/16/8/4

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MiG-21MF

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	3.5	2.5	2.5	6.0
M	1.5	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	6.0	Restr. Arcs:	180L 60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	220
Size:	+0	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0/1.5	1.0/1.5	1.0/1.5
HT	1.5/2.0	1.5/2.0	2.0/2.5
BT	2.5/3.0	2.5/3.0	2.5/3.0
ET	2.5/3.0	3.0/3.5	—

Selectable combat flaps. If selected and speed ≤ 4.5, use higher drag and reduce minimum speeds by 0.5.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 56	1/2 50	DT 44	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	4.0 – 11.0	4.5 – 10.0	—	12.0	1.0	0.5	1.0	0.5	—	—	EH+
VH	36–45	3.5 – 12.0	4.0 – 11.0	5.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 10.5	3.5 – 9.0	4.0 – 8.0	12.0	2.0	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 9.0	3.0 – 8.0	3.0 – 7.0	10.0	3.0	1.0	2.0	1.0	1.5	0.5	MH
ML	8–16	2.0 – 8.5	2.5 – 7.5	2.5 – 6.5	9.0	4.0	1.0	3.0	1.0	1.5	0.5	ML
LO	0–7	2.0 – 8.0	2.0 – 7.0	2.5 – 6.0	8.5	4.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	RP-22 Saphir
ECCM:	0
Arcs:	180+
Search:	48–12
Track:	30–8
Lock-On:	7

ECM:	IFF
RWR:	A
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	23 mm GSh-23
To Hit:	7/4/2
Ammunition:	2.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	RE
AtA/AtG:	5/5
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5
1/2: < 7
DT : ≥ 7

Weight Limit: 4,400

Station	Limit	Allowed Loads
1 and 5	550	BB RP RK EP FT MDR IRM
2 and 4	1,100	BB RP RK FT DR MDR IRM
3	1,100	EP PP FT

Load Notes:

1. May use AA-2 and AA-8 IRMs. MDRs may only carry two AA-8 IRMs.

Notes:

1. The Mikoyan-Gurevich MiG-21MF is an all-weather interceptor. It is an export version of the MiG-21SM. The NATO reporting name for the aircraft is Fishbed-J and for the radar is Jay Bird.
2. The thick front canopy gives a +1 modifier to sighting rolls for targets in the 180+ arc.

VPs: 24/16/8/4

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MiG-21bis

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.5	5.5
M	1.5	1.0	1.0	1.5
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	6.0	Restr. Arcs:	180L 60–
Climb Spd.:	5.0	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	264
Size:	+0	AtA Refuel:	No
Vulnerability:	−2	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0/1.5	1.0/1.5	1.5/2.0
HT	1.5/2.0	1.5/2.0	2.0/2.5
BT	2.5/3.0	2.5/3.0	—
ET	2.5/3.0	—	—

Selectable combat flaps. If selected and speed ≤ minimum + 2.5, use higher drag and reduce minimum speeds by 0.5.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 56	1/2 48	DT 44	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	4.5 – 13.5	5.0 – 10.5	—	13.5	2.0	1.0	1.0	0.5	—	—	EH+
VH	36–45	3.5 – 13.0	4.0 – 11.0	4.0 – 6.5	13.5	3.0	1.0	2.0	1.0	1.0	—	VH
HI	26–35	3.0 – 13.0	3.0 – 11.5	3.5 – 6.5	13.5	5.0	1.5	4.0	1.0	1.5	0.5	HI
MH	17–25	2.5 – 11.5	3.0 – 11.0	3.0 – 6.5	11.0	6.0	2.0	5.0	2.0	2.0	1.0	MH
ML	8–16	2.5 – 9.5	2.5 – 9.5	2.5 – 7.0	9.5	6.0	2.0	6.0	2.0	3.0	1.0	ML
LO	0–7	2.0 – 8.5	2.0 – 8.0	2.5 – 7.5	8.5	7.0	3.0	6.0	3.0	4.0	1.5	LO

Radar:	RP-22 Saphir-21	**ECM:**	IFF
ECCM:	0	RWR:	B
Arcs:	180+	DDS:	—
Search:	54–12	DJM:	—
Track:	36–8	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	23 mm GSh-23
To Hit:	6/3/1
Ammunition:	2.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/5
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 3,930

Station	Limit	Allowed Loads
1 and 5	1,100	BB RP RK MDR IRM RHM FT
2 and 4	550	BB RP RK MDR IRM RHM
3	1,100	GP FT

Load Notes:

1. May use R-3, R-13, and R-60 IRMs (AA-2 and AA-8). May use R-3R RHM (AA-2C). MDRs are for R-60s only.
2. Station 3 may carry a 490L FT or a special 800L FT. If carrying an 800L FT, the station is overloaded and the aircraft must remain below low transonic speed.

Notes:

1. The Mikoyan-Gurevich MiG-21bis is an all-weather interceptor. It is a development of the MiG-21SM with an improved engine. The NATO reporting name for the aircraft is Fishbed-L/N and for the radar is Jay Bird.
2. Low transonic drag (LTD).
3. The thick front canopy gives a +1 modifier to sighting rolls for targets in the 180+ arc.
4. Emergency AB (ChR AB) may be used if speed is at least high transonic and altitude is 13 or less. When used, the AB power is 5.0/4.5/4.0 and the fuel use is 7.5. Emergency AB cannot be used for more than two consecutive game turns or more than eight game turns in total.

VPs: 24/16/8/4

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Sukhoi Su-9

An ADC is provided for the:

- Su-9

Su-9

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	3.5	3.0	3.0	10.0
M	1.5	1.5	1.5	3.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	180L 60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	390
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	2.0	2.0	2.0
BT	2.5	2.5	3.0
ET	—	—	—

Speeds and Ceilings						Climb Capabilities						
Alt. Band	Conf. Ceil.	CL 60	1/2 56	DT 54	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	4.0 – 11.0	4.5 – 9.0	4.5 – 8.5	13.0	2.0	1.0	2.0	1.0	1.0	0.5	EH+
VH	36–45	3.5 – 12.0	3.5 – 10.0	3.5 – 8.5	13.0	2.0	1.0	2.0	1.0	1.0	0.5	VH
HI	26–35	3.0 – 10.5	3.0 – 9.0	3.0 – 8.0	12.0	3.0	1.0	2.0	1.0	2.0	1.0	HI
MH	17–25	2.5 – 9.0	2.5 – 8.5	3.0 – 7.5	11.0	4.0	2.0	3.0	2.0	2.0	1.0	MH
ML	8–16	2.0 – 8.0	2.5 – 8.0	2.5 – 7.0	9.0	4.0	2.0	3.0	2.0	2.0	1.0	ML
LO	0–7	2.0 – 7.0	2.0 – 6.5	2.5 – 6.0	8.0	5.0	2.0	4.0	2.0	3.0	1.0	LO

Radar:	Spin Scan	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	30–6	DJM:	—
Track:	18–6	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 7
DT : ≥ 7

Weight Limit: 3,000

Station	Limit	Allowed Loads
1–2 and 5–6	200	BRM RHM
3 and 4	1,100	FT

Load Notes:

1. May only used AA-1 BRMs and RHMs.

Notes:

1. The Sukhoi Su-9 is an all-weather interceptor. The NATO reporting name for the aircraft is Fishpot-B and for the radar is Spin Scan.

VPs: 16/11/5/3

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Sukhoi Su-11

An ADC is provided for the:

– Su-11

Su-11

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	3.5	3.0	3.0	10.0
M	1.5	1.5	1.5	3.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	180L 60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	390
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.0	2.0	2.5
BT	3.0	3.0	3.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 60	1/2 56	DT 54	Dive Speed
EH+	46+	4.0 – 11.0	4.5 – 9.0	4.5 – 8.5	13.0
VH	36–45	3.5 – 12.0	3.5 – 10.0	3.5 – 8.5	13.0
HI	26–35	3.0 – 10.5	3.0 – 9.0	3.0 – 8.0	12.0
MH	17–25	2.5 – 9.0	2.5 – 8.5	3.0 – 7.5	11.0
ML	8–16	2.0 – 8.0	2.5 – 8.0	2.5 – 7.0	9.0
LO	0–7	2.0 – 7.0	2.0 – 6.5	2.5 – 6.0	8.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
2.0	1.0	2.0	1.0	1.0	0.5	EH+
2.0	1.0	2.0	1.0	1.0	0.5	VH
3.0	1.0	2.0	1.0	2.0	1.0	HI
4.0	2.0	3.0	2.0	2.0	1.0	MH
4.0	2.0	3.0	2.0	2.0	1.0	ML
5.0	2.0	4.0	2.0	3.0	1.0	LO

Radar:	Skip Spin	**ECM:**	IFF
ECCM:	0	RWR:	A
Arcs:	180+	DDS:	—
Search:	54–12	DJM:	—
Track:	48–10	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 7
DT : ≥ 7

Weight Limit: 3,800

Station	Limit	Allowed Loads
1 and 4	600	IRM RHM
2 and 3	1,100	IRM FT

Load Notes:

1. May only use AA-2 or AA-3 IRMs and AA-3 RHMs on stations 1 and 4.
2. May only use AA-2 IRMs on stations 2 and 3.

Notes:

1. The Sukhoi Su-11 is an all-weather interceptor. It is an improved version of the Su-9. The NATO reporting name for the aircraft is Fishpot-C and for the radar is Skip Spin.

VPs: 18/12/6/3

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Tupolev Tu-22M

ADCs are provided for

- Tu-22M2

Tu-22M2
(Wings Forward)

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	2.5	2.0	1.0	24.0
M	1.5	1.0	0.5	11.0
N	0.0	0.0	0.0	5.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	-
Climb Spd.:	4.0	Blind Arcs:	60–
Visibility:	11	Internal Fuel:	5900
Size:	–2	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot, Copilot, Navigator, and Communications Officer

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	2.0	2.0	2.5
HT	3.0	3.0	3.5
BT	3.5	3.5	4.0
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 40	1/2 37	DT 35	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 3.5	3.0 – 3.5	—	3.5
HI	26–35	2.5 – 3.5	3.0 – 3.5	3.0 – 3.5	3.5
MH	17–25	2.5 – 3.5	2.5 – 3.5	3.0 – 3.5	3.5
ML	8–16	2.0 – 3.5	2.5 – 3.5	2.5 – 3.5	3.5
LO	0–7	2.0 – 3.5	2.0 – 3.5	2.5 – 3.5	3.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	0.50	0.25	0.50	0.00	—	—	VH
HI	1.00	0.50	1.00	0.25	0.50	0.25	HI
MH	2.00	1.00	1.00	0.50	0.50	0.25	MH
ML	2.50	1.00	1.50	0.50	1.00	0.25	ML
LO	3.00	1.50	2.00	1.00	1.00	0.50	LO

Radar:	PN-A
ECCM:	2
Arcs:	180+
Search:	Gr. Nav. (300)
Track:	Gr. Attack (180)
Lock-On:	7

ECM:	IFF
RWR:	B
DDS:	B
DJM:	—
AJM:	B3
BJM:	B4

Weapon Stations Diagram:

Guns:	Two 23 mm GSh-23
To Hit:	5/3/1
Ammunition:	4.0
Gunsight:	—
Ranging:	—
AtA/AtG:	5/-

Bomb System: Ballistic

Technology:

None

Load Point Limits: CL : <41 / 1/2: <59 / DT : ≥59

Weight Limit: 47,000

Station	Limit	Allowed Loads
1 and 5	12,000	BB ASM NAM MR
2 and 4	6,800	BB MR
3	19,000	BB ASM NAM

Load Notes:

1. Stations 1 and 5 are the wing-glove stations. They may each carry: (a) one Kh-22M/MA (AS-4 Kitchen) ASM/NAM, (b) nine FAB-250 BBs on a MR, (c) six FAB-500 BBs on a MR, (d) one FAB-1500 BB, or (e) one FAB-3000 BB.
2. Stations 2 and 4 are the fuselage external stations. They may carry the same bomb loads as stations 1 and 5.
3. Station 3 is the internal bay. It may carry: (a) one Kh-22M/AM (AS-4 Kitchen) ASM/NAM, (b) thirty-three FAB-250 BBs, (c) eighteen FAB-500 BBs, (d) six FAB-1500 BBs, or (e) naval mines.
4. As an exception to the normal rules for load points, internal loads contribute 1 load point for each 1,000 of weight and internal fuel contributes 1 load point for each 50 fuel points. A return mission will typically require leaving the target with at least 2000 fuel points (40 load points).

Notes:

1. The Tupolev Tu-22M2 is a bomber and maritime strike aircraft. The NATO reporting name for the aircraft is Backfire-B and for the radar is Down Beat.
2. This is a variable-geometry aircraft with allowed geometries of forward, mid, and aft. The geometry may be changed at the end of the aircraft's move if the maximum turn rate used is TT or less. The data shown here are for the forward geometry.
3. DDS capacity is 100 decoys.
4. Tail Radar. Equiped with a Argon-2 tail radar with ECCM 1, arc 60–, search 30-7, track 12-7, and lock-on 7–.
5. Articulated Guns. The guns can only fire at locked-on targets in the 30– arc. They may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are modified only by the target size.

VPs: 46/31/15/8

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Tu-22M2
(Wings Mid)

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	2.5	2.0	1.0	24.0
M	1.5	1.0	0.5	11.0
N	0.0	0.0	0.0	5.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	-
Climb Spd.:	4.0	Blind Arcs:	60–
Visibility:	11	Internal Fuel:	5900
Size:	–2	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot, Copilot, Navigator, and Communications Officer

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	2.0	2.5	2.5
HT	3.0	3.5	3.5
BT	3.5	4.0	4.0
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 40	1/2 37	DT 35	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 6.0	3.0 – 6.0	—	6.0
HI	26–35	2.5 – 6.0	3.0 – 6.0	3.0 – 6.0	6.5
MH	17–25	2.5 – 6.0	2.5 – 6.0	3.0 – 6.0	6.5
ML	8–16	2.0 – 6.0	2.5 – 6.0	2.5 – 6.0	7.0
LO	0–7	2.0 – 6.0	2.0 – 6.0	2.5 – 6.0	7.0

Climb Capabilities

Band	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	0.50	0.25	0.50	0.00	—	—	VH
HI	1.00	0.50	1.00	0.25	0.50	0.25	HI
MH	2.00	1.00	1.00	0.50	0.50	0.25	MH
ML	2.50	1.00	1.50	0.50	1.00	0.25	ML
LO	3.00	1.50	2.00	1.00	1.00	0.50	LO

Radar:	PN-A
ECCM:	2
Arcs:	180+
Search:	Gr. Nav. (300)
Track:	Gr. Attack (180)
Lock-On:	7

ECM:	IFF
RWR:	B
DDS:	B
DJM:	—
AJM:	B3
BJM:	B4

Weapon Stations Diagram:

Guns:	Two 23 mm GSh-23
To Hit:	5/3/1
Ammunition:	4.0
Gunsight:	—
Ranging:	—
AtA/AtG:	5/-

Bomb System: Ballistic

Technology:

None

Load Point Limits: CL : <41 / 1/2: <59 / DT : ≥59

Weight Limit: 47,000

Station	Limit	Allowed Loads
1 and 5	12,000	BB ASM NAM MR
2 and 4	6,800	BB MR
3	19,000	BB ASM NAM

Load Notes:

1. Stations 1 and 5 are the wing-glove stations. They may each carry: (a) one Kh-22M/MA (AS-4 Kitchen) ASM/NAM, (b) nine FAB-250 BBs on a MR, (c) six FAB-500 BBs on a MR, (d) one FAB-1500 BB, or (e) one FAB-3000 BB.
2. Stations 2 and 4 are the fuselage external stations. They may carry the same bomb loads as stations 1 and 5.
3. Station 3 is the internal bay. It may carry: (a) one Kh-22M/AM (AS-4 Kitchen) ASM/NAM, (b) thirty-three FAB-250 BBs, (c) eighteen FAB-500 BBs, (d) six FAB-1500 BBs, or (e) naval mines.
4. As an exception to the normal rules for load points, internal loads contribute 1 load point for each 1,000 of weight and internal fuel contributes 1 load point for each 50 fuel points. A return mission will typically require leaving the target with at least 2000 fuel points (40 load points).

Notes:

1. The Tupolev Tu-22M2 is a bomber and maritime strike aircraft. The NATO reporting name for the aircraft is Backfire-B and for the radar is Down Beat.
2. This is a variable-geometry aircraft with allowed geometries of forward, mid, and aft. The geometry may be changed at the end of the aircraft's move if the maximum turn rate used is TT or less. The data shown here are for the mid geometry.
3. High transonic drag (HTD). Rapid acceleration (RA).
4. DDS capacity is 100 decoys.
5. Tail Radar. Equiped with a Argon-2 tail radar with ECCM 1, arc 60–, search 30-7, track 12-7, and lock-on 7–.
6. Articulated Guns. The guns can only fire at locked-on targets in the 30– arc. They may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are modified only by the target size.

VPs: 46/31/15/8

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Tu-22M2
(Wings Aft)

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	2.5	2.0	1.0	24.0
M	1.5	1.0	0.5	11.0
N	0.0	0.0	0.0	5.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	-
Climb Spd.:	4.0	Blind Arcs:	60–
Visibility:	11	Internal Fuel:	5900
Size:	–2	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot, Copilot, Navigator, and Communications Officer

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	2.75	2.75	3.25
HT	3.75	3.75	4.25
BT	4.75	5.25	5.25
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 40	1/2 37	DT 35	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.5 – 11.0	3.5 – 9.5	—	15.0
HI	26–35	3.0 – 10.0	3.5 – 9.0	3.5 – 8.0	14.0
MH	17–25	3.0 – 9.0	2.5 – 8.5	3.5 – 7.5	13.0
ML	8–16	2.5 – 8.5	3.0 – 8.0	3.0 – 7.0	12.0
LO	0–7	2.5 – 8.5	2.5 – 8.0	3.0 – 7.0	11.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	0.50	0.25	0.50	0.00	—	—	VH
HI	1.00	0.50	1.00	0.25	0.50	0.25	HI
MH	2.00	1.00	1.00	0.50	0.50	0.25	MH
ML	2.50	1.00	1.50	0.50	1.00	0.25	ML
LO	3.00	1.50	2.00	1.00	1.00	0.50	LO

Radar:	PN-A
ECCM:	2
Arcs:	180+
Search:	Gr. Nav. (300)
Track:	Gr. Attack (180)
Lock-On:	7

ECM:	IFF
RWR:	B
DDS:	B
DJM:	—
AJM:	B3
BJM:	B4

Weapon Stations Diagram:

Guns:	Two 23 mm GSh-23
To Hit:	5/3/1
Ammunition:	4.0
Gunsight:	—
Ranging:	—
AtA/AtG:	5/-

Bomb System: Ballistic

Technology:

None

Load Point Limits: CL : <41 / 1/2: <59 / DT : ≥59

Weight Limit: 47,000

Station	Limit	Allowed Loads
1 and 5	12,000	BB ASM NAM MR
2 and 4	6,800	BB MR
3	19,000	BB ASM NAM

Load Notes:

1. Stations 1 and 5 are the wing-glove stations. They may each carry: (a) one Kh-22M/MA (AS-4 Kitchen) ASM/NAM, (b) nine FAB-250 BBs on a MR, (c) six FAB-500 BBs on a MR, (d) one FAB-1500 BB, or (e) one FAB-3000 BB.
2. Stations 2 and 4 are the fuselage external stations. They may carry the same bomb loads as stations 1 and 5.
3. Station 3 is the internal bay. It may carry: (a) one Kh-22M/AM (AS-4 Kitchen) ASM/NAM, (b) thirty-three FAB-250 BBs, (c) eighteen FAB-500 BBs, (d) six FAB-1500 BBs, or (e) naval mines.
4. As an exception to the normal rules for load points, internal loads contribute 1 load point for each 1,000 of weight and internal fuel contributes 1 load point for each 50 fuel points. A return mission will typically require leaving the target with at least 2000 fuel points (40 load points).

Notes:

1. The Tupolev Tu-22M2 is a bomber and maritime strike aircraft. The NATO reporting name for the aircraft is Backfire-B and for the radar is Down Beat.
2. This is a variable-geometry aircraft with allowed geometries of forward, mid, and aft. The geometry may be changed at the end of the aircraft's move if the maximum turn rate used is TT or less. The data shown here are for the aft geometry.
3. High bleed rate (HBR). Low transonic drag (LTD). Poor supersonic maneuverability (PSSM). Rapid acceleration (RA).
4. DDS capacity is 100 decoys.
5. Tail Radar. Equiped with a Argon-2 tail radar with ECCM 1, arc 60–, search 30-7, track 12-7, and lock-on 7–.
6. Articulated Guns. The guns can only fire at locked-on targets in the 30– arc. They may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are modified only by the target size.

VPs: 46/31/15/8

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Chapter 9

US Aircraft

North American F-51 Mustang

The North American F-51 Mustang fighter was originally designed and built to British specifications. The early versions were aerodynamically superb and performed excellently at low altitudes, but their performance fell off above 15,000 feet as their engines lacked a supercharger. Once this deficiency was remedied, later versions served very successfully as a long-range escort fighter with the USAAF in Europe and the Pacific. The F-51D was the most numerous version.

After WWII and now in the service of the USAF, the F-51 began to be replaced by the F-80, but nevertheless was extensively used in the Korean War as a fighter-bomber, where its endurance and ability to operate from poor airstrips gave it advantages over contemporary jets. Indeed, in the initial stages of the war, several USAF squadrons converted from the F-80 back to the F-51. Its principal disadvantage as a fighter-bomber was the vulnerability of its liquid-cooling system to small arms fire.

The RF-51D was the photo-reconnaissance version. It was equipped with two K-24 cameras in the rear fuselage, one oblique facing left and the other overhead.

The USAF used the F-51D and RF-51D in the Korean War, although as adequate airfields in the Korean peninsula became available, they were replaced by the F-80C, RF-80C, and other jets. The F-51D was also used in Korea by No. 77 Sqn RAAF until it was replaced by the Meteor F.8 in April 1951, by No. 2 Sqn SAAF until it was replaced by the F-86 in December 1952, and by the RoKAF. They also served in the air forces of many other countries, and in particular saw action in IAF service in both the 1948 and 1956 wars.

The gun armament of the F-51D is six .50 cal M2 machine guns with about 300 rounds per gun. A typical ground-to-air load in the Korean War would be a pair of 100 lb, 250 lb, or 500 lb bombs or a pair of 110 US gal (750 lb) napalm tanks on the inner wing stations, often combined with six HVAR rockets that could be carried on the outer wing stations. In RAAF service, RP-3 rockets were also used instead of HVAR rockets. The RF-51D is equipped with guns and the inner-wing stations, but not the outer-wing stations for rockets.

In earlier USAAF service in WWII, the F-51D and RF-51D were designated P-51D and F-6D.

- F-51D
- RF-51D

F-51D Mustang

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	1.5	1.5	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.5, reduce power by 0.5.

Cruise Spd. CL:	3.0	Restr. Arcs:	—
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	90
Size:	+0	AtA Refuel:	No
Vulnerability:	−1	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.25	0.25	0.25
HT	0.25	0.75	0.75
BT	0.75	0.75	—
ET	1.25	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 41	1/2 33	DT 22	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.0 – 4.0	—	—	5.5
HI	26–35	1.5 – 4.0	1.5 – 3.5	—	5.5
MH	17–25	1.0 – 4.0	1.5 – 3.5	1.5 – 3.0	6.0
ML	8–16	1.0 – 4.0	1.5 – 3.5	1.5 – 3.0	6.0
LO	0–7	1.0 – 4.0	1.0 – 3.5	1.5 – 3.0	5.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.25	—	—	—	—	VH
HI	—	0.50	—	0.25	—	—	HI
MH	—	0.50	—	0.50	—	0.25	MH
ML	—	1.00	—	0.50	—	0.50	ML
LO	—	1.00	—	1.00	—	0.50	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M2
To Hit:	6/3/0
Ammunition:	10.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	3/3**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1–3 and 6–8	150	RK
4 and 5	1,000	BB FT

Notes:

1. The North American F-51D Mustang is propeller-driven escort fighter and fighter-bomber. Prior to 1948, is was designated P-51D.
2. High transonic drag (HTD). Low bleed rate (LBR).

VPs: 5/3/2/1

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RF-51D Mustang

Crew: Pilot

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	1.5	1.5	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.5, reduce power by 0.5.

Cruise Spd. CL:	3.0	Restr. Arcs:	—
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	90
Size:	+0	AtA Refuel:	No
Vulnerability:	−1	Ejection Seat:	None

Maneuver DPs:

LR/DR	2.0
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.25	0.25	0.25
HT	0.25	0.75	0.75
BT	0.75	0.75	—
ET	1.25	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 41	1/2 33	DT 22	Dive Speed	Climb CL AB	Climb CL Oth	Climb 1/2 AB	Climb 1/2 Oth	Climb DT AB	Climb DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	2.0 – 4.0	—	—	5.5	—	0.25	—	—	—	—	VH
HI	26–35	1.5 – 4.0	1.5 – 3.5	—	5.5	—	0.50	—	0.25	—	—	HI
MH	17–25	1.0 – 4.0	1.5 – 3.5	1.5 – 3.0	6.0	—	0.50	—	0.50	—	0.25	MH
ML	8–16	1.0 – 4.0	1.5 – 3.5	1.5 – 3.0	6.0	—	1.00	—	0.50	—	0.50	ML
LO	0–7	1.0 – 4.0	1.0 – 3.5	1.5 – 3.0	5.5	—	1.00	—	1.00	—	0.50	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M2
To Hit:	6/3/0
Ammunition:	10.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	3/3**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 2	1,000	BB FT

Notes:

1. The North American RF-51D Mustang is propeller-driven, photo-reconnaissance aircraft. It is a version of the F-51D. Prior to 1948, it was designated F-6D.
2. High transonic drag (HTD). Low bleed rate (LBR).

VPs: 6/4/2/1

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Vought F4U and AU Corsair

The Vought F4U Corsair fighter was designed and built for the USN. It featured superb performance, but its long nose and a cockpit well to the rear meant it was a challenge to land on an aircraft carrier. During its long gestation, it was employed as a land-based fighter with the USMC, but by the end of WWII, it was regarded as the best carrier-based fighter in service. By the time of the Korean War, it had been replaced as a day fighter by the jet-engined F9F Panther, but continued to serve as a fighter-bomber in the USN and USMC.

The F4U-4 is the last version that was constructed during WWII and maintains the original armament of six .50 cal M2 machine guns. The F4U-4B is basically a -4 with four 20 mm M3 cannon substituting the machine guns. These two versions were used in large numbers in the Korean War for close air support and interdiction, both by the USN and USMC. The -4 was preferred for carrier operations, as its guns were easier to service in the confined spaces of the hanger deck of an aircraft carrier, and the -4B tended to be used by land-based USMC squadrons.

The F4U-5 is a post-WWII version with many refinements based on experience with the -4 and maintaining the 20 mm armament of the -4B. For reasons that are not clear to me, it did not see service in the Korean War.

The AU-1 is a dedicated close air support aircraft for the USMC, derived from the F4U-5, but with heavier armor, a simpler supercharger designed for operations at lower altitudes, and additional weapons stations. It entered service in 1952 and saw combat in the Korean War.

The gun armament of the -4 is six .50 cal M2 machine guns with about 400 rounds per gun (400 rounds for the inner two and 375 rounds for the outer one). The -4B, -5, and AU-1 have four 20 mm M3 cannon with 231 rounds per gun.

A typical air-to-ground armament for the -4 and -4B in the Korean War would be TODO.

- F4U-4
- F4U-4B
- F4U-4P
- F4U-5
- F4U-5P
- F4U-5N
- F4U-5NL
- AU-1

F4U-4 Corsair

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	2.0	1.5	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

If speed ≥ 3.5, reduce power by 0.5.
If speed ≥ 4.5, reduce power by 1.0.

Cruise Spd. CL:	2.5	Restr. Arcs:	180L
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	70
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.25	0.25	0.25
HT	0.25	0.75	0.75
BT	0.75	0.75	0.75
ET	1.25	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 34	DT 23	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.0 – 4.0	—	—	5.0
HI	26–35	1.5 – 4.5	2.0 – 4.0	—	5.0
MH	17–25	1.5 – 4.5	1.5 – 4.0	1.5 – 3.5	5.5
ML	8–16	1.0 – 4.0	1.5 – 3.5	1.5 – 3.0	5.5
LO	0–7	1.0 – 4.0	1.0 – 3.5	1.5 – 3.0	5.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	0.5	—	—	—	—	VH
—	0.5	—	0.5	—	—	HI
—	0.5	—	0.5	—	0.5	MH
—	1.0	—	0.5	—	0.5	ML
—	1.0	—	1.0	—	0.5	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M2
To Hit:	6/3/0
Ammunition:	13.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	3/3**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5
1/2: < 9
DT : ≥ 9

Weight Limit: 4,000

Station	Limit	Allowed Loads
1–4 and 7–10	500	BB RK
5 and 6	1,000	BB RK FT

Load Notes:

1. Stations 1 to 4 and 7 to 10 are closely spaced and have restrictions: a station adjacent to one other loaded with a store of more than 250 lb may only carry a store of 250 lb or less and a station between two others loaded with stores of more than 250 lb may not be used. In the first months of the Korean War, they could only carry HVAR RKs. Later, they could also carry ATAR RKs and BBs. Only one RK can be carried per station.
2. Stations 5 and 6 may carry 150 US gal (550L) FTs.
3. Stations 5 and 6 may carry Tiny Tim RKs.

Notes:

1. The Vought F4U-4 Corsair is a propeller-driven, carrier-capable day fighter and fighter-bomber.
2. High transonic drag (HTD). Low bleed rate (LBR).
3. If speed 4.5 or more, speedbrakes can only be used if they were used on the previous game turn.

VPs: 6/4/2/1

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F4U-4B Corsair

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	2.0	1.5	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

If speed ≥ 3.5, reduce power by 0.5.
If speed ≥ 4.5, reduce power by 1.0.

Cruise Spd. CL:	2.5	Restr. Arcs:	180L
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	70
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.25	0.25	0.25
HT	0.25	0.75	0.75
BT	0.75	0.75	0.75
ET	1.25	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 34	DT 23	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.0 – 4.0	—	—	5.0
HI	26–35	1.5 – 4.5	2.0 – 4.0	—	5.0
MH	17–25	1.5 – 4.5	1.5 – 4.0	1.5 – 3.5	5.5
ML	8–16	1.0 – 4.0	1.5 – 3.5	1.5 – 3.0	5.5
LO	0–7	1.0 – 4.0	1.0 – 3.5	1.5 – 3.0	5.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	0.5	—	—	—	—	VH
—	0.5	—	0.5	—	—	HI
—	0.5	—	0.5	—	0.5	MH
—	1.0	—	0.5	—	0.5	ML
—	1.0	—	1.0	—	0.5	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M3
To Hit:	6/4/3
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5
1/2: < 9
DT : ≥ 9

Weight Limit: 4,000

Station	Limit	Allowed Loads
1–4 and 7–10	500	BB RK
5 and 6	1,000	BB RK FT

Load Notes:

1. Stations 1 to 4 and 7 to 10 are closely spaced and have restrictions: a station adjacent to one other loaded with a store of more than 250 lb may only carry a store of 250 lb or less and a station between two others loaded with stores of more than 250 lb may not be used. In the first months of the Korean War, they could only carry HVAR RKs. Later, they could also carry ATAR RKs and BBs. Only one RK can be carried per station.
2. Stations 5 and 6 may carry 150 US gal (550L) FTs.
3. Stations 5 and 6 may carry Tiny Tim RKs.

Notes:

1. The Vought F4U-4B Corsair is a propeller-driven, carrier-capable day fighter and fighter-bomber. It it is developed from the F4U-4 and has four 20 mm M3 cannon in place of the six .50 cal machine guns.
2. High transonic drag (HTD). Low bleed rate (LBR).
3. If speed 4.5 or more, speedbrakes can only be used if they were used on the previous game turn.

VPs: 6/4/2/1

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F4U-4P Corsair

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.25	0.25	0.25
HT	0.25	0.75	0.75
BT	0.75	0.75	0.75
ET	1.25	—	—

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	2.0	1.5	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

If speed ≥ 3.5, reduce power by 0.5.
If speed ≥ 4.5, reduce power by 1.0.

Cruise Spd. CL:	2.5	Restr. Arcs:	180L
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	70
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 34	DT 23	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.0 – 4.0	—	—	5.0
HI	26–35	1.5 – 4.5	2.0 – 4.0	—	5.0
MH	17–25	1.5 – 4.5	1.5 – 4.0	1.5 – 3.5	5.5
ML	8–16	1.0 – 4.0	1.5 – 3.5	1.5 – 3.0	5.5
LO	0–7	1.0 – 4.0	1.0 – 3.5	1.5 – 3.0	5.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	0.5	—	—	—	—	VH
—	0.5	—	0.5	—	—	HI
—	0.5	—	0.5	—	0.5	MH
—	1.0	—	0.5	—	0.5	ML
—	1.0	—	1.0	—	0.5	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M2
To Hit:	6/3/0
Ammunition:	13.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	3/3**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5
1/2: < 9
DT : ≥ 9

Weight Limit: 4,000

Station	Limit	Allowed Loads
1–4 and 7–10	500	BB RK
5 and 6	1,000	BB RK FT

Load Notes:

1. Stations 1 to 4 and 7 to 10 are closely spaced and have restrictions: a station adjacent to one other loaded with a store of more than 250 lb may only carry a store of 250 lb or less and a station between two others loaded with stores of more than 250 lb may not be used. In the first months of the Korean War, they could only carry HVAR RKs. Later, they could also carry ATAR RKs and BBs. Only one RK can be carried per station.
2. Stations 5 and 6 may carry 150 US gal (550L) FTs.
3. Stations 5 and 6 may carry Tiny Tim RKs.

Notes:

1. The Vought F4U-4P Corsair is a propeller-driven, carrier-capable photographic photo-reconnaissance aircraft and fighter-bomber.
2. High transonic drag (HTD). Low bleed rate (LBR).
3. If speed 4.5 or more, speedbrakes can only be used if they were used on the previous game turn.
4. Overhead or oblique camera.

VPs: 6/4/2/1

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F4U-5 Corsair

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	2.0	1.5	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

If speed ≥ 3.5, reduce power by 0.5.
If speed ≥ 4.5, reduce power by 1.0.

Cruise Spd. CL:	2.5	Restr. Arcs:	180L
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	70
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.25	0.25	0.25
HT	0.25	0.75	0.75
BT	0.75	0.75	0.75
ET	1.25	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 34	DT 23	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.0 – 4.0	—	—	5.0
HI	26–35	1.5 – 4.5	2.0 – 4.0	—	5.0
MH	17–25	1.5 – 4.5	1.5 – 4.0	1.5 – 3.5	5.5
ML	8–16	1.0 – 4.0	1.5 – 3.5	1.5 – 3.0	5.5
LO	0–7	1.0 – 4.0	1.0 – 3.5	1.5 – 3.0	5.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	0.5	—	—	—	—	VH
—	0.5	—	0.5	—	—	HI
—	0.5	—	0.5	—	0.5	MH
—	1.0	—	0.5	—	0.5	ML
—	1.0	—	1.0	—	0.5	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M3
To Hit:	6/4/3
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5
1/2: < 9
DT : ≥ 9

Weight Limit: 5,200

Station	Limit	Allowed Loads
1–4 and 8–11	500	BB RK
5 and 7	1,600	BB RK FT
6	2,000	BB FT

Load Notes:

1. Stations 1 to 4 and 7 to 11 are closely spaced and have restrictions: a station adjacent to one other loaded with a store of more than 250 lb may only carry a store of 250 lb or less and a station between two others loaded with stores of more than 250 lb may not be used.
2. Stations 5, 6, and 7 may carry 150 US gal (550L) FTs.
3. Stations 5 and 7 may carry Tiny Tim RKs.

Notes:

1. The Vought F4U-5 Corsair is a propeller-driven, carrier-capable day fighter and fighter-bomber.
2. High transonic drag (HTD). Low bleed rate (LBR).
3. If speed 4.5 or more, speedbrakes can only be used if they were used on the previous game turn.

VPs: 6/4/2/1

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F4U-5P Corsair

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	2.0	1.5	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

If speed ≥ 3.5, reduce power by 0.5.
If speed ≥ 4.5, reduce power by 1.0.

Cruise Spd. CL:	2.5	Restr. Arcs:	180L
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	70
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.25	0.25	0.25
HT	0.25	0.75	0.75
BT	0.75	0.75	0.75
ET	1.25	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 34	DT 23	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.0 – 4.0	—	—	5.0
HI	26–35	1.5 – 4.5	2.0 – 4.0	—	5.0
MH	17–25	1.5 – 4.5	1.5 – 4.0	1.5 – 3.5	5.5
ML	8–16	1.0 – 4.0	1.5 – 3.5	1.5 – 3.0	5.5
LO	0–7	1.0 – 4.0	1.0 – 3.5	1.5 – 3.0	5.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	0.5	—	—	—	—	VH
—	0.5	—	0.5	—	—	HI
—	0.5	—	0.5	—	0.5	MH
—	1.0	—	0.5	—	0.5	ML
—	1.0	—	1.0	—	0.5	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M3
To Hit:	6/4/3
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5
1/2: < 9
DT : ≥ 9

Weight Limit: 5,200

Station	Limit	Allowed Loads
1–4 and 8–11	500	BB RK
5 and 7	1,600	BB RK FT
6	2,000	BB FT

Load Notes:

1. Stations 1 to 4 and 7 to 11 are closely spaced and have restrictions: a station adjacent to one other loaded with a store of more than 250 lb may only carry a store of 250 lb or less and a station between two others loaded with stores of more than 250 lb may not be used.
2. Stations 5, 6, and 7 may carry 150 US gal (550L) FTs.
3. Stations 5 and 7 may carry Tiny Tim RKs.

Notes:

1. The Vought F4U-5P Corsair is a propeller-driven, carrier-capable photographic photo-reconnaissance aircraft and fighter-bomber.
2. High transonic drag (HTD). Low bleed rate (LBR).
3. If speed 4.5 or more, speedbrakes can only be used if they were used on the previous game turn.
4. Overhead or oblique camera.

VPs: 6/4/2/1

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F4U-5N Corsair

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	2.0	1.5	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

If speed ≥ 3.5, reduce power by 0.5.
If speed ≥ 4.5, reduce power by 1.0.

Cruise Spd. CL:	2.5	Restr. Arcs:	180L
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	70
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.25	0.25	0.25
HT	0.25	0.75	0.75
BT	0.75	0.75	0.75
ET	1.25	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 34	DT 23	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.0 – 4.0	—	—	5.0
HI	26–35	1.5 – 4.5	2.0 – 4.0	—	5.0
MH	17–25	1.5 – 4.5	1.5 – 4.0	1.5 – 3.5	5.5
ML	8–16	1.0 – 4.0	1.5 – 3.5	1.5 – 3.0	5.5
LO	0–7	1.0 – 4.0	1.0 – 3.5	1.5 – 3.0	5.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	0.5	—	—	—	—	VH
—	0.5	—	0.5	—	—	HI
—	0.5	—	0.5	—	0.5	MH
—	1.0	—	0.5	—	0.5	ML
—	1.0	—	1.0	—	0.5	LO

Radar:	APS-19	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	70–10	DJM:	—
Track:	20–8	AJM:	—
Lock-On:	5	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M3
To Hit:	6/4/3
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5
1/2: < 9
DT : ≥ 9

Weight Limit: 5,200

Station	Limit	Allowed Loads
1–4 and 8–11	500	BB RK IP
5 and 7	1,600	BB RK FT
6	2,000	BB FT

Load Notes:

1. Stations 1 to 4 and 7 to 11 are closely spaced and have restrictions: a station adjacent to one other loaded with a store of more than 250 lb may only carry a store of 250 lb or less and a station between two others loaded with stores of more than 250 lb may not be used.
2. Stations 5, 6, and 7 may carry 150 US gal (550L) FTs.
3. Stations 5 and 7 may carry Tiny Tim RKs.

Notes:

1. The Vought F4U-5N Corsair is a propeller-driven, carrier-capable night fighter and night attack aircraft.
2. High transonic drag (HTD). Low bleed rate (LBR).
3. If speed 4.5 or more, speedbrakes can only be used if they were used on the previous game turn.

VPs: 6/4/2/1

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F4U-5NL Corsair

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.5

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	2.0	1.5	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

If speed ≥ 3.5, reduce power by 0.5.
If speed ≥ 4.5, reduce power by 1.0.

Turn DPs:

	CL	1/2	DT
TT	0.25	0.25	0.25
HT	0.25	0.75	0.75
BT	0.75	0.75	0.75
ET	1.25	—	—

Cruise Spd. CL:	2.5	Restr. Arcs:	180L
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	70
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 34	DT 23	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.0 – 4.0	—	—	5.0
HI	26–35	1.5 – 4.5	2.0 – 4.0	—	5.0
MH	17–25	1.5 – 4.5	1.5 – 4.0	1.5 – 3.5	5.5
ML	8–16	1.0 – 4.0	1.5 – 3.5	1.5 – 3.0	5.5
LO	0–7	1.0 – 4.0	1.0 – 3.5	1.5 – 3.0	5.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	0.5	—	—	—	—	VH
—	0.5	—	0.5	—	—	HI
—	0.5	—	0.5	—	0.5	MH
—	1.0	—	0.5	—	0.5	ML
—	1.0	—	1.0	—	0.5	LO

Radar:	APS-19	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	70–10	DJM:	—
Track:	20–8	AJM:	—
Lock-On:	5	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M3
To Hit:	6/4/3
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5
1/2: < 9
DT : ≥ 9

Weight Limit: 5,200

Station	Limit	Allowed Loads
1–4 and 8–11	500	BB RK IP
5 and 7	1,600	BB RK FT
6	2,000	BB FT

Load Notes:

1. Stations 1 to 4 and 7 to 11 are closely spaced and have restrictions: a station adjacent to one other loaded with a store of more than 250 lb may only carry a store of 250 lb or less and a station between two others loaded with stores of more than 250 lb may not be used.
2. Stations 5, 6, and 7 may carry 150 US gal (550L) FTs.
3. Stations 5 and 7 may carry Tiny Tim RKs.

Notes:

1. The Vought F4U-5NL Corsair is winterized version of the F4U-5N propeller-driven, carrier-capable night fighter and night attack aircraft.
2. High transonic drag (HTD). Low bleed rate (LBR).
3. If speed 4.5 or more, speedbrakes can only be used if they were used on the previous game turn.

VPs: 6/4/2/1

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AU-1 Corsair

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	2.0	1.5	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

If speed ≥ 3.5, reduce power by 0.5.
If speed ≥ 4.5, reduce power by 1.0.
If altitude ≥ 17, reduce power by 0.5.

Cruise Spd. CL:	2.5	Restr. Arcs:	180L
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	70
Size:	+0	AtA Refuel:	No
Vulnerability:	+2	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.25	0.25	0.25
HT	0.25	0.75	0.75
BT	0.75	0.75	0.75
ET	1.25	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 41	1/2 31	DT 20	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.0 – 3.5	—	—	5.0
HI	26–35	1.5 – 4.0	2.0 – 3.5	—	5.0
MH	17–25	1.5 – 4.0	1.5 – 3.5	1.5 – 3.0	5.5
ML	8–16	1.0 – 4.0	1.5 – 3.5	1.5 – 3.0	5.5
LO	0–7	1.0 – 4.0	1.0 – 3.5	1.5 – 3.0	5.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	0.5	—	—	—	—	VH
—	0.5	—	0.5	—	—	HI
—	0.5	—	0.5	—	0.5	MH
—	1.0	—	0.5	—	0.5	ML
—	1.0	—	1.0	—	0.5	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M3
To Hit:	6/4/3
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5
1/2: < 9
DT : ≥ 9

Weight Limit: 5,200

Station	Limit	Allowed Loads
1–5 and 9–13	280	BB RK
6 and 8	1,000	BB RK FT
7	1,200	BB FT

Load Notes:

1. Stations 1 to 5 and 9 to 13 are closely spaced and have restrictions: a station adjacent to one other loaded with a store of more than 250 lb may only carry a store of 250 lb or less and a station between two others loaded with stores of more than 250 lb may not be used. They make carry HVAR and ATAR RKs. Only one RK can be carried per station.
2. Stations 6, 7, and 8 may carry 150 US gal (550L) FTs.
3. Stations 6 and 8 may carry Tiny Tim RKs.

Notes:

1. The Vought AU-1 Corsair is a propeller-driven, carrier-capable close-air-support aircraf, developed for the USMC from the F4U-5. It has additional armor, oil coolers relocated to reduce vulnerability, simplified superchargers, and two additional weapon stations.
2. High transonic drag (HTD). Low bleed rate (LBR).
3. If speed 4.5 or more, speedbrakes can only be used if they were used on the previous game turn.

VPs: 7/5/2/1

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Douglas B-26 and A-26 Invader and Counter-Invader

The Douglas B-26 Invader is a bomber and attack aircraft. It entered service in the USAAF before the end of WWII and saw combat in both the European and Pacific Theaters. It later served with the USAF in the Korean War, during Operation Farm Gate in South Vietnam, and finally flying "Nimrod" interdiction missions over Laos. Many of its missions in Korea, Vietnam, and Laos were flown at night. It was also used by the Armée de l'air in the First Indochina War, the CIA in the Bay of Pigs Invasion, and in small number in many other conflicts in the 1950s and 1960s.

The B-26 was designed with two remote-control turrets, one dorsal and one ventral, similar to the rear turrets of the B-29 and each equipped with two .50 cal M2 machine guns. The turrets were operated by a single gunner, positioned behind the bomb bay, who monitored the sky though large ventral and dorsal windows and aimed both turrets with an periscope sight. The lower turret was removed in many aircraft to give more fuel capacity. In later service, both turrets were removed as defensive guns were not useful for its missions in Vietnam and Laos.

The B-26 also had a number of different noses, with the most common being the solid nose with eight .50 cal M2 machine guns on the B-26B and the gunless glass nose (which allowed the use of a bomb sight) on the B-26C. There was also some variation in guns fitted in the wings.

The B-26K was a rebuilt version, necessary after several earlier aircraft had been lost because of metal fatigue in the main wing spar. It saw combat from 1966 to 1969 with the USAF, flying from Thailand on nighttime interdiction missions in Laos.

The Invader was originally designated A-26. In 1948, it was redesignated B-26, reusing the designation of the earlier B-26 Marauder which by then had left service. In 1966, the B-26K was redesignated A-26A to avoid the perception of a bomber being based in supposedly neutral Thailand.

Typical armament in the Korean War, beyond the guns, was 500 or 1000 lb bombs in the bomb bay and 500 or 1000 lb bombs, 110 gal napalm cans, or HVARs or parachute flares on the wing stations.

Typical armament of Farm Gate B-26s was TODO.

Typical armament of Nimrod B-26Ks was fragmentation and incendiary bombs in the bomb bay, and then a mixture of illumination pods, napalm, LAU-3A rocket pods, and CBUs under the wings.

- B-26B (Two Turrets)
- B-26B (One Turret)
- B-26B (No Turrets)
- B-26C (Two Turrets)
- B-26C (One Turret)
- B-26C (No Turrets)
- B-26K
- A-26A

B-26B Invader (Two Turrets)

Power APs/DPs: ⊙⊙

	CL	1/2	DT	Fuel
FT	1.0	1.0	1.0	1.0
HT	0.5	0.5	0.5	0.5
N	0.0	0.0	0.0	0.2
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.0, reduce power by 0.5.

Cruise Spd. CL:	2.5	Restr. Arcs:	30–
Climb Spd.:	2.0	Blind Arcs:	—
Visibility:	8	Internal Fuel:	580
Size:	−1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Crew: Pilot, Navigator, and Gunner

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	0.50	0.50	0.75
HT	1.00	1.00	1.00
BT	1.50	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 24	1/2 20	DT 14	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	—	—	—	—	—	—	—	—	—	—	VH
HI	26–35	—	—	—	—	—	—	—	—	—	—	HI
MH	17–25	1.5 – 3.0	2.0 – 3.0	—	4.5	—	0.50	—	0.25	—	—	MH
ML	8–16	1.5 – 3.5	1.5 – 3.0	2.0 – 3.0	4.0	—	0.50	—	0.50	—	0.25	ML
LO	0–7	1.5 – 3.0	1.5 – 3.0	2.0 – 3.0	4.0	—	0.50	—	0.50	—	0.50	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Fourteen .50 cal M2
To Hit:	4/2/0
Ammunition:	10.0
Gunsight:	TT+1/HT+2
Ranging:	—
AtA/AtG:	5/7**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 7, 1/2: <11, DT : ≥11

Weight Limit: 6,000

Station	Limit	Allowed Loads
1 and 5	500	BB
2 and 4	500	BB FT
5	4,000	BB
6–9 and 16–19	150	RK
10–12 and 13–15	150	RK

Load Notes:

1. Either stations 1 and 5 or stations 6 to 9 and 16 to 19 can be used.
2. Either stations 2 and 4 or stations 10 to 15 can be used.
3. Station 5 is the internal bomb bay. Load options are: (a) two 2,000 lb bombs, (b) four 1,000 lb bombs, (c) eight 500 or 250 lb bombs, or (d) sixteen 100 lb bombs. Any bombs carried must be low-drag.

Notes:

1. The Douglas B-26B Invader is a attack aircraft. This variant has a solid nose, nose and wing guns, and both dorsal and ventral turrets. Prior to 1948, it was designated A-26B.
2. Low roll rate (LRR).
3. Articulated Guns. In addition to its fixed guns, this variant of the B-26 is equipped with dorsal and ventral turrets each with two .50 cal M2 guns. The turrets can fire in any direction. They may return fire twice per game turn in response to gun attacks or conduct one attack. As there is only one gunner, they may fire on only one aircraft per game turn. The hit rolls are 2/1/1 and the only modifiers are target size and a −1 modifier when firing into the 60– arc. The AtA damage rating is 2. The ammunition is 18.0.

VPs: 12/8/4/2

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B-26B Invader (One Turret)

Power APs/DPs: ⊙⊙

	CL	1/2	DT	Fuel
FT	1.0	1.0	1.0	1.0
HT	0.5	0.5	0.5	0.5
N	0.0	0.0	0.0	0.2
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.0, reduce power by 0.5.

Cruise Spd. CL:	2.5	Restr. Arcs:	30–
Climb Spd.:	2.0	Blind Arcs:	—
Visibility:	8	Internal Fuel:	620
Size:	−1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Crew: Pilot, Navigator, and Gunner

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	0.50	0.50	0.75
HT	1.00	1.00	1.00
BT	1.50	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 24	1/2 20	DT 14	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	—	—	—	—
HI	26–35	—	—	—	—
MH	17–25	1.5 – 3.0	2.0 – 3.0	—	4.5
ML	8–16	1.5 – 3.5	1.5 – 3.0	2.0 – 3.0	4.0
LO	0–7	1.5 – 3.0	1.5 – 3.0	2.0 – 3.0	4.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	—	—	—	—	—	VH
HI	—	—	—	—	—	—	HI
MH	—	0.50	—	0.25	—	—	MH
ML	—	0.50	—	0.50	—	0.25	ML
LO	—	0.50	—	0.50	—	0.50	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Fourteen .50 cal M2
To Hit:	4/2/0
Ammunition:	10.0
Gunsight:	TT+1/HT+2
Ranging:	—
AtA/AtG:	5/7**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 7, 1/2: <11, DT : ≥11

Weight Limit: 6,000

Station	Limit	Allowed Loads
1 and 5	500	BB
2 and 4	500	BB FT
5	4,000	BB
6–9 and 16–19	150	RK
10–12 and 13–15	150	RK

Load Notes:

1. Either stations 1 and 5 or stations 6 to 9 and 16 to 19 can be used.
2. Either stations 2 and 4 or stations 10 to 15 can be used.
3. Station 5 is the internal bomb bay. Load options are: (a) two 2,000 lb bombs, (b) four 1,000 lb bombs, (c) eight 500 or 250 lb bombs, or (d) sixteen 100 lb bombs. Any bombs carried must be low-drag.

Notes:

1. The Douglas B-26B Invader is a propeller-driven attack aircraft. This variant has a solid nose, nose and wing guns, and only the dorsal turret. In place of the ventral turret, it has an extra fuel tank. Prior to 1948, it was designated A-26B.
2. Low roll rate (LRR).
3. Articulated Guns. In addition to its fixed guns, this variant of the B-26 is equipped with a dorsal turret with two .50 cal M2 guns. The turret can fire in any direction at targets that are at the same altitude or higher. These guns may return fire twice per game turn in response to gun attacks or conduct one attack. As there is only one gunner, it may fire on only one aircraft per game turn. The hit rolls are 2/1/1 and the only modifiers are target size and a −1 modifier when firing into the 60– arc. The AtA damage rating is 2. The ammunition is 18.0.

VPs: 12/8/4/2

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B-26B Invader (No Turrets)

Power APs/DPs: ⊙⊙

	CL	1/2	DT	Fuel
FT	1.0	1.0	1.0	1.0
HT	0.5	0.5	0.5	0.5
N	0.0	0.0	0.0	0.2
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.0, reduce power by 0.5.

Cruise Spd. CL:	2.5	Restr. Arcs:	30–
Climb Spd.:	2.0	Blind Arcs:	—
Visibility:	8	Internal Fuel:	620
Size:	−1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Crew: Pilot, Navigator, and Observer

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	0.50	0.50	0.75
HT	1.00	1.00	1.00
BT	1.50	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 24	1/2 20	DT 14	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	—	—	—	—
HI	26–35	—	—	—	—
MH	17–25	1.5 – 3.0	2.0 – 3.0	—	4.5
ML	8–16	1.5 – 3.5	1.5 – 3.0	2.0 – 3.0	4.0
LO	0–7	1.5 – 3.0	1.5 – 3.0	2.0 – 3.0	4.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	—	—	—	—	—	VH
HI	—	—	—	—	—	—	HI
MH	—	0.50	—	0.25	—	—	MH
ML	—	0.50	—	0.50	—	0.25	ML
LO	—	0.50	—	0.50	—	0.50	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Fourteen .50 cal M2
To Hit:	4/2/0
Ammunition:	10.0
Gunsight:	TT+1/HT+2
Ranging:	—
AtA/AtG:	5/7**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 7, 1/2: <11, DT : ≥11

Weight Limit: 6,000

Station	Limit	Allowed Loads
1 and 5	500	BB
2 and 4	500	BB FT
5	4,000	BB
6–9 and 16–19	150	RK
10–12 and 13–15	150	RK

Load Notes:

1. Either stations 1 and 5 or stations 6 to 9 and 16 to 19 can be used.
2. Either stations 2 and 4 or stations 10 to 15 can be used.
3. Station 5 is the internal bomb bay. Load options are: (a) two 2,000 lb bombs, (b) four 1,000 lb bombs, (c) eight 500 or 250 lb bombs, or (d) sixteen 100 lb bombs. Any bombs carried must be low-drag.

Notes:

1. The Douglas B-26B Invader is a propeller-driven attack aircraft. This variant has a solid nose, nose and wing guns, and no turrets. In place of the ventral turret, it has an extra fuel tank. Prior to 1948, it was designated A-26B.
2. Low roll rate (LRR).
3. Articulated Guns. In addition to its fixed guns, this variant of the B-26 is equipped with a dorsal turret with two .50 cal M2 guns. The turret can fire in any direction at targets that are at the same altitude or higher. These guns may return fire twice per game turn in response to gun attacks or conduct one attack. As there is only one gunner, it may fire on only one aircraft per game turn. The hit rolls are 2/1/1 and the only modifiers are target size and a −1 modifier when firing into the 60– arc. The AtA damage rating is 2. The ammunition is 18.0.

VPs: 12/8/4/2

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B-26C Invader (Two Turrets)

Power APs/DPs: ⊙⊙

	CL	1/2	DT	Fuel
FT	1.0	1.0	1.0	1.0
HT	0.5	0.5	0.5	0.5
N	0.0	0.0	0.0	0.2
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.0, reduce power by 0.5.

Cruise Spd. CL:	2.5	Restr. Arcs:	30–
Climb Spd.:	2.0	Blind Arcs:	—
Visibility:	8	Internal Fuel:	580
Size:	−1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Crew: Pilot, Navigator, and Gunner

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	0.50	0.50	0.75
HT	1.00	1.00	1.00
BT	1.50	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 24	1/2 20	DT 14	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	—	—	—	—
HI	26–35	—	—	—	—
MH	17–25	1.5 – 3.0	2.0 – 3.0	—	4.5
ML	8–16	1.5 – 3.5	1.5 – 3.0	2.0 – 3.0	4.0
LO	0–7	1.5 – 3.0	1.5 – 3.0	2.0 – 3.0	4.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	—	—	—	—	—	VH
—	—	—	—	—	—	HI
—	0.50	—	0.25	—	—	MH
—	0.50	—	0.50	—	0.25	ML
—	0.50	—	0.50	—	0.50	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M2
To Hit:	4/2/0
Ammunition:	10.0
Gunsight:	TT+1/HT+2
Ranging:	—
AtA/AtG:	3/3**
Bomb System:	Manual ballistic

Technology:

None

Load Point Limits: CL : < 7, 1/2: <11, DT : ≥11

Weight Limit: 6,000

Station	Limit	Allowed Loads
1 and 5	500	BB
2 and 4	500	BB FT
5	4,000	BB
6–9 and 16–19	150	RK
10–12 and 13–15	150	RK

Load Notes:

1. Either stations 1 and 5 or stations 6 to 9 and 16 to 19 can be used.
2. Either stations 2 and 4 or stations 10 to 15 can be used.
3. Station 5 is the internal bomb bay. Load options are: (a) two 2,000 lb bombs, (b) four 1,000 lb bombs, (c) eight 500 or 250 lb bombs, or (d) sixteen 100 lb bombs. Any bombs carried must be low-drag.

Notes:

1. The Douglas B-26C Invader is a propeller-driven attack aircraft. This variant has a glazed nose, wing guns, and both dorsal and ventral turrets. Prior to 1948, it was designated A-26C.
2. Low roll rate (LRR).
3. Articulated Guns. In addition to its fixed guns, this variant of the B-26 is equipped with dorsal and ventral turrets each with two .50 cal M2 guns. The turrets can fire in any direction. They may return fire twice per game turn in response to gun attacks or conduct one attack. As there is only one gunner, they may fire on only one aircraft per game turn. The hit rolls are 2/1/1 and the only modifiers are target size and a −1 modifier when firing into the 60– arc. The AtA damage rating is 2. The ammunition is 18.0.
4. Bomb system is ballistic (−1) if doing level bombing from four or more altitude levels above the target.

VPs: 12/8/4/2

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B-26C Invader (One Turret)

Power APs/DPs: ⊙⊙

	CL	1/2	DT	Fuel
FT	1.0	1.0	1.0	1.0
HT	0.5	0.5	0.5	0.5
N	0.0	0.0	0.0	0.2
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.0, reduce power by 0.5.

Cruise Spd. CL:	2.5	Restr. Arcs:	30–
Climb Spd.:	2.0	Blind Arcs:	—
Visibility:	8	Internal Fuel:	620
Size:	−1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Crew: Pilot, Navigator, and Gunner

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	0.50	0.50	0.75
HT	1.00	1.00	1.00
BT	1.50	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 24	1/2 20	DT 14	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	—	—	—	—	—	—	—	—	—	—	VH
HI	26–35	—	—	—	—	—	—	—	—	—	—	HI
MH	17–25	1.5 – 3.0	2.0 – 3.0	—	4.5	—	0.50	—	0.25	—	—	MH
ML	8–16	1.5 – 3.5	1.5 – 3.0	2.0 – 3.0	4.0	—	0.50	—	0.50	—	0.25	ML
LO	0–7	1.5 – 3.0	1.5 – 3.0	2.0 – 3.0	4.0	—	0.50	—	0.50	—	0.50	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M2
To Hit:	4/2/0
Ammunition:	10.0
Gunsight:	TT+1/HT+2
Ranging:	—
AtA/AtG:	3/3**

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 7 / 1/2: <11 / DT : ≥11

Weight Limit: 6,000

Station	Limit	Allowed Loads
1 and 5	500	BB
2 and 4	500	BB FT
5	4,000	BB
6–9 and 16–19	150	RK
10–12 and 13–15	150	RK

Load Notes:

1. Either stations 1 and 5 or stations 6 to 9 and 16 to 19 can be used.
2. Either stations 2 and 4 or stations 10 to 15 can be used.
3. Station 5 is the internal bomb bay. Load options are: (a) two 2,000 lb bombs, (b) four 1,000 lb bombs, (c) eight 500 or 250 lb bombs, or (d) sixteen 100 lb bombs. Any bombs carried must be low-drag.

Notes:

1. The Douglas B-26C Invader is a propeller-driven attack aircraft. This variant has a glazed nose, wing guns, and only the dorsal turret. In place of the ventral turret, it has an extra fuel tank. Prior to 1948, it was designated A-26C.
2. Low roll rate (LRR).
3. Articulated Guns. In addition to its fixed guns, this variant of the B-26 is equipped with a dorsal turret with two .50 cal M2 guns. The turret can fire in any direction at targets that are at the same altitude or higher. These guns may return fire twice per game turn in response to gun attacks or conduct one attack. As there is only one gunner, it may fire on only one aircraft per game turn. The hit rolls are 2/1/1 and the only modifiers are target size and a −1 modifier when firing into the 60– arc. The AtA damage rating is 2. The ammunition is 18.0.
4. Bomb system is ballistic (−1) if doing level bombing from four or more altitude levels above the target.

VPs: 12/8/4/2

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B-26C Invader (No Turrets)

Power APs/DPs: ⊙⊙

	CL	1/2	DT	Fuel
FT	1.0	1.0	1.0	1.0
HT	0.5	0.5	0.5	0.5
N	0.0	0.0	0.0	0.2
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.0, reduce power by 0.5.

Cruise Spd. CL:	2.5	Restr. Arcs:	30–
Climb Spd.:	2.0	Blind Arcs:	—
Visibility:	8	Internal Fuel:	620
Size:	−1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Crew: Pilot, Navigator, and Observer

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	0.50	0.50	0.75
HT	1.00	1.00	1.00
BT	1.50	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 24	1/2 20	DT 14	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	—	—	—	—	—	—	—	—	—	—	VH
HI	26–35	—	—	—	—	—	—	—	—	—	—	HI
MH	17–25	1.5 – 3.0	2.0 – 3.0	—	4.5	—	0.50	—	0.25	—	—	MH
ML	8–16	1.5 – 3.5	1.5 – 3.0	2.0 – 3.0	4.0	—	0.50	—	0.50	—	0.25	ML
LO	0–7	1.5 – 3.0	1.5 – 3.0	2.0 – 3.0	4.0	—	0.50	—	0.50	—	0.50	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M2
To Hit:	4/2/0
Ammunition:	10.0
Gunsight:	TT+1/HT+2
Ranging:	—
AtA/AtG:	3/3**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 7, 1/2: <11, DT : ≥11

Weight Limit: 6,000

Station	Limit	Allowed Loads
1 and 5	500	BB
2 and 4	500	BB FT
5	4,000	BB
6–9 and 16–19	150	RK
10–12 and 13–15	150	RK

Load Notes:

1. Either stations 1 and 5 or stations 6 to 9 and 16 to 19 can be used.
2. Either stations 2 and 4 or stations 10 to 15 can be used.
3. Station 5 is the internal bomb bay. Load options are: (a) two 2,000 lb bombs, (b) four 1,000 lb bombs, (c) eight 500 or 250 lb bombs, or (d) sixteen 100 lb bombs. Any bombs carried must be low-drag.

Notes:

1. The Douglas B-26C Invader is a propeller-driven attack aircraft. This variant has a glazed nose, wing guns, and no turrets. In place of the ventral turret, it has an extra fuel tank. Prior to 1948, it was designated A-26C.
2. Low roll rate (LRR).
3. Articulated Guns. In addition to its fixed guns, this variant of the B-26 is equipped with a dorsal turret with two .50 cal M2 guns. The turret can fire in any direction at targets that are at the same altitude or higher. These guns may return fire twice per game turn in response to gun attacks or conduct one attack. As there is only one gunner, it may fire on only one aircraft per game turn. The hit rolls are 2/1/1 and the only modifiers are target size and a −1 modifier when firing into the 60– arc. The AtA damage rating is 2. The ammunition is 18.0.
4. Bomb system is ballistic (−1) if doing level bombing from four or more altitude levels above the target.

VPs: 12/8/4/2

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B-26K Counter-Invader

Crew: Pilot, Navigator, and Observer

Power APs/DPs: ⊙⊙

	CL	1/2	DT	Fuel
FT	1.5	1.0	1.0	1.0
HT	0.5	0.5	0.5	0.5
N	0.0	0.0	0.0	0.2
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.0, reduce power by 0.5.

Cruise Spd. CL:	2.5	Restr. Arcs:	30–
Climb Spd.:	2.0	Blind Arcs:	30L
Visibility:	8	Internal Fuel:	720
Size:	−1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	0.50	0.50	0.75
HT	1.00	1.00	1.00
BT	1.50	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 30	1/2 24	DT 17	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	—	—	—	—
HI	26–35	2.0 – 3.0	—	—	5.0
MH	17–25	1.5 – 3.0	2.0 – 3.0	2.0 – 3.0	4.5
ML	8–16	1.5 – 3.0	1.5 – 3.0	2.0 – 3.0	4.0
LO	0–7	1.5 – 3.0	1.5 – 3.0	2.0 – 3.0	4.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	—	—	—	—	—	VH
HI	—	0.25	—	—	—	—	HI
MH	—	0.50	—	0.50	—	0.50	MH
ML	—	0.50	—	0.50	—	0.50	ML
LO	—	0.50	—	0.50	—	0.50	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Eight .50 cal M2
To Hit:	4/2/0
Ammunition:	10.0
Gunsight:	TT+1/HT+2
Ranging:	—
AtA/AtG:	4/4**
Bomb System:	Manual ballistic

Technology:

None

Load Point Limits: CL : < 7; 1/2: <14; DT : ≥14

Weight Limit: 8,000

Station	Limit	Allowed Loads
1–2 and 8–9	750	BB RP GP
3–4 and 6–7	750	BB RP GP FT
5	4,000	BB

Load Notes:

1. Each wing can carry a maximum load of 2,000 lb.
2. Station 5 is the internal bomb bay. Load options are: (a) two 2,000 lb bombs, (b) four 1,000 lb bombs, (c) eight 500 or 250 lb bombs, or (d) sixteen 100 lb bombs. Any bombs carried must be low-drag.

Notes:

1. The Douglas B-26K Counter-Invader is a propeller-driven attack aircraft. It is an upgrade of the B-26B/TB-26B/B-26C by On Mark Engineering, with strengthened wings, wing-tip fuel tanks, a solid nose, and nose guns, but without wing guns. It was subsequently redesignated A-26A.
2. Low roll rate (LRR).
3. When the internal fuel is more than 620 fuel points, the fixed wing-tip tanks are in use and the vulnerability is +0.
4. Bomb system is ballistic (−1) if doing level bombing from four or more altitude levels above the target.

VPs: 14/9/5/2

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A-26A Counter-Invader

Crew: Pilot, Navigator, and Observer

Power APs/DPs: ⊙⊙

	CL	1/2	DT	Fuel
FT	1.5	1.0	1.0	1.0
HT	0.5	0.5	0.5	0.5
N	0.0	0.0	0.0	0.2
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.0, reduce power by 0.5.

Cruise Spd. CL:	2.5	Restr. Arcs:	30–
Climb Spd.:	2.0	Blind Arcs:	30L
Visibility:	8	Internal Fuel:	720
Size:	−1	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	0.50	0.50	0.75
HT	1.00	1.00	1.00
BT	1.50	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 30	1/2 24	DT 17	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	—	—	—	—
HI	26–35	2.0 – 3.0	—	—	5.0
MH	17–25	1.5 – 3.0	2.0 – 3.0	2.0 – 3.0	4.5
ML	8–16	1.5 – 3.0	1.5 – 3.0	2.0 – 3.0	4.0
LO	0–7	1.5 – 3.0	1.5 – 3.0	2.0 – 3.0	4.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	—	—	—	—	—	VH
—	0.25	—	—	—	—	HI
—	0.50	—	0.50	—	0.50	MH
—	0.50	—	0.50	—	0.50	ML
—	0.50	—	0.50	—	0.50	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Eight .50 cal M2
To Hit:	4/2/0
Ammunition:	10.0
Gunsight:	TT+1/HT+2
Ranging:	—
AtA/AtG:	4/4**
Bomb System:	Manual ballistic

Technology:

None

Load Point Limits: CL : < 7 / 1/2: <14 / DT : ≥14

Weight Limit: 8,000

Station	Limit	Allowed Loads
1–2 and 8–9	750	BB RP GP
3–4 and 6–7	750	BB RP GP FT
5	4,000	BB

Load Notes:

1. Each wing can carry a maximum load of 2,000 lb.
2. Station 5 is the internal bomb bay. Load options are: (a) two 2,000 lb bombs, (b) four 1,000 lb bombs, (c) eight 500 or 250 lb bombs, or (d) sixteen 100 lb bombs. Any bombs carried must be low-drag.

Notes:

1. The Douglas B-26K Counter-Invader is a propeller-driven attack aircraft. It is an upgrade of the B-26B/TB-26B/B-26C by On Mark Engineering, with strengthened wings, wing-tip fuel tanks, a solid nose, and nose guns, but without wing guns. It was previously designated B-26K.
2. Low roll rate (LRR).
3. When the internal fuel is more than 620 fuel points, the fixed wing-tip tanks are in use and the vulnerability is +0.
4. Bomb system is ballistic (−1) if doing level bombing from four or more altitude levels above the target.

VPs: 14/9/5/2

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Boeing B-29 Superfortress

The Boeing B-29 Superfortress is a strategic bomber. It entered service in the USAAF before the end of WWII and saw combat in the Pacific Theaters. It later served with the USAF in the Korean War.

The defensive armament of the B-29 is four remote-control turrets, two dorsal and two ventral, each equipped with two .50 cal M2 machine guns and a tail station with two .50 cal M2 machine guns and one 20 mm M2 cannon. Later models have four .50 cals in the forward dorsal turret. The ballistic characteristics of the 20 mm were not well-matched to the .50 cals, and it was later removed or replaced by a third .50 cal. Each gun has 500 rounds of ammunition.

The RB-29A is a strategic photo-reconnaissance version of the B-29A. It retains full defensive and offensive armament.

The Silverplate and Saddletree versions are adapted for delivery of nuclear bombs. The Silverplate program began during WWII — Silverplate aircraft dropped nuclear bombs on Hiroshima and Nagasaki — but was superseded by the similar Saddletree program in 1947. These aircraft were converted by removing the four turrets and their associated fire-control system and all armor removed and installing equipment for nuclear weapons and additional fuel tanks. The Saddletree aircraft are also equipped for air-to-air refueling.

A typical bomb load for the conventional variant during the Korean War was twenty 500 lb M64 or 1,000 lb M65 bombs. Occasionally, 2,000 lb M66 and 4,000 lb M56 bombs were used.

The Silverplate and Saddletree variants could carry a single Mark 3, 4, or 6 nuclear bomb.

ADCs are provided for:

- B-29A
- RB-29A
- B-29A (Silverplate)
- B-29A (Saddletree)

See Also

- Tupolev Tu-4
- Boeing B-50 Superfortress

B-29A Superfortress

Crew: Pilot, Co-pilot, Bombardier, Flight Engineer, Navigator, Radio Operator, Radar Observer, Right Gunner, Left Gunner, Fire Control Officer, and Tail Gunner

Power APs/DPs: ⊙⊙⊙⊙

	CL	1/2	DT	Fuel
FT	0.5	0.5	0.5	2.0
HT	0.2	0.2	0.2	1.0
N	0.0	0.0	0.0	0.4
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.0, reduce power by 0.2.

Cruise Spd. CL:	2.0	Restr. Arcs:	—
Climb Spd.:	2.0	Blind Arcs:	—
Visibility:	10	Internal Fuel:	2900
Size:	−2	AtA Refuel:	No
Vulnerability:	+2	Ejection Seat:	None

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	1.0	—	—
HT	—	—	—
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings / Climb Capabilities

Alt. Band	Conf. Ceil.	CL 40	1/2 37	DT 32	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	1.5 – 3.5	1.5 – 3.5	—	4.5	—	0.25	—	0.10	—	—	VH
HI	26–35	1.0 – 4.0	1.5 – 4.0	1.5 – 3.5	4.5	—	0.50	—	0.25	—	0.10	HI
MH	17–25	1.0 – 3.5	1.0 – 3.5	1.0 – 3.5	4.5	—	0.50	—	0.25	—	0.25	MH
ML	8–16	1.0 – 3.5	1.0 – 3.5	1.0 – 3.0	4.0	—	0.50	—	0.25	—	0.25	ML
LO	0–7	1.0 – 3.0	1.0 – 3.0	1.0 – 3.0	3.5	—	0.50	—	0.25	—	0.25	LO

Radar:	APQ-13
ECCM:	0
Arcs:	0+
Search:	Gr. Nav. (120)
Track:	Gr. Attack (60)
Lock-On:	6

ECM:	IFF
RWR:	A
DDS:	—
DJM:	—
AJM:	—
BJM:	A2

Weapon Stations Diagram:

Guns:	Thirteen .50 cal M2
To Hit:	2/1/1
Ammunition:	18.0
Gunsight:	—
Ranging:	—
AtA/AtG:	2/2**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : <12 / 1/2: <24 / DT : ≥24

Weight Limit: 20,000

Station	Limit	Allowed Loads
1 and 2	10,000	BB FT

Load Notes:

1. Stations 1 and 2 are the forward and rear internal bomb bays. Each can carry up to (a) two 4,000-lb M56 bombs, (b) four 2,000-lb M66 bombs, (c) six 1,000-lb M65 bombs, (d) twenty 500-lb M64 bombs, or (e) two special 640 gal (2400L) FTs. All bombs must be the same type.
2. As an exception to the normal rules for load points, internal loads contribute 1 load point for each 1,000 of weight and internal fuel contributes 1 load point for each 50 fuel points. A return mission will typically require leaving the target with at least 750 fuel points (15 load points).

Notes:

1. The Boeing B-29A is a propeller-driven strategic bomber. The base variant described here is a conventional bomber.
2. Low roll rate (LRR).
3. Flight Restrictions. VD, VC, and unloading are forbidden.
4. Articulated Guns. The guns can fire in any direction. They may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are modified only by the target size and a −1 modifier when firing into the 60– arc.

VPs: 24/16/8/4

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RB-29A Superfortress

Crew: Pilot, Co-pilot, Bombardier, Flight Engineer, Navigator, Radio Operator, Radar Observer, Right Gunner, Left Gunner, Fire Control Officer, and Tail Gunner

Power APs/DPs: ⊙⊙⊙⊙

	CL	1/2	DT	Fuel
FT	0.5	0.5	0.5	2.0
HT	0.2	0.2	0.2	1.0
N	0.0	0.0	0.0	0.4
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.0, reduce power by 0.2.

Cruise Spd. CL:	2.0	Restr. Arcs:	—
Climb Spd.:	2.0	Blind Arcs:	—
Visibility:	10	Internal Fuel:	2900
Size:	−2	AtA Refuel:	No
Vulnerability:	+2	Ejection Seat:	None

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	1.0	—	—
HT	—	—	—
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 40	1/2 37	DT 32	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	1.5 – 3.5	1.5 – 3.5	—	4.5	—	0.25	—	0.10	—	—	VH
HI	26–35	1.0 – 4.0	1.5 – 4.0	1.5 – 3.5	4.5	—	0.50	—	0.25	—	0.10	HI
MH	17–25	1.0 – 3.5	1.0 – 3.5	1.0 – 3.5	4.5	—	0.50	—	0.25	—	0.25	MH
ML	8–16	1.0 – 3.5	1.0 – 3.5	1.0 – 3.0	4.0	—	0.50	—	0.25	—	0.25	ML
LO	0–7	1.0 – 3.0	1.0 – 3.0	1.0 – 3.0	3.5	—	0.50	—	0.25	—	0.25	LO

Radar:	APQ-13	**ECM:**	IFF
ECCM:	0	RWR:	A
Arcs:	0+	DDS:	—
Search:	Gr. Nav. (120)	DJM:	—
Track:	Gr. Attack (60)	AJM:	—
Lock-On:	6	BJM:	A2

Weapon Stations Diagram:

Guns:	Thirteen .50 cal M2
To Hit:	2/1/1
Ammunition:	18.0
Gunsight:	—
Ranging:	—
AtA/AtG:	2/2**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : <12 / 1/2: <24 / DT : ≥24

Weight Limit: 20,000

Station	Limit	Allowed Loads
1 and 2	10,000	BB FT

Load Notes:

1. Stations 1 and 2 are the forward and rear internal bomb bays. Each can carry up to (a) two 4,000-lb M56 bombs, (b) four 2,000-lb M66 bombs, (c) six 1,000-lb M65 bombs, (d) twenty 500-lb M64 bombs, or (e) two special 640 gal (2400L) FTs. All bombs must be the same type.
2. As an exception to the normal rules for load points, internal loads contribute 1 load point for each 1,000 of weight and internal fuel contributes 1 load point for each 50 fuel points. A return mission will typically require leaving the target with at least 750 fuel points (15 load points).

Notes:

1. The RB-29A is a propeller-driven strategic photo-reconnaissance aircraft. It is a development of the B-29A and retains full combat capability. Prior to 1948, it was designated F-13A.
2. Low roll rate (LRR).
3. Flight Restrictions. VD, VC, and unloading are forbidden.
4. Articulated Guns. The guns can fire in any direction. They may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are modified only by the target size and a −1 modifier when firing into the 60– arc.

VPs: 24/16/8/4

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B-29A Superfortress (Silverplate)

Crew: Pilot, Copilot, Flight Engineer, Navigator, Bombardier, Weaponeer, Radio Operator, Radar Operator, Countermeasures Operator, and Tail Gunner

Power APs/DPs: ⊙⊙⊙⊙

	CL	1/2	DT	Fuel
FT	0.5	0.5	0.5	2.0
HT	0.2	0.2	0.2	1.0
N	0.0	0.0	0.0	0.4
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.0, reduce power by 0.2.

Cruise Spd. CL:	2.0	Restr. Arcs:	—
Climb Spd.:	2.0	Blind Arcs:	—
Visibility:	10	Internal Fuel:	2900
Size:	−2	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	1.0	—	—
HT	—	—	—
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings / Climb Capabilities

Alt. Band	Conf. Ceil.	CL 40	1/2 37	DT 32	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	1.5 – 3.5	1.5 – 3.5	—	4.5	—	0.25	—	0.10	—	—	VH
HI	26–35	1.0 – 4.0	1.5 – 4.0	1.5 – 3.5	4.5	—	0.50	—	0.25	—	0.10	HI
MH	17–25	1.0 – 3.5	1.0 – 3.5	1.0 – 3.5	4.5	—	0.50	—	0.25	—	0.25	MH
ML	8–16	1.0 – 3.5	1.0 – 3.5	1.0 – 3.0	4.0	—	0.50	—	0.25	—	0.25	ML
LO	0–7	1.0 – 3.0	1.0 – 3.0	1.0 – 3.0	3.5	—	0.50	—	0.25	—	0.25	LO

Radar:	APQ-13
ECCM:	0
Arcs:	0+
Search:	Gr. Nav. (120)
Track:	Gr. Attack (60)
Lock-On:	6

ECM:	IFF
RWR:	A
DDS:	—
DJM:	—
AJM:	—
BJM:	A2

Weapon Stations Diagram:

Guns:	Three .50 cal M2
To Hit:	3/2/2
Ammunition:	18.0
Gunsight:	—
Ranging:	—
AtA/AtG:	2/2**

Bomb System: Manual

Technology:

None

Load Point Limits: CL : <18 / 1/2: <30 / DT : ≥30

Weight Limit: 20,000

Station	Limit	Allowed Loads
1	11,000	BB
2	10,000	FT

Load Notes:

1. Station 1 is the forward internal bomb bay and can carry a Mark 3 (weight 10,000), Mark 4 (weight 11,000) or Mark 6 (weight 8,000) nuclear bomb.
2. Station 2 is the rear internal bomb bay and can carry two special 640 gal (2400L) FTs.
3. As an exception to the normal rules for load points, internal loads contribute 1 load point for each 1,000 of weight and internal fuel contributes 1 load point for each 50 fuel points. A return mission will typically require leaving the target with at least 750 fuel points (15 load points).

Notes:

1. The Boeing B-29A is a propeller-driven strategic nuclear bomber. This variant is a conversion of the conventional base variant under the 1943 to 1947 Silverplate program, with provision for nuclear weapons, all armor and turrets removed, and additional fuel tanks.
2. Low roll rate (LRR).
3. Flight Restrictions. VD, VC, and unloading are forbidden.
4. Articulated Guns. The guns can only fire at targets in the 60– arc. They may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are modified only by the target size.

VPs: 24/16/8/4

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B-29A Superfortress (Saddletree)

Crew: Pilot, Copilot, Flight Engineer, Navigator, Bombardier, Weaponeer, Radio Operator, Radar Operator, Countermeasures Operator, and Tail Gunner

Power APs/DPs: ⊙⊙⊙⊙

	CL	1/2	DT	Fuel
FT	0.5	0.5	0.5	2.0
HT	0.2	0.2	0.2	1.0
N	0.0	0.0	0.0	0.4
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.0, reduce power by 0.2.

Cruise Spd. CL:	2.0	Restr. Arcs:	—
Climb Spd.:	2.0	Blind Arcs:	—
Visibility:	10	Internal Fuel:	2900
Size:	−2	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	None

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	1.0	—	—
HT	—	—	—
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 40	1/2 37	DT 32	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	1.5 – 3.5	1.5 – 3.5	—	4.5	—	0.25	—	0.10	—	—	VH
HI	26–35	1.0 – 4.0	1.5 – 4.0	1.5 – 3.5	4.5	—	0.50	—	0.25	—	0.10	HI
MH	17–25	1.0 – 3.5	1.0 – 3.5	1.0 – 3.5	4.5	—	0.50	—	0.25	—	0.25	MH
ML	8–16	1.0 – 3.5	1.0 – 3.5	1.0 – 3.0	4.0	—	0.50	—	0.25	—	0.25	ML
LO	0–7	1.0 – 3.0	1.0 – 3.0	1.0 – 3.0	3.5	—	0.50	—	0.25	—	0.25	LO

Radar:	APQ-13
ECCM:	0
Arcs:	0+
Search:	Gr. Nav. (120)
Track:	Gr. Attack (60)
Lock-On:	6

ECM:	IFF
RWR:	A
DDS:	—
DJM:	—
AJM:	—
BJM:	A2

Weapon Stations Diagram:

Guns:	Three .50 cal M2
To Hit:	3/2/2
Ammunition:	18.0
Gunsight:	—
Ranging:	—
AtA/AtG:	2/2**

Bomb System: Manual

Technology:

None

Load Point Limits: CL : <18 / 1/2: <30 / DT : ≥30

Weight Limit: 20,000

Station	Limit	Allowed Loads
1	11,000	BB
2	10,000	FT

Load Notes:

1. Station 1 is the forward internal bomb bay and can carry a Mark 3 (weight 10,000), Mark 4 (weight 11,000) or Mark 6 (weight 8,000) nuclear bomb.
2. Station 2 is the rear internal bomb bay and can carry two special 640 gal (2400L) FTs.
3. As an exception to the normal rules for load points, internal loads contribute 1 load point for each 1,000 of weight and internal fuel contributes 1 load point for each 50 fuel points. A return mission will typically require leaving the target with at least 750 fuel points (15 load points).

Notes:

1. The Boeing B-29A is a propeller-driven strategic nuclear bomber. This variant is a conversion of the conventional base variant under the 1947 to 1949 Saddletree program, with provision for nuclear weapons, all armor and turrets removed, air-to-air refueling, additional fuel tanks, and winterized electronics.
2. Low roll rate (LRR).
3. Flight Restrictions. VD, VC, and unloading are forbidden.
4. Articulated Guns. The guns can only fire at targets in the 60– arc. They may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are modified only by the target size.

VPs: 24/16/8/4

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Lockheed F-80/T-33 Shooting Star

The Lockheed F-80 Shooting Star was a day fighter and fighter-bomber. It had unswept wings and a single Allison J33 centrifugal-flow jet engine. It entered service with the USAAF shortly before the end of WWII, but did not see combat until the Korean War, in which it served extensively with the USAF as a fighter and fighter bomber. Like other early jet fighters with unswept wings, it was found to have inferior performance to the MiG-15bis and was replaced by variants of the F-86 Sabre. It later served with the air forces of Brazil, Chile, Colombia, Ecuador, Peru, and Uruguay.

The P-80A was the first version to enter service and was armed with six .50 cal M2 machine guns in the nose. It was followed by the P-80B, which replaced the M2 machine guns with faster-firing M3 machine guns, used an ejection seat, and many minor improvements. The P-80C was produced in larger numbers than both previous versions. In USAF service from 1948, the P-80 was designated the F-80.

Like many early jet fighters, the F-80 suffered from short range. This was mitigated by the provision of jettisonable wing-tip fuel tanks. These stations were designed for 165 gal tanks, but these were found to be insufficient for missions over Korea from the USAF bases in Japan. A local field modification produced the 265 gal "Misawa" tank, which gave usefully greater range and loiter time, at the cost of overloading the wing-tip stations.

The F-80C was armed with six .50 cal M3 machine guns with 300 rounds per ground. A typical weapon load for F-80Cs engaged in ground-attack missions in the Korean War was two 500 lb M64 bombs or 110 gal (750 lb) napalm bombs often supplemented by four or eight HVAR rockets on the inner-wing stations. Although bombs could in theory be carried on the wing-tip stations, this does not appear to have occurred in practice. When flying from Japan, the weapon load was often limited to four HVARs rockets.

The RF-80C was an unarmed photo-reconnaissance version of the F-80C, with cameras replacing the machine guns in the nose. It was used by the USAF.

The T-33 Shooting Star (known informally as the "T-Bird") was a two-seater trainer developed from the F-80. Most T-33As were unarmed, but a number had two .50 cal M3 machine guns. The T-33A was used by the USAF, USN, RCAF, and the air forces of Bangladesh, Belgium, Bolivia, Brazil, Burma, Canada, Chile, Republic of China (Taiwan), Colombia, Cuba, Denmark, Dominican Republic, Ethiopia, Ecuador, El Salvador, France, Federal Republic of Germany, Greece, Guatemala, Honduras, Indonesia, Iran, Italy, Japan, Libya, Mexico, Netherlands, Nicaragua, Norway, Pakistan, Paraguay, Peru, Philippines, Portugal, Saudi Arabia, Singapore, South Korea, Spain, Thailand, Turkey, Uruguay, and Yugoslavia. Cuban T-33As saw combat during the Bay of Pigs invasion.

The RT-33A was a photo-reconnaissance version of the T-33A developed for foreign use. The nose was replaced with one with oblique and vertical cameras and the rear cockpit was used for equipment relocated from the nose of the T-33A and for additional fuel. It was used by the air forces of Belgium, Chile, Colombia, Ethiopia, France, Greece, Italy, Iran, Netherlands, Pakistan, Portugal, Saudi Arabia, Taiwan, Turkey, Thailand, and Yugoslavia. One was also used by the USAF for Project Field Goal, clandestine reconnaissance missions over Laos in the early 1960s.

Some T-33As were converted into AT-33A light attack aircraft by adding under-wing pylons to the machine guns. The AT-33A was used as a trainer by the USAF and also by the air forces of Brazil, Burma, Dominican Republic, Ecuador, Greece, Mexico, Nicaragua, Paraguay, and Uruguay.

- F-80C
- RF-80C
- T-33A
- RT-33A
- AT-33A

See Also

- Lockheed F-94

F-80C Shooting Star

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	4.0	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	135
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 45	1/2 40	DT 35	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 4.0	2.5 – 4.0	—	6.0
HI	26–35	2.0 – 4.5	2.5 – 4.5	2.5 – 4.0	6.5
MH	17–25	2.0 – 5.0	2.0 – 4.5	2.5 – 4.5	6.5
ML	8–16	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.5
LO	0–7	1.5 – 5.5	1.5 – 5.5	2.0 – 5.0	6.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	1.0	—	0.5	—	0.5	ML
LO	—	1.0	—	1.0	—	0.5	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M3
To Hit:	6/3/0
Ammunition:	8.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	4/4**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 4
1/2: < 7
DT : ≥ 7

Weight Limit: 4,200

Station	Limit	Allowed Loads
1 and 8	1,100	BB FT
2 and 7	1,100	BB RK
3–4 and 5–6	280	BB RK

Load Notes:

1. The wing-tip stations 1 and 8 were designed to each carry a 165 gal (600L) FT with a load of 1100 when full. As an exception to the normal loading rules, they may each carry a 265 gal (1000L) FT with a load of 1800 when full, but the maximum turn rate is reduced to HT until the FTs are jettisoned. Such “Misawa” tanks were used in 1950 when operating over Korea from bases in Japan.
2. Stations 3 to 6 can each carry two HVAR RKs.

Notes:

1. The Lockheed F-80C Shooting Star is a day fighter and fighter-bomber. Prior to 1948 it was designated P-80C.
2. High transonic drag (HTD).

VPs: 7/5/2/1

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RF-80C Shooting Star

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	4.0	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	135
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 45	1/2 40	DT 35	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	2.5 – 4.0	2.5 – 4.0	—	6.0	—	0.5	—	0.5	—	—	VH
HI	26–35	2.0 – 4.5	2.5 – 4.5	2.5 – 4.0	6.5	—	0.5	—	0.5	—	0.5	HI
MH	17–25	2.0 – 5.0	2.0 – 4.5	2.5 – 4.5	6.5	—	0.5	—	0.5	—	0.5	MH
ML	8–16	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.5	—	1.0	—	0.5	—	0.5	ML
LO	0–7	1.5 – 5.5	1.5 – 5.5	2.0 – 5.0	6.5	—	1.0	—	1.0	—	0.5	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 4
1/2: < 7
DT : ≥ 7

Weight Limit: 4,200

Station	Limit	Allowed Loads
1 and 8	1,100	BB FT
2 and 7	1,100	BB RK
3–4 and 5–6	280	BB RK

Load Notes:

1. The wing-tip stations 1 and 8 were designed to each carry a 165 gal (600L) FT with a load of 1100 when full. As an exception to the normal loading rules, they may each carry a 265 gal (1000L) FT with a load of 1800 when full, but the maximum turn rate is reduced to HT until the FTs are jettisoned. Such “Misawa” tanks were used in 1950 when operating over Korea from bases in Japan.
2. Stations 3 to 6 can each carry two HVAR RKs.

Notes:

1. The Lockheed RF-80C is a photo-reconnaissance aircraft. It is derived from the F-80C and has a nose containing cameras rather than guns.
2. High transonic drag (HTD).

VPs: 7/5/2/1

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T-33A Shooting Star

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	4.0	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	112
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot and Copilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 45	1/2 40	DT 35	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 4.0	2.5 – 4.0	—	6.0
HI	26–35	2.0 – 4.5	2.5 – 4.5	2.5 – 4.0	6.5
MH	17–25	2.0 – 5.0	2.0 – 4.5	2.5 – 4.5	6.5
ML	8–16	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.5
LO	0–7	1.5 – 5.5	1.5 – 5.5	2.0 – 5.0	6.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	1.0	—	0.5	—	0.5	ML
LO	—	1.0	—	1.0	—	0.5	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Two .50 cal M3

To Hit:	4/2/–
Ammunition:	8.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	1/2**

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 4
1/2: < 7
DT : ≥ 7

Weight Limit: 4,200

Station	Limit	Allowed Loads
1 and 2	1,500	FT

Load Notes:

1. May use 850L FTs.

Notes:

1. The Lockheed T-33A Shooting Star is a trainer developed from the F-80. The variant shown here is armed with two .50 cal machine guns, although most were unarmed. Prior to 1948, it was designated TP-80C.
2. High transonic drag (HTD).

VPs: 5/3/2/1

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RT-33A Shooting Star

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	4.0	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	165
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 45	1/2 40	DT 35	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 4.0	2.5 – 4.0	—	6.0
HI	26–35	2.0 – 4.5	2.5 – 4.5	2.5 – 4.0	6.5
MH	17–25	2.0 – 5.0	2.0 – 4.5	2.5 – 4.5	6.5
ML	8–16	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.5
LO	0–7	1.5 – 5.5	1.5 – 5.5	2.0 – 5.0	6.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	1.0	—	0.5	—	0.5	ML
LO	—	1.0	—	1.0	—	0.5	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: —

To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 4
1/2: < 7
DT : ≥ 7

Weight Limit: 4,200

Station	Limit	Allowed Loads
1 and 2	1,500	FT

Load Notes:

1. May use 850L FTs.

Notes:

1. The Lockheed RT-33A Shooting Star is a photo-reconnaissance version of the T-33A trainer. It is unarmed and equipped with oblique and vertical cameras in the nose. The rear cockpit is used for equipment relocated from the nose of the T-33A and for 165 gal of additional fuel.
2. High transonic drag (HTD).

VPs: 7/5/2/1

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AT-33A Shooting Star

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	4.0	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	112
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot and Copilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 45	1/2 40	DT 35	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.5 – 4.0	2.5 – 4.0	—	6.0
HI	26–35	2.0 – 4.5	2.5 – 4.5	2.5 – 4.0	6.5
MH	17–25	2.0 – 5.0	2.0 – 4.5	2.5 – 4.5	6.5
ML	8–16	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.5
LO	0–7	1.5 – 5.5	1.5 – 5.5	2.0 – 5.0	6.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	1.0	—	0.5	—	0.5	ML
LO	—	1.0	—	1.0	—	0.5	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Two .50 cal M3

To Hit:	4/2/–
Ammunition:	8.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	1/2**

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 4
1/2: < 7
DT : ≥ 7

Weight Limit: 4,200

Station	Limit	Allowed Loads
1 and 8	1,500	BB FT
2 and 7	1,100	BB RK
3–4 and 5–6	280	BB RK

Load Notes:

1. May use 850L FTs.
2. Stations 3 to 6 can each carry two HVAR RKs.

Notes:

1. The Lockheed AT-33A Shooting Star is a close-air-support version of the T-33A trainer.
2. High transonic drag (HTD).

VPs: 5/3/2/1

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Douglas AD/A-1 Skyraider

The Douglas AD Skyraider is a carrier-capable attack aircraft. Its development started during WWII, but it entered service with the USN in 1946. It was a large, single-engined propeller-driven aircraft. In 1962, it was redesignated as the A-1.

The Skyraider was initially armed with two 20 mm M3 cannon in the wings, but after experience in the early part of the Korean War this was increased to four in the AD-4 and subsequent versions. Later versions also had additional armor. It could also carry a heavy load on its centerline and underwing weapon stations.

In addition to the attack versions, it was adapted for radar search, anti-submarine, night attack, ECM, and night attack.

Early versions were a mainstay of the USN in the Korean War and later versions served in early part of the US involvement in the Vietnam War with the USN and USAF. It also saw limited service with the USMC. Most attack versions were single-seat, but the AD-5/A-1E had side-by-side seating for a pilot and copilot and was used by the USAF during Operation Farm Gate with a USAF pilot and nominal South Vietnamese copilot. Attack versions were also used by RVAF, Armée de l'Air, and the air forces of Cambodia, Chad, and Gabon. The AD-4W radar-search version also served with the RN as the Skyraider AEW.1.

From 1967, USAF A-1s were equipped with the Stanley rocket extraction system. While not an ejection seat, this system used a rocket to pull the pilot out of the cockpit when bailing out.

A typical air-to-ground load in the Korean War might be 500 lb M64, 1000 lb M65, or 2000 lb M66 GP bombs or 750 lb BLU-1 napalm bombs on the centerline and inner wing pylons and HVAR rockets or 100 lb M30, 250 lb M57 bombs on the outer wing pylons.

A typical air-to-ground load in the Vietnam War might include 500 lb Mk 82 or 1000 lb Mk 83 GP bombs or 750 lb BLU-27 napalm bombs on the centerline and inner wing station, a single SUU-11 gun pod on an inner-wing station, and 100 lb M47 WP bombs, 250 lb Mk 81 GP bombs, 500 lb BLU-11 napalm bombs, LAU-3 or LAU-68 70 mm rocket pods, CBU-25 cluster bomb dispensers on the outer wing pylons.

ADCs are provided for:

- AD-4
- AD-5
- A-1E
- AD-6
- A-1H
- AD-7
- A-1J

AD-4 Skyraider

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	1.5	1.0	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	2.0	Restr. Arcs:	—
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	120
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	0.5	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 30	1/2 24	DT 13	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	—	—	—	—
HI	26–35	1.5 – 3.0	—	—	4.5
MH	17–25	1.5 – 3.0	1.5 – 2.5	1.5 – 2.0	4.5
ML	8–16	1.0 – 3.0	1.0 – 2.5	1.0 – 2.5	4.0
LO	0–7	1.0 – 3.0	1.0 – 3.0	1.0 – 2.5	4.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	—	—	—	—	—	VH
HI	—	0.5	—	—	—	—	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	1.0	—	0.5	—	0.5	ML
LO	—	1.0	—	1.0	—	0.5	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M3
To Hit:	5/4/3
Ammunition:	6.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 7
1/2: <13
DT : ≥13

Weight Limit: 8,000

Station	Limit	Allowed Loads
1–6 and 10–15	500	BB RK
7 and 9	2,200	BB RK
8	2,200	BB

Load Notes:

1. Stations 1 to 6 and 10 to 15 are closely spaced and have restrictions: a station adjacent to one other loaded with a store of more than 250 lb may only carry a store of 250 lb or less and a station between two others loaded with stores of more than 250 lb may not be used.

Notes:

1. The Douglas AD-4 Skyraider is a propeller-driven, carrier-capable attack aircraft. It is propeller-driven, has a single engine, and is carrier-capable.

VPs: 7/5/2/1

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AD-5 Skyraider

Crew: Pilot and Copilot

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	1.5	1.0	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	2.0	Restr. Arcs:	—
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	120
Size:	+0	AtA Refuel:	No
Vulnerability:	+2	Ejection Seat:	None

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	0.5	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 30	1/2 24	DT 13	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	—	—	—	—	—	—	—	—	—	—	VH
HI	26–35	1.5 – 3.0	—	—	4.5	—	0.5	—	—	—	—	HI
MH	17–25	1.5 – 3.0	1.5 – 2.5	1.5 – 2.0	4.5	—	0.5	—	0.5	—	0.5	MH
ML	8–16	1.0 – 3.0	1.0 – 2.5	1.0 – 2.5	4.0	—	1.0	—	0.5	—	0.5	ML
LO	0–7	1.0 – 3.0	1.0 – 3.0	1.0 – 2.5	4.0	—	1.0	—	1.0	—	0.5	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M3
To Hit:	5/4/3
Ammunition:	6.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 7 / 1/2: <13 / DT : ≥13

Weight Limit: 8,000

Station	Limit	Allowed Loads
1–6 and 10–15	500	BB RK RP
7 and 9	2,200	BB RK RP FT
8	2,200	BB FT

Load Notes:

1. Stations 1 to 6 and 10 to 15 are closely spaced and have restrictions: a station adjacent to one other loaded with a store of more than 250 lb may only carry a store of 250 lb or less and a station between two others loaded with stores of more than 250 lb may not be used.

Notes:

1. The Douglas AD-5 Skyraider is a propeller-driven, carrier-capable attack aircraft. It was developed from the AD-4 and added a widened fuselage and cockpit with a copilot next to the pilot, additional armor, and omitted the lateral dive brakes. In 1962, it was redesignated A-1E.

VPs: 8/5/3/1

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A-1E Skyraider

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	1.5	1.0	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	2.0	Restr. Arcs:	—
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	120
Size:	+0	AtA Refuel:	No
Vulnerability:	+2	Ejection Seat:	None

Crew: Pilot and Copilot

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	0.5	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Speeds and Ceilings						Climb Capabilities						
Alt. Band	Conf. Ceil.	CL 30	1/2 24	DT 13	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	—	—	—	—	—	—	—	—	—	—	VH
HI	26–35	1.5 – 3.0	—	—	4.5	—	0.5	—	—	—	—	HI
MH	17–25	1.5 – 3.0	1.5 – 2.5	1.5 – 2.0	4.5	—	0.5	—	0.5	—	0.5	MH
ML	8–16	1.0 – 3.0	1.0 – 2.5	1.0 – 2.5	4.0	—	1.0	—	0.5	—	0.5	ML
LO	0–7	1.0 – 3.0	1.0 – 3.0	1.0 – 2.5	4.0	—	1.0	—	1.0	—	0.5	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M3
To Hit:	5/4/3
Ammunition:	6.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 7, 1/2: <13, DT : ≥13

Weight Limit: 8,000

Station	Limit	Allowed Loads
1–6 and 10–15	500	BB RK RP
7 and 9	2,200	BB RK RP FT
8	2,200	BB FT

Load Notes:

1. Stations 1 to 6 and 10 to 15 are closely spaced and have restrictions: a station adjacent to one other loaded with a store of more than 250 lb may only carry a store of 250 lb or less and a station between two others loaded with stores of more than 250 lb may not be used.

Notes:

1. The Douglas A-1E Skyraider is a propeller-driven, carrier-capable attack aircraft. It was developed from the AD-4 and added a widened fuselage and cockpit with a copilot next to the pilot, additional armor, and omitted the lateral dive brakes. Prior 1962, it was designated AD-5.
2. From 1967, equipped with the Stanley rocket extraction device which gives a –1 modifier when bailing out.

VPs: 8/5/3/1

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AD-6 Skyraider

Crew: Pilot

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	0.5	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	1.5	1.0	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	2.0	Restr. Arcs:	—
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	120
Size:	+0	AtA Refuel:	No
Vulnerability:	+2	Ejection Seat:	None

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 30	1/2 24	DT 13	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	—	—	—	—
HI	26–35	1.5 – 3.0	—	—	4.5
MH	17–25	1.5 – 3.0	1.5 – 2.5	1.5 – 2.0	4.5
ML	8–16	1.0 – 3.0	1.0 – 2.5	1.0 – 2.5	4.0
LO	0–7	1.0 – 3.0	1.0 – 3.0	1.0 – 2.5	4.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	—	—	—	—	—	VH
—	0.5	—	—	—	—	HI
—	0.5	—	0.5	—	0.5	MH
—	1.0	—	0.5	—	0.5	ML
—	1.0	—	1.0	—	0.5	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M3
To Hit:	5/4/3
Ammunition:	6.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 7 / 1/2: <13 / DT : ≥13

Weight Limit: 8,000

Station	Limit	Allowed Loads
1–6 and 10–15	500	BB RK RP
7 and 9	2,200	BB RK RP FT
8	2,200	BB FT

Load Notes:

1. Stations 1 to 6 and 10 to 15 are closely spaced and have restrictions: a station adjacent to one other loaded with a store of more than 250 lb may only carry a store of 250 lb or less and a station between two others loaded with stores of more than 250 lb may not be used.

Notes:

1. The Douglas AD-6 Skyraider is a propeller-driven, carrier-capable attack aircraft. It was developed from the AD-5, but returned to the fuselage single-pilot cockpit configuration of the AD-4. In 1962, it was redesignated A-1H.

VPs: 8/5/3/1

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A-1H Skyraider

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	1.5	1.0	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	2.0	Restr. Arcs:	—
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	120
Size:	+0	AtA Refuel:	No
Vulnerability:	+2	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	0.5	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 30	1/2 24	DT 13	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	—	—	—	—	—	—	—	—	—	—	VH
HI	26–35	1.5 – 3.0	—	—	4.5	—	0.5	—	—	—	—	HI
MH	17–25	1.5 – 3.0	1.5 – 2.5	1.5 – 2.0	4.5	—	0.5	—	0.5	—	0.5	MH
ML	8–16	1.0 – 3.0	1.0 – 2.5	1.0 – 2.5	4.0	—	1.0	—	0.5	—	0.5	ML
LO	0–7	1.0 – 3.0	1.0 – 3.0	1.0 – 2.5	4.0	—	1.0	—	1.0	—	0.5	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M3
To Hit:	5/4/3
Ammunition:	6.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 7 / 1/2: <13 / DT : ≥13

Weight Limit: 8,000

Station	Limit	Allowed Loads
1–6 and 10–15	500	BB RK RP
7 and 9	2,200	BB RK RP FT
8	2,200	BB FT

Load Notes:

1. Stations 1 to 6 and 10 to 15 are closely spaced and have restrictions: a station adjacent to one other loaded with a store of more than 250 lb may only carry a store of 250 lb or less and a station between two others loaded with stores of more than 250 lb may not be used.

Notes:

1. The Douglas A-1H Skyraider is a propeller-driven, carrier-capable attack aircraft. It was developed from the AD-5, but returned to the fuselage and single-pilot cockpit configuration of the AD-4. Prior to 1962, it was designated AD-6.
2. From 1967, equipped with the Stanley rocket extraction device which gives a –1 modifier when bailing out.

VPs: 8/5/3/1

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AD-7 Skyraider

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	1.5	1.0	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	2.0	Restr. Arcs:	—
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	120
Size:	+0	AtA Refuel:	No
Vulnerability:	+2	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	0.5	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 30	1/2 24	DT 13	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	—	—	—	—
HI	26–35	1.5 – 3.0	—	—	4.5
MH	17–25	1.5 – 3.0	1.5 – 2.5	1.5 – 2.0	4.5
ML	8–16	1.0 – 3.0	1.0 – 2.5	1.0 – 2.5	4.0
LO	0–7	1.0 – 3.0	1.0 – 3.0	1.0 – 2.5	4.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	—	—	—	—	—	VH
HI	—	0.5	—	—	—	—	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	1.0	—	0.5	—	0.5	ML
LO	—	1.0	—	1.0	—	0.5	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M3
To Hit:	5/4/3
Ammunition:	6.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 7, 1/2: <13, DT : ≥13

Weight Limit: 8,000

Station	Limit	Allowed Loads
1–6 and 10–15	500	BB RK RP
7 and 9	2,200	BB RK RP FT
8	2,200	BB FT

Load Notes:

1. Stations 1 to 6 and 10 to 15 are closely spaced and have restrictions: a station adjacent to one other loaded with a store of more than 250 lb may only carry a store of 250 lb or less and a station between two others loaded with stores of more than 250 lb may not be used.

Notes:

1. The Douglas AD-7 Skyraider is a propeller-driven, carrier-capable attack aircraft. It was developed from the AD-6. In 1962, it was redesignated A-1J.

VPs: 8/5/3/1

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A-1J Skyraider

Power APs/DPs: ⊙

	CL	1/2	DT	Fuel
FT	1.5	1.0	1.0	0.5
HT	0.5	0.5	0.5	0.2
N	0.0	0.0	0.0	0.1
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Cruise Spd. CL:	2.0	Restr. Arcs:	—
Climb Spd.:	1.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	120
Size:	+0	AtA Refuel:	No
Vulnerability:	+2	Ejection Seat:	None

Crew: Pilot

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	0.5	1.0	1.0
BT	1.0	1.0	1.5
ET	—	—	—

Speeds and Ceilings						Climb Capabilities						
Alt. Band	Conf. Ceil.	CL 30	1/2 24	DT 13	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	—	—	—	—	—	—	—	—	—	—	VH
HI	26–35	1.5 – 3.0	—	—	4.5	—	0.5	—	—	—	—	HI
MH	17–25	1.5 – 3.0	1.5 – 2.5	1.5 – 2.0	4.5	—	0.5	—	0.5	—	0.5	MH
ML	8–16	1.0 – 3.0	1.0 – 2.5	1.0 – 2.5	4.0	—	1.0	—	0.5	—	0.5	ML
LO	0–7	1.0 – 3.0	1.0 – 3.0	1.0 – 2.5	4.0	—	1.0	—	1.0	—	0.5	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M3
To Hit:	5/4/3
Ammunition:	6.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 7
1/2: <13
DT : ≥13

Weight Limit: 8,000

Station	Limit	Allowed Loads
1–6 and 10–15	500	BB RK RP
7 and 9	2,200	BB RK RP FT
8	2,200	BB FT

Load Notes:

1. Stations 1 to 6 and 10 to 15 are closely spaced and have restrictions: a station adjacent to one other loaded with a store of more than 250 lb may only carry a store of 250 lb or less and a station between two others loaded with stores of more than 250 lb may not be used.

Notes:

1. The Douglas A-1J Skyraider is a propeller-driven, carrier-capable attack aircraft. It was developed from the AD-6. Prior to 1962, it was designated AD-7.
2. From 1967, equipped with the Stanley rocket extraction device which gives a –1 modifier when bailing out.

VPs: 8/5/3/1

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Lockheed P2V Neptune

The Lockheed P2V Neptune is a multiple-engined maritime patrol and anti-submarine aircraft. Early versions had two rotary engines, but later versions added two auxiliary jet engines. In 1962, it was redesignated as the P-2.

In 1954, Lockheed converted five P2V-7s into P2V-7U electronic intelligence (ELINT) aircraft for the CIA. Armament was removed and in its place a wide and variable range of ELINT equipment was installed.

There were nominally assigned to the USAF and designated RB-69A. From 1957 to 1959, they were used by CIA crews for missions in Europe. From 1957 to 1966, they were flown by ROCAF crews from the 34th “Black Bats” Squadron on ELINT missions over mainland China. Five were lost, with at least three being shot down.

The normal load for an RB-69A would be two 200 gal (760L) FTs on the wing tips. From 1964, AIM-9B IRMs could be carried, but the low speed of the aircraft reduced the chance of a successful launch.

An ADC is provided for the:

– P2V-7U

P2V-7U Neptune

Crew: Pilot, Co-Pilot, Third Pilot, Flight Engineer, Navigator, Navigator, Radar Navigator, Radar Navigator, ECM Officer, ECM Officer, Radio Operator, Observer, and Observer

Power APs/DPs:

	CL	1/2	DT	Fuel
FT	1.5	1.5	1.0	2.0
HT	1.0	1.0	0.5	1.0
N	0.0	0.0	0.0	0.2
I	1.0	1.0	1.0	0.0
SPBR	—	—	—	—

If speed ≥ 3.0, reduce power by 0.5.

Cruise Spd. CL:	2.5	Restr. Arcs:	60–
Climb Spd.:	2.0	Blind Arcs:	30L
Visibility:	9	Internal Fuel:	940
Size:	−2	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	None

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	0.50	0.50	0.75
HT	1.00	1.00	1.00
BT	1.50	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 22	1/2 18	DT 12	Dive Speed	Climb Capabilities CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	—	—	—	—	—	—	—	—	—	—	VH
HI	26–35	—	—	—	—	—	—	—	—	—	—	HI
MH	17–25	—	—	—	—	—	—	—	—	—	—	MH
ML	8–16	—	—	1.5 – 3.5	4.0	—	—	—	—	—	0.25	ML
LO	0–7	—	—	1.5 – 3.0	4.0	—	—	—	—	—	0.25	LO

Radar:	APQ-24
ECCM:	1
Arcs:	180+
Search:	Gr. Nav. (180)
Track:	Gr. Attack (120)
Lock-On:	0

ECM:	IFF
RWR:	C
DDS:	A
DJM:	B4
AJM:	B4
BJM:	B3

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—

Bomb System: Manual

Technology:

TFR-A

Load Point Limits: CL : < 1; 1/2: < 2; DT : ≥ 2

Weight Limit: 10,600

Station	Limit	Allowed Loads
1 and 7	1,300	FT
2–3 and 5–6	150	IRM
4	8,000	

Load Notes:

1. Stations 1 and 7 are the wing-tip stations. They always carry 400 gal (760L) FTs.
2. May use AIM-9B IRMs from 1964. Apply a launch modifier of +1 for each 0.5 speed below 3.0.
3. Station 4 is the internal bomb bay. It can carry a supply pod or a leaflet dispenser.
4. The weight of the internal ELINT equipment is sufficient that the aircraft is always considered to be DT.

Notes:

1. The Lockheed P2V-7U Neptune is an electronic intelligence (ELINT) aircraft. It is an specialized adaptation of the P2V-7. It was formally assigned to the USAF and designated the RB-69A.
2. Low roll rate (LRR).
3. Flight Restrictions. VD, VC, and unloading are forbidden.
4. The aircraft has two propeller engines and two jet engines. HT uses the propeller engines. FT uses both the propeller and jet engines. When the power setting is HT or less, reduce the maximum speed by 1.0.
5. DDS is available from 1959 and can dispense CH only.
6. BJM is available from 1959.
7. AJM is available from 1962.
8. TFR-A is available from 1964.

VPs: 25/17/8/4

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Republic F-84 Thunderjet

The Republic F-84 Thunderjet is an early escort fighter, fighter-bomber, and tactical nuclear bomber. It has unswept wings, a single jet engine, and an air intake in the nose.

The aircraft was designated P-48 during its development. The P-84B entered service in 1947; there was no P-84A version, as the XP-84A was a prototype and the YP-84A a service test version. It was armed with six .50 cal M3 machine guns, with four guns were installed in the nose and one in each wing root. It was equipped with an Allison J35-A-15 engine and, to improve its range, wing-tip fuel tanks with a capacity of 226 gal each. In 1948, the P-48 was redesignated as the F-84.

The F-84C followed shortly after the F-84B, and was almost identical. The main change being the use of the J35-A-13C engine, which had better reliability than the engine in the F-84B, but otherwise had almost identical performance. Both of these models suffered from structural damage to the fuselage skin, which lead to performance limitations, and structural failures in the wings, caused at least in part by the fuel tanks applying unexpected twisting loads to the wings during high-g maneuvers.

The first satisfactory version was the F-84D, which entered service in 1949. It had strengthened wings, triangular fins on the wing-tip tanks to mitigate twisting, and a more powerful J35-A-17D engine.

The F-84E entered service in 1950 and represented a further improvement on the F-84D. It has lengthened fuselage, further strengthened wings, added an A-1B gun sight with an APG-30 range-finding radar, and had provision for 230 gal fuel tanks on the under-wing stations. It kept the same engine as the F-84D. The F-84E could be equipped with air-to-air refueling probes on each wing-tip fuel tank, and these were used in combat in Korea to permit long-range missions to be flown from Japan.

The final F-84G version was intended to bridge the gap before the introduction of the swept-wing F-84F. It was equipped with an air-to-air refueling receptacle in its left wing (in addition to possible use of air-to-air refueling probes in the wing-tip fuel tanks, like the F-84E), a new framed canopy as the single-piece canopy of the F-84E was subject to failure, and could carry a Mk 7 nuclear bomb. The new canopy was subsequently refitted to previous versions.

In the Korean War, when the MiG-15 entered combat on 1 November 1950, the best fighter the USAF had in the theater was the straight-wing F-80C, and it was unable to match the swept-wing MiG. The response of the USAF, in retrospect, was curious; it sent a wing of quite similar F-84Es. Starting in December 1950, these begin to escort daylight B-29 raids. It was found to be rugged and a stable gun platform, but like the F-80C was easily outmaneuvered by the faster MiG-15. The role of countering the MiG was given to the F-86, and the F-84 subsequently was used as a fighter-bomber and, towards the end of the war, night intruder. Starting in 1951, many F-80C units in Korea converted to the F-84.

In addition to the USAF, the F-84E was used by the air forces of Belgium, France, Netherlands, and Norway. The F-84G was used by these and also by the air forces of Denmark, Greece, Iran, Italy, Portugal, Republic of China, Thailand, Turkey, and Yugoslavia. Taiwanese F-84s engaged in air combat with PRC MiG-15 and MiG-17s during the Second Taiwan Straight Crisis in 1958. Portuguese F-84s saw combat in the Angolan War of Independence from 1961 as fighter-bombers.

ADCs are provided for:

- F-84E
- F-84G

F-84E Thunderjet

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	150
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.5	1.5
BT	1.5	1.5	1.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 41	1/2 36	DT 30	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	2.5 – 5.0	2.5 – 5.0	—	6.0	—	0.5	—	0.5	—	—	VH
HI	26–35	2.0 – 5.5	2.5 – 5.5	—	6.5	—	0.5	—	0.5	—	0.5	HI
MH	17–25	2.0 – 5.5	2.0 – 5.5	2.5 – 5.0	6.5	—	1.0	—	0.5	—	0.5	MH
ML	8–16	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	7.0	—	1.0	—	1.0	—	0.5	ML
LO	0–7	1.5 – 6.0	1.5 – 5.5	2.0 – 5.5	7.0	—	1.5	—	1.0	—	0.5	LO

Radar:	APG-30	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M3
To Hit:	6/3/0
Ammunition:	8.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/4**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5 / 1/2: <13 / DT : ≥13

Weight Limit: 6,120

Station	Limit	Allowed Loads
1 and 8	1,500	FT RK
2–3 and 6–7	420	RK
4 and 5	1,500	BB FT RK

Load Notes:

1. Stations 1 and 8 normally carry 230 gal (850L) wing-tip FTs. They can instead each carry four or six HVAR RKs.
2. Stations 4 and 5 can each carry one 230 gal (850L) FT, one 1000 lb M65 BB, one 500 lb M64 BB, one 250 lb M57 BB, one 100 lb M30 BB, or four HVAR RKs.
3. Stations 2, 3, 6, and 7 can each carry one, two, or three HVAR RKs.

Notes:

1. The Republic F-84E Thunderjet is a day fighter-bomber.
2. High transonic drag (HTD).

VPs: 8/5/3/1

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F-84G Thunderjet

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	150
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.5	1.5
BT	1.5	1.5	1.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 41	1/2 36	DT 30	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	2.5 – 5.0	2.5 – 5.0	—	6.0	—	0.5	—	0.5	—	—	VH
HI	26–35	2.0 – 5.5	2.5 – 5.5	—	6.5	—	0.5	—	0.5	—	0.5	HI
MH	17–25	2.0 – 5.5	2.0 – 5.5	2.5 – 5.0	6.5	—	1.0	—	1.0	—	0.5	MH
ML	8–16	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	7.0	—	1.5	—	1.5	—	1.0	ML
LO	0–7	1.5 – 6.0	1.5 – 5.5	2.0 – 5.5	7.0	—	1.5	—	1.5	—	1.0	LO

Radar:	APG-30	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M3
To Hit:	6/3/0
Ammunition:	8.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/4**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5, 1/2: <13, DT : ≥13

Weight Limit: 6,200

Station	Limit	Allowed Loads
1 and 8	1,500	FT RK
2–3 and 6–7	420	RK
4 and 5	1,700	BB FT RK

Load Notes:

1. Stations 1 and 8 normally carry 230 gal (850L) wing-tip FTs. They can instead each carry four or six HVAR RKs.
2. Stations 4 and 5 can each carry one 230 gal (850L) FT, one 1000 lb M65 BB, one 500 lb M64 BB, one 250 lb M57 BB, one 100 lb M30 BB, or four HVAR RKs.
3. Stations 2, 3, 6, and 7 can each carry one, two, or three HVAR RKs.
4. A single Mk 7 (weight 1700 and load 3.5) nuclear bomb can also be carried on either station 4 or 5.

Notes:

1. The Republic F-84G Thunderjet is a fighter-bomber and tactical nuclear strike aircraft. It is a development of the F-84E and has a more powerful engine, in-flight refueling, and the provision for nuclear bombs.
2. High transonic drag (HTD).

VPs: 9/6/3/2

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McDonnell F2H Banshee

- F2H-2
- F2H-2P
- F2H-2B
- F2H-2B (ATA Refueling)
- F2H-3
- F2H-3 (ATA Refueling)
- F2H-3 (RCN)
- F2H-4
- F2H-4 (ATA Refueling)

F2H-2 Banshee

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	180L
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	290
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	1.5	1.5	2.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 36	Dive Speed
EH+	46+	3.0 – 4.5	—	—	6.0
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.5	6.0
HI	26–35	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.5
MH	17–25	2.0 – 5.5	2.0 – 5.0	2.5 – 5.0	6.5
ML	8–16	1.5 – 5.5	2.0 – 5.0	2.0 – 5.0	7.0
LO	0–7	1.5 – 5.5	1.5 – 5.0	2.0 – 5.0	7.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	1.0	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	APG-30	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M3
To Hit:	6/4/3
Ammunition:	6.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 9, 1/2: <13, DT : ≥13

Weight Limit: 3,600

Station	Limit	Allowed Loads
1 and 6	1,300	FT
2 and 5	250	BB
3 and 4	500	BB

Load Notes:

1. The wing-tip stations 1 and 6 usually carry 200 gal (700L) FTs. They cannot be jettisoned in flight.
2. Stations 2 and 3 and stations 4 and 5 are closely spaced. If a 500 lb bomb is carried on station 4 or 5, the adjacent station cannot be used.

Notes:

1. The McDonnell F2H-2 Banshee is a carrier-capable fighter-bomber.
2. High transonic drag (HTD).

VPs: 8/5/3/1

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F2H-2P Banshee

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	180L
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	290
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	1.5	1.5	2.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 36	Dive Speed
EH+	46+	3.0 – 4.5	—	—	6.0
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.5	6.0
HI	26–35	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.5
MH	17–25	2.0 – 5.5	2.0 – 5.0	2.5 – 5.0	6.5
ML	8–16	1.5 – 5.5	2.0 – 5.0	2.0 – 5.0	7.0
LO	0–7	1.5 – 5.5	1.5 – 5.0	2.0 – 5.0	7.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	1.0	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 9
1/2: <13
DT : ≥13

Weight Limit: 3,600

Station	Limit	Allowed Loads
1 and 6	1,300	FT
2 and 5	250	BB
3 and 4	500	BB

Load Notes:

1. The wing-tip stations 1 and 6 usually carry 200 gal (700L) FTs. They cannot be jettisoned in flight.
2. Stations 2 and 3 and stations 4 and 5 are closely spaced. If a 500 lb bomb is carried on station 4 or 5, the adjacent station cannot be used.

Notes:

1. The McDonnell F2H-2P Banshee is a carrier-capable photo-reconnaissance aircraft. It is adapted from the F2H-2 and features a new nose with oblique and overhead cameras instead of guns.
2. High transonic drag (HTD).

VPs: 8/5/3/1

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F2H-2B Banshee

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	180L
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	290
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	1.5	1.5	2.0
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 36	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 4.5	—	—	6.0	—	0.5	—	—	—	—	EH+
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.5	6.0	—	0.5	—	0.5	—	0.5	VH
HI	26–35	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.5	—	0.5	—	0.5	—	0.5	HI
MH	17–25	2.0 – 5.5	2.0 – 5.0	2.5 – 5.0	6.5	—	0.5	—	0.5	—	0.5	MH
ML	8–16	1.5 – 5.5	2.0 – 5.0	2.0 – 5.0	7.0	—	1.0	—	1.0	—	1.0	ML
LO	0–7	1.5 – 5.5	1.5 – 5.0	2.0 – 5.0	7.0	—	1.0	—	1.0	—	1.0	LO

Radar:	APG-30	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M3
To Hit:	6/4/3
Ammunition:	6.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 9, 1/2: <13, DT : ≥13

Weight Limit: 4,600

Station	Limit	Allowed Loads
1 and 10	1,300	FT
2–3 and 8–9	250	BB RK
4 and 7	250	BB
5 and 6	500	BB

Load Notes:

1. The wing-tip stations 1 and 10 usually carry 200 gal (700L) FTs. They cannot be jettisoned in flight.
2. Stations 4 and 5 and stations 6 and 7 are closely spaced. If a 500 lb bomb is carried on station 5 or 6, the adjacent station cannot be used.
3. As an exception to the normal loading rules, a Mk 7 (weight 1700 and load 3.5) or Mk 8 (weight 3300 and load 5.0) nuclear bomb can be carried on station 5.

Notes:

1. The McDonnell F2H-2B Banshee is a carrier-capable fighter-bomber and tactical nuclear bomber. It is a development of the F2H-2 with provision for a nuclear bomb on its port inner-wing weapon station.
2. High transonic drag (HTD).

VPs: 9/6/3/2

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F2H-2B Banshee (ATA Refueling)

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	180L
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	290
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	1.5	1.5	2.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 36	Dive Speed
EH+	46+	3.0 – 4.5	—	—	6.0
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.5	6.0
HI	26–35	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.5
MH	17–25	2.0 – 5.5	2.0 – 5.0	2.5 – 5.0	6.5
ML	8–16	1.5 – 5.5	2.0 – 5.0	2.0 – 5.0	7.0
LO	0–7	1.5 – 5.5	1.5 – 5.0	2.0 – 5.0	7.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	0.5	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	1.0	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	APG-30	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Three 20 mm Mk 3
To Hit:	6/4/3
Ammunition:	6.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/5*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 9, 1/2: <13, DT : ≥13

Weight Limit: 4,600

Station	Limit	Allowed Loads
1 and 10	1,300	FT
2–3 and 8–9	250	BB RK
4 and 7	250	BB
5 and 6	500	BB

Load Notes:

1. The wing-tip stations 1 and 10 usually carry 200 gal (700L) FTs. They cannot be jettisoned in flight.
2. Stations 4 and 5 and stations 6 and 7 are closely spaced. If a 500 lb bomb is carried on station 5 or 6, the adjacent station cannot be used.
3. As an exception to the normal loading rules, a Mk 7 (weight 1700 and load 3.5) or Mk 8 (weight 3300 and load 5.0) nuclear bomb can be carried on station 5.

Notes:

1. The McDonnell F2H-2B Banshee is a carrier-capable fighter-bomber and tactical nuclear bomber. It is a development of the F2H-2 with provision for a nuclear bomb on its port inner-wing weapon station. This variant has an air-to-air refueling probe fitted in place of the upper starboard cannon.
2. High transonic drag (HTD).

VPs: 9/6/3/2

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F2H-3 Banshee

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	180L
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	370
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	1.5	1.5	2.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 46	1/2 42	DT 38	Dive Speed
EH+	46+	3.0 – 4.5	—	—	6.0
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.5	6.0
HI	26–35	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.5
MH	17–25	2.0 – 5.5	2.0 – 5.0	2.5 – 5.0	6.5
ML	8–16	1.5 – 5.5	2.0 – 5.0	2.0 – 5.0	7.0
LO	0–7	1.5 – 5.5	1.5 – 5.0	2.0 – 5.0	7.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	1.0	—	0.5	MH
ML	—	1.0	—	1.0	—	1.0	ML
LO	—	1.5	—	1.0	—	1.0	LO

Radar:	APQ-41
ECCM:	0
Arcs:	180+
Search:	32–8
Track:	24–6
Lock-On:	5

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Mk 16
To Hit:	6/4/3
Ammunition:	6.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 9, 1/2: <13, DT : ≥13

Weight Limit: 4,200

Station	Limit	Allowed Loads
1 and 10	1,100	FT
2–3 and 8–9	250	BB RK
4 and 7	250	BB
5 and 6	500	BB IRM

Load Notes:

1. The wing-tip stations 1 and 10 usually carry 170 gal (600L) FTs. They cannot be jettisoned in flight.
2. Stations 4 and 5 and stations 6 and 7 are closely spaced. If a 500 lb bomb is carried on station 5 or 6, the adjacent station cannot be used.
3. As an exception to the normal loading rules, a Mk 7 (weight 1700 and load 3.5) or Mk 8 (weight 3300 and load 5.0) nuclear bomb can be carried on station 6.
4. From 1958, may use AIM-9B IRMs.

Notes:

1. The McDonnell F2H-3 Banshee is a carrier-capable all-weather interceptor, fighter-bomber, and tactical nuclear bomber. It is a major development of the F2H-2 with a lengthened fuselage, increased fuel capacity, additional weapon stations, and the APQ-41 search radar.
2. High transonic drag (HTD).

VPs: 11/7/4/2

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F2H-3 Banshee (ATA Refueling)

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	1.5	1.5	2.0
ET	—	—	—

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	180L
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	370
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Early

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 46	1/2 42	DT 38	Dive Speed
EH+	46+	3.0 – 4.5	—	—	6.0
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.5	6.0
HI	26–35	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.5
MH	17–25	2.0 – 5.5	2.0 – 5.0	2.5 – 5.0	6.5
ML	8–16	1.5 – 5.5	2.0 – 5.0	2.0 – 5.0	7.0
LO	0–7	1.5 – 5.5	1.5 – 5.0	2.0 – 5.0	7.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	1.0	—	0.5	MH
ML	—	1.0	—	1.0	—	1.0	ML
LO	—	1.5	—	1.0	—	1.0	LO

Radar:	APQ-41
ECCM:	0
Arcs:	180+
Search:	32–8
Track:	24–6
Lock-On:	5

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Three 20 mm Mk 16
To Hit:	6/4/3
Ammunition:	6.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/5*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 9, 1/2: <13, DT : ≥13

Weight Limit: 4,200

Station	Limit	Allowed Loads
1 and 10	1,100	FT
2–3 and 8–9	250	BB RK
4 and 7	250	BB
5 and 6	500	BB IRM

Load Notes:

1. The wing-tip stations 1 and 10 usually carry 170 gal (600L) FTs. They cannot be jettisoned in flight.
2. Stations 4 and 5 and stations 6 and 7 are closely spaced. If a 500 lb bomb is carried on station 5 or 6, the adjacent station cannot be used.
3. As an exception to the normal loading rules, a Mk 7 (weight 1700 and load 3.5) or Mk 8 (weight 3300 and load 5.0) nuclear bomb can be carried on station 6.
4. From 1958, may use AIM-9B IRMs.

Notes:

1. The McDonnell F2H-3 Banshee is a carrier-capable all-weather interceptor, fighter-bomber, and tactical nuclear bomber. It is a major development of the F2H-2 with a lengthened fuselage, increased fuel capacity, additional weapon stations, and the APQ-41 search radar. This variant has an air-to-air refueling probe fitted in place of the upper port cannon.
2. High transonic drag (HTD).

VPs: 11/7/4/2

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F2H-3 Banshee (RCN)

Crew: Pilot

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	180L
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	370
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	1.5	1.5	2.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 46	1/2 42	DT 38	Dive Speed
EH+	46+	3.0 – 4.5	—	—	6.0
VH	36–45	2.5 – 5.0	3.0 – 4.5	3.0 – 4.5	6.0
HI	26–35	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.5
MH	17–25	2.0 – 5.5	2.0 – 5.0	2.5 – 5.0	6.5
ML	8–16	1.5 – 5.5	2.0 – 5.0	2.0 – 5.0	7.0
LO	0–7	1.5 – 5.5	1.5 – 5.0	2.0 – 5.0	7.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	0.5	—	—	—	—	EH+
—	0.5	—	0.5	—	0.5	VH
—	0.5	—	0.5	—	0.5	HI
—	1.0	—	1.0	—	0.5	MH
—	1.0	—	1.0	—	1.0	ML
—	1.5	—	1.0	—	1.0	LO

Radar:	APQ-41
ECCM:	0
Arcs:	180+
Search:	32–8
Track:	24–6
Lock-On:	5

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Mk 16
To Hit:	6/4/3
Ammunition:	6.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 9, 1/2: <13, DT : ≥13

Weight Limit: 4,200

Station	Limit	Allowed Loads
1 and 10	1,100	FT
2 and 9	250	BB RK IRM
3 and 8	250	BB RK
4 and 7	250	BB
5 and 6	500	BB

Load Notes:

1. The wing-tip stations 1 and 10 can carry 170 gal (600L) FTs, but these are rarely used. They cannot be jettisoned in flight.
2. Stations 4 and 5 and stations 6 and 7 are closely spaced. If a 500 lb bomb is carried on station 5 or 6, the adjacent station cannot be used.
3. May use AIM-9B IRMs.

Notes:

1. The McDonnell F2H-3 Banshee is a carrier-capable all-weather interceptor, fighter-bomber, and tactical nuclear bomber. It is a major development of the F2H-2 with a lengthened fuselage, increased fuel capacity, additional weapon stations, and the APQ-41 search radar. This variant is modified for service in the RCN. In particular, AIM-9B IRMs can be carried on the outer stations 2 and 9, wing-tip FTs are rarely used, and neither air-to-air refueling nor nuclear weapons are available.
2. High transonic drag (HTD).

VPs: 11/7/4/2

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F2H-4 Banshee

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	180L
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	370
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	1.5	1.5	2.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 46	1/2 42	DT 38	Dive Speed
EH+	46+	3.0 – 5.0	—	—	6.0
VH	36–45	2.5 – 5.5	3.0 – 5.0	3.0 – 5.0	6.0
HI	26–35	2.0 – 5.5	2.5 – 5.5	2.5 – 5.0	6.5
MH	17–25	2.0 – 6.0	2.0 – 5.5	2.5 – 5.5	6.5
ML	8–16	1.5 – 6.0	2.0 – 5.5	2.0 – 5.5	7.0
LO	0–7	1.5 – 6.0	1.5 – 5.5	2.0 – 5.5	7.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	1.0	—	0.5	MH
ML	—	1.0	—	1.0	—	1.0	ML
LO	—	1.5	—	1.0	—	1.0	LO

Radar:	APG-37
ECCM:	0
Arcs:	180+
Search:	70–10
Track:	40–8
Lock-On:	6

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Mk 16
To Hit:	6/4/3
Ammunition:	6.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 9 / 1/2: <13 / DT : ≥13

Weight Limit: 4,200

Station	Limit	Allowed Loads
1 and 10	1,100	FT
2–3 and 8–9	250	BB RK
4 and 7	250	BB
5 and 6	500	BB IRM

Load Notes:

1. The wing-tip stations 1 and 10 usually carry 170 gal (600L) FTs. They cannot be jettisoned in flight.
2. Stations 4 and 5 and stations 6 and 7 are closely spaced. If a 500 lb bomb is carried on station 5 or 6, the adjacent station cannot be used.
3. As an exception to the normal loading rules, a Mk 7 (weight 1700 and load 3.5) or Mk 8 (weight 3300 and load 5.0) nuclear bomb can be carried on station 6.
4. From 1958, may use AIM-9B IRMs.

Notes:

1. The McDonnell F2H-3 Banshee is a carrier-capable all-weather interceptor, fighter-bomber, and tactical nuclear bomber. It is a development of the F2H-3 with the APG-37 search radar and more powerful engines.
2. High transonic drag (HTD).

VPs: 12/8/4/2

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F2H-4 Banshee (ATA Refueling)

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	180L
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	370
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	1.5	1.5	2.0
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 46	1/2 42	DT 38	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 5.0	—	—	6.0	—	0.5	—	—	—	—	EH+
VH	36–45	2.5 – 5.5	3.0 – 5.0	3.0 – 5.0	6.0	—	0.5	—	0.5	—	0.5	VH
HI	26–35	2.0 – 5.5	2.5 – 5.5	2.5 – 5.0	6.5	—	0.5	—	0.5	—	0.5	HI
MH	17–25	2.0 – 6.0	2.0 – 5.5	2.5 – 5.5	6.5	—	1.0	—	1.0	—	0.5	MH
ML	8–16	1.5 – 6.0	2.0 – 5.5	2.0 – 5.5	7.0	—	1.0	—	1.0	—	1.0	ML
LO	0–7	1.5 – 6.0	1.5 – 5.5	2.0 – 5.5	7.0	—	1.5	—	1.0	—	1.0	LO

Radar:	APG-37	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	70–10	DJM:	—
Track:	40–8	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Three 20 mm Mk 16
To Hit:	6/4/3
Ammunition:	6.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/5*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 9, 1/2: <13, DT : ≥13

Weight Limit: 4,200

Station	Limit	Allowed Loads
1 and 10	1,100	FT
2–3 and 8–9	250	BB RK
4 and 7	250	BB
5 and 6	500	BB IRM

Load Notes:

1. The wing-tip stations 1 and 10 usually carry 170 gal (600L) FTs. They cannot be jettisoned in flight.
2. Stations 4 and 5 and stations 6 and 7 are closely spaced. If a 500 lb bomb is carried on station 5 or 6, the adjacent station cannot be used.
3. As an exception to the normal loading rules, a Mk 7 (weight 1700 and load 3.5) or Mk 8 (weight 3300 and load 5.0) nuclear bomb can be carried on station 6.
4. From 1958, may use AIM-9B IRMs.

Notes:

1. The McDonnell F2H-3 Banshee is a carrier-capable all-weather interceptor, fighter-bomber, and tactical nuclear bomber. It is a development of the F2H-3 with the APG-37 search radar and more powerful engines. This variant has an ATA refueling probe fitted in place of the upper port cannon.
2. High transonic drag (HTD).

VPs: 12/8/4/2

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Convair B-36 Peacemaker

An ADC is provided for the:

– B-36D

B-36D Peacemaker

Crew: Commander, Pilot, Pilot, Flight Engineer, Flight Engineer, Navigator, Bombardier, Radio Operator, Radio Operator, Right Gunner, Observer, Gunner, Gunner, Gunner, Gunner, and Gunner

Power APs/DPs:

	CL	1/2	DT	Fuel
FT	1.0	1.0	0.5	10.0
HT	0.5	0.5	0.5	4.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	—	—	—	—

Cruise Spd. CL:	2.0	Restr. Arcs:	—
Climb Spd.:	2.0	Blind Arcs:	—
Visibility:	13	Internal Fuel:	1760
Size:	−2	AtA Refuel:	No
Vulnerability:	+2	Ejection Seat:	None

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	1.5
HT	1.5	2.0	2.0
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 46	1/2 40	DT 32	Dive Speed
EH+	46+	2.0 – 4.0	—	—	4.0
VH	36–45	1.5 – 4.5	2.0 – 4.0	—	4.5
HI	26–35	1.5 – 4.5	1.5 – 4.0	2.0 – 4.0	5.0
MH	17–25	1.5 – 4.0	1.5 – 4.0	1.5 – 3.5	4.5
ML	8–16	1.0 – 3.5	1.5 – 3.5	1.5 – 3.0	4.5
LO	0–7	1.0 – 3.0	1.0 – 3.0	1.5 – 2.5	4.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	0.20	—	—	—	—	—	EH+
VH	0.25	0.20	0.20	—	—	—	VH
HI	0.50	0.20	0.25	0.20	0.20	—	HI
MH	0.50	0.25	0.50	0.20	0.25	0.20	MH
ML	1.00	0.50	0.50	0.25	0.50	0.20	ML
LO	1.00	0.50	1.00	0.50	0.50	0.25	LO

Radar:	APS-23
ECCM:	1
Arcs:	180–
Search:	Gr. Nav. (200)
Track:	Gr. Attack (100)
Lock-On:	0

ECM:	IFF
RWR:	A
DDS:	—
DJM:	—
AJM:	A3
BJM:	—

Weapon Stations Diagram:

Guns:	Thirteen .50 cal M2
To Hit:	2/1/1
Ammunition:	18.0
Gunsight:	—
Ranging:	—
AtA/AtG:	2/2**
Bomb System:	Ballistic

Technology:

None

Load Point Limits: CL : <41 / 1/2: <71 / DT : ≥71

Weight Limit: 86,000

Station	Limit	Allowed Loads
1–4	21,500	BB FT

Load Notes:

1. Stations 1 to 4 are the internal bomb bays. Stations 1 and 2 and stations 3 and 4 may be combined.
2. The load option for an individual bay are: (a) FT with 1075 fuel points, (b) six 3,000 lb bombs, (c) eight 2,000 lb bombs, (d) sixteen 1,000 lb bombs, (e) thirty three 500 lb bombs, or (f) photographic cameras. Any bombs carried must be low-drag.
3. The load options for a combined pair are: (a) one 43,000 lb bomb, (b) two 22,000 lb bombs, (c) four 12,000 lb bombds, or (d) four 10,000 lb bombs.

Notes:

1. The Convair B-36D Peacemaker is a propeller-driven strategic nuclear bomber.
2. High transonic drag (HTD).
3. Flight Restrictions. VD, VC, and unloading are forbidden.
4. Articulated Guns. The guns can fire in any direction. They may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are modified only by the target size, a −1 modifier when firing into the 60– arc, and possibly a −1 modifer for RE radar ranging with the tail radar.
5. Tail Radar. Equipped with an APG-32 tail radar with ECCM 1, arc 60–, search 30–10, track 15/10, and lock-on 7–.

VPs: 42/28/14/7

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Boeing B-50 Superfortress

- B-50A
- B-50A (Saddletree)
- B-50D
- B-50D (Saddletree)

See Also

- Boeing B-29 Superfortress

B-50A Superfortress

Crew: Pilot, Copilot, Bombardier, Navigator, Flight Engineer, Radio Operator, Radar Operator, Countermeasures Operator, Top Gunner, Right Gunner, Left Gunner, and Tail Gunner

Power APs/DPs: ⊙⊙⊙⊙

	CL	1/2	DT	Fuel
FT	1.0	1.0	0.5	2.0
HT	0.5	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	—	—	—	—

Cruise Spd. CL:	2.5	Restr. Arcs:	—
Climb Spd.:	2.0	Blind Arcs:	—
Visibility:	10	Internal Fuel:	2160
Size:	−2	AtA Refuel:	Yes
Vulnerability:	+2	Ejection Seat:	None

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	1.5
HT	1.5	—	—
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 39	1/2 36	DT 32	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	1.5 – 3.5	1.5 – 3.5	—	4.5	—	0.25	—	0.10	—	—	VH
HI	26–35	1.0 – 4.0	1.5 – 4.0	1.5 – 3.5	4.5	—	0.50	—	0.25	—	0.10	HI
MH	17–25	1.0 – 4.0	1.0 – 3.5	1.0 – 3.5	4.5	—	0.50	—	0.25	—	0.25	MH
ML	8–16	1.0 – 3.5	1.0 – 3.5	1.0 – 3.0	4.0	—	0.50	—	0.50	—	0.25	ML
LO	0–7	1.0 – 3.0	1.0 – 3.0	1.0 – 3.0	3.5	—	0.50	—	0.50	—	0.50	LO

Radar:	APQ-24
ECCM:	1
Arcs:	180+
Search:	Gr. Nav. (180)
Track:	Gr. Attack (120)
Lock-On:	0

ECM:	IFF
RWR:	A
DDS:	—
DJM:	—
AJM:	—
BJM:	A2

Weapon Stations Diagram:

Guns:	Thirteen .50 cal M2
To Hit:	2/1/1
Ammunition:	18.0
Gunsight:	—
Ranging:	—
AtA/AtG:	2/2**
Bomb System:	Ballistic

Technology:

None

Load Point Limits: CL : <16, 1/2: <32, DT : ≥32

Weight Limit: 33,000

Station	Limit	Allowed Loads
1 and 4	4,500	BB DR TR WR FT
2 and 3	10,000	BB FT

Load Notes:

1. Stations 2 and 3 are the forward and rear internal bomb bays. Each can carry up to (a) two 4,000 lb bombs, (b) four 2,000 lb bombs, (c) six 1,000 lb bombs, (d) twenty 500 lb bombs. All bombs must be the same type and low-drag. Station 3 may alternatively carry a special 2200 gal (8300L) FT.
2. Stations 1 and 4 may each carry a special 700 gal (2600L) FT.
3. As an exception to the normal rules, internal loads contribute 1 load point for each 1,000 of weight and internal fuel contributes 1 load point for each 50 fuel points. A return mission will typically require leaving the target with at least 1250 fuel points (25 load points).

Notes:

1. The B-50A is a propeller-driven strategic bomber. The version described here is a conventional bomber. It is a development of the B-29 and was originally designated B-29D. All B-50A conventional bombers were converted to “Saddletree” nuclear bombers immediately upon delivery.
2. Flight Restrictions. VD, VC, and unloading are forbidden.
3. Articulated Guns. The guns can fire in any direction. They may return fire twice per game turn in response to gun attacks or conduct one attack.The hit rolls are modified only by the target size and a −1 modifier when firing into the 60− arc.

VPs: 28/19/9/5

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B-50A Superfortress (Saddletree)

Crew: Pilot, Copilot, Flight Engineer, Navigator, Bombardier, Weaponeer, Radio Operator, Radar Operator, Countermeasures Operator, and Tail Gunner

Power APs/DPs: ⊙⊙⊙⊙

	CL	1/2	DT	Fuel
FT	1.0	1.0	0.5	2.0
HT	0.5	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	—	—	—	—

Cruise Spd. CL:	2.5	Restr. Arcs:	—
Climb Spd.:	2.0	Blind Arcs:	—
Visibility:	10	Internal Fuel:	2160
Size:	−2	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	None

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	1.5
HT	1.5	—	—
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 39	1/2 36	DT 32	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	1.5 – 3.5	1.5 – 3.5	—	4.5	—	0.25	—	0.10	—	—	VH
HI	26–35	1.0 – 4.0	1.5 – 4.0	1.5 – 3.5	4.5	—	0.50	—	0.25	—	0.10	HI
MH	17–25	1.0 – 4.0	1.0 – 3.5	1.0 – 3.5	4.5	—	0.50	—	0.25	—	0.25	MH
ML	8–16	1.0 – 3.5	1.0 – 3.5	1.0 – 3.0	4.0	—	0.50	—	0.50	—	0.25	ML
LO	0–7	1.0 – 3.0	1.0 – 3.0	1.0 – 3.0	3.5	—	0.50	—	0.50	—	0.50	LO

Radar:	APQ-24
ECCM:	1
Arcs:	180+
Search:	Gr. Nav. (180)
Track:	Gr. Attack (120)
Lock-On:	0

ECM:	IFF
RWR:	A
DDS:	—
DJM:	—
AJM:	—
BJM:	A2

Weapon Stations Diagram:

Guns:	Three .50 cal M2
To Hit:	3/2/2
Ammunition:	18.0
Gunsight:	—
Ranging:	—
AtA/AtG:	2/2**

Bomb System: Ballistic

Technology:

None

Load Point Limits: CL : <18, 1/2: <30, DT : ≥30

Weight Limit: 30,000

Station	Limit	Allowed Loads
1 and 4	4,500	FT
2	11,000	NBB
3	14,000	FT

Load Notes:

1. Station 2 is the forward bomb bay. It can carry a Mark 4 (weight 11,000), Mark 5 (weight 3,000), or Mark 6 (weight 8,000) nuclear bomb.
2. Station 3 is the rear bomb bay. It permanently carries a special 2200 gal (8300L) FT.
3. Stations 1 and 4 may each carry a special 700 gal (2600L) FT.
4. As an exception to the normal rules, internal loads contribute 1 load point for each 1,000 of weight and internal fuel contributes 1 load point for each 50 fuel points. A return mission will typically require leaving the target with at least 1250 fuel points (25 load points).

Notes:

1. The B-50A is a propeller-driven strategic bomber. This variant is a nuclear bomber converted from the conventional variant under the 1947 to 1949 Saddletree program, and has provision for nuclear weapons, all armor and turrets removed, air-to-air refueling, additional fuel tanks, and winterized electronics.
2. Flight Restrictions. VD, VC, and unloading are forbidden.
3. Articulated Guns. The guns can only fire at targets in the 60– arc. They may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are modified only by the target size.

VPs: 28/19/9/5

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B-50D Superfortress

Crew: Pilot, Copilot, Bombardier, Navigator, Flight Engineer, Radio Operator, Radar Operator, Countermeasures Operator, Top Gunner, Right Gunner, Left Gunner, and Tail Gunner

Power APs/DPs: ⊙⊙⊙⊙

	CL	1/2	DT	Fuel
FT	1.0	1.0	0.5	2.0
HT	0.5	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	—	—	—	—

Cruise Spd. CL:	2.5	Restr. Arcs:	—
Climb Spd.:	2.0	Blind Arcs:	—
Visibility:	10	Internal Fuel:	2400
Size:	−2	AtA Refuel:	Yes
Vulnerability:	+2	Ejection Seat:	None

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	1.5
HT	1.5	—	—
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 39	1/2 36	DT 32	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	1.5 – 3.5	1.5 – 3.5	—	4.5	—	0.25	—	0.10	—	—	VH
HI	26–35	1.0 – 4.0	1.5 – 4.0	1.5 – 3.5	4.5	—	0.50	—	0.25	—	0.10	HI
MH	17–25	1.0 – 4.0	1.0 – 3.5	1.0 – 3.5	4.5	—	0.50	—	0.25	—	0.25	MH
ML	8–16	1.0 – 3.5	1.0 – 3.5	1.0 – 3.0	4.0	—	0.50	—	0.50	—	0.25	ML
LO	0–7	1.0 – 3.0	1.0 – 3.0	1.0 – 3.0	3.5	—	0.50	—	0.50	—	0.50	LO

Radar:	APQ-24	**ECM:**	IFF
ECCM:	1	RWR:	A
Arcs:	180+	DDS:	—
Search:	Gr. Nav. (180)	DJM:	—
Track:	Gr. Attack (120)	AJM:	—
Lock-On:	0	BJM:	A2

Weapon Stations Diagram:

Guns:	Thirteen .50 cal M2
To Hit:	2/1/1
Ammunition:	18.0
Gunsight:	—
Ranging:	—
AtA/AtG:	2/2**
Bomb System:	Ballistic

Technology:

None

Load Point Limits: CL : <16, 1/2: <32, DT : ≥32

Weight Limit: 33,000

Station	Limit	Allowed Loads
1 and 4	4,500	BB DR TR WR FT
2 and 3	10,000	BB FT

Load Notes:

1. Stations 2 and 3 are the forward and rear internal bomb bays. Each can carry up to (a) two 4,000 lb bombs, (b) four 2,000 lb bombs, (c) six 1,000 lb bombs, (d) twenty 500 lb bombs. All bombs must be the same type and low-drag. Station 3 may alternatively carry a special 2200 gal (8300L) FT.
2. Stations 1 and 4 may each carry a special 700 gal (2600L) FT.
3. As an exception to the normal rules, internal loads contribute 1 load point for each 1,000 of weight and internal fuel contributes 1 load point for each 50 fuel points. A return mission will typically require leaving the target with at least 1250 fuel points (25 load points).

Notes:

1. The Boeing B-50D Superfortress is a propeller-driven strategic bomber. The version described here is a conventional bomber. It a development of the B-50A/B and has increased fuel capacity.
2. Flight Restrictions. VD, VC, and unloading are forbidden.
3. Articulated Guns. The guns can fire in any direction. They may return fire twice per game turn in response to gun attacks or conduct one attack.The hit rolls are modified only by the target size and a −1 modifier when firing into the 60– arc.

VPs: 28/19/9/5

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B-50D Superfortress (Saddletree)

Crew: Pilot, Copilot, Flight Engineer, Navigator, Bombardier, Weaponeer, Radio Operator, Radar Operator, Countermeasures Operator, and Tail Gunner

Power APs/DPs: ⊙⊙⊙⊙

	CL	1/2	DT	Fuel
FT	1.0	1.0	0.5	2.0
HT	0.5	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	—	—	—	—

Cruise Spd. CL:	2.5	Restr. Arcs:	—
Climb Spd.:	2.0	Blind Arcs:	—
Visibility:	10	Internal Fuel:	2400
Size:	−2	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	None

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	1.5
HT	1.5	—	—
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 39	1/2 36	DT 32	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	1.5 – 3.5	1.5 – 3.5	—	4.5	—	0.25	—	0.10	—	—	VH
HI	26–35	1.0 – 4.0	1.5 – 4.0	1.5 – 3.5	4.5	—	0.50	—	0.25	—	0.10	HI
MH	17–25	1.0 – 4.0	1.0 – 3.5	1.0 – 3.5	4.5	—	0.50	—	0.25	—	0.25	MH
ML	8–16	1.0 – 3.5	1.0 – 3.5	1.0 – 3.0	4.0	—	0.50	—	0.50	—	0.25	ML
LO	0–7	1.0 – 3.0	1.0 – 3.0	1.0 – 3.0	3.5	—	0.50	—	0.50	—	0.50	LO

Radar:	APQ-24
ECCM:	1
Arcs:	180+
Search:	Gr. Nav. (180)
Track:	Gr. Attack (120)
Lock-On:	0

ECM:	IFF
RWR:	A
DDS:	—
DJM:	—
AJM:	—
BJM:	A2

Weapon Stations Diagram:

Guns:	Three .50 cal M2
To Hit:	3/2/2
Ammunition:	18.0
Gunsight:	—
Ranging:	—
AtA/AtG:	2/2**

Bomb System: Ballistic

Technology:

None

Load Point Limits: CL : <18, 1/2: <30, DT : ≥30

Weight Limit: 30,000

Station	Limit	Allowed Loads
1 and 4	4,500	FT
2	11,000	NBB
3	14,000	FT

Load Notes:

1. Station 2 is the forward bomb bay. It can carry a Mark 4 (weight 11,000), Mark 5 (weight 3,000), or Mark 6 (weight 8,000) nuclear bomb.
2. Station 3 is the rear bomb bay. It permanently carries a special 2200 gal (8300L) FT.
3. Stations 1 and 4 may each carry a special 700 gal (2600L) FT.
4. As an exception to the normal rules, internal loads contribute 1 load point for each 1,000 of weight and internal fuel contributes 1 load point for each 50 fuel points. A return mission will typically require leaving the target with at least 1250 fuel points (25 load points).

Notes:

1. The B-50D is a propeller-driven strategic bomber. This variant is a nuclear bomber converted from the conventional variant under the 1947 to 1949 Saddletree program, with provision for nuclear weapons, all armor and turrets removed, air-to-air refueling, additional fuel tanks, and winterized electronics.
2. Flight Restrictions. VD, VC, and unloading are forbidden.
3. Articulated Guns. The guns can only fire at targets in the 60– arc. They may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are modified only by the target size.

VPs: 28/19/9/5

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Grumman F9F Panther

- F9F-2
- F9F-2P
- F9F-2B
- F9F-5
- F9F-5P

See Also

- Grumman F9F Cougar

F9F-2 Panther

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	300
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.5	1.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 35	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.0 – 5.0	2.5 – 5.0	—	6.0
HI	26–35	2.0 – 5.0	2.0 – 5.0	2.5 – 4.5	6.5
MH	17–25	1.5 – 5.5	1.5 – 5.0	2.0 – 4.5	6.5
ML	8–16	1.0 – 5.5	1.5 – 5.5	2.0 – 5.0	6.5
LO	0–7	1.0 – 6.0	1.5 – 5.5	1.5 – 5.0	6.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	APG-30	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M3
To Hit:	6/4/3
Ammunition:	6.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 2,000

Station	Limit	Allowed Loads
1–3 and 4–6	250	RK

Notes:

1. The Grumman F9F-2 Panther is a carrier-capable day fighter. This version has outer-wing stations capable of carrying only six HVARs. All F9F-2 versions were subsequently converted to F9F-2B versions.
2. High transonic drag (HTD).

VPs: 7/5/2/1

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F9F-2P Panther

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	300
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.5	1.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 35	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.0 – 5.0	2.5 – 5.0	—	6.0
HI	26–35	2.0 – 5.0	2.0 – 5.0	2.5 – 4.5	6.5
MH	17–25	1.5 – 5.5	1.5 – 5.0	2.0 – 4.5	6.5
ML	8–16	1.0 – 5.5	1.5 – 5.5	2.0 – 5.0	6.5
LO	0–7	1.0 – 6.0	1.5 – 5.5	1.5 – 5.0	6.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 7
DT : ≥ 7

Weight Limit: 2,000

Station	Limit	Allowed Loads
1–3 and 4–6	250	RK

Notes:

1. The Grumman F9F-2P Panther is a carrier-capable photo-reconnaissance aircraft. It is derived from the F9F-2 fighter version and has a nose equipped with cameras rather than guns.
2. High transonic drag (HTD).
3. Oblique and overhead cameras in the nose.

VPs: 7/5/2/1

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F9F-2B Panther

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	300
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.5	1.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 35	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.0 – 5.0	2.5 – 5.0	—	6.0
HI	26–35	2.0 – 5.0	2.0 – 5.0	2.5 – 4.5	6.5
MH	17–25	1.5 – 5.5	1.5 – 5.0	2.0 – 4.5	6.5
ML	8–16	1.0 – 5.5	1.5 – 5.5	2.0 – 5.0	6.5
LO	0–7	1.0 – 6.0	1.5 – 5.5	1.5 – 5.0	6.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	APG-30
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	6

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M3
To Hit:	6/4/3
Ammunition:	6.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 2,000

Station	Limit	Allowed Loads
1–3 and 6–8	500	BB RK
4 and 5	1,000	BB RK

Load Notes:

1. The load weight limit is 1200 when launched from a carrier.

Notes:

1. The Grumman F9F-2B Panther is a carrier-capable day fighter and fighter-bomber. This version is a development of the F9F-2 version and has additional stations on the wing root and can carry both bombs and HVARs. All F9F-2 aircraft were converted to this standard, and subsequently commonly referred to as the F9F-2 rather than the F9F-2B.
2. High transonic drag (HTD).

VPs: 7/5/2/1

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F9F-5 Panther

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	320
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.5	1.5
BT	1.5	1.5	1.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 35	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.0 – 5.0	2.5 – 5.0	—	6.0
HI	26–35	2.0 – 5.0	2.0 – 5.0	2.5 – 4.5	6.5
MH	17–25	1.5 – 5.5	1.5 – 5.0	2.0 – 4.5	6.5
ML	8–16	1.0 – 5.5	1.5 – 5.5	2.0 – 5.0	6.5
LO	0–7	1.0 – 6.0	1.5 – 5.5	1.5 – 5.0	6.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	APG-30	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M3
To Hit:	6/4/3
Ammunition:	6.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 3,000

Station	Limit	Allowed Loads
1–3 and 6–8	500	BB RK
4 and 5	1,000	BB RK FT

Notes:

1. The Grumman F9F-5 Panther is a carrier-capable day fighter and fighter-bomber. This version is a development of the F9F-2B version and has more powerful engines, blown flaps, a larger fuselage, and more internal fuel.
2. High transonic drag (HTD).

VPs: 8/5/3/1

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F9F-5P Panther

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	320
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.5	1.5
BT	1.5	1.5	1.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 35	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.0 – 5.0	2.5 – 5.0	—	6.0
HI	26–35	2.0 – 5.0	2.0 – 5.0	2.5 – 4.5	6.5
MH	17–25	1.5 – 5.5	1.5 – 5.0	2.0 – 4.5	6.5
ML	8–16	1.0 – 5.5	1.5 – 5.5	2.0 – 5.0	6.5
LO	0–7	1.0 – 6.0	1.5 – 5.5	1.5 – 5.0	6.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 7
DT : ≥ 7

Weight Limit: 3,000

Station	Limit	Allowed Loads
1–3 and 6–8	500	BB RK
4 and 5	1,000	BB RK FT

Notes:

1. The Grumman F9F-5P Panther is a carrier-capable photo-reconnaissance aircraft. It is derived from the F9F-5 fighter version and has a nose equipped with cameras rather than guns.
2. High transonic drag (HTD).
3. Oblique and overhead cameras in the nose.

VPs: 8/5/3/1

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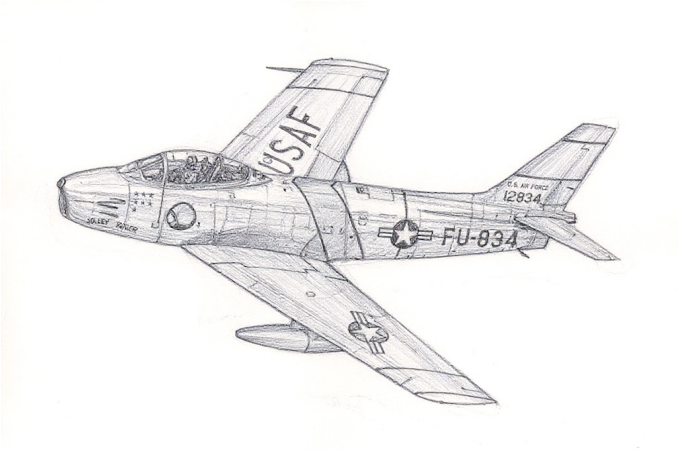
North American F-86 Sabre



The North American F-86 Sabre is a single-engined fighter, interceptor, fighter-bomber, and tactical nuclear bomber, and was the first swept-wing aircraft to enter service in the USAF. There are many versions and variants of the F-86, and we discuss here first the fighters and fighter-bombers (F-86A/E/F/H) and then the interceptors (F-86D/K/L).[1]

Fighter Versions

F-86A

The F-86A has a swept wing and a swept tail with conventional control surfaces. It is powered by a J47-GE-7 engine with 5340 lb of dry thrust; only the interceptor versions of the F-86 had afterburners. It is armed with six .50 cal M3 machine guns and the view from the cockpit is excellent.[2]

Like many of its contemporaries, it suffers from a very short range on internal fuel, and relied on a pair of either 120-gallon or 206-gallon fuel tanks on under-wing stations to achieve a useful range. However, the 206-gallon tank limits maneuvers to 3G and so can only be used for ferry flights. Instead of fuel tanks, it can carry two bombs of up to 1000 lb or sixteen 5-inch HVAR rockets, but has a very restricted combat range while doing so, and therefore served essentially as a day fighter rather than a fighter bomber.

It entered service with the USAF in March 1949. It was rushed to Korea to counter Soviet MiG-15s, which were outclassing the straight-wing F-80C fighters already in theater, and saw combat starting in December 1950.

F-86E

The F-86E improves on the F-86A by having a slightly more powerful J47-GE-13 engine with 5450 lb of dry thrust, the A-1CM radar-ranging gunsight, and an all-flying tail. The new tail significantly improves the handling compared to the F-86A at high transonic speeds.[3]

The F-86E entered service in February 1951 and arrived in Korea in July 1951.

F-86F-1/5/10/15/20

The F-86F series introduces a series of significant improvements over earlier models. All F-86F variants are powered by the J47-GE-27 engine, producing 5970 lb of dry thrust.[4]

The initial F-1 block otherwise closely resembles the F-86E. It entered service in April 1952 and arrived in Korea by June 1952.[5]

The F-5 block adds the improved A-4 gunsight.[6]

The F-10, F-15, and F-20 blocks permit the use of 200 US gallon fuel tanks without maneuver restrictions, greatly enhancing operational range for day-fighter missions. These blocks entered service starting in June 1952.[7]

F-86F-2

The F-2 “GUNVAL” are experimental aircraft converted from E and F-1 aircraft. They have their .50-cal guns replaced with four T-160 20-mm guns each with 100 rounds. This is a revolved cannon with a rate of fire of 1400 rounds per minute, much greater than the 720 rounds per minute of the conventional Navy M3 and Air Force M24 guns. All had the 6-3 wing.[8]

The GUNVAL Sabres saw combat in Korea from December 1952 to April 1953. The weapons were effective, but the aircraft suffered from compressor stalls due to ingestion of gun fumes when the guns were used at high altitude.

F-86F-25/30/35

The F-25 and F-30 blocks hugely improve the capability of the F-86 as a fighter bomber. They have a second pair of weapon pylons on the inner wing, allowing the aircraft to carry both a pair of bombs or eight HVAR rockets in addition to a pair of fuel tanks. This configuration provides a much improved range when carrying air-to-ground weapons. The F-25 models entered service in Korea in October 1952.[9]

The F-35 block is specialized as a tactical nuclear bomber, with a strengthened the left inner pylon to permit carriage of the second-generation Mk 12 nuclear bomb and the LABS (Low Altitude Bombing System) to allow toss bomb-

ing. It entered service in January 1954 and was based mainly in Europe.[10]

All the versions mentioned up to this point were built with the basic wing, which had automatic leading-edge slats that increased lift at low speed. In the summer of 1952, North American developed the "6-3 wing" or the "solid 6-3 wing", which features a 6-inch extension to the chord at the wing root and a 3-inch extension at the wing tip. The resulting larger area gives much better maneuverability at high altitude. The loss of the automatic slats increased the landing speed and the landing roll, and led to accidents when used by inadequately-trained pilots. Starting in September 1952, field-modification kits were provided to add the 6-3 wing to existing F models and later-production F-25/30/35 had them installed in the factory.[11]

F-86F-40

The F-86F-40 was initially a version to be manufactured for the JASDF by Mitsubishi under license, but was also built by North American for the USAF and other US allies. It is similar to the F-25, but features a new wing with 12-inch span extensions at the wing-tips and once more automatic leading-edge slats. As such, it combined the superior high-altitude maneuverability of the 6-3 wing with the lower landing speeds of the basic wing; it was known as the "extended 6-3 wing" or just the "F-40 wing". Deliveries to the USAF and US allies under the MAP (Military Assistance Program) started in 1955. Many earlier F-series aircraft were upgraded to the F-40 standard.[12]

F-86H

The F-86H further refines the F-86 as a fighter-bomber. It has a more powerful, albeit heavier, J73-GE-3 engine producing 8900 lb of dry thrust and giving a much improved rate of climb. Many were later upgraded with the extended 6-3 wing.[13]

The initial H-1 block maintains the armament of six 0.50-cal machine guns, but the later H-5/10 blocks have four 20 mm M39 guns each with 150 rounds, finally giving the Sabre a potent air-to-air armament, albeit in a model not intended as a fighter.

The F-86H entered service in 1954.

Interceptor Versions

The interceptor F-86D/K/L versions of the F-86 are significantly different to the F-86A/E/F/H versions, sharing wings and tail but little else. Informally, they were known as the "Sabre Dog".

F-86D

The F-86D has the J47-GE-17 engine with 5500 lb of dry thrust and an afterburner giving 7650 lb; the afterburner was vital to allow the aircraft to quickly climb to the high altitudes at which it was expected to intercept intruding bombers. The larger fuselage allows more internal fuel, but despite this the F-86D and subsequent interceptors almost always flew with two 120-gallon fuel tanks on wing stations. The F-86D has the basic wing and all-flying tail of the F-86E.[14]

Its weapon system consisted of an APG-7 radar, twenty-four 70 mm FFAR rockets in an extending ventral tray, and a Hughes E-4 fire-control system linking the two. The combination permitted collision-course rocket attacks from the beam, but presented a heavy workload for the single pilot.

Early variants of the aircraft began to be delivered in March 1951, but versions with the E-4 fire control system were only delivered starting in July 1952.

F-86K

The F-86K is a simplified interceptor developed from F-86D for export under the Military Assistance Program (MAP). The weapon system was reworked, with four 20 mm M24 guns replacing the FFARs and a Hughes MG-4 fire-control system replacing the more advanced E-4 system. The simpler fire-control system no longer had collision-course attacks was capable of tail-chase attacks. Some F-86Ks have the extended 6-3 wing of the F-40, either as late-production builds or as upgrades.[15]

Many F-86Ks for European air forces were assembled by Fiat from kits provided by North American; others were built by North American itself.

The F-86K served with the air forces of Italy, Netherlands, and Germany, with deliveries between 1955 and 1958.

F-86L

The F-86L is a rebuild of the F-86D. It has the extended 6-3 wing and updated electronics, including a data link to allow the intercepts to be directly guided by the computerized SAGE system.[16]

The F-86L entered service in late 1957.

Armament and Stores

Guns

The F-86A/E/F/H-1 are armed with six M3 .50-cal machine guns with 300 rounds per gun.[17]

Fuel Tanks

The F-86A/E/F-1 can use 120-gallon (450L) fuel tanks without maneuver restrictions, but 200-gallon (760L) fuel tanks limited maneuverability to 3G and were only used for ferry flights.

The F-86F-5/10/15/20/25/35/40 and F-86H can carry either 120-gallon (450L) fuel tanks or 200-gallon fuel tanks on the outer-wing without maneuver restrictions. Those with dual-store wings can also carry 120-gallon (450L) fuel tanks on the inner-wing stations.

The F-86D/K/L can only use 120-gallon (450L) fuel tanks.[18]

Bombs

All the fighter-bomber versions can carry two bombs of up to 1,000 lb. Early options include the M65 1,000-lb, M64 500-lb, and M57 250-lb HE bombs as well as the BLU-1750-lb napalm bomb. Later options include the BLU-27 750-lb napalm bomb, the M117 750-lb HE bomb, the Mk-83 1,000-lb HE bomb, and the Mk-82 500-lb HE bomb.[19]

The F-86A/E/F-1/5/10/15/20 have "single-store" wings with only two stations and cannot carry both bombs and fuel tanks. When carrying bombs, their combat radius is only 50 miles or 80 kilometers. Effectively, these versions are not useful as fighter-bombers.

On the other hand, the F-86F-25/30/35/40 and F-86H have "dual-store" wings and can carry bombs on the inner stations and fuel tanks on the outer stations.

The nuclear-capable F-86F-35 and F-86H versions can carry a 1,200-lb Mk 12 nuclear bomb on their left inner station and a 120-gallon fuel tank on the corresponding right station.[20]

Rockets

All the fighter-bomber versions can carry HVAR rockets, but the arrangement changes from model to model. The common thread is that each rail can carry two HVARs, one below the other.

The F-86A/E/F-1/5/10/15/20 can carry sixteen HVARs on eight rails in place of other stores. This is not a very practical arrangement, since it precludes carrying external fuel tanks and so the combat range is very short.

The F-86F-25/30/35/40 can either use the inner-wing and outer-wing stations, or replace the inner-wing stations with four rails, or replace all stations with eight rails. Thus, it can either carry sixteen HVARs without fuel tanks or eight with fuel tanks.

The F-86H has a different arrangement. It has four rails, two on each wing, between the inner-wing and outer-wing stations. If the inner stations are empty, all four rails may each carry two HVARs. If the inner stations are carrying 1000 lb or lighter bombs, the outer pair of rails may each carry a single HVAR. [21]

Starting in 1958, some F-86D/K/L aircraft were retrofitted with two missile stations inboard of the fuel tanks for the Sidewinder missile. This upgrade enhanced their air-to-air combat capability, particularly against more maneuverable or heavily armed adversaries.

ADCs

- F-86A
- F-86D
- F-86E
- F-86F-1
- F-86F-1 (6-3 Wing)
- F-86F-2
- F-86F-5
- F-86F-5 (6-3 Wing)
- F-86F-10
- F-86F-10 (6-3 Wing)
- F-86F-25
- F-86F-25 (6-3 Wing)
- F-86F-35
- F-86F-35 (6-3 Wing)
- F-86F-40
- F-86H
- F-86H (Extended 6-3 Wing)
- F-86K
- F-86K (Extended 6-3 Wing)
- F-86L

See Also

- CAC Sabre
- Canadair Sabre

Notes

1. **Sources.**
   - Baughter (Wayback)
   - Curtis, "North American F-86 Sabre", 2000, Crowood.
   - , 1951
   - F-86F Flight ManualF-86A Flight Manual, 1960
   - F-86H Flight Manual, 1956
   - F-86L SAC
   - Goebel, "North American F-86 Sabre", Air Vectors (Wayback).

- Meldrum, "The View From MiG Alley," APJ 37. This describes the GUNVAL Sabres.
- Webster, "The F-86 Sabre Family Tree", APJ 25. This has ADCs for A/E/D/F/F-25/F-40/H/K/L.
- Wikipedia on F-86
- Wikipedia on F-86D

Summary of Versions. This table gives a summary of the major differences between versions. Note that many aircraft were later upgraded with the 6-3 or extended 6-3 wing.

Version	Engine	Thrust (lb)	Wing	Notes
A	J47-GE-7	5340	Original	
E	J47-GE-13	5450	Original	All-flying tail. Radar ranging.
F-1	J47-GE-27	5970	Original	
F-5/10/15/20	J47-GE-27	5970	Original	200-gallon FTs for combat
F-5/10/15/20	J47-GE-27	5970	Original	
F-25/30	J47-GE-27	5970	Original/6-3	Dual-store wing
F-35	J47-GE-27	5970	?	Dual-store wing with Mk 12 nuclear bomb
F-40	J47-GE-27	5970	Extended 6-3	Dual-store wing
H	J73-GE	8900	6-3	Dual-store wing with FTs only on outer stations
D	J47-GE-17	5500/7650	Original	
K			Original	
L	J47-GE-33	5500/7650	Extended 6-3	

2. **F-86A.** ADC adapted from Webster. Curtis (pp. 22-23) states that radar ranging was also installed on the last 25 As, but I've not added this variant. Service from Curtis (p. 19).
3. **F-86E.** ADC adapted from Webster. J47-GE-13 engine with 5450 lb thrust (Curtis, p. 62). All-flying tail (Curtis, p. 61). Service from Curtis (p. 63).

   Radar Ranging. Webster adds radar-ranging in the F, but Baughter and Curtis (p. 62) state the APG-30 was standard in the E. I have added radar-ranging to the ADC for the E.
4. **F-86F.** ADC adapted from Webster. J47-GE-27 with 5970 lb thrust (Curtis, p. 69).
5. **F-86F-1.** ADC adapted from Webster. Curtis (pp. 69–73).
6. **F-86F-5.** ADC adapted from Webster. Goebel and Curtis (p. 72) state that the F-5 could carry 200-gallon FTs (each 1400 lb) on its wing stations. These are only rated for 1000 lb in the ADC from Webster. The station loads need increasing to 1400 lb each and the total load to 2800 lb.
7. **F-86F-10/15/20.** ADC originally from Webster. The F-5/F-10/F-15/F-20 are similar (Curtis, p. 71). Many early aircraft converted to 6-3 wing starting in September 1952 (Curtis p. 73). Since the F-25/30 was not produced until October 1952, these must have been F-20s and earlier.
8. **F-86F-2 GUNVAL.** See Meldrum and Curtis (pp. 84–87).

   Meldrum suggests gun values of 6/4/3 (5/7*) to match the F-100A in TSOH. Webster gives the same numbers for the F-86H. 100 rounds at 1400 rounds per minute corresponds to 2.0 ammunition points.

   After the initial modifications (sealing the doors into the intake and cutting holes in the gun bay doors), there were 41 engagements before another flame-out. This suggests the probability of a flame-out is about 1/100.
9. **F-86F-25/30.** ADC adapted from Webster. Early F-25 had the original wing, but later production had 6-3 wing (Curtis p. 73). Many early aircraft were converted to 6-3 wing starting in September 1952 (Curtis p. 73). The F-30 was identical to the F-25, but built at Inglewood rather than Columbus (Curtis, p. 72).
10. **F-86F-35.** ADC adapted from Webster. The F-35 could carry a Mk 12 nuclear bomb on its port wing and drop tanks on its starboard wing (Goebel and Curtis, p. 82). I assumed the Mk 12 has a weight of 1200 lb and 3.0 load points.
11. **6-3 Wing.** Many early aircraft were converted to 6-3 wing starting in September 1952 (Curtis p. 73). Since the F-25/30 was not produced until October 1952, these must have been F-20s and earlier.

    Webster writes about the 6-3 wing on the F-25:

    > "On the data card, this is reflected by reducing the minimum allowed speed at higher altitudes rather than reducing the decel for turning, since the next-lowest gameable decel amount is 0.5, which would skew the data card's power-to-decel relationship too far from reality compared to the other cards. One last thing about the 6-3 wing is that the Sabre's low-speed handling characteristics were degraded, but this applied to the landing regime and is not reflected in game terms. Adequately trained pilots had no problems with it."

    The field conversions were modifications of the wing leading edge, and so would have maintained the same configuration of load stations.
12. **F-86F-40.** ADC adapted from Webster. The F-40 had the 6-3 wing with automatic slats and 12-inch wing-tip extensions (Curtis, p. 83). Deliveries started in 1955 (Curtis, p. 83). Many earlier F models brought up to F-40 standard before being supplied to other countries through MAP (Curtis., p. 83).
13. **F-86H.** ADC originally from Webster. This variant has the 6-3 wing. Used GE J73, which was heavier but more powerful (8900 lb) (Curtis, p. 92). Entered service in 1954 (Curtis, p. 94). Versions with the extended 6-3 wing were produced in 1955, and many earlier H models also converted (Curtis, p. 95).
14. **F-86D.** ADC adapted from Webster.
15. **F-86K.** ADC originally from Webster. Similar to the F-86D (Curtis, p. 103–104), so presumably also with the original wing. Delivered to Italian AF in 1955 (Curtis, p. 105). Deliveries to Italy, Netherlands, and Germany completed in 1958. Last 45 has the extended 6-3 wing (Curtis, p. 105).
16. **F-86L.** ADC originally from Webster. Has extended 6-3 wing (Curtis, p. 56).
17. **Guns.**
    - F-86A/E/F/H-1 with six M3 .50-cal guns with 300 rounds per gun (Curtis p. 22 and p. 92). At 800 rounds per minutes, this corresponds to 11 ammunition points.
    - F-86H-5/10 with four M39 20-mm guns and 150 rounds per gun (F-86H Flight Manual). At 1500 rounds per minute, this corresponds to 3.0 ammunition points.

      The combined rate of fire is equal to the M61 and the muzzle velocity is similar, so I increase the rolls and ratings given by Webster of 6/4/3 (5/7*) to 7/5/3 (6/8*) to match the M61 in the F-104A.

      On some F-86H models, either the upper two or all four guns can be selected (F-86H Flight Manual). For this, I give rolls and ratings of 6/4/2 (5/6*) to match four 20 mm Hispano V or M3 guns, which have a similar rate of fire.
    - F-86K with four M24A1 20-mm guns with 132 rounds per gun (Wikipedia). At 720 rounds per minute, this corresponds to 5.5 ammunition points. For this, I give rolls and ratings of 6/4/2 (5/6*) to match four 20 mm Hispano V or M3 guns, which have a similar rate of fire.

18. **Fuel Tanks.**
    - F-86A could use 120-gallon (450L) FTs (Curtis, p. 36)
    - F-86A could use 206-gallon (772L) FTs for ferry missions (Curtis, p. 18-19). These tanks could be dropped, but limited the aircraft to 3G (F-86A Flight Manual, p. 126).
    - F-86D could use two 120-gallon FTs (Curtis, p. 41)
    - F-86D-25 first model with "jettisonable drop tanks" (Curtis, p. 49). I presume this means earlier models could use external FTs but not jettison them. The "definitive" version was the D-45 (Curtis, p. 50).
    - F-86F-5 was the first Sabre to be able to use the 200-gallon (760L and 1380 lb) FT (Curtis, p. 71).
    - The new pylon on the F-86F were inboard of the existing pylons for 120-gallon FT or 1000-lb BB (Curtis, p. 72).
    - F-86F-35 could carry Mk 12 20-kt nuclear bomb on inner left pylon and a FT on the other side (Curtis, p. 82).
    - F-86H could also carry 1200-lb Mk 12 nuclear bomb (Curtis, p. 93)
    - F-86L can carry only 120-gallon FTs (SAC from 1958)
19. **Bombs.** The list of bombs is from the F-86A/F/H flight manuals.
20. **Nuclear Bombs.** See Curtis (p. 82 and p. 93).
21. **Rockets.** The F-86A/E/F-1/5/10/15/20 could carry sixteen HVARs in place of other stores (F-86A Flight Manual p.). The F-86F-25/30/35/40 (F-86F Flight Manual p. 4-38) could carry four in place of the inner stores. The F-86H (F-86H Flight Manual, p. 5-4 and 5-6) has four rails for HVARs, two on each wing between the inner and outer stations. All four rails can each carry two HVARs if the inner station is unloaded, but also the outer rocket rails can each carry one HVAR provided inner stations carry 1000 lb or lighter bombs.

Photo Credit

- F-86 Sabre: J.M. Eddins Jr. (Public Domain)

F-86A Sabre

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	145
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5/0.5	1.0/1.0	1.0/1.0
HT	1.0/1.0	1.0/1.0	1.0/1.0
BT	1.0/1.5	1.5/2.0	1.5/2.0
ET	—	—	—

Automatic leading-edge slats. If speed ≤ 3.5, use higher drag.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 46	1/2 43	DT 40	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 5.5	—	—	6.5	—	0.5	—	—	—	—	EH+
VH	36–45	3.0 – 5.5	3.0 – 5.0	3.0 – 5.0	6.5	—	0.5	—	0.5	—	0.5	VH
HI	26–35	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	7.0	—	1.0	—	0.5	—	0.5	HI
MH	17–25	2.0 – 6.5	2.5 – 5.5	2.5 – 5.0	7.0	—	1.0	—	1.0	—	0.5	MH
ML	8–16	1.5 – 6.5	2.0 – 6.0	2.5 – 5.5	7.5	—	1.0	—	1.0	—	1.0	ML
LO	0–7	1.5 – 6.5	1.5 – 6.0	2.0 – 5.5	7.5	—	1.0	—	1.0	—	1.0	LO

Radar: —

ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns: Six .50 cal M3

To Hit:	6/3/0
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	4/4**

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 7
DT : ≥ 7

Weight Limit: 2,800

Station	Limit	Allowed Loads
1 and 2	1,400	FT BB
3–6 and 7–10	280	RK

Load Notes:

1. Either stations 1 and 2 or 3 to 10 may be used.
2. Stations must be loaded symmetrically.
3. May use 120 gal (450L) FTs. May also use 200 gal (760L) FTs, but only for ferry flights and not for combat.
4. May use two HVAR RKs on each of stations 3 to 10.

Notes:

1. The North American F-86A Sabre is single-engined, swept-wing day fighter. The F-86A has the early slatted wing, conventional horizontal stabilizers and elevators, and lacks radar ranging.
2. High transonic drag (HTD).
3. Hit rolls at high transonic speed or greater in HI or higher altitude bands have a +1 modifier to the hit roll due to instability generated by the conventional horizontal stabilizers and elevators.

VPs: 8/5/3/1

v3 0000000
0000-00-00T00:00:00

F-86D Sabre-Dog

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	1.5	1.0	1.0	3.0
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	205
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0/1.0	1.0/1.0	1.0/1.0
HT	1.0/1.0	1.0/1.5	1.0/1.5
BT	1.5/2.0	1.5/2.0	1.5/2.0
ET	—	—	—

Automatic leading-edge slats. If speed ≤ 3.5, use higher drag.

Speeds and Ceilings						Climb Capabilities						
Alt. Band	Conf. Ceil.	CL 50	1/2 47	DT 44	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 6.0	3.0 – 5.5	—	6.5	1.0	0.5	1.0	0.5	—	—	EH+
VH	36–45	3.0 – 6.0	3.0 – 5.5	3.0 – 5.0	6.5	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	2.5 – 6.0	2.5 – 6.0	3.0 – 5.5	7.0	1.5	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	2.0 – 6.5	2.5 – 6.0	2.5 – 6.0	7.0	1.5	1.0	1.0	0.5	1.0	0.5	MH
ML	8–16	1.5 – 6.5	2.0 – 6.5	2.5 – 6.0	7.5	2.0	1.0	1.5	1.0	1.5	1.0	ML
LO	0–7	1.5 – 7.0	2.0 – 6.5	2.0 – 6.0	7.5	2.0	1.0	1.5	1.0	1.5	1.0	LO

Radar:	APG-36
ECCM:	0
Arcs:	180+
Search:	70–10
Track:	40–8
Lock-On:	6

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	—
Bomb System:	Manual

Technology:

CC Rocket Attack

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 2,400

Station	Limit	Allowed Loads
1 and 5	1,000	FT
2 and 4	200	IRM
3	0	

Load Notes:

1. Stations must be loaded symmetrically.
2. May use 120 gal (450L) FTs.
3. From 1958, may use AIM-9B IRMs.
4. Station 3 is an internal rocket tray with 2 factors of air-to-air rockets.

Notes:

1. The North America F-86D Sabre-Dog is a single-engined, swept-wing all-weather interceptor. The F-86D is a extensively modification of the F-86A. The F-86D has the early slatted wing and an all-flying tail (which appears on all subsequent derived versions). It is armed with 24 FFARs in a ventral tray. The APG-36 radar and Hughes E-4 fire-control system allow collision-course rocket attacks.
2. High transonic drag (HTD).

VPs: 11/7/4/2

v3 0000000
0000-00-00T00:00:00

F-86E Sabre

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	145
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5/0.5	1.0/1.0	1.0/1.0
HT	1.0/1.0	1.0/1.0	1.0/1.0
BT	1.0/1.5	1.5/2.0	1.5/2.0
ET	—	—	—

Automatic leading-edge slats. If speed ≤ 3.5, use higher drag.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 46	1/2 43	DT 40	Dive Speed
EH+	46+	3.0 – 5.5	—	—	6.5
VH	36–45	3.0 – 5.5	3.0 – 5.0	3.0 – 5.0	6.5
HI	26–35	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	7.0
MH	17–25	2.0 – 6.5	2.5 – 5.5	2.5 – 5.0	7.0
ML	8–16	1.5 – 6.5	2.0 – 6.0	2.5 – 5.5	7.5
LO	0–7	1.5 – 6.5	1.5 – 6.0	2.0 – 5.5	7.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	1.0	—	0.5	—	0.5	HI
MH	—	1.0	—	1.0	—	0.5	MH
ML	—	1.0	—	1.0	—	1.0	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	APG-30
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	6

ECM:

RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M3
To Hit:	6/3/0
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/4**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 7
DT : ≥ 7

Weight Limit: 2,800

Station	Limit	Allowed Loads
1 and 2	1,400	FT BB
3–6 and 7–10	280	RK

Load Notes:

1. Either stations 1 and 2 or 3 to 10 may be used.
2. Stations must be loaded symmetrically.
3. May use 120 gal (450L) FTs. May also use 200 gal (760L) FTs, but only for ferry flights and not for combat.
4. May use two HVAR RKs on each of stations 3 to 10.

Notes:

1. The North American F-86E Sabre is single-engined, swept-wing, fighter. The F-86E is derived from the F-86A and has the early slatted wing, but an all-flying tail and radar ranging (both of which appear on all subsequent derived versions).
2. High transonic drag (HTD).

VPs: 8/5/3/1

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F-86F-1 Sabre

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	145
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5/0.5	1.0/1.0	1.0/1.0
HT	1.0/1.0	1.0/1.0	1.0/1.0
BT	1.0/1.5	1.5/2.0	1.5/2.0
ET	—	—	—

Automatic leading-edge slats. If speed ≤ 3.5, use higher drag.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 45	DT 42	Dive Speed
EH+	46+	3.0 – 5.5	—	—	6.5
VH	36–45	3.0 – 5.5	3.0 – 5.0	3.0 – 5.0	6.5
HI	26–35	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	7.0
MH	17–25	2.0 – 6.5	2.5 – 5.5	2.5 – 5.0	7.0
ML	8–16	1.5 – 6.5	2.0 – 6.0	2.5 – 5.5	7.5
LO	0–7	1.5 – 6.5	1.5 – 6.0	2.0 – 5.5	7.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	1.0	—	0.5	—	0.5	HI
MH	—	1.0	—	1.0	—	0.5	MH
ML	—	1.5	—	1.0	—	1.0	ML
LO	—	1.5	—	1.5	—	1.0	LO

Radar:	APG-30
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	6

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M3
To Hit:	6/3/0
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/4**

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3 / 1/2: < 7 / DT : ≥ 7

Weight Limit: 2,800

Station	Limit	Allowed Loads
1 and 2	1,400	FT BB
3–6 and 7–10	280	RK

Load Notes:

1. Either stations 1 and 2 or 3 to 10 may be used.
2. Stations must be loaded symmetrically.
3. May use 120 gal (450L) FTs. May also use 200 gal (760L) FTs, but only for ferry flights and not for combat.
4. May use two HVAR RKs on each of stations 3 to 10.

Notes:

1. The North American F-86F Sabre is a single-engined, swept-wing, day fighter. The F-86F-1 is derived from the F-86E, but gains a more powerful engine. This variant is the original with the early slatted wing.
2. High transonic drag (HTD).

VPs: 9/6/3/2

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F-86F-1 Sabre (6-3 Wing)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	145
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.0	1.0
BT	1.5	2.0	2.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 45	DT 42	Dive Speed
EH+	46+	2.5 – 5.5	—	—	6.5
VH	36–45	2.5 – 6.0	2.5 – 5.0	3.0 – 5.0	6.5
HI	26–35	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	7.0
MH	17–25	2.0 – 6.5	2.5 – 5.5	2.5 – 5.0	7.0
ML	8–16	2.0 – 6.5	2.0 – 6.0	2.5 – 5.5	7.5
LO	0–7	1.5 – 6.5	1.5 – 6.0	2.0 – 5.5	7.5

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	0.5	—	—	—	—	EH+
—	0.5	—	0.5	—	0.5	VH
—	1.0	—	0.5	—	0.5	HI
—	1.0	—	1.0	—	0.5	MH
—	1.5	—	1.0	—	1.0	ML
—	1.5	—	1.5	—	1.0	LO

Radar:	APG-30
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	6

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M3
To Hit:	6/3/0
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/4**

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 7
DT : ≥ 7

Weight Limit: 2,800

Station	Limit	Allowed Loads
1 and 2	1,400	FT BB
3–6 and 7–10	280	RK

Load Notes:

1. Either stations 1 and 2 or 3 to 10 may be used.
2. Stations must be loaded symmetrically.
3. May use 120 gal (450L) FTs. May also use 200 gal (760L) FTs, but only for ferry flights and not for combat.
4. May use two HVAR RKs on each of stations 3 to 10.

Notes:

1. The North American F-86F Sabre is a single-engined, swept-wing, day fighter. The F-86F-1 is derived from the F-86E, but gains a more powerful engine. This variant is modified with the unslatted 6-3 wing, which gives better maneuverability at altitude but raises the landing and stall speed.

VPs: 9/6/3/2

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F-86F-2 Sabre

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	145
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.0	1.0
BT	1.5	2.0	2.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 45	DT 42	Dive Speed
EH+	46+	2.5 – 5.5	—	—	6.5
VH	36–45	2.5 – 6.0	2.5 – 5.0	3.0 – 5.0	6.5
HI	26–35	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	7.0
MH	17–25	2.0 – 6.5	2.5 – 5.5	2.5 – 5.0	7.0
ML	8–16	2.0 – 6.5	2.0 – 6.0	2.5 – 5.5	7.5
LO	0–7	1.5 – 6.5	1.5 – 6.0	2.0 – 5.5	7.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	1.0	—	0.5	—	0.5	HI
MH	—	1.0	—	1.0	—	0.5	MH
ML	—	1.5	—	1.0	—	1.0	ML
LO	—	1.5	—	1.5	—	1.0	LO

Radar:	APG-30	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm T-160
To Hit:	6/4/3
Ammunition:	2.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/7*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 7
DT : ≥ 7

Weight Limit: 2,800

Station	Limit	Allowed Loads
1 and 2	1,400	FT BB
3–6 and 7–10	280	RK

Load Notes:

1. Either stations 1 and 2 or 3 to 10 may be used.
2. Stations must be loaded symmetrically.
3. May use 120 gal (450L) FTs. May also use 200 gal (760L) FTs, but only for ferry flights and not for combat.
4. May use two HVAR RKs on each of stations 3 to 10.

Notes:

1. The North American F-86F-2 Sabre is a single-engined, swept-wing, fighter-bomber. The F-86F-2 is derived from the F-86F-1, but with four T-160 20-mm guns in place of the .50-cal guns. These were fitted as part of the GUNVAL trials to find a more effective armament for USAF fighters. The F-86F-2 has the 6-3 wing.

VPs: 10/7/3/2

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F-86F-5 Sabre

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	145
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5/0.5	1.0/1.0	1.0/1.0
HT	1.0/1.0	1.0/1.0	1.0/1.0
BT	1.0/1.5	1.5/2.0	1.5/2.0
ET	—	—	—

Automatic leading-edge slats. If speed ≤ 3.5, use higher drag.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 48	1/2 45	DT 42	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 5.5	—	—	6.5	—	0.5	—	—	—	—	EH+
VH	36–45	3.0 – 5.5	3.0 – 5.0	3.0 – 5.0	6.5	—	0.5	—	0.5	—	0.5	VH
HI	26–35	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	7.0	—	1.0	—	0.5	—	0.5	HI
MH	17–25	2.0 – 6.5	2.5 – 5.5	2.5 – 5.0	7.0	—	1.0	—	1.0	—	0.5	MH
ML	8–16	1.5 – 6.5	2.0 – 6.0	2.5 – 5.5	7.5	—	1.5	—	1.0	—	1.0	ML
LO	0–7	1.5 – 6.5	1.5 – 6.0	2.0 – 5.5	7.5	—	1.5	—	1.5	—	1.0	LO

Radar:	APG-30
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	6

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M3
To Hit:	6/3/0
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/4**

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 2,800

Station	Limit	Allowed Loads
1 and 2	1,400	FT BB
3–6 and 7–10	280	RK

Load Notes:

1. Either stations 1 and 2 or 3 to 10 may be used.
2. Stations must be loaded symmetrically.
3. May use 120 gal (450L) or 200 gal (760L) FTs.
4. May use two HVAR RKs on each of stations 3 to 10.

Notes:

1. The North American F-86F Sabre is a single-engined, swept-wing, day fighter. The F-86F-5 is derived from the F-86E, and gains a more powerful engine and a better combat range as they can carry the larger 200 gal fuel tank in combat. This variant is the original with the early slatted wing.
2. High transonic drag (HTD).

VPs: 9/6/3/2

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F-86F-5 Sabre (6-3 Wing)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	145
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.0	1.0
BT	1.5	2.0	2.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 45	DT 42	Dive Speed
EH+	46+	2.5 – 5.5	—	—	6.5
VH	36–45	2.5 – 6.0	2.5 – 5.0	3.0 – 5.0	6.5
HI	26–35	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	7.0
MH	17–25	2.0 – 6.5	2.5 – 5.5	2.5 – 5.0	7.0
ML	8–16	2.0 – 6.5	2.0 – 6.0	2.5 – 5.5	7.5
LO	0–7	1.5 – 6.5	1.5 – 6.0	2.0 – 5.5	7.5

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	0.5	—	—	—	—	EH+
—	0.5	—	0.5	—	0.5	VH
—	1.0	—	0.5	—	0.5	HI
—	1.0	—	1.0	—	0.5	MH
—	1.5	—	1.0	—	1.0	ML
—	1.5	—	1.5	—	1.0	LO

Radar:	APG-30	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M3
To Hit:	6/3/0
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/4**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 2,800

Station	Limit	Allowed Loads
1 and 2	1,400	FT BB
3–6 and 7–10	280	RK

Load Notes:

1. Either stations 1 and 2 or 3 to 10 may be used.
2. Stations must be loaded symmetrically.
3. May use 120 gal (450L) or 200 gal (760L) FTs.
4. May use two HVAR RKs on each of stations 3 to 10.

Notes:

1. The North American F-86F Sabre is a single-engined, swept-wing, day fighter. The F-86F-5 is derived from the F-86E, and gains a more powerful engine and a better combat range as they can carry the larger 200 gal fuel tank in combat. This variant is modified with the unslatted 6-3 wing, which gives better maneuverability at altitude but raises the landing and stall speed.

VPs: 9/6/3/2

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F-86F-10 Sabre

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	145
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5/0.5	1.0/1.0	1.0/1.0
HT	1.0/1.0	1.0/1.0	1.0/1.0
BT	1.0/1.5	1.5/2.0	1.5/2.0
ET	—	—	—

Automatic leading-edge slats. If speed ≤ 3.5, use higher drag.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 45	DT 42	Dive Speed
EH+	46+	3.0 – 5.5	—	—	6.5
VH	36–45	3.0 – 5.5	3.0 – 5.0	3.0 – 5.0	6.5
HI	26–35	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	7.0
MH	17–25	2.0 – 6.5	2.5 – 5.5	2.5 – 5.0	7.0
ML	8–16	1.5 – 6.5	2.0 – 6.0	2.5 – 5.5	7.5
LO	0–7	1.5 – 6.5	1.5 – 6.0	2.0 – 5.5	7.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	0.5	VH
HI	—	1.0	—	0.5	—	0.5	HI
MH	—	1.0	—	1.0	—	0.5	MH
ML	—	1.5	—	1.0	—	1.0	ML
LO	—	1.5	—	1.5	—	1.0	LO

Radar:	APG-30
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	7

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M3
To Hit:	6/3/0
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/4**

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 7
DT : ≥ 7

Weight Limit: 2,800

Station	Limit	Allowed Loads
1 and 2	1,400	FT BB
3–6 and 7–10	280	RK

Load Notes:

1. Either stations 1 and 2 or 3 to 10 may be used.
2. Stations must be loaded symmetrically.
3. May use 120 gal (450L) or 200 gal (760L) FTs.
4. May use two HVAR RKs on each of stations 3 to 10.

Notes:

1. The North American F-86F-10 Sabre is a single-engined, swept-wing, fighter-bomber. The F-86F-10 is derived from the F-86F-5, but has the improved A-4 gunsight. The F-86F-15/20 are similar. This variant is the original, with the early slatted wing.
2. High transonic drag (HTD).

VPs: 9/6/3/2

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F-86F-10 Sabre (6-3 Wing)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	145
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.0	1.0
BT	1.5	2.0	2.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 45	DT 42	Dive Speed
EH+	46+	2.5 – 5.5	—	—	6.5
VH	36–45	2.5 – 6.0	2.5 – 5.0	3.0 – 5.0	6.5
HI	26–35	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	7.0
MH	17–25	2.0 – 6.5	2.5 – 5.5	2.5 – 5.0	7.0
ML	8–16	2.0 – 6.5	2.0 – 6.0	2.5 – 5.5	7.5
LO	0–7	1.5 – 6.5	1.5 – 6.0	2.0 – 5.5	7.5

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	0.5	—	—	—	—	EH+
—	0.5	—	0.5	—	0.5	VH
—	1.0	—	0.5	—	0.5	HI
—	1.0	—	1.0	—	0.5	MH
—	1.5	—	1.0	—	1.0	ML
—	1.5	—	1.5	—	1.0	LO

Radar:	APG-30
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	7

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M3
To Hit:	6/3/0
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/4**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 2,800

Station	Limit	Allowed Loads
1 and 2	1,400	FT BB
3–6 and 7–10	280	RK

Load Notes:

1. Either stations 1 and 2 or 3 to 10 may be used.
2. Stations must be loaded symmetrically.
3. May use 120 gal (450L) or 200 gal (760L) FTs.
4. May use two HVAR RKs on each of stations 3 to 10.

Notes:

1. The North American F-86F-10 Sabre is a single-engined, swept-wing, fighter-bomber. The F-86F-10 is derived from the F-86F-5, but has the improved A-4 gunsight. The F-86F-15/20 are similar. This variant is modified with the unslatted 6-3 wing, which gives better maneuverability at altitude but raises the landing and stall speed.

VPs: 9/6/3/2

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F-86F-25 Sabre

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	145
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5/0.5	1.0/1.0	1.0/1.0
HT	1.0/1.0	1.0/1.0	1.0/1.0
BT	1.0/1.5	1.5/2.0	1.5/2.0
ET	—	—	—

Automatic leading-edge slats. If speed ≤ 3.5, use higher drag.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 48	1/2 45	DT 42	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 5.5	—	—	6.5	—	0.5	—	—	—	—	EH+
VH	36–45	3.0 – 5.5	3.0 – 5.0	3.0 – 5.0	6.5	—	0.5	—	0.5	—	0.5	VH
HI	26–35	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	7.0	—	1.0	—	0.5	—	0.5	HI
MH	17–25	2.0 – 6.5	2.5 – 5.5	2.5 – 5.0	7.0	—	1.0	—	1.0	—	0.5	MH
ML	8–16	1.5 – 6.5	2.0 – 6.0	2.5 – 5.5	7.5	—	1.5	—	1.0	—	1.0	ML
LO	0–7	1.5 – 6.5	1.5 – 6.0	2.0 – 5.5	7.5	—	1.5	—	1.5	—	1.0	LO

Radar:	APG-30	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M3
To Hit:	6/3/0
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/4**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 7
DT : ≥ 7

Weight Limit: 4,800

Station	Limit	Allowed Loads
1 and 4	1,400	FT
2 and 3	1,000	FT BB IRM
5–6 and 11–12	280	RK
7–8 and 9–10	280	RK

Load Notes:

1. Either stations 1 to 4, or stations 1, 4, and 7 to 10, or stations 5 to 12 may be used.
2. Stations must be loaded symmetrically.
3. May use 200 gal (760L) FTs on stations 1 and 4 and 120 gal (450L) FTs on stations 2 and 3.
4. May use two HVAR RKs on each of stations 5 to 12.
5. From 1958, may use AIM-9B IRMs.

Notes:

1. The North American F-86F-25 Sabre is a single-engined, swept-wing, fighter-bomber. The F-86F-25 is derived from the F-86F-15/20, but has a second pair of weapon stations on the inner wing, allowing the aircraft to carry bombs or rockets in addition to a pair of 200 gal fuel tanks and giving it for the first time a useful range when used as a fighter-bomber. The F-86F-30 is similar. This variant is the original, with the early slatted wing.
2. High transonic drag (HTD).

VPs: 9/6/3/2

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F-86F-25 Sabre (6-3 Wing)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	145
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.0	1.0
BT	1.5	2.0	2.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 45	DT 42	Dive Speed
EH+	46+	2.5 – 5.5	—	—	6.5
VH	36–45	2.5 – 6.0	2.5 – 5.0	3.0 – 5.0	6.5
HI	26–35	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	7.0
MH	17–25	2.0 – 6.5	2.5 – 5.5	2.5 – 5.0	7.0
ML	8–16	2.0 – 6.5	2.0 – 6.0	2.5 – 5.5	7.5
LO	0–7	1.5 – 6.5	1.5 – 6.0	2.0 – 5.5	7.5

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	0.5	—	—	—	—	EH+
—	0.5	—	0.5	—	0.5	VH
—	1.0	—	0.5	—	0.5	HI
—	1.0	—	1.0	—	0.5	MH
—	1.5	—	1.0	—	1.0	ML
—	1.5	—	1.5	—	1.0	LO

Radar:	APG-30	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M3
To Hit:	6/3/0
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/4**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 7
DT : ≥ 7

Weight Limit: 4,800

Station	Limit	Allowed Loads
1 and 4	1,400	FT
2 and 3	1,000	FT BB IRM
5–6 and 11–12	280	RK
7–8 and 9–10	280	RK

Load Notes:

1. Either stations 1 to 4, or stations 1, 4, and 7 to 10, or stations 5 to 12 may be used.
2. Stations must be loaded symmetrically.
3. May use 200 gal (760L) FTs on stations 1 and 4 and 120 gal (450L) FTs on stations 2 and 3.
4. May use two HVAR RKs on each of stations 5 to 12.
5. From 1958, may use AIM-9B IRMs.

Notes:

1. The North American F-86F-25 Sabre is a single-engined, swept-wing, fighter-bomber. The F-86F-25 is derived from the F-86F-15/20, but has a second pair of weapon stations on the inner wing, allowing the aircraft to carry bombs or rockets in addition to a pair of 200 gal fuel tanks and giving it for the first time a useful range when used as a fighter-bomber. The F-86F-30 is similar. This variant is a late-production or modified aircraft with the unslatted 6-3 wing, which gives better maneuverability at altitude but raises the landing and stall speed.

VPs: 9/6/3/2

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F-86F-35 Sabre

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	145
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5/0.5	1.0/1.0	1.0/1.0
HT	1.0/1.0	1.0/1.0	1.0/1.0
BT	1.0/1.5	1.5/2.0	1.5/2.0
ET	—	—	—

Automatic leading-edge slats. If speed ≤ 3.5, use higher drag.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 48	1/2 45	DT 42	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 5.5	—	—	6.5	—	0.5	—	—	—	—	EH+
VH	36–45	3.0 – 5.5	3.0 – 5.0	3.0 – 5.0	6.5	—	0.5	—	0.5	—	0.5	VH
HI	26–35	2.5 – 6.0	3.0 – 5.5	3.0 – 5.0	7.0	—	1.0	—	0.5	—	0.5	HI
MH	17–25	2.0 – 6.5	2.5 – 5.5	2.5 – 5.0	7.0	—	1.0	—	1.0	—	0.5	MH
ML	8–16	1.5 – 6.5	2.0 – 6.0	2.5 – 5.5	7.5	—	1.5	—	1.0	—	1.0	ML
LO	0–7	1.5 – 6.5	1.5 – 6.0	2.0 – 5.5	7.5	—	1.5	—	1.5	—	1.0	LO

Radar:	APG-30	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M3
To Hit:	6/3/0
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/4**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 7
DT : ≥ 7

Weight Limit: 5,000

Station	Limit	Allowed Loads
1 and 4	1,400	FT
2	1,000	FT BB IRM
3	1,200	FT BB IRM
5–6 and 11–12	280	RK
7–8 and 9–10	280	RK

Load Notes:

1. Either stations 1 to 4, or stations 1, 4, and 7 to 10, or stations 5 to 12 may be used.
2. Stations must be loaded symmetrically, with the exception that a Mk 12 nuclear bomb (weight 1200 lb and load 3.0) may be carried on station 3 (left) with a 120 gal (450L) FT on station 2 (right).
3. May use 200 gal (760L) FTs on stations 1 and 4 and 120 gal (450L) FTs on stations 2 and 3.
4. May use two HVAR RKs on each of stations 5 to 12.
5. From 1958, may use AIM-9B IRMs.

Notes:

1. The North American F-86F-35 Sabre is a single-engined, swept-wing, fighter-bomber, and tactical nuclear bomber. The F-86F-35 is similar to the F-86F-25 but the inner left weapon station is reinforced to allow carriage of a Mk 12 nuclear bomb and the aircraft is equipped with the LABS system to allow toss bombing. This variant is the original, with the early slatted wing.
2. High transonic drag (HTD).

VPs: 10/7/3/2

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F-86F-35 Sabre (6-3 Wing)

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	145
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.0	1.0
BT	1.5	2.0	2.0
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 48	1/2 45	DT 42	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	2.5 – 5.5	—	—	6.5	—	0.5	—	—	—	—	EH+
VH	36–45	2.5 – 6.0	2.5 – 5.0	3.0 – 5.0	6.5	—	0.5	—	0.5	—	0.5	VH
HI	26–35	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	7.0	—	1.0	—	0.5	—	0.5	HI
MH	17–25	2.0 – 6.5	2.5 – 5.5	2.5 – 5.0	7.0	—	1.0	—	1.0	—	0.5	MH
ML	8–16	2.0 – 6.5	2.0 – 6.0	2.5 – 5.5	7.5	—	1.5	—	1.0	—	1.0	ML
LO	0–7	1.5 – 6.5	1.5 – 6.0	2.0 – 5.5	7.5	—	1.5	—	1.5	—	1.0	LO

Radar:	APG-30	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M3
To Hit:	6/3/0
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/4**

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3 / 1/2: < 7 / DT : ≥ 7

Weight Limit: 5,000

Station	Limit	Allowed Loads
1 and 4	1,400	FT
2	1,000	FT BB IRM
3	1,200	FT BB IRM
5–6 and 11–12	280	RK
7–8 and 9–10	280	RK

Notes:

1. The North American F-86F-35 Sabre is a single-engined, swept-wing, fighter-bomber, and tactical nuclear bomber. The F-86F-35 is similar to the F-86F-25 but the inner left weapon station is reinforced to allow carriage of a Mk 12 nuclear bomb and the aircraft is equipped with the LABS system to allow toss bombing. This variant is fitted with the unslatted 6-3 wing, which gives better maneuverability at altitude but raises the landing and stall speed.

Load Notes:

1. Either stations 1 to 4, or stations 1, 4, and 7 to 10, or stations 5 to 12 may be used.
2. Stations must be loaded symmetrically, with the exception that a Mk 12 nuclear bomb (weight 1200 lb and load 3.0) may be carried on station 3 (left) with a 120 gal (450L) FT on station 2 (right).
3. May use 200 gal (760L) FTs on stations 1 and 4 and 120 gal (450L) FTs on stations 2 and 3.
4. May use two HVAR RKs on each of stations 5 to 12.
5. From 1958, may use AIM-9B IRMs.

VPs: 10/7/3/2

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F-86F-40 Sabre

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	145
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5/0.5	0.5/0.5	1.0/1.0
HT	1.0/1.0	1.0/1.0	1.0/1.0
BT	1.0/1.5	1.0/1.5	1.5/2.0
ET	—	—	—

Automatic leading-edge slats. If speed ≤ 3.5, use higher drag.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 50	1/2 48	DT 44	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	2.5 – 5.5	3.0 – 5.0	—	6.5	—	0.5	—	0.5	—	—	EH+
VH	36–45	2.5 – 6.0	2.5 – 5.0	2.5 – 5.0	6.5	—	1.0	—	0.5	—	0.5	VH
HI	26–35	2.0 – 6.0	2.0 – 5.5	2.5 – 5.0	7.0	—	1.0	—	1.0	—	0.5	HI
MH	17–25	2.0 – 6.5	2.0 – 5.5	2.0 – 5.0	7.0	—	1.5	—	1.0	—	1.0	MH
ML	8–16	1.5 – 6.5	2.0 – 6.0	2.0 – 5.5	7.5	—	1.5	—	1.0	—	1.0	ML
LO	0–7	1.5 – 6.5	1.5 – 6.0	1.5 – 5.5	7.5	—	1.5	—	1.5	—	1.0	LO

Radar:	APG-30	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	Six .50 cal M3
To Hit:	6/3/0
Ammunition:	7.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/4**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 7
DT : ≥ 7

Weight Limit: 4,800

Station	Limit	Allowed Loads
1 and 4	1,400	FT
2 and 3	1,000	FT BB IRM
5–6 and 11–12	280	RK
7–8 and 9–10	280	RK

Load Notes:

1. Either stations 1 to 4, or stations 1, 4, and 7 to 10, or stations 5 to 12 may be used.
2. Stations must be loaded symmetrically.
3. May use 200 gal (760L) FTs on stations 1 and 4 and 120 gal (450L) FTs on stations 2 and 3.
4. May use two HVAR RKs on each of stations 5 to 12.
5. From 1958, may use AIM-9B IRMs.

Notes:

1. The North American F-86F-40 Sabre is a single-engined, swept-wing, fighter-bomber. The F-86F-40 is derived from and is similar to the F-86F-25, but has the slatted, extended 6-3 wing, which gives better maneuverability at altitude and lowers the landing and stall speed.

VPs: 10/7/3/2

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F-86H Sabre

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.5	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	180
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.0	1.0	1.0
BT	1.5	1.5	1.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 51	1/2 46	DT 42	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	2.5 – 5.5	3.0 – 5.0	—	6.5	—	0.5	—	0.5	—	—	EH+
VH	36–45	2.5 – 5.5	2.5 – 5.0	3.0 – 5.0	6.5	—	1.0	—	1.0	—	0.5	VH
HI	26–35	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	7.0	—	1.5	—	1.0	—	0.5	HI
MH	17–25	2.0 – 6.5	2.5 – 5.5	2.5 – 5.5	7.0	—	1.5	—	1.5	—	1.0	MH
ML	8–16	2.0 – 6.5	2.0 – 6.0	2.5 – 5.5	7.5	—	2.0	—	1.5	—	1.0	ML
LO	0–7	1.5 – 7.0	2.0 – 6.5	2.5 – 6.0	7.5	—	2.5	—	2.0	—	1.5	LO

Radar:	APG-30
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	7

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M39
To Hit:	7/5/3
Ammunition:	3.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	6/8*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 3 / 1/2: < 7 / DT : ≥ 7

Weight Limit: 5,200

Station	Limit	Allowed Loads
1 and 8	1,400	FT
2 and 7	280	RK
3 and 6	280	RK
4	1,000	FT BB IRM
5	1,200	FT BB IRM

Notes:

1. The North American F-86H Sabre is a single-engined, swept-wing, fighter-bomber. The F-86H is derived from the F-86F-35, but has a more powerful engine and four 20 mm M39 guns in place of the original six .50 cal guns. This variant is the original with the unslatted 6-3 wing.
2. May use only the upper two guns with hit rolls of 6/4/2 and damage ratings of 5/6*.

Load Notes:

1. Stations must be loaded symmetrically, with the exception that a Mk 12 nuclear bomb (weight 1200 lb and load 3.0) may be carried on station 5 (left) with a 120 gal (450L) FT on station 4 (right).
2. May use 200 gal (760L) FTs on stations 1 and 4 and 120 gal (450L) FTs on stations 2 and 3.
3. May use two HVAR RKs on each of stations 2, 3, 6, and 7 if stations 4 and 5 are unloaded.
4. May use one HVAR on each of stations 2 and 7 if stations 4 and 4 are carrying 1000 lb or lighter bombs.
5. From 1958, may use AIM-9B IRMs.

VPs: 12/8/4/2

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F-86H Sabre (Extended 6-3 Wing)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.5	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	180
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0/1.0	1.0/1.0	1.0/1.0
HT	1.0/1.0	1.0/1.0	1.0/1.5
BT	1.5/2.0	1.5/2.0	1.5/2.0
ET	—	—	—

Automatic leading-edge slats. If speed ≤ 3.5, use higher drag.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 51	1/2 46	DT 42	Dive Speed
EH+	46+	2.5 – 5.5	3.0 – 5.0	—	6.5
VH	36–45	2.5 – 5.5	2.5 – 5.0	3.0 – 5.0	6.5
HI	26–35	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	7.0
MH	17–25	2.0 – 6.5	2.5 – 5.5	2.5 – 5.5	7.0
ML	8–16	2.0 – 6.5	2.0 – 6.0	2.5 – 5.5	7.5
LO	0–7	1.5 – 7.0	1.5 – 6.5	2.0 – 6.0	7.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	0.5	—	—	EH+
VH	—	1.0	—	1.0	—	0.5	VH
HI	—	1.5	—	1.0	—	0.5	HI
MH	—	1.5	—	1.5	—	1.0	MH
ML	—	2.0	—	1.5	—	1.0	ML
LO	—	2.5	—	2.0	—	1.5	LO

Radar:	APG-30	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M39
To Hit:	7/5/3
Ammunition:	3.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	6/8*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 5,200

Station	Limit	Allowed Loads
1 and 8	1,400	FT
2 and 7	280	RK
3 and 6	280	RK
4	1,000	FT BB IRM
5	1,200	FT BB IRM

Load Notes:

1. Stations must be loaded symmetrically, with the exception that a Mk 12 nuclear bomb (weight 1200 lb and load 3.0) may be carried on station 5 (left) with a 120 gal (450L) FT on station 4 (right).
2. May use 200 gal (760L) FTs on stations 1 and 4 and 120 gal (450L) FTs on stations 2 and 3.
3. May use two HVAR RKs on each of stations 2, 3, 6, and 7 if stations 4 and 5 are unloaded.
4. May use one HVAR on each of stations 2 and 7 if stations 4 and 4 are carrying 1000 lb or lighter bombs.
5. From 1958, may use AIM-9B IRMs.

Notes:

1. The North American F-86H Sabre is a single-engined, swept-wing, fighter-bomber. The F-86H is derived from the F-86F-35, but has a more powerful engine and four 20 mm M39 guns in place of the original six .50 cal guns. This variant is refitted with the slatted, extended 6-3 wing.
2. May use only the upper two guns with hit rolls of 6/4/2 and damage ratings of 5/6*.

VPs: 12/8/4/2

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F-86K Sabre-Dog

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	1.5	1.0	1.0	3.0
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	205
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0/1.0	1.0/1.0	1.0/1.0
HT	1.0/1.0	1.0/1.5	1.0/1.5
BT	1.5/2.0	1.5/2.0	1.5/2.0
ET	—	—	—

Automatic leading-edge slats. If speed ≤ 3.5, use higher drag.

Speeds and Ceilings						Climb Capabilities						
Alt. Band	Conf. Ceil.	CL 50	1/2 47	DT 44	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 6.0	3.0 – 5.5	—	6.5	1.0	0.5	1.0	0.5	—	—	EH+
VH	36–45	3.0 – 6.0	3.0 – 5.5	3.0 – 5.0	6.5	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	2.5 – 6.0	2.5 – 6.0	3.0 – 5.5	7.0	1.5	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	2.0 – 6.5	2.5 – 6.0	2.5 – 6.0	7.0	1.5	1.0	1.0	0.5	1.0	0.5	MH
ML	8–16	1.5 – 6.5	2.0 – 6.5	2.5 – 6.0	7.5	2.0	1.0	1.5	1.0	1.5	1.0	ML
LO	0–7	1.5 – 7.0	2.0 – 6.5	2.0 – 6.0	7.5	2.0	1.0	1.5	1.0	1.5	1.0	LO

Radar:	APG-36	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	70–10	DJM:	—
Track:	40–8	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M24
To Hit:	6/4/2
Ammunition:	5.5
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 2,400

Station	Limit	Allowed Loads
1 and 4	1,000	FT
2 and 3	200	IRM

Load Notes:

1. Stations must be loaded symmetrically.
2. May use 120 gal (450L) FTs.
3. From 1958, may use AIM-9B IRMs.

Notes:

1. The North American F-86K Sabre-Dog is a single-engined, swept-wing, all-weather interceptor. The F-86K version is a derivative of the F-86D and has four 20 mm Mk24 cannons in place of the rocket armament of the earlier version and the simpler MG-4 fire-control system. This variant is the original with the early slatted wing.
2. High transonic drag (HTD).

VPs: 11/7/4/2

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F-86K Sabre-Dog (Extended 6-3 Wing)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	1.5	1.0	1.0	3.0
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	205
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.0	1.0	1.0
BT	1.5	1.5	1.5
ET	—	—	—

Speeds and Ceilings						Climb Capabilities						
Alt. Band	Conf. Ceil.	CL 50	1/2 47	DT 44	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	2.5 – 6.0	2.5 – 5.5	—	6.5	1.0	0.5	1.0	0.5	—	—	EH+
VH	36–45	2.5 – 6.0	2.5 – 5.5	2.5 – 5.0	6.5	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	2.0 – 6.0	2.5 – 6.0	2.5 – 5.5	7.0	1.5	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	2.0 – 6.5	2.5 – 6.0	2.5 – 6.0	7.0	1.5	1.0	1.0	0.5	1.0	0.5	MH
ML	8–16	1.5 – 6.5	2.0 – 6.5	2.5 – 6.0	7.5	2.0	1.0	1.5	1.0	1.5	1.0	ML
LO	0–7	1.5 – 7.0	2.0 – 6.5	2.0 – 6.0	7.5	2.0	1.0	1.5	1.0	1.5	1.0	LO

Radar:	APG-36	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	70–10	DJM:	—
Track:	40–8	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M24
To Hit:	6/4/2
Ammunition:	5.5
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 2,400

Station	Limit	Allowed Loads
1 and 4	1,000	FT
2 and 3	200	IRM

Load Notes:

1. Stations must be loaded symmetrically.
2. May use 120 gal (450L) FTs.
3. From 1958, may use AIM-9B IRMs.

Notes:

1. The North American F-86K Sabre-Dog is a single-engined, swept-wing, all-weather interceptor. The F-86K version is a derivative of the F-86D and has four 20 mm Mk24 cannons in place of the rocket armament of the earlier version and the simpler MG-4 fire-control system. This variant has the slatted, extended 6-3 wing.

VPs: 12/8/4/2

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F-86L Sabre-Dog

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	1.5	1.0	1.0	3.0
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	205
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.0	1.0	1.0
BT	1.5	1.5	1.5
ET	—	—	—

Speeds and Ceilings						Climb Capabilities						
Alt. Band	Conf. Ceil.	CL 50	1/2 47	DT 44	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	2.5 – 6.0	2.5 – 5.5	—	6.5	1.0	0.5	1.0	0.5	—	—	EH+
VH	36–45	2.5 – 6.0	2.5 – 5.5	2.5 – 5.0	6.5	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	2.0 – 6.0	2.5 – 6.0	2.5 – 5.5	7.0	1.5	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	2.0 – 6.5	2.5 – 6.0	2.5 – 6.0	7.0	1.5	1.0	1.0	0.5	1.0	0.5	MH
ML	8–16	1.5 – 6.5	2.0 – 6.5	2.5 – 6.0	7.5	2.0	1.0	1.5	1.0	1.5	1.0	ML
LO	0–7	1.5 – 7.0	2.0 – 6.5	2.0 – 6.0	7.5	2.0	1.0	1.5	1.0	1.5	1.0	LO

Radar:	APG-36	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	70–10	DJM:	—
Track:	40–8	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	—
Bomb System:	Manual

Technology:

CC Rocket Attack

Load Point Limits: CL : < 3 / 1/2: < 7 / DT : ≥ 7

Weight Limit: 2,400

Station	Limit	Allowed Loads
1 and 5	1,000	FT
2 and 4	200	IRM
3	0	

Load Notes:

1. Stations must be loaded symmetrically.
2. May use 120 gal (450L) FTs.
3. From 1958, may use AIM-9B IRMs.
4. Station 3 is an internal rocket tray with 2 factors of air-to-air rockets.

Notes:

1. The North American F-86L Sabre-Dog is a single-engined, swept-wing, all-weather interceptor. It is armed with 24 FFARs in a ventral tray. The APG-36 radar and Hughes E-4 fire-control system allow collision-course rocket attacks. The F-86L is a derivative of the F-86D and has the slatted, extended 6-3 wing and a SAGE data-link.

VPs: 13/9/4/2

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Lockheed F-94

- F-94A
- F-94B

See Also

- Lockheed F-80/T-33 Shooting Star

F-94A

Crew: Pilot and Radar Officer

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	1.0	1.0	1.0	2.0
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	103
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	1.0
HT	1.0	1.0	1.5
BT	1.5	1.5	2.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 47	1/2 42	DT 37	Dive Speed
EH+	46+	2.5 – 4.5	—	—	6.5
VH	36–45	2.5 – 5.0	2.5 – 5.0	2.5 – 4.5	7.0
HI	26–35	2.5 – 5.5	2.5 – 5.0	2.5 – 4.0	7.0
MH	17–25	2.0 – 5.5	2.0 – 5.5	2.5 – 4.5	7.0
ML	8–16	2.0 – 6.0	2.0 – 5.5	2.0 – 5.0	7.5
LO	0–7	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	7.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	0.50	—	—	—	—	—	EH+
VH	0.50	0.25	0.50	—	0.50	—	VH
HI	1.00	0.50	0.50	0.25	0.50	0.25	HI
MH	1.00	0.50	1.00	0.50	0.50	0.25	MH
ML	1.00	0.50	1.00	0.50	1.00	0.50	ML
LO	1.50	1.00	1.50	1.00	1.00	0.50	LO

Radar:	APG-33	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	60–10	DJM:	—
Track:	30–8	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	Four .50 cal M3
To Hit:	6/3/0
Ammunition:	8.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	3/3**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5
1/2: < 8
DT : ≥ 8

Weight Limit: 2,200

Station	Limit	Allowed Loads
1 and 2	1,100	FT

Load Notes:

1. The wing-tip stations 1 and 2 usually carry 165 gal (600L) FTs, each with a weight of 1100, 3.0/2.0 load points, and 50 fuel points.

Notes:

1. The Lockheed F-94A is an all-weather interceptor. It is derived from the T-33A trainer, but adds the APG-33 radar and the Hughes E-1 fire-control system. It is armed with four .50-cal machine guns, and the fire-control system allows them to be fired under radar control.
2. High transonic drag (HTD).
3. The E1 all-weather fire-control system allows the guns to be fired on targets that are unsighted but tracked by radar if the radar-ranging attempt succeeds.

VPs: 10/7/3/2

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F-94B

Crew: Pilot and Radar Officer

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	1.0	1.0	1.0	2.0
M	1.0	0.5	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	103
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	1.0
HT	1.0	1.0	1.5
BT	1.5	1.5	2.0
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 47	1/2 42	DT 37	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	2.5 – 4.5	—	—	6.5	0.50	—	—	—	—	—	EH+
VH	36–45	2.5 – 5.0	2.5 – 5.0	2.5 – 4.5	7.0	0.50	0.25	0.50	—	0.50	—	VH
HI	26–35	2.5 – 5.5	2.5 – 5.0	2.5 – 4.0	7.0	1.00	0.50	0.50	0.25	0.50	0.25	HI
MH	17–25	2.0 – 5.5	2.0 – 5.5	2.5 – 4.5	7.0	1.00	0.50	1.00	0.50	0.50	0.25	MH
ML	8–16	2.0 – 6.0	2.0 – 5.5	2.0 – 5.0	7.5	1.00	0.50	1.00	0.50	1.00	0.50	ML
LO	0–7	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	7.5	1.50	1.00	1.50	1.00	1.00	0.50	LO

Radar:	APG-33	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	60–10	DJM:	—
Track:	30–8	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	Four .50 cal M3
To Hit:	6/3/0
Ammunition:	8.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	3/3**
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5 / 1/2: < 8 / DT : ≥ 8

Weight Limit: 3,600

Station	Limit	Allowed Loads
1 and 2	1,800	FT

Load Notes:

1. The wing-tip stations 1 and 2 usually carry 230 gal (850L) FTs, each with a weight of 1800, 3.5/2.5 load points, and 75 fuel points.

Notes:

1. The Lockheed F-94B is an all-weather interceptor. It is a development of the F-94A and features a more reliable engine and modifications to the cockpit. It retains the APG-33 radar and the Hughes E-1 fire-control system. It is armed with four .50 cal machine guns, and the fire-control system allows them to be fired under radar control.
2. High transonic drag (HTD).
3. The E1 all-weather fire-control system allows the guns to be fired on targets that are unsighted but tracked by radar if the radar-ranging attempt succeeds.

VPs: 10/7/3/2

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Northrup F-89 Scorpion

- F-89D
- F-89H
- F-89J (Rocket-and-Fuel Pods)
- F-89J (Fuel-Only Pods)

F-89D Scorpion

Crew: Pilot and Radar Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	1.0	1.0	1.0	6.0
M	1.0	1.0	0.5	3.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

If not using AB, reduce maximum speeds by 0.5.

Cruise Spd. CL:	4.5	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	575
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.0
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	1.0
HT	1.0	1.0	1.5
BT	1.5	1.5	1.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 49	1/2 45	DT 40	Dive Speed
EH+	46+	3.0 – 5.0	—	—	6.0
VH	36–45	3.0 – 5.5	3.0 – 5.0	3.0 – 4.5	6.0
HI	26–35	2.5 – 6.0	2.5 – 5.5	3.0 – 5.0	6.5
MH	17–25	2.5 – 6.0	2.5 – 5.5	2.5 – 5.0	6.5
ML	8–16	2.0 – 6.5	2.0 – 6.0	2.0 – 5.5	7.0
LO	0–7	1.5 – 6.5	1.5 – 6.0	2.0 – 5.5	7.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	0.50	0.25	—	—	—	—	EH+
VH	0.50	0.25	0.50	0.25	0.50	0.25	VH
HI	0.50	0.25	0.50	0.25	0.50	0.25	HI
MH	1.00	0.50	1.00	0.50	1.00	0.50	MH
ML	1.00	0.50	1.00	0.50	1.00	0.50	ML
LO	1.00	0.50	1.00	0.50	1.00	0.50	LO

Radar:	APG-40	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	100–20	DJM:	—
Track:	40–8	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	—
Bomb System:	Manual

Technology:

CC Rocket Attack

Load Point Limits: CL : < 5, 1/2: < 9, DT : ≥ 9

Weight Limit: 4,400

Station	Limit	Allowed Loads
1 and 4	0	
2 and 3	1,600	BB FT

Load Notes:

1. Stations 1 and 8 are fixed wing-tip pods for rockets and fuel. Each can carry 4.5 factors of air-to-air rockets, giving a total of 9 factors with both pods. The pod fuel is included in the internal fuel.

Notes:

1. The Northrop F-89D Scorpion is an all-weather interceptor.
2. High transonic drag (HTD).
3. The E-6 fire-control system provides CC Rocket Attack technology.

VPs: 12/8/4/2

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F-89H Scorpion

Crew: Pilot and Radar Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	1.0	1.0	1.0	6.0
M	1.0	1.0	0.5	3.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

If not using AB, reduce maximum speeds by 0.5.

Cruise Spd. CL:	4.5	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	575
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.0
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	1.0
HT	1.0	1.0	1.5
BT	1.5	1.5	1.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 49	1/2 45	DT 40	Dive Speed
EH+	46+	3.0 – 5.0	—	—	6.0
VH	36–45	3.0 – 5.5	3.0 – 5.0	3.0 – 4.5	6.0
HI	26–35	2.5 – 6.0	2.5 – 5.5	3.0 – 5.0	6.5
MH	17–25	2.5 – 6.0	2.5 – 5.5	2.5 – 5.0	6.5
ML	8–16	2.0 – 6.5	2.0 – 6.0	2.0 – 5.5	7.0
LO	0–7	1.5 – 6.5	1.5 – 6.0	2.0 – 5.5	7.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	0.50	0.25	—	—	—	—	EH+
VH	0.50	0.25	0.50	0.25	0.50	0.25	VH
HI	0.50	0.25	0.50	0.25	0.50	0.25	HI
MH	1.00	0.50	1.00	0.50	1.00	0.50	MH
ML	1.00	0.50	1.00	0.50	1.00	0.50	ML
LO	1.00	0.50	1.00	0.50	1.00	0.50	LO

Radar:	APG-40	**ECM:**	IFF
ECCM:	1	RWR:	—
Arcs:	180+	DDS:	—
Search:	120–20	DJM:	—
Track:	60–10	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	—
Bomb System:	Manual

Technology:

CC Rocket Attack

Load Point Limits: CL : < 5 / 1/2: < 9 / DT : ≥ 9

Weight Limit: 4,400

Station	Limit	Allowed Loads
1 and 4	390	IRM RHM
2 and 4	1,600	BB FT

Load Notes:

1. Stations 1 and 4 are fixed wing-tip pods for rockets, missiles, and fuel. Each can carry 2 factors of air-to-air rockets, giving a total of 4 factors for with pods. Each can also carry three RHM/IRM. The pod fuel is included in the internal fuel.
2. May use GAR-1/-1D RHMs and GAR-2/-2A IRMs. Typically carries three RHMs in one pod and three IRMs in the other.

Notes:

1.
2. High transonic drag (HTD).
3. The E-9 fire-control system provides CC Rocket Attack technology.

VPs: 14/9/5/2

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F-89J Scorpion (Rocket-and-Fuel Pods)

Crew: Pilot and Radar Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	1.0	1.0	1.0	6.0
M	1.0	1.0	0.5	3.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

If not using AB, reduce maximum speeds by 0.5.

Cruise Spd. CL:	4.5	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	575
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.0
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	1.0
HT	1.0	1.0	1.5
BT	1.5	1.5	1.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 49	1/2 45	DT 40	Dive Speed
EH+	46+	3.0 – 5.0	—	—	6.0
VH	36–45	3.0 – 5.5	3.0 – 5.0	3.0 – 4.5	6.0
HI	26–35	2.5 – 6.0	2.5 – 5.5	3.0 – 5.0	6.5
MH	17–25	2.5 – 6.0	2.5 – 5.5	2.5 – 5.0	6.5
ML	8–16	2.0 – 6.5	2.0 – 6.0	2.0 – 5.5	7.0
LO	0–7	1.5 – 6.5	1.5 – 6.0	2.0 – 5.5	7.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	0.50	0.25	—	—	—	—	EH+
VH	0.50	0.25	0.50	0.25	0.50	0.25	VH
HI	0.50	0.25	0.50	0.25	0.50	0.25	HI
MH	1.00	0.50	1.00	0.50	1.00	0.50	MH
ML	1.00	0.50	1.00	0.50	1.00	0.50	ML
LO	1.00	0.50	1.00	0.50	1.00	0.50	LO

Radar:	APG-40	**ECM:**	IFF
ECCM:	1	RWR:	—
Arcs:	180+	DDS:	—
Search:	120–20	DJM:	—
Track:	60–10	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	—
Bomb System:	Manual

Technology:

CC Rocket Attack

Load Point Limits: CL : < 5 / 1/2: < 9 / DT : ≥ 9

Weight Limit: 4,400

Station	Limit	Allowed Loads
1 and 8	0	
2 and 7	1,600	BB FT Nuclear RK
3–4 and 5–6	150	IRM

Load Notes:

1. Stations 1 and 8 are fixed wing-tip pods for rockets and fuel. Each can carry 4.5 factors of air-to-air rockets, giving a total of 9 factors with both pods. The pod fuel is included in the internal fuel.
2. May use AIR-2A nuclear RK.
3. May use GAR-2/-2A IRM.

Notes:

1.
2. High transonic drag (HTD).
3. The MG-12 fire-control system provides CC Rocket Attack technology.

VPs: 15/10/5/3

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F-89J Scorpion (Fuel-Only Pods)

Crew: Pilot and Radar Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	1.0	1.0	1.0	6.0
M	1.0	1.0	0.5	3.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

If not using AB, reduce maximum speeds by 0.5.

Cruise Spd. CL:	4.5	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	770
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.0
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	1.0
HT	1.0	1.0	1.5
BT	1.5	1.5	1.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 49	1/2 45	DT 40	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 5.0	—	—	6.0	0.50	0.25	—	—	—	—	EH+
VH	36–45	3.0 – 5.5	3.0 – 5.0	3.0 – 4.5	6.0	0.50	0.25	0.50	0.25	0.50	0.25	VH
HI	26–35	2.5 – 6.0	2.5 – 5.5	3.0 – 5.0	6.5	0.50	0.25	0.50	0.25	0.50	0.25	HI
MH	17–25	2.5 – 6.0	2.5 – 5.5	2.5 – 5.0	6.5	1.00	0.50	1.00	0.50	1.00	0.50	MH
ML	8–16	2.0 – 6.5	2.0 – 6.0	2.0 – 5.5	7.0	1.00	0.50	1.00	0.50	1.00	0.50	ML
LO	0–7	1.5 – 6.5	1.5 – 6.0	2.0 – 5.5	7.0	1.00	0.50	1.00	0.50	1.00	0.50	LO

Radar:	APG-40
ECCM:	1
Arcs:	180+
Search:	120–20
Track:	60–10
Lock-On:	7

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	—

Bomb System: Manual

Technology:

CC Rocket Attack

Load Point Limits: CL : < 5 / 1/2: < 9 / DT : ≥ 9

Weight Limit: 4,400

Station	Limit	Allowed Loads
1 and 8	0	
2 and 7	1,600	BB FT Nuclear RK
3–4 and 5–6	150	IRM RHM

Load Notes:

1. Stations 1 and 8 are fixed wing-tip pods for fuel only. The pod fuel is included in the internal fuel.
2. May use AIM-4 IRM and RHMs.
3. May use AIR-2A nuclear RK.

Notes:

1.
2. High transonic drag (HTD).
3. The MG-12 fire-control system provides CC Rocket Attack technology.

VPs: 15/10/5/3

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Grumman F9F Cougar

- F9F-6
- F9F-6P
- F9F-8
- F9F-8P
- F9F-8B
- F9F-8T
- TF-9J

See Also

- Grumman F9F Panther

F9F-6 Cougar

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	345
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.0	1.0	1.5
BT	2.0	2.0	2.0
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	3.0 – 5.5	3.5 – 5.5	—	6.5	—	0.5	—	0.5	—	—	VH
HI	26–35	2.5 – 6.0	3.0 – 5.5	3.5 – 5.0	7.0	—	0.5	—	0.5	—	0.5	HI
MH	17–25	2.0 – 6.5	2.5 – 6.0	2.5 – 5.5	7.0	—	1.0	—	1.0	—	0.5	MH
ML	8–16	1.5 – 6.5	2.0 – 6.0	2.0 – 5.5	7.5	—	1.0	—	1.0	—	0.5	ML
LO	0–7	1.5 – 6.5	1.5 – 6.5	2.0 – 6.0	7.5	—	1.0	—	1.0	—	1.0	LO

Radar:	APG-30A
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	6

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M3
To Hit:	6/4/3
Ammunition:	8.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 5, 1/2: < 9, DT : ≥ 9

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 2	1,000	BB FT

Notes:

1.
2. High transonic drag (HTD).

VPs: 9/6/3/2

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F9F-6P Cougar

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	345
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.0	1.0	1.5
BT	2.0	2.0	2.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 44	1/2 40	DT 38	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.5	3.5 – 5.5	—	6.5
HI	26–35	2.5 – 6.0	3.0 – 5.5	3.5 – 5.0	7.0
MH	17–25	2.0 – 6.5	2.5 – 6.0	2.5 – 5.5	7.0
ML	8–16	1.5 – 6.5	2.0 – 6.0	2.0 – 5.5	7.5
LO	0–7	1.5 – 6.5	1.5 – 6.5	2.0 – 6.0	7.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	1.0	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 5
1/2: < 9
DT : ≥ 9

Weight Limit: 2,000

Station	Limit	Allowed Loads
1 and 2	1,000	BB FT

Notes:

1.
2. High transonic drag (HTD).
3. Oblique and overhead cameras in the nose.

VPs: 9/6/3/2

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F9F-8 Cougar

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	345
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Early

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.0	1.0	1.5
BT	2.0	2.0	2.0
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 42	1/2 38	DT 34	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	3.0 – 5.5	3.5 – 5.5	—	6.5	—	0.5	—	0.5	—	—	VH
HI	26–35	2.5 – 6.0	3.0 – 5.5	3.5 – 5.0	7.0	—	0.5	—	0.5	—	0.5	HI
MH	17–25	2.0 – 6.5	2.5 – 6.0	2.5 – 5.5	7.0	—	1.0	—	1.0	—	0.5	MH
ML	8–16	1.5 – 6.5	2.0 – 6.0	2.0 – 5.5	7.5	—	1.0	—	1.0	—	0.5	ML
LO	0–7	1.5 – 6.5	1.5 – 6.5	2.0 – 6.0	7.5	—	1.0	—	1.0	—	1.0	LO

Radar:	APG-30A
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	6

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M3
To Hit:	6/4/3
Ammunition:	8.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 5 / 1/2: < 9 / DT : ≥ 9

Weight Limit: 4,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB RK RG FT
2–3 and 4–5	500	BB RK RP IRM

Load Notes:

1. May use AIM-9B IRMs and AGM-12 RGs from 1958.

Notes:

1.
2. High transonic drag (HTD).

VPs: 12/8/4/2

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F9F-8P Cougar

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	345
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Early

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.0	1.0	1.5
BT	2.0	2.0	2.0
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 42	1/2 38	DT 34	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	3.0 – 5.5	3.5 – 5.5	—	6.5	—	0.5	—	0.5	—	—	VH
HI	26–35	2.5 – 6.0	3.0 – 5.5	3.5 – 5.0	7.0	—	0.5	—	0.5	—	0.5	HI
MH	17–25	2.0 – 6.5	2.5 – 6.0	2.5 – 5.5	7.0	—	1.0	—	1.0	—	0.5	MH
ML	8–16	1.5 – 6.5	2.0 – 6.0	2.0 – 5.5	7.5	—	1.0	—	1.0	—	0.5	ML
LO	0–7	1.5 – 6.5	1.5 – 6.5	2.0 – 6.0	7.5	—	1.0	—	1.0	—	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5 / 1/2: < 9 / DT : ≥ 9

Weight Limit: 4,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB RK RG FT
2–3 and 4–5	500	BB RK RP IRM

Load Notes:

1. May use AIM-9B IRMs and AGM-12 RGs from 1958.

Notes:

1.
2. High transonic drag (HTD).
3. Oblique and overhead cameras in the nose.

VPs: 9/6/3/2

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F9F-8B Cougar

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	345
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.0	1.0	1.5
BT	2.0	2.0	2.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 42	1/2 38	DT 34	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.5	3.5 – 5.5	—	6.5
HI	26–35	2.5 – 6.0	3.0 – 5.5	3.5 – 5.0	7.0
MH	17–25	2.0 – 6.5	2.5 – 6.0	2.5 – 5.5	7.0
ML	8–16	1.5 – 6.5	2.0 – 6.0	2.0 – 5.5	7.5
LO	0–7	1.5 – 6.5	1.5 – 6.5	2.0 – 6.0	7.5

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	0.5	—	0.5	—	—	VH
—	0.5	—	0.5	—	0.5	HI
—	1.0	—	1.0	—	0.5	MH
—	1.0	—	1.0	—	0.5	ML
—	1.0	—	1.0	—	1.0	LO

Radar:	APG-30A	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M3
To Hit:	6/4/3
Ammunition:	8.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5
1/2: < 9
DT : ≥ 9

Weight Limit: 4,000

Station	Limit	Allowed Loads
1 and 2	1,200	Nuclear BB FT

Load Notes:

1. Station 1 may carry a Mk 12 nuclear bomb (weight 1200 and load 3.0).
2. Station 2 may carry a 150 gal FT (600L, weight 1100, load 3.0/2.0, and 50 fuel points).

Notes:

1.
2. High transonic drag (HTD).

VPs: 12/8/4/2

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F9F-8T Cougar

Crew: Pilot and Observer

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	345
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Early

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.0	1.0	1.5
BT	2.0	2.0	2.0
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 42	1/2 38	DT 34	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	3.0 – 5.5	3.5 – 5.5	—	6.5	—	0.5	—	0.5	—	—	VH
HI	26–35	2.5 – 6.0	3.0 – 5.5	3.5 – 5.0	7.0	—	0.5	—	0.5	—	0.5	HI
MH	17–25	2.0 – 6.5	2.5 – 6.0	2.5 – 5.5	7.0	—	1.0	—	1.0	—	0.5	MH
ML	8–16	1.5 – 6.5	2.0 – 6.0	2.0 – 5.5	7.5	—	1.0	—	1.0	—	0.5	ML
LO	0–7	1.5 – 6.5	1.5 – 6.5	2.0 – 6.0	7.5	—	1.0	—	1.0	—	1.0	LO

Radar:	APG-30A
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	6

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm M3
To Hit:	6/4/3
Ammunition:	5.5
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	3/4*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 5 / 1/2: < 9 / DT : ≥ 9

Weight Limit: 4,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB RK RG FT
2–3 and 4–5	500	BB RK RP IRM

Load Notes:

1. May use AIM-9B IRMs and AGM-12 RGs from 1958.

Notes:

1.
2. High transonic drag (HTD).

VPs: 12/8/4/2

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TF-9J Cougar

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	345
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Early

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.0	1.0	1.5
BT	2.0	2.0	2.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 42	1/2 38	DT 34	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.5	3.5 – 5.5	—	6.5
HI	26–35	2.5 – 6.0	3.0 – 5.5	3.5 – 5.0	7.0
MH	17–25	2.0 – 6.5	2.5 – 6.0	2.5 – 5.5	7.0
ML	8–16	1.5 – 6.5	2.0 – 6.0	2.0 – 5.5	7.5
LO	0–7	1.5 – 6.5	1.5 – 6.5	2.0 – 6.0	7.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	1.0	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	APG-30A
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	6

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm M3
To Hit:	6/4/3
Ammunition:	5.5
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	3/4*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 5 / 1/2: < 9 / DT : ≥ 9

Weight Limit: 4,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB RK RG FT
2–3 and 4–5	500	BB RK RP IRM

Load Notes:

1. May use AIM-9B IRMs and AGM-12 RGs from 1958.

Notes:

1.
2. High transonic drag (HTD).

VPs: 12/8/4/2

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Vought F7U Cutlass

- F7U-3
- F7U-3M

F7U-3 Cutlass

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	1.5	1.5	1.0	4.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.0	Restr. Arcs:	60–
Climb Spd.:	4.0	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	365
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.25	1.25	1.75
HT	1.75	1.75	2.25
BT	2.25	2.25	2.75
ET	2.75	2.75	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 45	1/2 40	DT 35	Dive Speed	Climb CL AB	Climb CL Oth	Climb 1/2 AB	Climb 1/2 Oth	Climb DT AB	Climb DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	3.0 – 6.0	3.5 – 6.0	—	7.0	1.0	0.5	1.0	0.5	—	—	VH
HI	26–35	2.5 – 6.0	3.0 – 6.0	3.5 – 5.5	7.0	1.0	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	2.0 – 6.5	2.5 – 6.0	2.5 – 5.5	7.0	1.5	0.5	1.0	0.5	1.0	0.5	MH
ML	8–16	1.5 – 6.5	2.0 – 6.5	2.0 – 6.0	7.5	2.0	1.0	1.5	0.5	1.0	0.5	ML
LO	0–7	1.5 – 7.0	2.0 – 6.5	2.0 – 6.0	7.5	2.0	1.0	1.5	1.0	1.0	0.5	LO

Radar:	APG-30	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Mk 12
To Hit:	6/4/3
Ammunition:	4.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

CC Rocket Attack

Load Point Limits: CL : < 3 / 1/2: < 9 / DT : ≥ 9

Weight Limit: 4,500

Station	Limit	Allowed Loads
1 and 3	1,500	BB RP FT
2	1,500	Ventral pod

Load Notes:

1. Station 2 may carry a conformal ventral pod with 3 factors of air-to-air rockets (weight 800 and 2.0/1.0 load points) or a special 220 gal (800L) FT.

Notes:

1.
2. High bleed rate (HBR). High pitch rate (HPR).

VPs: 12/8/4/2

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F7U-3M Cutlass

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	1.5	1.5	1.0	4.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.0	Restr. Arcs:	60–
Climb Spd.:	4.0	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	430
Size:	+0	AtA Refuel:	No
Vulnerability:	+1	Ejection Seat:	Early

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.25	1.25	1.75
HT	1.75	1.75	2.25
BT	2.25	2.25	2.75
ET	2.75	2.75	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 45	1/2 40	DT 35	Dive Speed	Climb CL AB	Climb CL Oth	Climb 1/2 AB	Climb 1/2 Oth	Climb DT AB	Climb DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	3.0 – 6.0	3.5 – 6.0	—	7.0	1.0	0.5	1.0	0.5	—	—	VH
HI	26–35	2.5 – 6.0	3.0 – 6.0	3.5 – 5.5	7.0	1.0	0.5	1.0	0.5	1.0	0.5	HI
MH	17–25	2.0 – 6.5	2.5 – 6.0	2.5 – 5.5	7.0	1.5	0.5	1.0	0.5	1.0	0.5	MH
ML	8–16	1.5 – 6.5	2.0 – 6.5	2.0 – 6.0	7.5	2.0	1.0	1.5	0.5	1.0	0.5	ML
LO	0–7	1.5 – 7.0	2.0 – 6.5	2.0 – 6.0	7.5	2.0	1.0	1.5	1.0	1.0	0.5	LO

Radar:	APQ-51
ECCM:	0
Arcs:	Limited
Search:	40–10
Track:	24–8
Lock-On:	6

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Mk 12
To Hit:	6/4/3
Ammunition:	4.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

CC Rocket Attack

Load Point Limits: CL : < 3 / 1/2: < 9 / DT : ≥ 9

Weight Limit: 5,500

Station	Limit	Allowed Loads
1 and 5	1,000	BB RP BRM IRM
2 and 4	1,500	BB RP BRM IRM FT
3	1,500	Ventral pod

Load Notes:

1. May use Sparrow-I BRMs and AIM-9B IRMs.
2. Station 3 may carry a conformal ventral pod with 3 factors of air-to-air rockets (weight 800 and 2.0/1.0 load points) or a special 220 gal (800L) FT.

Notes:

1.
2. High bleed rate (HBR). High pitch rate (HPR).

VPs: 14/9/5/2

Martin B-57 Canberra

- B-57B (Early)
- B-57B
- B-57B (PAF)
- B-57G

B-57B Canberra (Early)

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	3.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	8	Internal Fuel:	875
Size:	−1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot and Weapons Officer

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	—
ET	—	—	—

Only one vertical roll allowed per game turn.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 42	DT 35	Dive Speed
EH+	46+	3.0 – 5.0	—	—	6.0
VH	36–45	2.5 – 5.5	3.0 – 5.0	—	6.0
HI	26–35	2.5 – 5.5	2.5 – 5.5	3.0 – 5.0	6.5
MH	17–25	2.0 – 5.0	2.5 – 5.0	2.5 – 5.0	6.5
ML	8–16	2.0 – 5.0	2.0 – 5.0	2.5 – 4.5	6.5
LO	0–7	1.5 – 5.0	2.0 – 5.0	2.0 – 4.5	6.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	APW-11
ECCM:	0
Arcs:	180+
Search:	Gr. Nav. (90)
Track:	Gr. Attack (30)
Lock-On:	7

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Eight .50 cal M3
To Hit:	4/2/1
Ammunition:	7.0
Gunsight:	TT+1/HT+2/BT+3
Ranging:	—
AtA/AtG:	5/7*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 9, 1/2: <16, DT : ≥16

Weight Limit: 12,000

Station	Limit	Allowed Loads
1 and 11	2,200	FT
2–3 and 9–10	250	BB RP RK
4–5 and 7–8	750	BB RP RK
6	6,000	BB

Load Notes:

1. Station 6 is the internal bomb bay. It can carry six illumination flares and either (a) six 1,000 lb BB, (b) eight 750 lb BB, (c) nine 500 lb BB, or (d) twelve 250 lb BB. All BB must be HE type.
2. Stations 2 to 5 and 7 to 10 can each carry two RKs.

Notes:

1.
2. High transonic drag (HTD). Low roll rate (LRR).
3. Tail Warning Radar. APS-54 with ECCM of 0, arc of 30−, and search capability of 30–10. The radar has no tracking capability.

VPs: 16/11/5/3

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B-57B Canberra

Crew: Pilot and Weapons Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	3.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	8	Internal Fuel:	875
Size:	−1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	—
ET	—	—	—

Only one vertical roll allowed per game turn.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 48	1/2 42	DT 35	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 5.0	—	—	6.0	—	0.5	—	—	—	—	EH+
VH	36–45	2.5 – 5.5	3.0 – 5.0	—	6.0	—	0.5	—	0.5	—	—	VH
HI	26–35	2.5 – 5.5	2.5 – 5.5	3.0 – 5.0	6.5	—	0.5	—	0.5	—	0.5	HI
MH	17–25	2.0 – 5.0	2.5 – 5.0	2.5 – 5.0	6.5	—	1.0	—	0.5	—	0.5	MH
ML	8–16	2.0 – 5.0	2.0 – 5.0	2.5 – 4.5	6.5	—	1.0	—	1.0	—	0.5	ML
LO	0–7	1.5 – 5.0	2.0 – 5.0	2.0 – 4.5	6.5	—	1.0	—	1.0	—	1.0	LO

Radar:	APW-11
ECCM:	0
Arcs:	180+
Search:	Gr. Nav. (90)
Track:	Gr. Attack (30)
Lock-On:	7

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M39
To Hit:	4/2/1
Ammunition:	8.0
Gunsight:	TT+1/HT+2/BT+3
Ranging:	—
AtA/AtG:	5/7*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 9, 1/2: <16, DT : ≥16

Weight Limit: 12,000

Station	Limit	Allowed Loads
1 and 11	2,200	FT
2–3 and 9–10	250	BB RP RK
4–5 and 7–8	750	BB RP RK
6	6,000	BB

Load Notes:

1. Station 6 is the internal bomb bay. It can carry six illumination flares and either (a) six 1,000 lb BB, (b) eight 750 lb BB, (c) nine 500 lb BB, or (d) twelve 250 lb BB. All BB must be HE type.
2. Stations 2 to 5 and 7 to 10 can each carry two RKs.

Notes:

1.
2. High transonic drag (HTD). Low roll rate (LRR).
3. Tail Warning Radar. APS-54 with ECCM of 0, arc of 30−, and search capability of 30–10. The radar has no tracking capability.

VPs: 16/11/5/3

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B-57B Canberra (PAF)

Crew: Pilot and Weapons Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	3.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	8	Internal Fuel:	875
Size:	−1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	—
ET	—	—	—

Only one vertical roll allowed per game turn.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 42	DT 35	Dive Speed
EH+	46+	3.0 – 5.0	—	—	6.0
VH	36–45	2.5 – 5.5	3.0 – 5.0	—	6.0
HI	26–35	2.5 – 5.5	2.5 – 5.5	3.0 – 5.0	6.5
MH	17–25	2.0 – 5.0	2.5 – 5.0	2.5 – 5.0	6.5
ML	8–16	2.0 – 5.0	2.0 – 5.0	2.5 – 4.5	6.5
LO	0–7	1.5 – 5.0	2.0 – 5.0	2.0 – 4.5	6.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	RB-1A
ECCM:	0
Arcs:	180+
Search:	Gr. Nav. (180)
Track:	Gr. Attack (60)
Lock-On:	7

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M39
To Hit:	4/2/1
Ammunition:	8.0
Gunsight:	TT+1/HT+2/BT+3
Ranging:	—
AtA/AtG:	5/7*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 9, 1/2: <16, DT : ≥16

Weight Limit: 12,000

Station	Limit	Allowed Loads
1 and 11	2,200	FT
2–3 and 9–10	250	BB RP RK
4–5 and 7–8	750	BB RP RK FT
6	6,000	BB

Load Notes:

1. Station 6 is the internal bomb bay. It can carry six illumination flares and either (a) six 1,000 lb BB, (b) eight 750 lb BB, (c) nine 500 lb BB, or (d) twelve 250 lb BB. All BB must be HE type.
2. Stations 2 to 5 and 7 to 10 can each carry two RKs.

Notes:

1.
2. High transonic drag (HTD). Low roll rate (LRR).
3. Tail Warning Radar. APS-54 with ECCM of 0, arc of 30−, and search capability of 30–10. The radar has no tracking capability.

VPs: 16/11/5/3

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B-57G Canberra

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	3.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	8	Internal Fuel:	875
Size:	−1	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot and Weapons Officer

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	0.5
HT	1.0	1.0	1.0
BT	1.0	1.0	—
ET	—	—	—

Only one vertical roll allowed per game turn.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 42	DT 35	Dive Speed
EH+	46+	3.0 – 5.0	—	—	6.0
VH	36–45	2.5 – 5.5	3.0 – 5.0	—	6.0
HI	26–35	2.5 – 5.5	2.5 – 5.5	3.0 – 5.0	6.5
MH	17–25	2.0 – 5.0	2.5 – 5.0	2.5 – 5.0	6.5
ML	8–16	2.0 – 5.0	2.0 – 5.0	2.5 – 4.5	6.5
LO	0–7	1.5 – 5.0	2.0 – 5.0	2.0 – 4.5	6.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	APW-11
ECCM:	0
Arcs:	180+
Search:	Gr. Nav. (90)
Track:	Gr. Attack (30)
Lock-On:	7

ECM:	IFF
RWR:	A
DDS:	A
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+1/HT+2/BT+3
Ranging:	—
AtA/AtG:	—
Bomb System:	Computed

Technology:

TV/IR Optics and Laser Designator – A

Load Point Limits: CL : < 9, 1/2: <16, DT : ≥16

Weight Limit: 12,000

Station	Limit	Allowed Loads
1 and 11	2,200	FT
2–3 and 9–10	250	BB RP RK
4–5 and 7–8	750	BB RP RK BG
6	6,000	BB

Load Notes:

1. Station 6 is the internal bomb bay. It can carry six illumination flares and either (a) six 1,000 lb BB, (b) eight 750 lb BB, (c) nine 500 lb BB, or (d) twelve 250 lb BB. All BB must be HE type.
2. Stations 2 to 5 and 7 to 10 can each carry two RKs.

Notes:

1.
2. High transonic drag (HTD). Low roll rate (LRR).
3. Tail Warning Radar. APS-54 with ECCM of 0, arc of 30−, and search capability of 30–10. The radar has no tracking capability.

VPs: 20/13/7/3

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North America F-100 Super Sabre

- F-100A
- F-100C
- F-100D
- F-100D (Late)
- F-100F
- F-100F (Wild Weasel I)
- F-100F (Wild Weasel II)

F-100A Super Sabre

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.0	1.5	1.5	6.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	240
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0/1.0	1.0/1.0	1.0/1.0
HT	1.0/1.5	1.5/1.5	1.5/1.5
BT	1.5/2.0	1.5/2.0	2.0/2.5
ET	2.5/2.5	—	—

Automatic leading-edge slats. If speed ≤ 3.5, use higher drag.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 51	1/2 47	DT 41	Dive Speed
EH+	46+	4.0 – 8.0	—	—	10.0
VH	36–45	3.5 – 9.0	4.0 – 8.0	4.0 – 7.5	10.0
HI	26–35	3.0 – 8.5	3.5 – 8.0	4.0 – 7.0	10.5
MH	17–25	2.5 – 8.5	3.0 – 7.5	3.5 – 6.5	9.0
ML	8–16	2.0 – 8.0	2.5 – 7.5	3.0 – 6.5	8.5
LO	0–7	2.0 – 7.5	2.0 – 7.0	2.5 – 6.0	8.0

Climb Capabilities

	CL		1/2		DT		
	AB	Oth	AB	Oth	AB	Oth	
EH+	1.0	0.5	—	—	—	—	EH+
VH	2.0	0.5	1.0	0.5	1.0	0.5	VH
HI	2.0	1.0	1.0	0.5	1.0	0.5	HI
MH	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	3.0	1.0	2.0	1.0	1.0	0.5	ML
LO	3.0	1.0	2.0	1.0	2.0	1.0	LO

Radar:	APG-30	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M39
To Hit:	6/4/3
Ammunition:	4.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/7*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5, 1/2: <11, DT : ≥11

Weight Limit: 6,000

Station	Limit	Allowed Loads
1 and 2	2,700	BB FT

Notes:

1.

VPs: 12/8/4/2

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F-100C Super Sabre

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.0	1.5	1.5	6.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	385
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0/1.0	1.0/1.0	1.0/1.0
HT	1.0/1.5	1.5/1.5	1.5/1.5
BT	1.5/2.0	1.5/2.0	2.0/2.5
ET	2.5/2.5	—	—

Automatic leading-edge slats. If speed ≤ 3.5, use higher drag.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 48	1/2 44	DT 40	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	4.0 – 8.0	—	—	10.0	1.0	0.5	—	—	—	—	EH+
VH	36–45	3.5 – 9.0	4.0 – 8.0	4.0 – 7.5	10.0	2.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 8.5	3.5 – 8.0	4.0 – 7.0	10.5	2.0	1.0	1.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 8.5	3.0 – 7.5	3.5 – 6.5	9.0	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	8–16	2.0 – 8.0	2.5 – 7.5	3.0 – 6.5	8.5	3.0	1.0	2.0	1.0	1.0	0.5	ML
LO	0–7	2.0 – 7.5	2.0 – 7.0	2.5 – 6.0	8.0	3.0	1.0	2.0	1.0	2.0	1.0	LO

Radar:	APG-30	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M39
To Hit:	6/4/3
Ammunition:	4.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/7*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5 / 1/2: <11 / DT : ≥11

Weight Limit: 6,000

Station	Limit	Allowed Loads
1 and 7	750	BB RP
2 and 6	2,700	BB RP DR TR FT IRM
3 and 5	1,500	BB RP DR TR FT IRM
4	2,000	BB WR

Load Notes:

1. May only use AIM-9 IRMs.

Notes:

1.

VPs: 15/10/5/3

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F-100D Super Sabre

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.0	1.5	1.5	6.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	385
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0/1.0	1.0/1.0	1.0/1.0
HT	1.0/1.5	1.5/1.5	1.5/1.5
BT	1.5/2.0	1.5/2.0	2.0/2.5
ET	2.5/2.5	—	—

Automatic leading-edge slats. If speed ≤ 3.5, use higher drag.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 44	DT 40	Dive Speed
EH+	46+	4.0 – 8.0	—	—	10.0
VH	36–45	3.5 – 9.0	4.0 – 8.0	4.0 – 7.5	10.0
HI	26–35	3.0 – 8.5	3.5 – 8.0	4.0 – 7.0	10.5
MH	17–25	2.5 – 8.5	3.0 – 7.5	3.5 – 6.5	9.0
ML	8–16	2.0 – 8.0	2.5 – 7.5	3.0 – 6.5	8.5
LO	0–7	2.0 – 7.5	2.0 – 7.0	2.5 – 6.0	8.0

Climb Capabilities

	CL		1/2		DT		
	AB	Oth	AB	Oth	AB	Oth	
EH+	1.0	0.5	—	—	—	—	EH+
VH	2.0	0.5	1.0	0.5	1.0	0.5	VH
HI	2.0	1.0	1.0	0.5	1.0	0.5	HI
MH	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	3.0	1.0	2.0	1.0	1.0	0.5	ML
LO	3.0	1.0	2.0	1.0	2.0	1.0	LO

Radar:	APG-30
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	6

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M39
To Hit:	6/4/3
Ammunition:	4.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/7*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 5 / 1/2: <11 / DT : ≥11

Weight Limit: 7,500

Station	Limit	Allowed Loads
1 and 7	1,000	BB RP EP
2 and 6	3,000	BB RP RG DR TR FT IRM
3 and 5	1,500	BB RP DR TR EP FT IRM
4	2,000	BB WR

Load Notes:

1. May only use AIM-9 IRMs.

Notes:

1.

VPs: 16/11/5/3

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F-100D Super Sabre (Late)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.0	1.5	1.5	6.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	385
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0/1.0	1.0/1.0	1.0/1.0
HT	1.0/1.5	1.5/1.5	1.5/1.5
BT	1.5/2.0	1.5/2.0	2.0/2.5
ET	2.5/2.5	—	—

Automatic leading-edge slats. If speed ≤ 3.5, use higher drag.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 44	DT 40	Dive Speed
EH+	46+	4.0 – 8.0	—	—	10.0
VH	36–45	3.5 – 9.0	4.0 – 8.0	4.0 – 7.5	10.0
HI	26–35	3.0 – 8.5	3.5 – 8.0	4.0 – 7.0	10.5
MH	17–25	2.5 – 8.5	3.0 – 7.5	3.5 – 6.5	9.0
ML	8–16	2.0 – 8.0	2.5 – 7.5	3.0 – 6.5	8.5
LO	0–7	2.0 – 7.5	2.0 – 7.0	2.5 – 6.0	8.0

Climb Capabilities

	CL		1/2		DT		
	AB	Oth	AB	Oth	AB	Oth	
EH+	1.0	0.5	—	—	—	—	EH+
VH	2.0	0.5	1.0	0.5	1.0	0.5	VH
HI	2.0	1.0	1.0	0.5	1.0	0.5	HI
MH	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	3.0	1.0	2.0	1.0	1.0	0.5	ML
LO	3.0	1.0	2.0	1.0	2.0	1.0	LO

Radar:	APG-30	**ECM:**	IFF
ECCM:	—	RWR:	A
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm M39
To Hit:	6/4/3
Ammunition:	4.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/7*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5 / 1/2: <11 / DT : ≥11

Weight Limit: 7,500

Station	Limit	Allowed Loads
1 and 7	1,000	BB RP EP
2 and 6	3,000	BB RP RG DR TR FT IRM
3 and 5	1,500	BB RP DR TR EP FT IRM
4	2,000	BB WR

Load Notes:

1. May only use AIM-9 IRMs.

Notes:

1.

VPs: 16/11/5/3

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F-100F Super Sabre

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.0	1.5	1.5	6.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	385
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0/1.0	1.0/1.0	1.0/1.0
HT	1.0/1.5	1.5/1.5	1.5/1.5
BT	1.5/2.0	1.5/2.0	2.0/2.5
ET	2.5/2.5	—	—

Automatic leading-edge slats. If speed ≤ 3.5, use higher drag.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 45	1/2 40	DT 36	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	4.0 – 8.0	—	—	10.0	1.0	0.5	—	—	—	—	EH+
VH	36–45	3.5 – 9.0	4.0 – 8.0	4.0 – 7.5	10.0	2.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 8.5	3.5 – 8.0	4.0 – 7.0	10.5	2.0	1.0	1.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 8.5	3.0 – 7.5	3.5 – 6.5	9.0	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	8–16	2.0 – 8.0	2.5 – 7.5	3.0 – 6.5	8.5	3.0	1.0	2.0	1.0	1.0	0.5	ML
LO	0–7	2.0 – 7.5	2.0 – 7.0	2.5 – 6.0	8.0	3.0	1.0	2.0	1.0	2.0	1.0	LO

Radar:	APG-30	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm M39
To Hit:	5/3/2
Ammunition:	4.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/4*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5 / 1/2: <11 / DT : ≥11

Weight Limit: 7,500

Station	Limit	Allowed Loads
1 and 7	1,000	BB RP EP
2 and 6	3,000	BB RP RG DR TR FT IRM
3 and 5	1,500	BB RP DR TR EP FT IRM
4	2,000	BB WR

Load Notes:

1. May only use AIM-9 IRMs.

Notes:

1.

VPs: 16/11/5/3

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F-100F Super Sabre (Wild Weasel I)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.0	1.5	1.5	6.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	385
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot and EW Officer

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0/1.0	1.0/1.0	1.0/1.0
HT	1.0/1.5	1.5/1.5	1.5/1.5
BT	1.5/2.0	1.5/2.0	2.0/2.5
ET	2.5/2.5	—	—

Automatic leading-edge slats. If speed ≤ 3.5, use higher drag.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 45	1/2 40	DT 36	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	4.0 – 8.0	—	—	10.0	1.0	0.5	—	—	—	—	EH+
VH	36–45	3.5 – 9.0	4.0 – 8.0	4.0 – 7.5	10.0	2.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 8.5	3.5 – 8.0	4.0 – 7.0	10.5	2.0	1.0	1.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 8.5	3.0 – 7.5	3.5 – 6.5	9.0	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	8–16	2.0 – 8.0	2.5 – 7.5	3.0 – 6.5	8.5	3.0	1.0	2.0	1.0	1.0	0.5	ML
LO	0–7	2.0 – 7.5	2.0 – 7.0	2.5 – 6.0	8.0	3.0	1.0	2.0	1.0	2.0	1.0	LO

Radar:	APG-30
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	6

ECM:	IFF
RWR:	B
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm M39
To Hit:	5/3/2
Ammunition:	4.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/4*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 5 / 1/2: <11 / DT : ≥11

Weight Limit: 7,500

Station	Limit	Allowed Loads
1 and 7	1,000	BB RP EP
2 and 6	3,000	BB RP RG DR TR FT IRM
3 and 5	1,500	BB RP DR TR EP FT IRM
4	2,000	BB WR

Load Notes:

1. May only use AIM-9 IRMs.

Notes:

1.

VPs: 18/12/6/3

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F-100F Super Sabre (Wild Weasel II)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.0	1.5	1.5	6.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	385
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot and EW Officer

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0/1.0	1.0/1.0	1.0/1.0
HT	1.0/1.5	1.5/1.5	1.5/1.5
BT	1.5/2.0	1.5/2.0	2.0/2.5
ET	2.5/2.5	—	—

Automatic leading-edge slats. If speed ≤ 3.5, use higher drag.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 45	1/2 40	DT 36	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	4.0 – 8.0	—	—	10.0	1.0	0.5	—	—	—	—	EH+
VH	36–45	3.5 – 9.0	4.0 – 8.0	4.0 – 7.5	10.0	2.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 8.5	3.5 – 8.0	4.0 – 7.0	10.5	2.0	1.0	1.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 8.5	3.0 – 7.5	3.5 – 6.5	9.0	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	8–16	2.0 – 8.0	2.5 – 7.5	3.0 – 6.5	8.5	3.0	1.0	2.0	1.0	1.0	0.5	ML
LO	0–7	2.0 – 7.5	2.0 – 7.0	2.5 – 6.0	8.0	3.0	1.0	2.0	1.0	2.0	1.0	LO

Radar:	APG-30	**ECM:**	IFF
ECCM:	—	RWR:	B
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm M39
To Hit:	5/3/2
Ammunition:	4.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/4*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5 / 1/2: <11 / DT : ≥11

Weight Limit: 7,500

Station	Limit	Allowed Loads
1 and 7	1,000	BB RP EP
2 and 6	3,000	BB RP RG DR TR FT IRM
3 and 5	1,500	BB RP DR TR EP FT IRM ARM
4	2,000	BB WR

Load Notes:

1. May only use AIM-9 IRMs.
2. May only use AGM-45 ARMs.

Notes:

1.

VPs: 18/12/6/3

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Boeing B-52 Stratofortress

- B-52D
- B-52G

B-52D Stratofortress

Power APs/DPs: ○○○○ ○○○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	16.0
N	0.0	0.0	0.0	8.0
I	1.0	1.0	2.0	2.0
SPBR	1.0	1.0	1.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	30L
Visibility:	12	Internal Fuel:	11000
Size:	−2	AtA Refuel:	Yes
Vulnerability:	+2	Ejection Seat:	Std

Crew: Pilot, Copilot, EW Officer, EW Officer, Navigator, and Gunner

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.0	—	—
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 55	1/2 48	DT 44	Dive Speed
EH+	46+	3.5 – 5.0	4.0 – 5.0	—	6.0
VH	36–45	3.0 – 5.5	3.5 – 5.5	3.5 – 5.0	6.0
HI	26–35	3.0 – 6.0	3.0 – 5.5	3.5 – 5.0	6.5
MH	17–25	2.5 – 6.0	2.5 – 5.5	3.0 – 5.0	6.5
ML	8–16	2.0 – 5.5	2.5 – 5.0	3.0 – 4.5	6.5
LO	0–7	2.0 – 4.5	2.0 – 4.5	2.5 – 4.0	6.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.50	—	0.25	—	—	EH+
VH	—	0.50	—	0.50	—	0.25	VH
HI	—	0.50	—	0.50	—	0.50	HI
MH	—	1.00	—	1.00	—	0.50	MH
ML	—	1.00	—	1.00	—	1.00	ML
LO	—	1.00	—	1.00	—	1.00	LO

Radar:	Nav	**ECM:**	IFF
ECCM:	3	RWR:	B
Arcs:	150+	DDS:	A
Search:	Gr. Nav. (300)	DJM:	B3
Track:	Gr. Attack (180)	AJM:	B3
Lock-On:	8	BJM:	B3

Weapon Stations Diagram:

Guns:	Four .50 cal M3
To Hit:	5/3/1
Ammunition:	8.0
Gunsight:	—
Ranging:	RE
AtA/AtG:	4/4**

Bomb System: Ballistic

Technology:

None

Load Point Limits: CL : <41 / 1/2: <71 / DT : ≥71

Weight Limit: 60,000

Station	Limit	Allowed Loads
1 and 5	20,000	FT
2 and 4	10,000	BB ASM Decoys
3	49,500	BB ASM Decoys

Load Notes:

1. Stations 1 and 5 may carry special 750 gal (2800L) or 3000 gal (11000L) FTs.
2. Stations 2 and 3 may each carry (a) twelve BB, (b) two ADM-120 Quail decoys, or (c) one AGM-28 Hound Dog ASM.
3. Station 3 is the internal bomb bay. These guns may carry (a) eight nuclear BB and two ADM-120 Qual decoys, (b) sixty six 750 lb BB, or (c) eighty four 500 lb BB.

Notes:

1.
2. High transonic drag (HTD). Low roll rate (LRR).
3. DDS load is 240 CH and 60 FL.
4. The tail gunner does not have an ejection seat and can only bail out.
5. Tail Radar. Equipped with an APS-54 tail radar with ECCM 2, arc 60–, search 40–8, track 18–6, and lock-on 8–.
6. Articulated Guns. The guns can only fire at targets in the 30– arc. They may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are modified only by the target size and a possible –1 modifier for RE radar ranging.

VPs: 60/40/20/10

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B-52G Stratofortress

Power APs/DPs: ○○○○ ○○○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	16.0
N	0.0	0.0	0.0	8.0
I	1.0	1.0	2.0	2.0
SPBR	1.0	1.0	1.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	90–
Visibility:	12	Internal Fuel:	11000
Size:	−2	AtA Refuel:	Yes
Vulnerability:	+2	Ejection Seat:	Std

Crew: Pilot, Copilot, EW Officer, EW Officer, Navigator, and Gunner

Maneuver DPs:

LR/DR	—
VR	—

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.0	—	—
BT	—	—	—
ET	—	—	—

No rolling maneuvers allowed.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 55	1/2 48	DT 44	Dive Speed
EH+	46+	3.5 – 5.0	4.0 – 5.0	—	6.0
VH	36–45	3.0 – 5.5	3.5 – 5.5	3.5 – 5.0	6.0
HI	26–35	3.0 – 6.0	3.0 – 5.5	3.5 – 5.0	6.5
MH	17–25	2.5 – 6.0	2.5 – 5.5	3.0 – 5.0	6.5
ML	8–16	2.0 – 5.5	2.5 – 5.0	3.0 – 4.5	6.5
LO	0–7	2.0 – 4.5	2.0 – 4.5	2.5 – 4.0	6.5

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	0.50	—	0.25	—	—	EH+
—	0.50	—	0.50	—	0.25	VH
—	0.50	—	0.50	—	0.50	HI
—	1.00	—	1.00	—	0.50	MH
—	1.00	—	1.00	—	1.00	ML
—	1.00	—	1.00	—	1.00	LO

Radar:	Nav	**ECM:**	IFF
ECCM:	3	RWR:	C
Arcs:	150+	DDS:	B
Search:	Gr. Nav. (300)	DJM:	C4
Track:	Gr. Attack (180)	AJM:	C4
Lock-On:	8	BJM:	B3

Weapon Stations Diagram:

Guns:	Four .50 cal M3
To Hit:	6/4/2
Ammunition:	8.0
Gunsight:	—
Ranging:	RE
AtA/AtG:	4/4**

Bomb System: Ballistic

Technology:

TFR-A

Load Point Limits: CL : <41 / 1/2: <71 / DT : ≥71

Weight Limit: 64,000

Station	Limit	Allowed Loads
1 and 5	20,000	FT
2 and 4	10,000	BB ASM Decoys
3	49,500	BB ASM Decoys

Load Notes:

1. Stations 1 and 5 may carry special 750 gal (2800L) or 3000 gal (11000L) FTs.
2. Stations 2 and 3 may each carry (a) twelve BB, (b) two ADM-120 Quail decoys, (c) one AGM-28 Hound Dog ASM, or (d) six AGM-69 SRAM ASM.
3. Station 3 is the internal bomb bay. These guns may carry (a) eight nuclear BB and two ADM-120 Quail decoys,(b) sixteen AGM-69 SRAM ASM, (c) eight AGM-69 SRAM ASM and two ADM-120 Quail decoys, (d) sixty six 750 lb BB, or (e) eighty four 500 lb BB.

Notes:

1.
2. High transonic drag (HTD). Low roll rate (LRR).
3. DDS load is 240 CH and 60 FL.
4. Tail Radar. Equipped with an APS-54 tail radar with ECCM 2, arc 60–, search 40–8, track 18–6, and lock-on 8–.
5. Articulated Guns. The guns can only fire at locked-on targets in the 30– arc. They may return fire twice per game turn in response to gun attacks or conduct one attack. The hit rolls are modified only by the target size.

VPs: 70/47/23/12

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Douglas A3D/A-3 Skywarrior

- A3D-2 (Early)
- A-3B (Early)
- A3D-2 (Late)
- A-3B (Late)
- A3D-2Q
- EA-3B

See Also

- Douglas B-66 Destroyer

A3D-2 Skywarrior (Early)

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	1450
Size:	−1	AtA Refuel:	Yes
Vulnerability:	−1	Ejection Seat:	None

Crew: Pilot, Bombardier-Navigator, and Gunner

Maneuver DPs:

LR/DR	—
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	2.0
HT	1.5	2.0	2.0
BT	—	—	—
ET	—	—	—

Only one vertical roll allowed per game turn.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 41	1/2 35	DT 30	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.5	—	—	6.0
HI	26–35	2.5 – 5.5	3.0 – 5.5	3.0 – 5.0	6.5
MH	17–25	2.0 – 6.0	2.5 – 5.5	2.5 – 5.5	6.5
ML	8–16	2.0 – 6.0	2.0 – 6.0	2.5 – 5.5	6.5
LO	0–7	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	6.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.50	—	—	—	—	VH
HI	—	0.50	—	0.50	—	0.25	HI
MH	—	1.00	—	0.50	—	0.50	MH
ML	—	1.00	—	1.00	—	0.50	ML
LO	—	1.00	—	1.00	—	1.00	LO

Radar:	ASB-7	**ECM:**	IFF
ECCM:	1	RWR:	A
Arcs:	180+	DDS:	—
Search:	Gr. Nav. (150)	DJM:	—
Track:	Gr. Attack (90)	AJM:	A3
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm M3L
To Hit:	3/2/1
Ammunition:	6.0
Gunsight:	—
Ranging:	—
AtA/AtG:	4/4*

Bomb System: Ballistic

Technology:

None

Load Point Limits: CL : < 7; 1/2: <10; DT : ≥10

Weight Limit: 15,000

Station	Limit	Allowed Loads
1 and 3	3,000	BB FT EP
2	9,000	BB

Load Notes:

1. Station 2 is the internal bomb bay. Load options are (a) four 2,000 lb BB, (b) six 1,000 lb BB, (c) twelve 500 lb BB, or (d) two nuclear bombs.

Notes:

1.
2. High transonic drag (HTD).
3. Tail Radar. Equipped with an APS-54 tail radar with ECCM 1, arc 60–, search 30–10, track 15–10, and lock-on 7–.
4. Articulated Guns. The guns can only fire at locked-on targets in the 60– arc. They may return fire twice per game turn in response to gun attacks or conduct one gun attack. The hit rolls are modified only by the target size.

VPs: 24/16/8/4

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A-3B Skywarrior (Early)

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	1450
Size:	−1	AtA Refuel:	Yes
Vulnerability:	−1	Ejection Seat:	None

Crew: Pilot, Bombardier-Navigator, and Gunner

Maneuver DPs:

LR/DR	—
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	2.0
HT	1.5	2.0	2.0
BT	—	—	—
ET	—	—	—

Only one vertical roll allowed per game turn.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 41	1/2 35	DT 30	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.5	—	—	6.0
HI	26–35	2.5 – 5.5	3.0 – 5.5	3.0 – 5.0	6.5
MH	17–25	2.0 – 6.0	2.5 – 5.5	2.5 – 5.5	6.5
ML	8–16	2.0 – 6.0	2.0 – 6.0	2.5 – 5.5	6.5
LO	0–7	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	6.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.50	—	—	—	—	VH
HI	—	0.50	—	0.50	—	0.25	HI
MH	—	1.00	—	0.50	—	0.50	MH
ML	—	1.00	—	1.00	—	0.50	ML
LO	—	1.00	—	1.00	—	1.00	LO

Radar:	ASB-7	**ECM:**	IFF
ECCM:	1	RWR:	A
Arcs:	180+	DDS:	—
Search:	Gr. Nav. (150)	DJM:	—
Track:	Gr. Attack (90)	AJM:	A3
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm M3L
To Hit:	3/2/1
Ammunition:	6.0
Gunsight:	—
Ranging:	—
AtA/AtG:	4/4*

Bomb System: Ballistic

Technology:

None

Load Point Limits: CL : < 7; 1/2: <10; DT : ≥10

Weight Limit: 15,000

Station	Limit	Allowed Loads
1 and 3	3,000	BB FT EP
2	9,000	BB

Load Notes:

1. Station 2 is the internal bomb bay. Load options are (a) four 2,000 lb BB, (b) six 1,000 lb BB, (c) twelve 500 lb BB, or (d) two nuclear bombs.

Notes:

1.
2. High transonic drag (HTD).
3. Tail Radar. Equipped with an APS-54 tail radar with ECCM 1, arc 60–, search 30–10, track 15–10, and lock-on 7–.
4. Articulated Guns. The guns can only fire at locked-on targets in the 60– arc. They may return fire twice per game turn in response to gun attacks or conduct one gun attack. The hit rolls are modified only by the target size.

VPs: 24/16/8/4

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A3D-2 Skywarrior (Late)

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	1450
Size:	−1	AtA Refuel:	Yes
Vulnerability:	−1	Ejection Seat:	None

Crew: Pilot, Bombardier-Navigator, and EW Officer

Maneuver DPs:

LR/DR	—
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	2.0
HT	1.5	2.0	2.0
BT	—	—	—
ET	—	—	—

Only one vertical roll allowed per game turn.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 41	1/2 35	DT 30	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.5	—	—	6.0
HI	26–35	2.5 – 5.5	3.0 – 5.5	3.0 – 5.0	6.5
MH	17–25	2.0 – 6.0	2.5 – 5.5	2.5 – 5.5	6.5
ML	8–16	2.0 – 6.0	2.0 – 6.0	2.5 – 5.5	6.5
LO	0–7	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	6.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.50	—	—	—	—	VH
HI	—	0.50	—	0.50	—	0.25	HI
MH	—	1.00	—	0.50	—	0.50	MH
ML	—	1.00	—	1.00	—	0.50	ML
LO	—	1.00	—	1.00	—	1.00	LO

Radar:	ASB-7	**ECM:**	IFF
ECCM:	1	RWR:	A
Arcs:	180+	DDS:	A
Search:	Gr. Nav. (150)	DJM:	B3
Track:	Gr. Attack (90)	AJM:	A3
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	Ballistic

Technology:

None

Load Point Limits: CL : < 7
1/2: <10
DT : ≥10

Weight Limit: 15,000

Station	Limit	Allowed Loads
1 and 3	3,000	BB FT EP
2	9,000	BB

Load Notes:

1. Station 2 is the internal bomb bay. Load options are (a) four 2,000 lb BB, (b) six 1,000 lb BB, (c) twelve 500 lb BB, or (d) two nuclear bombs.

Notes:

1.
2. High transonic drag (HTD).
3. The DDS has 120 CH or 90 CH and 30 FL.

VPs: 24/16/8/4

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A-3B Skywarrior (Late)

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	1450
Size:	−1	AtA Refuel:	Yes
Vulnerability:	−1	Ejection Seat:	None

Crew: Pilot, Bombardier-Navigator, and EW Officer

Maneuver DPs:

LR/DR	—
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	2.0
HT	1.5	2.0	2.0
BT	—	—	—
ET	—	—	—

Only one vertical roll allowed per game turn.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 41	1/2 35	DT 30	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.5	—	—	6.0
HI	26–35	2.5 – 5.5	3.0 – 5.5	3.0 – 5.0	6.5
MH	17–25	2.0 – 6.0	2.5 – 5.5	2.5 – 5.5	6.5
ML	8–16	2.0 – 6.0	2.0 – 6.0	2.5 – 5.5	6.5
LO	0–7	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	6.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.50	—	—	—	—	VH
HI	—	0.50	—	0.50	—	0.25	HI
MH	—	1.00	—	0.50	—	0.50	MH
ML	—	1.00	—	1.00	—	0.50	ML
LO	—	1.00	—	1.00	—	1.00	LO

Radar:	ASB-7
ECCM:	1
Arcs:	180+
Search:	Gr. Nav. (150)
Track:	Gr. Attack (90)
Lock-On:	7

ECM:	IFF
RWR:	A
DDS:	A
DJM:	B3
AJM:	A3
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—

Bomb System: Ballistic

Technology:

None

Load Point Limits: CL : < 7; 1/2: <10; DT : ≥10

Weight Limit: 15,000

Station	Limit	Allowed Loads
1 and 3	3,000	BB FT EP
2	9,000	BB

Load Notes:

1. Station 2 is the internal bomb bay. Load options are (a) four 2,000 lb BB, (b) six 1,000 lb BB, (c) twelve 500 lb BB, or (d) two nuclear bombs.

Notes:

1.
2. High transonic drag (HTD).
3. The DDS has 120 CH or 90 CH and 30 FL.

VPs: 24/16/8/4

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A3D-2Q Skywarrior

Crew: Pilot, Bombardier-Navigator, EW Officer, EW Officer, and EW Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	1450
Size:	−1	AtA Refuel:	Yes
Vulnerability:	−1	Ejection Seat:	None

Maneuver DPs:

LR/DR	—
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	2.0
HT	1.5	2.0	2.0
BT	—	—	—
ET	—	—	—

Only one vertical roll allowed per game turn.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 41	1/2 35	DT 30	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.5	—	—	6.0
HI	26–35	2.5 – 5.5	3.0 – 5.5	3.0 – 5.0	6.5
MH	17–25	2.0 – 6.0	2.5 – 5.5	2.5 – 5.5	6.5
ML	8–16	2.0 – 6.0	2.0 – 6.0	2.5 – 5.5	6.5
LO	0–7	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	6.5

Climb Capabilities

Band	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.50	—	—	—	—	VH
HI	—	0.50	—	0.50	—	0.25	HI
MH	—	1.00	—	0.50	—	0.50	MH
ML	—	1.00	—	1.00	—	0.50	ML
LO	—	1.00	—	1.00	—	1.00	LO

Radar:	ASB-7	**ECM:**	IFF
ECCM:	1	RWR:	C
Arcs:	180+	DDS:	A
Search:	Gr. Nav. (150)	DJM:	B4
Track:	Gr. Attack (90)	AJM:	B4
Lock-On:	7	BJM:	Two B3

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	Ballistic

Technology:

None

Load Point Limits: CL : < 7 / 1/2: <10 / DT : ≥10

Weight Limit: 15,000

Station	Limit	Allowed Loads
1 and 2	3,000	BB FT EP

Notes:

1.
2. High transonic drag (HTD).
3. The DDS has 120 CH or 90 CH and 30 FL.

VPs: 34/23/11/6

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EA-3B Skywarrior

Crew: Pilot, Bombardier-Navigator, EW Officer, EW Officer, and EW Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	1450
Size:	−1	AtA Refuel:	Yes
Vulnerability:	−1	Ejection Seat:	None

Maneuver DPs:

LR/DR	—
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	2.0
HT	1.5	2.0	2.0
BT	—	—	—
ET	—	—	—

Only one vertical roll allowed per game turn.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 41	1/2 35	DT 30	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.5	—	—	6.0
HI	26–35	2.5 – 5.5	3.0 – 5.5	3.0 – 5.0	6.5
MH	17–25	2.0 – 6.0	2.5 – 5.5	2.5 – 5.5	6.5
ML	8–16	2.0 – 6.0	2.0 – 6.0	2.5 – 5.5	6.5
LO	0–7	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	6.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.50	—	—	—	—	VH
HI	—	0.50	—	0.50	—	0.25	HI
MH	—	1.00	—	0.50	—	0.50	MH
ML	—	1.00	—	1.00	—	0.50	ML
LO	—	1.00	—	1.00	—	1.00	LO

Radar:	ASB-7
ECCM:	1
Arcs:	180+
Search:	Gr. Nav. (150)
Track:	Gr. Attack (90)
Lock-On:	7

ECM:	IFF
RWR:	C
DDS:	A
DJM:	B4
AJM:	B4
BJM:	Two B3

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—

Bomb System: Ballistic

Technology:

None

Load Point Limits: CL : < 7
1/2: <10
DT : ≥10

Weight Limit: 15,000

Station	Limit	Allowed Loads
1 and 2	3,000	BB FT EP

Notes:

1.
2. High transonic drag (HTD).
3. The DDS has 120 CH or 90 CH and 30 FL.

VPs: 34/23/11/6

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Douglas A4D/A-4 Skyhawk

- A4D-2N
- A-4C
- A-4C (1965 Upgrade)
- A-4C (1966 Upgrade)
- A4D-5
- A-4E
- A-4E (1969 Upgrade)

A4D-2N Skyhawk

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	2.0	1.5	1.0	1.5
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	260
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5/0.5	1.0/1.0	1.0/1.0
HT	1.0/1.0	1.5/1.5	1.5/1.5
BT	1.5/2.0	2.0/2.5	2.0/2.5
ET	—	—	—

Automatic slats. If speed ≤ 3.0, use higher drag.

Speeds and Ceilings						Climb Capabilities						
Alt. Band	Conf. Ceil.	CL 48	1/2 42	DT 35	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 5.0	—	—	6.0	—	0.5	—	—	—	—	EH+
VH	36–45	3.0 – 5.5	3.5 – 5.0	—	6.0	—	0.5	—	0.5	—	—	VH
HI	26–35	2.5 – 5.5	3.0 – 5.0	3.0 – 4.5	6.5	—	0.5	—	0.5	—	0.5	HI
MH	17–25	2.0 – 6.0	2.0 – 5.5	2.5 – 5.0	6.5	—	1.0	—	0.5	—	0.5	MH
ML	8–16	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	7.0	—	1.0	—	1.0	—	0.5	ML
LO	0–7	1.5 – 6.5	1.5 – 5.5	2.0 – 5.0	7.0	—	1.5	—	1.0	—	1.0	LO

Radar:	APG-53	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	Gr. Nav. (60)	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm Mk 12
To Hit:	5/3/1
Ammunition:	3.0
Gunsight:	TT+1/HT+2/BT+3
Ranging:	—
AtA/AtG:	4/4*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 7
1/2: <13
DT : ≥13

Weight Limit: 7,400

Station	Limit	Allowed Loads
1 and 3	2,200	BB RP RG IP ARM WR GP IRM FT
2	3,100	BB RP RG IP WR GP FT

Load Notes:
1. May only used AGM-12 RGs.
2. May only use AGM-45 ARMs on a roll of 4–.
3. May only use AIM-9B IRMs on a roll of 4–.

Notes:
1.
2. High roll rate (HRR). High transonic drag (HTD).

VPs: 11/7/4/2

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A-4C Skyhawk

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	2.0	1.5	1.0	1.5
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	260
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5/0.5	1.0/1.0	1.0/1.0
HT	1.0/1.0	1.5/1.5	1.5/1.5
BT	1.5/2.0	2.0/2.5	2.0/2.5
ET	—	—	—

Automatic slats. If speed ≤ 3.0, use higher drag.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 42	DT 35	Dive Speed
EH+	46+	3.5 – 5.0	—	—	6.0
VH	36–45	3.0 – 5.5	3.5 – 5.0	—	6.0
HI	26–35	2.5 – 5.5	3.0 – 5.0	3.0 – 4.5	6.5
MH	17–25	2.0 – 6.0	2.0 – 5.5	2.5 – 5.0	6.5
ML	8–16	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	7.0
LO	0–7	1.5 – 6.5	1.5 – 5.5	2.0 – 5.0	7.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.5	—	1.0	—	1.0	LO

Radar:	APG-53
ECCM:	0
Arcs:	180+
Search:	Gr. Nav. (60)
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm Mk 12
To Hit:	5/3/1
Ammunition:	3.0
Gunsight:	TT+1/HT+2/BT+3
Ranging:	—
AtA/AtG:	4/4*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 7 / 1/2: <13 / DT : ≥13

Weight Limit: 7,400

Station	Limit	Allowed Loads
1 and 3	2,200	BB RP RG IP ARM WR GP IRM FT
2	3,100	BB RP RG IP WR GP FT

Load Notes:

1. May only used AGM-12 RGs.
2. May only use AGM-45 ARMs on a roll of 4–.
3. May only use AIM-9B IRMs on a roll of 4–.

Notes:

1.
2. High roll rate (HRR). High transonic drag (HTD).

VPs: 11/7/4/2

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A-4C Skyhawk (1965 Upgrade)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	2.0	1.5	1.0	1.5
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	260
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5/0.5	1.0/1.0	1.0/1.0
HT	1.0/1.0	1.5/1.5	1.5/1.5
BT	1.5/2.0	2.0/2.5	2.0/2.5
ET	—	—	—

Automatic slats. If speed ≤ 3.0, use higher drag.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 42	DT 35	Dive Speed
EH+	46+	3.5 – 5.0	—	—	6.0
VH	36–45	3.0 – 5.5	3.5 – 5.0	—	6.0
HI	26–35	2.5 – 5.5	3.0 – 5.0	3.0 – 4.5	6.5
MH	17–25	2.0 – 6.0	2.0 – 5.5	2.5 – 5.0	6.5
ML	8–16	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	7.0
LO	0–7	1.5 – 6.5	1.5 – 5.5	2.0 – 5.0	7.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.5	—	1.0	—	1.0	LO

Radar:	APG-53	**ECM:**	IFF
ECCM:	0	RWR:	A
Arcs:	180+	DDS:	—
Search:	Gr. Nav. (60)	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm Mk 12
To Hit:	5/3/1
Ammunition:	3.0
Gunsight:	TT+1/HT+2/BT+3
Ranging:	—
AtA/AtG:	4/4*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 7, 1/2: <13, DT : ≥13

Weight Limit: 7,400

Station	Limit	Allowed Loads
1 and 3	2,200	BB RP RG IP ARM WR GP IRM FT
2	3,100	BB RP RG IP WR GP FT

Load Notes:

1. May only used AGM-12 RGs.
2. May only use AGM-45 ARMs on a roll of 4–.
3. May only use AIM-9B IRMs on a roll of 4–.

Notes:

1.
2. High roll rate (HRR). High transonic drag (HTD).

VPs: 11/7/4/2

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A-4C Skyhawk (1966 Upgrade)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	2.0	1.5	1.0	1.5
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	260
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5/0.5	1.0/1.0	1.0/1.0
HT	1.0/1.0	1.5/1.5	1.5/1.5
BT	1.5/2.0	2.0/2.5	2.0/2.5
ET	—	—	—

Automatic slats. If speed ≤ 3.0, use higher drag.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 42	DT 35	Dive Speed
EH+	46+	3.5 – 5.0	—	—	6.0
VH	36–45	3.0 – 5.5	3.5 – 5.0	—	6.0
HI	26–35	2.5 – 5.5	3.0 – 5.0	3.0 – 4.5	6.5
MH	17–25	2.0 – 6.0	2.0 – 5.5	2.5 – 5.0	6.5
ML	8–16	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	7.0
LO	0–7	1.5 – 6.5	1.5 – 5.5	2.0 – 5.0	7.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.5	—	1.0	—	1.0	LO

Radar:	APG-53
ECCM:	0
Arcs:	180+
Search:	Gr. Nav. (60)
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	A
DDS:	A
DJM:	A3
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm Mk 12
To Hit:	5/3/1
Ammunition:	3.0
Gunsight:	TT+1/HT+2/BT+3
Ranging:	—
AtA/AtG:	4/4*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 7 / 1/2: <13 / DT : ≥13

Weight Limit: 7,400

Station	Limit	Allowed Loads
1 and 3	2,200	BB RP RG IP ARM WR GP IRM FT
2	3,100	BB RP RG IP WR GP FT

Load Notes:

1. May only used AGM-12 RGs.
2. May only use AGM-45 ARMs on a roll of 4–.
3. May only use AIM-9B IRMs on a roll of 4–.

Notes:

1.
2. High roll rate (HRR). High transonic drag (HTD).

VPs: 11/7/4/2

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A4D-5 Skyhawk

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	2.0	1.5	1.0	1.5
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	260
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5/0.5	1.0/1.0	1.0/1.0
HT	1.0/1.0	1.5/1.5	1.5/1.5
BT	1.5/2.0	2.0/2.5	2.0/2.5
ET	—	—	—

Automatic slats. If speed ≤ 3.0, use higher drag.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 42	DT 35	Dive Speed
EH+	46+	3.5 – 5.0	—	—	6.0
VH	36–45	3.0 – 5.5	3.5 – 5.0	—	6.0
HI	26–35	2.5 – 5.5	3.0 – 5.0	3.0 – 4.5	6.5
MH	17–25	2.0 – 6.0	2.0 – 5.5	2.5 – 5.0	6.5
ML	8–16	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	7.0
LO	0–7	1.5 – 6.5	1.5 – 5.5	2.0 – 5.0	7.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.5	—	1.0	—	1.0	LO

Radar:	APG-53	**ECM:**	IFF
ECCM:	0	RWR:	A
Arcs:	180+	DDS:	A
Search:	Gr. Nav. (60)	DJM:	A3
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm Mk 12
To Hit:	5/3/1
Ammunition:	3.0
Gunsight:	TT+1/HT+2/BT+3
Ranging:	—
AtA/AtG:	4/4*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 7
1/2: <13
DT : ≥13

Weight Limit: 8,200

Station	Limit	Allowed Loads
1 and 5	600	BB RP RG TR IP ARM
2 and 4	2,200	BB BS RP RG IP ARM WR GP FT
3	3,100	BB BS RP RG IP WR GP FT

Load Notes:

1. May only used AGM-12 RGs, AGM-45 ARMs. and AGM-62 BSs.

Notes:

1.
2. High roll rate (HRR). High transonic drag (HTD).

VPs: 11/7/4/2

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A-4E Skyhawk

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	2.0	1.5	1.0	1.5
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	260
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5/0.5	1.0/1.0	1.0/1.0
HT	1.0/1.0	1.5/1.5	1.5/1.5
BT	1.5/2.0	2.0/2.5	2.0/2.5
ET	—	—	—

Automatic slats. If speed ≤ 3.0, use higher drag.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 42	DT 35	Dive Speed
EH+	46+	3.5 – 5.0	—	—	6.0
VH	36–45	3.0 – 5.5	3.5 – 5.0	—	6.0
HI	26–35	2.5 – 5.5	3.0 – 5.0	3.0 – 4.5	6.5
MH	17–25	2.0 – 6.0	2.0 – 5.5	2.5 – 5.0	6.5
ML	8–16	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	7.0
LO	0–7	1.5 – 6.5	1.5 – 5.5	2.0 – 5.0	7.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	0.5	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.5	—	1.0	—	1.0	LO

Radar:	APG-53
ECCM:	0
Arcs:	180+
Search:	Gr. Nav. (60)
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	A
DDS:	A
DJM:	A3
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm Mk 12
To Hit:	5/3/1
Ammunition:	3.0
Gunsight:	TT+1/HT+2/BT+3
Ranging:	—
AtA/AtG:	4/4*

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 7
1/2: <13
DT : ≥13

Weight Limit: 8,200

Station	Limit	Allowed Loads
1 and 5	600	BB RP RG TR IP ARM
2 and 4	2,200	BB BS RP RG IP ARM WR GP FT
3	3,100	BB BS RP RG IP WR GP FT

Load Notes:

1. May only used AGM-12 RGs, AGM-45 ARMs. and AGM-62 BSs.

Notes:

1.
2. High roll rate (HRR). High transonic drag (HTD).

VPs: 11/7/4/2

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A-4E Skyhawk (1969 Upgrade)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	2.0	1.5	1.0	1.5
N	0.0	0.0	0.0	1.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	260
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	0.5/0.5	1.0/1.0	1.0/1.0
HT	1.0/1.0	1.5/1.5	1.5/1.5
BT	1.5/2.0	2.0/2.5	2.0/2.5
ET	—	—	—

Automatic slats. If speed ≤ 3.0, use higher drag.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 48	1/2 42	DT 35	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 5.0	—	—	6.0	—	0.5	—	—	—	—	EH+
VH	36–45	3.0 – 5.5	3.5 – 5.0	—	6.0	—	0.5	—	0.5	—	—	VH
HI	26–35	2.5 – 5.5	3.0 – 5.0	3.0 – 4.5	6.5	—	0.5	—	0.5	—	0.5	HI
MH	17–25	2.0 – 6.0	2.0 – 5.5	2.5 – 5.0	6.5	—	1.0	—	0.5	—	0.5	MH
ML	8–16	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	7.0	—	1.0	—	1.0	—	0.5	ML
LO	0–7	1.5 – 6.5	1.5 – 5.5	2.0 – 5.0	7.0	—	1.5	—	1.0	—	1.0	LO

Radar:	APG-53	**ECM:**	IFF
ECCM:	0	RWR:	B
Arcs:	180+	DDS:	B
Search:	Gr. Nav. (60)	DJM:	B3
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm Mk 12
To Hit:	5/3/1
Ammunition:	3.0
Gunsight:	TT+1/HT+2/BT+3
Ranging:	—
AtA/AtG:	4/4*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 7 / 1/2: <13 / DT : ≥13

Weight Limit: 8,200

Station	Limit	Allowed Loads
1 and 5	600	BB RP RG TR IP ARM
2 and 4	2,200	BB BS RP RG IP ARM WR GP FT
3	3,100	BB BS RP RG IP WR GP FT

Load Notes:

1. May only used AGM-12 RGs, AGM-45 ARMs. and AGM-62 BSs.

Notes:

1.
2. High roll rate (HRR). High transonic drag (HTD).

VPs: 11/7/4/2

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Douglas B-66 Destroyer

- B-66B (Early)
- B-66B (Late)
- RB-66C
- EB-66C

See Also

- Douglas A3D/A-3 Skywarrior

B-66B Destroyer (Early)

Crew: Pilot, Bombardier-Navigator, and Gunner

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	1450
Size:	−1	AtA Refuel:	Yes
Vulnerability:	−1	Ejection Seat:	Std

Maneuver DPs:

LR/DR	—
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	2.0
HT	1.5	2.0	2.0
BT	—	—	—
ET	—	—	—

Only one vertical roll allowed per game turn.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 41	1/2 35	DT 30	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	3.0 – 5.5	—	—	6.0	—	0.50	—	—	—	—	VH
HI	26–35	2.5 – 5.5	3.0 – 5.5	3.0 – 5.0	6.5	—	0.50	—	0.50	—	0.25	HI
MH	17–25	2.0 – 6.0	2.5 – 5.5	2.5 – 5.5	6.5	—	1.00	—	0.50	—	0.50	MH
ML	8–16	2.0 – 6.0	2.0 – 6.0	2.5 – 5.5	6.5	—	1.00	—	1.00	—	0.50	ML
LO	0–7	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	6.5	—	1.00	—	1.00	—	1.00	LO

Radar:	APS-63	**ECM:**	IFF
ECCM:	1	RWR:	A
Arcs:	180+	DDS:	A
Search:	Gr. Nav. (180)	DJM:	—
Track:	Gr. Attack (120)	AJM:	A3
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm M3L
To Hit:	3/2/1
Ammunition:	6.0
Gunsight:	—
Ranging:	—
AtA/AtG:	4/4*
Bomb System:	Ballistic

Technology:

None

Load Point Limits: CL : < 7; 1/2: <10; DT : ≥10

Weight Limit: 15,000

Station	Limit	Allowed Loads
1 and 3	3,000	BB FT EP
2	9,000	BB

Load Notes:

1. Station 2 is the internal bomb bay. Load options are (a) four 2,000 lb BB, (b) six 1,000 lb BB, (c) twelve 500 lb BB, or (d) two nuclear bombs.

Notes:

1.
2. High transonic drag (HTD).
3. Tail Radar. Equipped with an APS-54 tail radar with ECCM 1, arc 60–, search 30–10, track 15–10, and lock-on 7–.
4. Articulated Guns. The guns can only fire at locked-on targets in the 60– arc. They may return fire twice per game turn in response to gun attacks or conduct one gun attack. The hit rolls are modified only by the target size.

VPs: 24/16/8/4

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B-66B Destroyer (Late)

Crew: Pilot, Bombardier-Navigator, and Gunner

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	1450
Size:	−1	AtA Refuel:	Yes
Vulnerability:	−1	Ejection Seat:	Std

Maneuver DPs:

LR/DR	—
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	2.0
HT	1.5	2.0	2.0
BT	—	—	—
ET	—	—	—

Only one vertical roll allowed per game turn.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 41	1/2 35	DT 30	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	3.0 – 5.5	—	—	6.0	—	0.50	—	—	—	—	VH
HI	26–35	2.5 – 5.5	3.0 – 5.5	3.0 – 5.0	6.5	—	0.50	—	0.50	—	0.25	HI
MH	17–25	2.0 – 6.0	2.5 – 5.5	2.5 – 5.5	6.5	—	1.00	—	0.50	—	0.50	MH
ML	8–16	2.0 – 6.0	2.0 – 6.0	2.5 – 5.5	6.5	—	1.00	—	1.00	—	0.50	ML
LO	0–7	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	6.5	—	1.00	—	1.00	—	1.00	LO

Radar:	APS-63
ECCM:	1
Arcs:	180+
Search:	Gr. Nav. (180)
Track:	Gr. Attack (120)
Lock-On:	7

ECM:	IFF
RWR:	A
DDS:	A
DJM:	B3
AJM:	A3
BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm M3L
To Hit:	3/2/1
Ammunition:	6.0
Gunsight:	—
Ranging:	—
AtA/AtG:	4/4*

Bomb System: Ballistic

Technology:

None

Load Point Limits: CL : < 7; 1/2: <10; DT : ≥10

Weight Limit: 15,000

Station	Limit	Allowed Loads
1 and 3	3,000	BB FT EP
2	9,000	BB

Load Notes:

1. Station 2 is the internal bomb bay. Load options are (a) four 2,000 lb BB, (b) six 1,000 lb BB, (c) twelve 500 lb BB, or (d) two nuclear bombs.

Notes:

1.
2. High transonic drag (HTD).
3. The DDS has 120 CH or 90 CH and 30 FL.
4. IR Jammer. Equipped with an IR jammer that gives a +2 modifier to IRM attacks from the 60– arc.

VPs: 24/16/8/4

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RB-66C Destroyer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	1450
Size:	−1	AtA Refuel:	Yes
Vulnerability:	−1	Ejection Seat:	Std

Crew: Pilot, Navigator, EW Officer, EW Officer, and EW Officer

Maneuver DPs:

LR/DR	—
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	2.0
HT	1.5	2.0	2.0
BT	—	—	—
ET	—	—	—

Only one vertical roll allowed per game turn.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 41	1/2 35	DT 30	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.5	—	—	6.0
HI	26–35	2.5 – 5.5	3.0 – 5.5	3.0 – 5.0	6.5
MH	17–25	2.0 – 6.0	2.5 – 5.5	2.5 – 5.5	6.5
ML	8–16	2.0 – 6.0	2.0 – 6.0	2.5 – 5.5	6.5
LO	0–7	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	6.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.50	—	—	—	—	VH
HI	—	0.50	—	0.50	—	0.25	HI
MH	—	1.00	—	0.50	—	0.50	MH
ML	—	1.00	—	1.00	—	0.50	ML
LO	—	1.00	—	1.00	—	1.00	LO

Radar:	APS-63
ECCM:	1
Arcs:	180+
Search:	Gr. Nav. (180)
Track:	Gr. Attack (120)
Lock-On:	7

ECM:	IFF
RWR:	C
DDS:	A
DJM:	B4
AJM:	B4
BJM:	Two B3

Weapon Stations Diagram:

Guns:	Two 20 mm M3L
To Hit:	3/2/1
Ammunition:	6.0
Gunsight:	—
Ranging:	—
AtA/AtG:	4/4*

Bomb System: Ballistic

Technology:

None

Load Point Limits: CL : < 7, 1/2: <10, DT : ≥10

Weight Limit: 15,000

Station	Limit	Allowed Loads
1 and 2	3,000	BB FT EP

Notes:

1.
2. High transonic drag (HTD).
3. The DDS has 120 CH or 90 CH and 30 FL.

VPs: 34/23/11/6

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EB-66C Destroyer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.0	Restr. Arcs:	—
Climb Spd.:	3.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	1450
Size:	−1	AtA Refuel:	Yes
Vulnerability:	−1	Ejection Seat:	Std

Crew: Pilot, Navigator, EW Officer, EW Officer, and EW Officer

Maneuver DPs:

LR/DR	—
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	2.0
HT	1.5	2.0	2.0
BT	—	—	—
ET	—	—	—

Only one vertical roll allowed per game turn.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 41	1/2 35	DT 30	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.5	—	—	6.0
HI	26–35	2.5 – 5.5	3.0 – 5.5	3.0 – 5.0	6.5
MH	17–25	2.0 – 6.0	2.5 – 5.5	2.5 – 5.5	6.5
ML	8–16	2.0 – 6.0	2.0 – 6.0	2.5 – 5.5	6.5
LO	0–7	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	6.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.50	—	—	—	—	VH
HI	—	0.50	—	0.50	—	0.25	HI
MH	—	1.00	—	0.50	—	0.50	MH
ML	—	1.00	—	1.00	—	0.50	ML
LO	—	1.00	—	1.00	—	1.00	LO

Radar:	APS-63
ECCM:	1
Arcs:	180+
Search:	Gr. Nav. (180)
Track:	Gr. Attack (120)
Lock-On:	7

ECM:	IFF
RWR:	C
DDS:	A
DJM:	B4
AJM:	B4
BJM:	Two B3

Weapon Stations Diagram:

Guns:	Two 20 mm M3L
To Hit:	3/2/1
Ammunition:	6.0
Gunsight:	—
Ranging:	—
AtA/AtG:	4/4*

Bomb System: Ballistic

Technology:

None

Load Point Limits: CL : < 7, 1/2: <10, DT : ≥10

Weight Limit: 15,000

Station	Limit	Allowed Loads
1 and 2	3,000	BB FT EP

Notes:

1.
2. High transonic drag (HTD).
3. The DDS has 120 CH or 90 CH and 30 FL.

VPs: 34/23/11/6

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Convair F-102 Delta Dagger

- F-102A
- F-102A (Late)

F-102A Delta Dagger

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.0	2.0	7.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	7	Internal Fuel:	340
Size:	+0	AtA Refuel:	No
Vulnerability:	−1	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.75	0.75	1.25
HT	1.25	1.25	1.75
BT	1.75	1.75	2.25
ET	2.25	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 55	1/2 53	DT 50	Dive Speed
EH+	46+	3.0 – 7.5	3.5 – 6.0	3.5 – 6.0	10.0
VH	36–45	3.5 – 8.0	3.0 – 6.5	3.5 – 6.0	10.0
HI	26–35	2.5 – 8.0	3.0 – 6.5	3.0 – 6.0	9.5
MH	17–25	2.5 – 8.0	2.5 – 6.5	2.5 – 6.0	9.0
ML	8–16	2.0 – 7.5	2.5 – 7.0	2.5 – 6.5	8.0
LO	0–7	1.5 – 7.0	2.0 – 7.0	2.0 – 6.5	7.5

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
1.0	0.5	1.0	0.5	1.0	0.5	EH+
2.0	0.5	1.0	0.5	1.0	0.5	VH
2.0	0.5	1.0	0.5	1.0	0.5	HI
2.0	1.0	2.0	1.0	1.0	0.5	MH
3.0	1.0	2.0	1.0	2.0	1.0	ML
3.0	1.0	2.0	1.0	2.0	1.0	LO

Radar:	Hughes MG-3	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	90–10	DJM:	—
Track:	40–8	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	None

Technology:

CC Rocket Attack

Load Point Limits: CL : < 4
1/2: < 7
DT : ≥ 7

Weight Limit: 4,000

Station	Limit	Allowed Loads
1 and 5	1,500	FT
2 and 4	280	IRM RHM
3	280	IRM RHM

Load Notes:

1. Stations 2 to 4 corresponds to the internal weapons bays. They can each carry two RHMs and IRMs. The central bay 3 also has two factors of air-to-air rocket.
2. May only use GAR-1/1D (AIM-4/-4A) RHMs and GAR-2/-2A/-2B (AIM-4B/-4C/-4D) IRMs.

Notes:

1.
2. High bleed rate (HBR). Low transonic drag (LTD). Poor supersonic maneuverability (PSSM).

VPs: 20/13/7/3

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F-102A Delta Dagger (Late)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.0	2.0	7.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	7	Internal Fuel:	340
Size:	+0	AtA Refuel:	No
Vulnerability:	−1	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.75	0.75	1.25
HT	1.25	1.25	1.75
BT	1.75	1.75	2.25
ET	2.25	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 55	1/2 53	DT 50	Dive Speed
EH+	46+	3.0 – 7.5	3.5 – 6.0	3.5 – 6.0	10.0
VH	36–45	3.5 – 8.0	3.0 – 6.5	3.5 – 6.0	10.0
HI	26–35	2.5 – 8.0	3.0 – 6.5	3.0 – 6.0	9.5
MH	17–25	2.5 – 8.0	2.5 – 6.5	2.5 – 6.0	9.0
ML	8–16	2.0 – 7.5	2.5 – 7.0	2.5 – 6.5	8.0
LO	0–7	1.5 – 7.0	2.0 – 7.0	2.0 – 6.5	7.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	2.0	0.5	1.0	0.5	1.0	0.5	VH
HI	2.0	0.5	1.0	0.5	1.0	0.5	HI
MH	2.0	1.0	2.0	1.0	1.0	0.5	MH
ML	3.0	1.0	2.0	1.0	2.0	1.0	ML
LO	3.0	1.0	2.0	1.0	2.0	1.0	LO

Radar:	Hughes MG-3	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	90–10	DJM:	—
Track:	40–8	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	None

Technology:

CC Rocket Attack and IRST-A

Load Point Limits: CL : < 4
1/2: < 7
DT : ≥ 7

Weight Limit: 4,080

Station	Limit	Allowed Loads
1 and 5	1,500	FT
2 and 4	280	IRM RHM
3	520	IRM RHM

Load Notes:

1. Stations 2 to 4 corresponds to the internal weapons bays. They can each carry two RHMs and IRMs.
2. The side bays 2 and 4 may carry only AIM-4B/-4C/-4D (GAR-2/-2A/-2B) IRMs and AIM-4/-4A (GAR-1/1D). The central bay 3 may also carry AIM-26A/-26B RHMs.

Notes:

1.
2. High bleed rate (HBR). Low transonic drag (LTD). Poor supersonic maneuverability (PSSM).

VPs: 20/13/7/3

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Vought F8U/F-8 Crusader

- F8U-1P
- RF-8A
- F8U-2
- F-8C
- F-8C (1966 Upgrade)
- F-8C (1969 Upgrade)
- F8U-2N
- F-8D
- F-8D (1966 Upgrade)
- F-8D (1969 Upgrade)
- F8U-2NE
- F-8E
- F-8E (1966 Upgrade)
- F-8E (1969 Upgrade)
- F-8E (FN)
- F-8J

F8U-1P Crusader

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.5	2.0	7.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	480
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.0	1.5	1.5
BT	2.0	2.0	2.0
ET	2.0	2.5	2.5

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 52	1/2 50	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 11.0	4.0 – 10.0	4.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 11.0	3.0 – 10.0	3.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	2.5 – 10.0	2.5 – 10.0	2.5 – 9.0	11.0	2.0	1.0	2.0	1.0	2.0	1.0	HI
MH	17–25	2.0 – 9.0	2.0 – 9.0	2.0 – 8.0	10.0	3.0	1.0	3.0	1.0	2.0	1.0	MH
ML	8–16	2.0 – 8.0	2.0 – 8.0	2.0 – 7.5	9.5	3.0	1.5	3.0	1.0	3.0	1.0	ML
LO	0–7	1.5 – 7.5	2.0 – 7.5	2.0 – 7.5	8.5	4.0	2.0	3.0	1.0	3.0	1.0	LO

Radar:	APS-67	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	40–8	DJM:	—
Track:	24–6	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	—
Bomb System:	Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 1
1/2: < 5
DT : ≥ 5

Weight Limit: 1,400

Station	Limit	Allowed Loads

Notes:

1.
2. Rapid acceleration (RA).
3. Equipped with oblique camera and overhead day-and-night camera.

VPs: 20/13/7/3

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RF-8A Crusader

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.5	2.0	7.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	480
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.0	1.5	1.5
BT	2.0	2.0	2.0
ET	2.0	2.5	2.5

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 52	1/2 50	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 11.0	4.0 – 10.0	4.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 11.0	3.0 – 10.0	3.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	2.5 – 10.0	2.5 – 10.0	2.5 – 9.0	11.0	2.0	1.0	2.0	1.0	2.0	1.0	HI
MH	17–25	2.0 – 9.0	2.0 – 9.0	2.0 – 8.0	10.0	3.0	1.0	3.0	1.0	2.0	1.0	MH
ML	8–16	2.0 – 8.0	2.0 – 8.0	2.0 – 7.5	9.5	3.0	1.5	3.0	1.0	3.0	1.0	ML
LO	0–7	1.5 – 7.5	2.0 – 7.5	2.0 – 7.5	8.5	4.0	2.0	3.0	1.0	3.0	1.0	LO

Radar:	APS-67	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	40–8	DJM:	—
Track:	24–6	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	—
Bomb System:	Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 1 / 1/2: < 5 / DT : ≥ 5

Weight Limit: 1,400

Station	Limit	Allowed Loads

Notes:

1.
2. Rapid acceleration (RA).
3. Equipped with oblique camera and overhead day-and-night camera.

VPs: 20/13/7/3

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F8U-2 Crusader

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.5	2.0	7.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	410
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.0	1.5	1.5
BT	2.0	2.0	2.0
ET	2.0	2.5	2.5

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 52	1/2 50	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 11.0	4.0 – 10.0	4.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 11.0	3.0 – 10.0	3.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	2.5 – 10.0	2.5 – 10.0	2.5 – 9.0	11.0	2.0	1.0	2.0	1.0	2.0	1.0	HI
MH	17–25	2.0 – 9.0	2.0 – 9.0	2.0 – 8.0	10.0	3.0	1.0	3.0	1.0	2.0	1.0	MH
ML	8–16	2.0 – 8.0	2.0 – 8.0	2.0 – 7.5	9.5	3.0	1.5	3.0	1.0	3.0	1.0	ML
LO	0–7	1.5 – 7.5	2.0 – 7.5	2.0 – 7.5	8.5	4.0	2.0	3.0	1.0	3.0	1.0	LO

Radar:	APS-67	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	40–8	DJM:	—
Track:	24–6	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Mk 12
To Hit:	6/4/3
Ammunition:	4.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

CC Rocket Attack

Load Point Limits: CL : < 1, 1/2: < 5, DT : ≥ 5

Weight Limit: 1,400

Station	Limit	Allowed Loads
1 and 3	350	IRM RP
2	0	

Load Notes:

1. Station 2 is a retractable rocket pack with 3 factors of air-to-air rockets.
2. May only use AIM-9 IRMs.
3. May only use LAU-33 RPs.

Notes:

1.
2. Rapid acceleration (RA).

VPs: 20/13/7/3

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F-8C Crusader

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.5	2.0	7.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	410
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.0	1.5	1.5
BT	2.0	2.0	2.0
ET	2.0	2.5	2.5

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 52	1/2 50	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 11.0	4.0 – 10.0	4.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 11.0	3.0 – 10.0	3.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	2.5 – 10.0	2.5 – 10.0	2.5 – 9.0	11.0	2.0	1.0	2.0	1.0	2.0	1.0	HI
MH	17–25	2.0 – 9.0	2.0 – 9.0	2.0 – 8.0	10.0	3.0	1.0	3.0	1.0	2.0	1.0	MH
ML	8–16	2.0 – 8.0	2.0 – 8.0	2.0 – 7.5	9.5	3.0	1.5	3.0	1.0	3.0	1.0	ML
LO	0–7	1.5 – 7.5	2.0 – 7.5	2.0 – 7.5	8.5	4.0	2.0	3.0	1.0	3.0	1.0	LO

Radar:	APS-67	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	40–8	DJM:	—
Track:	24–6	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Mk 12
To Hit:	6/4/3
Ammunition:	4.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

CC Rocket Attack

Load Point Limits: CL : < 1 / 1/2: < 5 / DT : ≥ 5

Weight Limit: 1,400

Station	Limit	Allowed Loads
1 and 3	350	IRM RP
2	0	

Load Notes:

1. Station 2 is a retractable rocket pack with 3 factors of air-to-air rockets.
2. May only use AIM-9 IRMs.
3. May only use LAU-33 RPs.

Notes:

1.
2. Rapid acceleration (RA).

VPs: 20/13/7/3

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F-8C Crusader (1966 Upgrade)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.5	2.0	7.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	410
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.0	1.5	1.5
BT	2.0	2.0	2.0
ET	2.0	2.5	2.5

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 52	1/2 50	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 11.0	4.0 – 10.0	4.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 11.0	3.0 – 10.0	3.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	2.5 – 10.0	2.5 – 10.0	2.5 – 9.0	11.0	2.0	1.0	2.0	1.0	2.0	1.0	HI
MH	17–25	2.0 – 9.0	2.0 – 9.0	2.0 – 8.0	10.0	3.0	1.0	3.0	1.0	2.0	1.0	MH
ML	8–16	2.0 – 8.0	2.0 – 8.0	2.0 – 7.5	9.5	3.0	1.5	3.0	1.0	3.0	1.0	ML
LO	0–7	1.5 – 7.5	2.0 – 7.5	2.0 – 7.5	8.5	4.0	2.0	3.0	1.0	3.0	1.0	LO

Radar:	APS-67	**ECM:**	IFF
ECCM:	0	RWR:	A
Arcs:	180+	DDS:	—
Search:	40–8	DJM:	—
Track:	24–6	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Mk 12
To Hit:	6/4/3
Ammunition:	4.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

CC Rocket Attack

Load Point Limits: CL : < 1; 1/2: < 5; DT : ≥ 5

Weight Limit: 1,400

Station	Limit	Allowed Loads
1 and 3	350	IRM RP
2	0	

Load Notes:

1. Station 2 is a retractable rocket pack with 3 factors of air-to-air rockets.
2. May only use AIM-9 IRMs.
3. May only use LAU-33 RPs.

Notes:

1.
2. Rapid acceleration (RA).

VPs: 20/13/7/3

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F-8C Crusader (1969 Upgrade)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.5	2.0	7.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	410
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.0	1.5	1.5
BT	2.0	2.0	2.0
ET	2.0	2.5	2.5

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 52	1/2 50	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 11.0	4.0 – 10.0	4.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 11.0	3.0 – 10.0	3.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	2.5 – 10.0	2.5 – 10.0	2.5 – 9.0	11.0	2.0	1.0	2.0	1.0	2.0	1.0	HI
MH	17–25	2.0 – 9.0	2.0 – 9.0	2.0 – 8.0	10.0	3.0	1.0	3.0	1.0	2.0	1.0	MH
ML	8–16	2.0 – 8.0	2.0 – 8.0	2.0 – 7.5	9.5	3.0	1.5	3.0	1.0	3.0	1.0	ML
LO	0–7	1.5 – 7.5	2.0 – 7.5	2.0 – 7.5	8.5	4.0	2.0	3.0	1.0	3.0	1.0	LO

Radar:	APS-67	**ECM:**	IFF
ECCM:	0	RWR:	A
Arcs:	180+	DDS:	—
Search:	40–8	DJM:	A3
Track:	24–6	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Mk 12
To Hit:	6/4/3
Ammunition:	2.5
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

CC Rocket Attack

Load Point Limits: CL : < 1 / 1/2: < 5 / DT : ≥ 5

Weight Limit: 1,400

Station	Limit	Allowed Loads
1 and 3	350	IRM RP
2	0	

Load Notes:

1. Station 2 is a retractable rocket pack with 3 factors of air-to-air rockets.
2. May only use AIM-9 IRMs.
3. May only use LAU-33 RPs.

Notes:

1.
2. Rapid acceleration (RA).

VPs: 20/13/7/3

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F8U-2N Crusader

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.5	2.0	7.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	480
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.0	1.5	1.5
BT	2.0	2.0	2.0
ET	2.0	2.5	2.5

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 52	1/2 50	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 11.0	4.0 – 10.0	4.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 11.0	3.0 – 10.0	3.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	2.5 – 10.0	2.5 – 10.0	2.5 – 9.0	11.0	2.0	1.0	2.0	1.0	2.0	1.0	HI
MH	17–25	2.0 – 9.0	2.0 – 9.0	2.0 – 8.0	10.0	3.0	1.0	3.0	1.0	2.0	1.0	MH
ML	8–16	2.0 – 8.0	2.0 – 8.0	2.0 – 7.5	9.5	3.0	1.5	3.0	1.0	3.0	1.0	ML
LO	0–7	1.5 – 7.5	2.0 – 7.5	2.0 – 7.5	8.5	4.0	2.0	3.0	1.0	3.0	1.0	LO

Radar:	APQ-83	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	80–10	DJM:	—
Track:	40–10	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Mk 12
To Hit:	6/4/3
Ammunition:	4.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 1, 1/2: < 5, DT : ≥ 5

Weight Limit: 1,400

Station	Limit	Allowed Loads
1 and 2	700	IRM RHM RP

Load Notes:

1. May only use AIM-9 IRMs and AIM-9C RHMs.
2. May only use LAU-33 RPs.

Notes:

1.
2. Rapid acceleration (RA).

VPs: 22/15/7/4

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F-8D Crusader

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.5	2.0	7.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	480
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.0	1.5	1.5
BT	2.0	2.0	2.0
ET	2.0	2.5	2.5

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 52	1/2 50	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 11.0	4.0 – 10.0	4.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 11.0	3.0 – 10.0	3.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	2.5 – 10.0	2.5 – 10.0	2.5 – 9.0	11.0	2.0	1.0	2.0	1.0	2.0	1.0	HI
MH	17–25	2.0 – 9.0	2.0 – 9.0	2.0 – 8.0	10.0	3.0	1.0	3.0	1.0	2.0	1.0	MH
ML	8–16	2.0 – 8.0	2.0 – 8.0	2.0 – 7.5	9.5	3.0	1.5	3.0	1.0	3.0	1.0	ML
LO	0–7	1.5 – 7.5	2.0 – 7.5	2.0 – 7.5	8.5	4.0	2.0	3.0	1.0	3.0	1.0	LO

Radar:	APQ-83	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	80–10	DJM:	—
Track:	40–10	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Mk 12
To Hit:	6/4/3
Ammunition:	4.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 1, 1/2: < 5, DT : ≥ 5

Weight Limit: 1,400

Station	Limit	Allowed Loads
1 and 2	700	IRM RHM RP

Load Notes:

1. May only use AIM-9 IRMs and AIM-9C RHMs.
2. May only use LAU-33 RPs.

Notes:

1.
2. Rapid acceleration (RA).

VPs: 22/15/7/4

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F-8D Crusader (1966 Upgrade)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.5	2.0	7.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	480
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.0	1.5	1.5
BT	2.0	2.0	2.0
ET	2.0	2.5	2.5

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 52	1/2 50	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 11.0	4.0 – 10.0	4.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 11.0	3.0 – 10.0	3.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	2.5 – 10.0	2.5 – 10.0	2.5 – 9.0	11.0	2.0	1.0	2.0	1.0	2.0	1.0	HI
MH	17–25	2.0 – 9.0	2.0 – 9.0	2.0 – 8.0	10.0	3.0	1.0	3.0	1.0	2.0	1.0	MH
ML	8–16	2.0 – 8.0	2.0 – 8.0	2.0 – 7.5	9.5	3.0	1.5	3.0	1.0	3.0	1.0	ML
LO	0–7	1.5 – 7.5	2.0 – 7.5	2.0 – 7.5	8.5	4.0	2.0	3.0	1.0	3.0	1.0	LO

Radar:	APQ-83	**ECM:**	IFF
ECCM:	0	RWR:	A
Arcs:	180+	DDS:	—
Search:	80–10	DJM:	—
Track:	40–10	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Mk 12
To Hit:	6/4/3
Ammunition:	4.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 1 / 1/2: < 5 / DT : ≥ 5

Weight Limit: 1,400

Station	Limit	Allowed Loads
1 and 2	700	IRM RHM RP

Load Notes:

1. May only use AIM-9 IRMs and AIM-9C RHMs.
2. May only use LAU-33 RPs.

Notes:

1.
2. Rapid acceleration (RA).

VPs: 22/15/7/4

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F-8D Crusader (1969 Upgrade)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.5	2.0	7.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	480
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.0	1.5	1.5
BT	2.0	2.0	2.0
ET	2.0	2.5	2.5

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 52	1/2 50	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.5 – 11.0	4.0 – 10.0	4.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.0 – 11.0	3.0 – 10.0	3.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	2.5 – 10.0	2.5 – 10.0	2.5 – 9.0	11.0	2.0	1.0	2.0	1.0	2.0	1.0	HI
MH	17–25	2.0 – 9.0	2.0 – 9.0	2.0 – 8.0	10.0	3.0	1.0	3.0	1.0	2.0	1.0	MH
ML	8–16	2.0 – 8.0	2.0 – 8.0	2.0 – 7.5	9.5	3.0	1.5	3.0	1.0	3.0	1.0	ML
LO	0–7	1.5 – 7.5	2.0 – 7.5	2.0 – 7.5	8.5	4.0	2.0	3.0	1.0	3.0	1.0	LO

Radar:	APQ-83	**ECM:**	IFF
ECCM:	0	RWR:	A
Arcs:	180+	DDS:	—
Search:	80–10	DJM:	A3
Track:	40–10	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Mk 12
To Hit:	6/4/3
Ammunition:	2.5
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 1 / 1/2: < 5 / DT : ≥ 5

Weight Limit: 1,400

Station	Limit	Allowed Loads
1 and 2	700	IRM RHM RP

Load Notes:

1. May only use AIM-9 IRMs and AIM-9C RHMs.
2. May only use LAU-33 RPs.

Notes:

1.
2. Rapid acceleration (RA).

VPs: 22/15/7/4

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F8U-2NE Crusader

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.0	2.0	8.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	435
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.0	2.5
ET	2.5	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 58	1/2 52	DT 45	Dive Speed
EH+	46+	4.0 – 11.0	4.0 – 9.5	—	12.0
VH	36–45	3.5 – 11.0	3.5 – 9.5	4.0 – 8.5	12.0
HI	26–35	3.0 – 10.0	3.0 – 9.0	3.5 – 8.0	11.0
MH	17–25	2.5 – 9.0	2.5 – 8.5	3.0 – 7.5	10.0
ML	8–16	2.0 – 8.0	2.0 – 7.5	2.5 – 7.0	9.0
LO	0–7	1.5 – 7.5	2.0 – 7.5	2.0 – 6.5	8.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
1.0	0.5	1.0	0.5	—	—	EH+
1.0	0.5	1.0	0.5	1.0	0.5	VH
2.0	1.0	1.0	0.5	1.0	0.5	HI
3.0	1.0	2.0	1.0	1.0	0.5	MH
3.0	1.5	2.0	1.0	2.0	1.0	ML
3.0	1.5	3.0	1.0	2.0	1.0	LO

Radar:	APQ-94	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	120–20	DJM:	—
Track:	90–15	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Mk 12
To Hit:	6/4/3
Ammunition:	4.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 3
1/2: < 7
DT : ≥ 7

Weight Limit: 5,500

Station	Limit	Allowed Loads
1 and 4	2,700	BB RP RG WR
2 and 3	700	IRM RHM RP MDR DR

Load Notes:
1. May only use AIM-9 IRMs and RHMs.
2. May only use LAU-33 RPs on stations 2 and 3.
3. May only use AGM-12 RGs.

Notes:
1.
2. Rapid acceleration (RA).

VPs: 24/16/8/4

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F-8E Crusader

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.0	2.0	8.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	435
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.0	2.5
ET	2.5	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 58	1/2 52	DT 45	Dive Speed
EH+	46+	4.0 – 11.0	4.0 – 9.5	—	12.0
VH	36–45	3.5 – 11.0	3.5 – 9.5	4.0 – 8.5	12.0
HI	26–35	3.0 – 10.0	3.0 – 9.0	3.5 – 8.0	11.0
MH	17–25	2.5 – 9.0	2.5 – 8.5	3.0 – 7.5	10.0
ML	8–16	2.0 – 8.0	2.0 – 7.5	2.5 – 7.0	9.0
LO	0–7	1.5 – 7.5	2.0 – 7.5	2.0 – 6.5	8.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	2.0	1.0	1.0	0.5	1.0	0.5	HI
MH	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	3.0	1.5	2.0	1.0	2.0	1.0	ML
LO	3.0	1.5	3.0	1.0	2.0	1.0	LO

Radar:	APQ-94	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	120–20	DJM:	—
Track:	90–15	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Mk 12
To Hit:	6/4/3
Ammunition:	4.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 5,500

Station	Limit	Allowed Loads
1 and 4	2,700	BB RP RG WR
2 and 3	700	IRM RHM RP MDR DR

Load Notes:

1. May only use AIM-9 IRMs and RHMs.
2. May only use LAU-33 RPs on stations 2 and 3.
3. May only use AGM-12 RGs.

Notes:

1.
2. Rapid acceleration (RA).

VPs: 24/16/8/4

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F-8E Crusader (1966 Upgrade)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.0	2.0	8.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	435
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.0	2.5
ET	2.5	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 58	1/2 52	DT 45	Dive Speed
EH+	46+	4.0 – 11.0	4.0 – 9.5	—	12.0
VH	36–45	3.5 – 11.0	3.5 – 9.5	4.0 – 8.5	12.0
HI	26–35	3.0 – 10.0	3.0 – 9.0	3.5 – 8.0	11.0
MH	17–25	2.5 – 9.0	2.5 – 8.5	3.0 – 7.5	10.0
ML	8–16	2.0 – 8.0	2.0 – 7.5	2.5 – 7.0	9.0
LO	0–7	1.5 – 7.5	2.0 – 7.5	2.0 – 6.5	8.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
1.0	0.5	1.0	0.5	—	—	EH+
1.0	0.5	1.0	0.5	1.0	0.5	VH
2.0	1.0	1.0	0.5	1.0	0.5	HI
3.0	1.0	2.0	1.0	1.0	0.5	MH
3.0	1.5	2.0	1.0	2.0	1.0	ML
3.0	1.5	3.0	1.0	2.0	1.0	LO

Radar:	APQ-94	**ECM:**	IFF
ECCM:	0	RWR:	A
Arcs:	180+	DDS:	—
Search:	120–20	DJM:	—
Track:	90–15	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Mk 12
To Hit:	6/4/3
Ammunition:	4.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 3
1/2: < 7
DT : ≥ 7

Weight Limit: 5,500

Station	Limit	Allowed Loads
1 and 4	2,700	BB RP RG WR
2 and 3	700	IRM RHM RP MDR DR

Load Notes:
1. May only use AIM-9 IRMs and RHMs.
2. May only use LAU-33 RPs on stations 2 and 3.
3. May only use AGM-12 RGs.

Notes:
1.
2. Rapid acceleration (RA).

VPs: 24/16/8/4

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F-8E Crusader (1969 Upgrade)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.0	2.0	8.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	435
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.0	2.5
ET	2.5	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 58	1/2 52	DT 45	Dive Speed
EH+	46+	4.0 – 11.0	4.0 – 9.5	—	12.0
VH	36–45	3.5 – 11.0	3.5 – 9.5	4.0 – 8.5	12.0
HI	26–35	3.0 – 10.0	3.0 – 9.0	3.5 – 8.0	11.0
MH	17–25	2.5 – 9.0	2.5 – 8.5	3.0 – 7.5	10.0
ML	8–16	2.0 – 8.0	2.0 – 7.5	2.5 – 7.0	9.0
LO	0–7	1.5 – 7.5	2.0 – 7.5	2.0 – 6.5	8.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
1.0	0.5	1.0	0.5	—	—	EH+
1.0	0.5	1.0	0.5	1.0	0.5	VH
2.0	1.0	1.0	0.5	1.0	0.5	HI
3.0	1.0	2.0	1.0	1.0	0.5	MH
3.0	1.5	2.0	1.0	2.0	1.0	ML
3.0	1.5	3.0	1.0	2.0	1.0	LO

Radar:	APQ-94	**ECM:**	IFF
ECCM:	0	RWR:	A
Arcs:	180+	DDS:	—
Search:	120–20	DJM:	A3
Track:	90–15	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Mk 12
To Hit:	6/4/3
Ammunition:	2.5
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 3 / 1/2: < 7 / DT : ≥ 7

Weight Limit: 5,500

Station	Limit	Allowed Loads
1 and 4	2,700	BB RP RG WR
2 and 3	700	IRM RHM RP MDR DR

Load Notes:

1. May only use AIM-9 IRMs and RHMs.
2. May only use LAU-33 RPs on stations 2 and 3.
3. May only use AGM-12 RGs.

Notes:

1.
2. Rapid acceleration (RA).

VPs: 24/16/8/4

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F-8E Crusader (FN)

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.0	2.0	8.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	435
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.0	2.5
ET	2.5	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 58	1/2 52	DT 45	Dive Speed
EH+	46+	4.0 – 11.0	4.0 – 9.5	—	12.0
VH	36–45	3.5 – 11.0	3.5 – 9.5	4.0 – 8.5	12.0
HI	26–35	3.0 – 10.0	3.0 – 9.0	3.5 – 8.0	11.0
MH	17–25	2.5 – 9.0	2.5 – 8.5	3.0 – 7.5	10.0
ML	8–16	2.0 – 8.0	2.0 – 7.5	2.5 – 7.0	9.0
LO	0–7	1.5 – 7.5	2.0 – 7.5	2.0 – 6.5	8.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	2.0	1.0	1.0	0.5	1.0	0.5	HI
MH	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	3.0	1.5	2.0	1.0	2.0	1.0	ML
LO	3.0	1.5	3.0	1.0	2.0	1.0	LO

Radar:	APQ-94
ECCM:	0
Arcs:	180+
Search:	120–20
Track:	90–15
Lock-On:	6

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Mk 12
To Hit:	6/4/3
Ammunition:	4.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*

Bomb System: Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 5,500

Station	Limit	Allowed Loads
1 and 4	2,700	BB RP RG WR
2 and 3	700	IRM RHM RP MDR DR

Load Notes:

1. May only use Matra 550 IRMs and Matra 530 RHMs.
2. May only use LAU-33 RPs on stations 2 and 3.
3. May only use AS-30 RGs.

Notes:

1.
2. Rapid acceleration (RA).

VPs: 24/16/8/4

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F-8J Crusader

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.0	2.0	8.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	435
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.0	2.5
ET	2.5	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 58	1/2 52	DT 45	Dive Speed
EH+	46+	4.0 – 11.0	4.0 – 9.5	—	12.0
VH	36–45	3.5 – 11.0	3.5 – 9.5	4.0 – 8.5	12.0
HI	26–35	3.0 – 10.0	3.0 – 9.0	3.5 – 8.0	11.0
MH	17–25	2.5 – 9.0	2.5 – 8.5	3.0 – 7.5	10.0
ML	8–16	2.0 – 8.0	2.0 – 7.5	2.5 – 7.0	9.0
LO	0–7	1.5 – 7.5	2.0 – 7.5	2.0 – 6.5	8.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	1.0	0.5	1.0	0.5	1.0	0.5	VH
HI	2.0	1.0	1.0	0.5	1.0	0.5	HI
MH	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	3.0	1.5	2.0	1.0	2.0	1.0	ML
LO	3.0	1.5	3.0	1.0	2.0	1.0	LO

Radar:	APQ-124
ECCM:	0
Arcs:	180+
Search:	150–30
Track:	90–30
Lock-On:	6

ECM:	IFF
RWR:	A
DDS:	—
DJM:	A3
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Four 20 mm Mk 12
To Hit:	6/4/3
Ammunition:	2.5
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	5/6*
Bomb System:	Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 3, 1/2: < 7, DT : ≥ 7

Weight Limit: 5,500

Station	Limit	Allowed Loads
1 and 4	2,700	BB RP RG WR FT
2 and 3	700	IRM RHM RP MDR DR

Load Notes:

1. May only use AIM-9 IRMs and RHMs.
2. May only use LAU-33 RPs on stations 2 and 3.
3. May only use AGM-12 RGs.

Notes:

1.
2. Rapid acceleration (RA).

VPs: 24/16/8/4

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McDonnell F-101 Voodoo

- F-101B
- F-101C
- RF-101C
- RF-101C (Late)

F-101B Voodoo

Crew: Pilot and Radar Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.5	12.0
M	1.5	1.5	1.0	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	665
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.0
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.0	2.5	2.5
BT	2.5	3.0	3.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 55	1/2 50	DT 45	Dive Speed
EH+	46+	4.0 – 10.0	4.5 – 9.0	—	12.0
VH	36–45	3.5 – 11.0	4.0 – 10.0	4.0 – 8.5	12.0
HI	26–35	3.0 – 10.0	3.5 – 9.0	4.0 – 8.0	11.0
MH	17–25	2.5 – 9.0	3.0 – 8.0	3.5 – 7.0	10.0
ML	8–16	2.5 – 8.0	2.5 – 7.0	3.0 – 6.0	9.0
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	8.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	2.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	1.0	1.0	0.5	HI
MH	4.0	1.0	3.0	1.0	2.0	1.0	MH
ML	6.0	2.0	4.0	1.0	3.0	1.0	ML
LO	7.0	3.0	5.0	2.0	3.0	1.0	LO

Radar:	MG-13	**ECM:**	IFF
ECCM:	1	RWR:	—
Arcs:	180+	DDS:	—
Search:	180–30	DJM:	—
Track:	60–20	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 5 / 1/2: < 9 / DT : ≥ 9

Weight Limit: 8,000

Station	Limit	Allowed Loads
1 and 3	3,000	FT
2	2,000	IRM RHM Nuc RK

Load Notes:

1. Station 2 is the internal weapons bay. It can carry two RHM/IRM and two MB-1 (AIR-2A) Genie nuclear rockets.
2. May only use GAR-1/1D (AIM-4/-4A) RHMs and GAR-2/-2A/-2B (AIM-4B/-4C/-4D) IRMs.

Notes:

1.

VPs: 24/16/8/4

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F-101C Voodoo

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.0	2.5	2.5
BT	2.5	3.0	3.0
ET	—	—	—

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.5	12.0
M	1.5	1.5	1.0	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	740
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Std

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 55	1/2 50	DT 45	Dive Speed
EH+	46+	4.0 – 10.0	4.5 – 9.0	—	12.0
VH	36–45	3.5 – 11.0	4.0 – 10.0	4.0 – 8.5	12.0
HI	26–35	3.0 – 10.0	3.5 – 9.0	4.0 – 8.0	11.0
MH	17–25	2.5 – 9.0	3.0 – 8.0	3.5 – 7.0	10.0
ML	8–16	2.5 – 8.0	2.5 – 7.0	3.0 – 6.0	9.0
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	8.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	2.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	1.0	1.0	0.5	HI
MH	4.0	1.0	3.0	1.0	2.0	1.0	MH
ML	6.0	2.0	4.0	1.0	3.0	1.0	ML
LO	7.0	3.0	5.0	2.0	3.0	1.0	LO

Radar:	APS-154
ECCM:	0
Arcs:	180+
Search:	60–12
Track:	48–12
Lock-On:	6

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Three 20 mm M39
To Hit:	6/3/3
Ammunition:	9.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	4/6*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5
1/2: < 9
DT : ≥ 9

Weight Limit: 8,000

Station	Limit	Allowed Loads
1 and 3	3,000	FT
2	2,000	BB FT

Notes:
1.

VPs: 16/11/5/3

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RF-101C Voodoo

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.5	12.0
M	1.5	1.5	1.0	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	740
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.0	2.5	2.5
BT	2.5	3.0	3.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 55	1/2 50	DT 45	Dive Speed
EH+	46+	4.0 – 10.0	4.5 – 9.0	—	12.0
VH	36–45	3.5 – 11.0	4.0 – 10.0	4.0 – 8.5	12.0
HI	26–35	3.0 – 10.0	3.5 – 9.0	4.0 – 8.0	11.0
MH	17–25	2.5 – 9.0	3.0 – 8.0	3.5 – 7.0	10.0
ML	8–16	2.5 – 8.0	2.5 – 7.0	3.0 – 6.0	9.0
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	8.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	2.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	1.0	1.0	0.5	HI
MH	4.0	1.0	3.0	1.0	2.0	1.0	MH
ML	6.0	2.0	4.0	1.0	3.0	1.0	ML
LO	7.0	3.0	5.0	2.0	3.0	1.0	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	—

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 5
1/2: < 9
DT : ≥ 9

Weight Limit: 8,000

Station	Limit	Allowed Loads
1 and 3	3,000	FT
2	2,000	BB FT

Notes:

1.
2. Camera-filled nose, with oblique and overhead cameras.

VPs: 20/13/7/3

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RF-101C Voodoo (Late)

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.0	2.5	2.5
BT	2.5	3.0	3.0
ET	—	—	—

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.5	12.0
M	1.5	1.5	1.0	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	740
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Std

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 55	1/2 50	DT 45	Dive Speed
EH+	46+	4.0 – 10.0	4.5 – 9.0	—	12.0
VH	36–45	3.5 – 11.0	4.0 – 10.0	4.0 – 8.5	12.0
HI	26–35	3.0 – 10.0	3.5 – 9.0	4.0 – 8.0	11.0
MH	17–25	2.5 – 9.0	3.0 – 8.0	3.5 – 7.0	10.0
ML	8–16	2.5 – 8.0	2.5 – 7.0	3.0 – 6.0	9.0
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	8.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	2.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	1.0	1.0	0.5	HI
MH	4.0	1.0	3.0	1.0	2.0	1.0	MH
ML	6.0	2.0	4.0	1.0	3.0	1.0	ML
LO	7.0	3.0	5.0	2.0	3.0	1.0	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	A
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	—

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 5
1/2: < 9
DT : ≥ 9

Weight Limit: 8,000

Station	Limit	Allowed Loads
1 and 5	500	EP
2 and 4	3,000	FT
3	2,000	BB FT

Notes:

1.
2. Camera-filled nose, with oblique and overhead cameras.

VPs: 20/13/7/3

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Cessna T-37 Tweet

An ADC is provided for the:

- T-37C

See Also

- Cessna A-37 Dragonfly

T-37C Tweet

Crew: Pilot and Observer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	0.5	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.0	Restr. Arcs:	-
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	130
Size:	+1	AtA Refuel:	Yes
Vulnerability:	−1	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.0
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	1.0
HT	1.0	1.0	1.5
BT	1.0	1.5	1.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 38	1/2 35	DT 30	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	2.0 – 4.0	—	—	5.5
HI	26–35	2.0 – 4.0	2.0 – 3.5	—	5.5
MH	17–25	1.5 – 4.5	2.0 – 3.5	2.0 – 3.5	5.5
ML	8–16	1.0 – 4.5	1.5 – 4.0	1.5 – 3.5	5.5
LO	0–7	1.0 – 4.5	1.0 – 4.0	1.5 – 3.5	5.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	—	—	—	VH
HI	—	0.5	—	0.5	—	—	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.0	—	1.0	—	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+1/HT+2/BT+3
Ranging:	—
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 5
DT : ≥ 5

Weight Limit: 1,000

Station	Limit	Allowed Loads
1 and 2	500	BB RK RP MDR IRM

Load Notes:

1. May only use the AIM-9B IRM.

Notes:

1.
2. High transonic drag (HTD).

VPs: 8/5/3/1

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Lockheed F-104 Starfighter

- F-104A
- F-104A (Late)
- F-104B
- F-104B (Late)
- F-104C
- F-104C (ATA Refueling)
- F-104D
- F-104D (ATA Refueling)

F-104A Starfighter

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	3.5	3.5	3.0	5.0
M	2.0	2.0	1.5	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	6.0	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	290
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.0	2.0	2.0
BT	2.5	—	—
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 59	1/2 52	DT 44	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	6.0 – 13.5	6.0 – 11.0	—	13.5	3.0	1.0	1.0	0.5	—	—	EH+
VH	36–45	4.5 – 13.5	4.5 – 11.0	4.5 – 10.0	13.5	4.0	1.0	2.0	0.5	1.0	0.5	VH
HI	26–35	3.5 – 13.0	4.0 – 11.5	4.0 – 10.0	13.5	5.0	2.0	3.0	1.0	2.0	0.5	HI
MH	17–25	3.0 – 12.0	3.5 – 9.5	3.5 – 9.0	12.0	6.0	2.0	4.0	1.0	2.0	1.0	MH
ML	8–16	2.5 – 10.5	2.5 – 8.5	3.0 – 8.0	10.5	7.0	2.0	5.0	2.0	3.0	1.0	ML
LO	0–7	2.5 – 9.0	2.5 – 7.5	2.5 – 7.0	9.0	7.0	3.0	5.0	2.0	3.0	1.0	LO

Radar:	ASG-14	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	60–12	DJM:	—
Track:	30–10	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	20 mm M61A1 Vulcan
To Hit:	7/5/3
Ammunition:	3.5
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	6/8*
Bomb System:	Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 3, 1/2: < 6, DT : ≥ 6

Weight Limit: 7,800

Station	Limit	Allowed Loads
1 and 4	1,300	IRM FT
2 and 3	1,500	FT

Load Notes:

1. Stations 1 and 4 may only carry IRMs or 165 gal (600L) FTs.
2. Stations 2 and 3 may only carry 200 gal (700L) FTs.
3. May only use AIM-9B through AIM-9P IRMs.

Notes:

1.
2. Good supersonic maneuverability (GSSM). Low transonic drag (LTD). Rapid acceleration (RA). Rapid power response (RPR).
3. Before 1958, F-104As has downward ejecting seats. No ejections allowed unless aircraft is at least 2 levels above terrain.

VPs: 15/10/5/3

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F-104A Starfighter (Late)

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	4.0	3.5	3.5	6.0
M	2.5	2.5	2.5	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	6.0	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	290
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.0	2.0	2.0
BT	2.5	—	—
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 63	1/2 58	DT 50	Dive Speed
EH+	46+	6.0 – 13.5	6.0 – 11.0	—	13.5
VH	36–45	4.5 – 13.5	4.5 – 11.0	4.5 – 10.0	13.5
HI	26–35	3.5 – 13.0	4.0 – 11.5	4.0 – 10.0	13.5
MH	17–25	3.0 – 12.0	3.5 – 9.5	3.5 – 9.0	12.0
ML	8–16	2.5 – 10.5	2.5 – 8.5	3.0 – 8.0	10.5
LO	0–7	2.5 – 9.0	2.5 – 7.5	2.5 – 7.0	9.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	3.0	1.0	1.0	0.5	—	—	EH+
VH	4.0	1.0	2.0	0.5	1.0	0.5	VH
HI	5.0	2.0	3.0	1.0	2.0	0.5	HI
MH	6.0	2.0	4.0	1.0	2.0	1.0	MH
ML	7.0	2.0	5.0	2.0	3.0	1.0	ML
LO	7.0	3.0	5.0	2.0	3.0	1.0	LO

Radar:	ASG-14	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	60–12	DJM:	—
Track:	30–10	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	20 mm M61A1 Vulcan
To Hit:	7/5/3
Ammunition:	3.5
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	6/8*
Bomb System:	Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 3, 1/2: < 6, DT : ≥ 6

Weight Limit: 7,800

Station	Limit	Allowed Loads
1 and 4	1,300	IRM FT
2 and 3	1,500	FT

Load Notes:

1. Stations 1 and 4 may only carry IRMs or 165 gal (600L) FTs.
2. Stations 2 and 3 may only carry 200 gal (700L) FTs.
3. May only use AIM-9B through AIM-9P IRMs.

Notes:

1.
2. Good supersonic maneuverability (GSSM). Low transonic drag (LTD). Rapid acceleration (RA). Rapid power response (RPR).

VPs: 18/12/6/3

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F-104B Starfighter

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	3.5	3.5	3.0	5.0
M	2.0	2.0	1.5	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	6.0	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	230
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.0	2.0	2.0
BT	2.5	—	—
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 59	1/2 52	DT 44	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	6.0 – 13.5	6.0 – 11.0	—	13.5	3.0	1.0	1.0	0.5	—	—	EH+
VH	36–45	4.5 – 13.5	4.5 – 11.0	4.5 – 10.0	13.5	4.0	1.0	2.0	0.5	1.0	0.5	VH
HI	26–35	3.5 – 13.0	4.0 – 11.5	4.0 – 10.0	13.5	5.0	2.0	3.0	1.0	2.0	0.5	HI
MH	17–25	3.0 – 12.0	3.5 – 9.5	3.5 – 9.0	12.0	6.0	2.0	4.0	1.0	2.0	1.0	MH
ML	8–16	2.5 – 10.5	2.5 – 8.5	3.0 – 8.0	10.5	7.0	2.0	5.0	2.0	3.0	1.0	ML
LO	0–7	2.5 – 9.0	2.5 – 7.5	2.5 – 7.0	9.0	7.0	3.0	5.0	2.0	3.0	1.0	LO

Radar:	ASG-14	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	60–12	DJM:	—
Track:	30–10	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 6, DT : ≥ 6

Weight Limit: 7,800

Station	Limit	Allowed Loads
1 and 4	1,300	IRM FT
2 and 3	1,500	FT

Load Notes:

1. Stations 1 and 4 may only carry IRMs or 165 gal (600L) FTs.
2. Stations 2 and 3 may only carry 200 gal (700L) FTs.
3. May only use AIM-9B through AIM-9P IRMs.

Notes:

1.
2. Good supersonic maneuverability (GSSM). Low transonic drag (LTD). Rapid acceleration (RA). Rapid power response (RPR).

VPs: 16/11/5/3

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F-104B Starfighter (Late)

Crew: Pilot and Observer

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	4.0	3.5	3.5	6.0
M	2.5	2.5	2.5	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	6.0	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	230
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.0	2.0	2.0
BT	2.5	—	—
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 63	1/2 58	DT 50	Dive Speed
EH+	46+	6.0 – 13.5	6.0 – 11.0	—	13.5
VH	36–45	4.5 – 13.5	4.5 – 11.0	4.5 – 10.0	13.5
HI	26–35	3.5 – 13.0	4.0 – 11.5	4.0 – 10.0	13.5
MH	17–25	3.0 – 12.0	3.5 – 9.5	3.5 – 9.0	12.0
ML	8–16	2.5 – 10.5	2.5 – 8.5	3.0 – 8.0	10.5
LO	0–7	2.5 – 9.0	2.5 – 7.5	2.5 – 7.0	9.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
3.0	1.0	1.0	0.5	—	—	EH+
4.0	1.0	2.0	0.5	1.0	0.5	VH
5.0	2.0	3.0	1.0	2.0	0.5	HI
6.0	2.0	4.0	1.0	2.0	1.0	MH
7.0	2.0	5.0	2.0	3.0	1.0	ML
7.0	3.0	5.0	2.0	3.0	1.0	LO

Radar:	ASG-14	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	60–12	DJM:	—
Track:	30–10	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 6, DT : ≥ 6

Weight Limit: 7,800

Station	Limit	Allowed Loads
1 and 4	1,300	IRM FT
2 and 3	1,500	FT

Load Notes:

1. Stations 1 and 4 may only carry IRMs or 165 gal (600L) FTs.
2. Stations 2 and 3 may only carry 200 gal (700L) FTs.
3. May only use AIM-9B through AIM-9P IRMs.

Notes:

1.
2. Good supersonic maneuverability (GSSM). Low transonic drag (LTD). Rapid acceleration (RA). Rapid power response (RPR).

VPs: 18/12/6/3

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F-104C Starfighter

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	3.5	3.5	3.0	5.0
M	2.0	2.0	1.5	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	6.0	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	290
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.0	2.0	2.0
BT	2.5	—	—
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 59	1/2 52	DT 44	Dive Speed
EH+	46+	6.0 – 13.5	6.0 – 11.0	—	13.5
VH	36–45	4.5 – 13.5	4.5 – 11.0	4.5 – 10.0	13.5
HI	26–35	3.5 – 13.0	4.0 – 11.5	4.0 – 10.0	13.5
MH	17–25	3.0 – 12.0	3.5 – 9.5	3.5 – 9.0	12.0
ML	8–16	2.5 – 10.5	2.5 – 8.5	3.0 – 8.0	10.5
LO	0–7	2.5 – 9.0	2.5 – 7.5	2.5 – 7.0	9.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
3.0	1.0	1.0	0.5	—	—	EH+
4.0	1.0	2.0	0.5	1.0	0.5	VH
5.0	2.0	3.0	1.0	2.0	0.5	HI
6.0	2.0	4.0	1.0	2.0	1.0	MH
7.0	2.0	5.0	2.0	3.0	1.0	ML
7.0	3.0	5.0	2.0	3.0	1.0	LO

Radar:	ASG-14
ECCM:	0
Arcs:	180+
Search:	60–12
Track:	30–10
Lock-On:	6

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	20 mm M61A1 Vulcan
To Hit:	7/5/3
Ammunition:	3.5
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	6/8*
Bomb System:	Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 3
1/2: < 6
DT : ≥ 6

Weight Limit: 7,800

Station	Limit	Allowed Loads
1 and 5	1,300	IRM FT
2 and 4	1,500	BB RP FT
3	2,200	BB Nuc. BB MDR

Load Notes:

1. Stations 1 and 4 may only carry IRMs or 165 gal (600L) FTs.
2. Stations 2 and 3 may carry 200 gal (700L) FTs, BBs, or RPs.
3. Station 3 may carry a BB, Mark 28 nuclear bomb (weight 2100 and load 3.0), or an MDR with two IRMs.
4. May only use AIM-9B through AIM-9P IRMs.

Notes:

1.
2. Good supersonic maneuverability (GSSM). Low transonic drag (LTD). Rapid acceleration (RA). Rapid power response (RPR).

VPs: 16/11/5/3

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F-104C Starfighter (ATA Refueling)

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	3.5	3.5	3.0	5.0
M	2.0	2.0	1.5	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	6.0	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	290
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.0	2.0	2.0
BT	2.5	—	—
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 59	1/2 52	DT 44	Dive Speed
EH+	46+	6.0 – 11.5	6.0 – 11.0	—	13.5
VH	36–45	4.5 – 11.5	4.5 – 11.0	4.5 – 10.0	13.5
HI	26–35	3.5 – 12.0	4.0 – 11.5	4.0 – 10.0	13.5
MH	17–25	3.0 – 12.0	3.5 – 9.5	3.5 – 9.0	12.0
ML	8–16	2.5 – 10.5	2.5 – 8.5	3.0 – 8.0	10.5
LO	0–7	2.5 – 9.0	2.5 – 7.5	2.5 – 7.0	9.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
3.0	1.0	1.0	0.5	—	—	EH+
4.0	1.0	2.0	0.5	1.0	0.5	VH
5.0	2.0	3.0	1.0	2.0	0.5	HI
6.0	2.0	4.0	1.0	2.0	1.0	MH
7.0	2.0	5.0	2.0	3.0	1.0	ML
7.0	3.0	5.0	2.0	3.0	1.0	LO

Radar:	ASG-14	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	60–12	DJM:	—
Track:	30–10	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	20 mm M61A1 Vulcan
To Hit:	7/5/3
Ammunition:	3.5
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	6/8*
Bomb System:	Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 3 / 1/2: < 6 / DT : ≥ 6

Weight Limit: 7,800

Station	Limit	Allowed Loads
1 and 5	1,300	IRM FT
2 and 4	1,500	BB RP FT
3	2,200	BB Nuc. BB MDR

Load Notes:

1. Stations 1 and 4 may only carry IRMs or 165 gal (600L) FTs.
2. Stations 2 and 3 may carry 200 gal (700L) FTs, BBs, or RPs.
3. Station 3 may carry a BB, Mark 28 nuclear bomb (weight 2100 and load 3.0), or an MDR with two IRMs.
4. May only use AIM-9B through AIM-9P IRMs.

Notes:

1.
2. Good supersonic maneuverability (GSSM). Low transonic drag (LTD). Rapid acceleration (RA). Rapid power response (RPR).

VPs: 16/11/5/3

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F-104D Starfighter

Crew: Pilot and Observer

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	3.5	3.5	3.0	5.0
M	2.0	2.0	1.5	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	6.0	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	230
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.0	2.0	2.0
BT	2.5	—	—
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 59	1/2 52	DT 44	Dive Speed
EH+	46+	6.0 – 13.5	6.0 – 11.0	—	13.5
VH	36–45	4.5 – 13.5	4.5 – 11.0	4.5 – 10.0	13.5
HI	26–35	3.5 – 13.0	4.0 – 11.5	4.0 – 10.0	13.5
MH	17–25	3.0 – 12.0	3.5 – 9.5	3.5 – 9.0	12.0
ML	8–16	2.5 – 10.5	2.5 – 8.5	3.0 – 8.0	10.5
LO	0–7	2.5 – 9.0	2.5 – 7.5	2.5 – 7.0	9.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
3.0	1.0	1.0	0.5	—	—	EH+
4.0	1.0	2.0	0.5	1.0	0.5	VH
5.0	2.0	3.0	1.0	2.0	0.5	HI
6.0	2.0	4.0	1.0	2.0	1.0	MH
7.0	2.0	5.0	2.0	3.0	1.0	ML
7.0	3.0	5.0	2.0	3.0	1.0	LO

Radar:	ASG-14	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	60–12	DJM:	—
Track:	30–10	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3
1/2: < 6
DT : ≥ 6

Weight Limit: 7,800

Station	Limit	Allowed Loads
1 and 5	1,300	IRM FT
2 and 4	1,500	BB RP FT
3	2,200	BB Nuc. BB MDR

Load Notes:

1. Stations 1 and 4 may only carry IRMs or 165 gal (600L) FTs.
2. Stations 2 and 3 may carry 200 gal (700L) FTs, BBs, or RPs.
3. Station 3 may carry a BB, Mark 28 nuclear bomb (weight 2100 and load 3.0), or an MDR with two IRMs.
4. May only use AIM-9B through AIM-9P IRMs.

Notes:

1.
2. Good supersonic maneuverability (GSSM). Low transonic drag (LTD). Rapid acceleration (RA). Rapid power response (RPR).

VPs: 16/11/5/3

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F-104D Starfighter (ATA Refueling)

Crew: Pilot and Observer

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	3.5	3.5	3.0	5.0
M	2.0	2.0	1.5	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	6.0	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	5	Internal Fuel:	230
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.0	2.0	2.0
BT	2.5	—	—
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 59	1/2 52	DT 44	Dive Speed
EH+	46+	6.0 – 11.5	6.0 – 11.0	—	13.5
VH	36–45	4.5 – 11.5	4.5 – 11.0	4.5 – 10.0	13.5
HI	26–35	3.5 – 12.0	4.0 – 11.5	4.0 – 10.0	13.5
MH	17–25	3.0 – 12.0	3.5 – 9.5	3.5 – 9.0	12.0
ML	8–16	2.5 – 10.5	2.5 – 8.5	3.0 – 8.0	10.5
LO	0–7	2.5 – 9.0	2.5 – 7.5	2.5 – 7.0	9.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
3.0	1.0	1.0	0.5	—	—	EH+
4.0	1.0	2.0	0.5	1.0	0.5	VH
5.0	2.0	3.0	1.0	2.0	0.5	HI
6.0	2.0	4.0	1.0	2.0	1.0	MH
7.0	2.0	5.0	2.0	3.0	1.0	ML
7.0	3.0	5.0	2.0	3.0	1.0	LO

Radar:	ASG-14
ECCM:	0
Arcs:	180+
Search:	60–12
Track:	30–10
Lock-On:	6

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	—
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 3, 1/2: < 6, DT : ≥ 6

Weight Limit: 7,800

Station	Limit	Allowed Loads
1 and 5	1,300	IRM FT
2 and 4	1,500	BB RP FT
3	2,200	BB Nuc. BB MDR

Load Notes:

1. Stations 1 and 4 may only carry IRMs or 165 gal (600L) FTs.
2. Stations 2 and 3 may carry 200 gal (700L) FTs, BBs, or RPs.
3. Station 3 may carry a BB, Mark 28 nuclear bomb (weight 2100 and load 3.0), or an MDR with two IRMs.
4. May only use AIM-9B through AIM-9P IRMs.

Notes:

1.
2. Good supersonic maneuverability (GSSM). Low transonic drag (LTD). Rapid acceleration (RA). Rapid power response (RPR).

VPs: 16/11/5/3

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Republic F-105 Thunderchief

- F-105B
- F-105D
- F-105D (Thunderstick II)
- F-105F (Early Wild Weasel)
- F-105F (Late Wild Weasel)
- F-105G (Early Wild Weasel)
- F-105G (Late Wild Weasel)

F-105B Thunderchief

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.0	2.0	1.5	9.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	-
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	7	Internal Fuel:	375
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.0	2.5	2.5
BT	2.5	3.0	3.0
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 48	1/2 38	DT 32	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	5.0 – 13.0	—	—	14.0	1.0	0.5	—	—	—	—	EH+
VH	36–45	4.0 – 13.5	4.0 – 11.0	—	14.0	2.0	0.5	1.0	0.5	—	—	VH
HI	26–35	3.0 – 12.0	3.5 – 10.0	4.0 – 9.0	14.0	3.0	1.0	2.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 11.0	3.0 – 9.0	3.5 – 8.0	13.0	4.0	1.0	3.0	1.0	1.0	0.5	MH
ML	8–16	2.5 – 10.0	3.0 – 8.0	3.0 – 7.0	11.0	4.0	1.0	3.0	1.0	1.5	0.5	ML
LO	0–7	2.0 – 8.5	2.5 – 7.5	2.5 – 6.0	9.5	5.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	APG-31	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	20 mm M61 Vulcan
To Hit:	7/5/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	6/8*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5, 1/2: <13, DT : ≥13

Weight Limit: 14,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB RP RG EP ARM IRM MDR
2 and 5	3,500	BB RP RG WR FT
3	3,000	Nuc. BB FT
4	5,000	BB RP WR FT

Load Notes:

1. Station 3 is the internal bomb bay. These guns may carry two nuclear BBs or a special 350 gal (1300L) FT.
2. Station 4 is the external centerline pylon. These guns may not be used if weapons are carried in the internal bomb bay.
3. May only use AIM-9 IRMs, AGM-45 ARMs, and AGM-12 RGs.

Notes:

1.
2. Low transonic drag (LTD). Rapid acceleration (RA) if CL.

VPs: 22/15/7/4

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F-105D Thunderchief

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.0	2.0	9.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	-
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	7	Internal Fuel:	375
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.0	2.5	2.5
BT	2.5	3.0	3.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 38	DT 32	Dive Speed
EH+	46+	5.0 – 13.0	—	—	14.0
VH	36–45	4.0 – 13.5	4.0 – 11.0	—	14.0
HI	26–35	3.0 – 12.0	3.5 – 10.0	4.0 – 9.0	14.0
MH	17–25	2.5 – 11.0	3.0 – 9.0	3.5 – 8.0	13.0
ML	8–16	2.5 – 10.0	3.0 – 8.0	3.0 – 7.0	11.0
LO	0–7	2.0 – 8.5	2.5 – 7.5	2.5 – 6.0	9.5

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
1.0	0.5	—	—	—	—	EH+
2.0	0.5	1.0	0.5	—	—	VH
3.0	1.0	2.0	0.5	1.0	0.5	HI
4.0	1.0	3.0	1.0	1.0	0.5	MH
4.0	1.0	3.0	1.0	1.5	0.5	ML
5.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	R-14A	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	60–15	DJM:	—
Track:	40–10	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	20 mm M61 Vulcan
To Hit:	7/5/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	6/8*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5
1/2: <13
DT : ≥13

Weight Limit: 14,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB RP RG EP ARM IRM MDR
2 and 5	3,500	BB RP RG WR FT
3	3,000	Nuc. BB FT
4	5,000	BB RP WR FT

Load Notes:

1. Station 3 is the internal bomb bay. These guns may carry two nuclear BBs or a special 350 gal (1300L) FT.
2. Station 4 is the external centerline pylon. These guns may not be used if weapons are carried in the internal bomb bay.
3. May only use AIM-9 IRMs, AGM-45 ARMs, and AGM-12 RGs.

Notes:

1.
2. Low transonic drag (LTD). Rapid acceleration (RA) if CL.
3. Radar in air-to-ground mode has: Gr. Nav. (180) and Gr. Attack (90).

VPs: 24/16/8/4

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F-105D Thunderchief (Thunderstick II)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.0	2.0	9.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	-
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	7	Internal Fuel:	375
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.0	2.5	2.5
BT	2.5	3.0	3.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 38	DT 32	Dive Speed
EH+	46+	5.0 – 13.0	—	—	14.0
VH	36–45	4.0 – 13.5	4.0 – 11.0	—	14.0
HI	26–35	3.0 – 12.0	3.5 – 10.0	4.0 – 9.0	14.0
MH	17–25	2.5 – 11.0	3.0 – 9.0	3.5 – 8.0	13.0
ML	8–16	2.5 – 10.0	3.0 – 8.0	3.0 – 7.0	11.0
LO	0–7	2.0 – 8.5	2.5 – 7.5	2.5 – 6.0	9.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	—	—	—	—	EH+
VH	2.0	0.5	1.0	0.5	—	—	VH
HI	3.0	1.0	2.0	0.5	1.0	0.5	HI
MH	4.0	1.0	3.0	1.0	1.0	0.5	MH
ML	4.0	1.0	3.0	1.0	1.5	0.5	ML
LO	5.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	R-14A
ECCM:	0
Arcs:	180+
Search:	60–15
Track:	40–10
Lock-On:	6

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	20 mm M61 Vulcan
To Hit:	7/5/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	6/8*

Bomb System: Ballistic

Technology:

None

Load Point Limits: CL : < 5 / 1/2: <13 / DT : ≥13

Weight Limit: 14,000

Station	Limit	Allowed Loads
1 and 6	1,000	BB RP RG EP ARM IRM MDR
2 and 5	3,500	BB RP RG WR FT
3	3,000	Nuc. BB FT
4	5,000	BB RP WR FT

Load Notes:

1. Station 3 is the internal bomb bay. These guns may carry two nuclear BBs or a special 350 gal (1300L) FT.
2. Station 4 is the external centerline pylon. These guns may not be used if weapons are carried in the internal bomb bay.
3. May only use AIM-9 IRMs, AGM-45 ARMs, and AGM-12 RGs.

Notes:

1.
2. Low transonic drag (LTD). Rapid acceleration (RA) if CL.
3. Radar in air-to-ground mode has: Gr. Nav. (180) and Gr. Attack (90).

VPs: 24/16/8/4

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F-105F Thunderchief (Early Wild Weasel)

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.0	2.5	2.5
BT	2.5	3.0	3.0
ET	—	—	—

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.0	2.0	9.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	-
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	7	Internal Fuel:	500
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Std

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 48	1/2 38	DT 32	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	5.0 – 13.0	—	—	14.0	1.0	0.5	—	—	—	—	EH+
VH	36–45	4.0 – 13.5	4.0 – 11.0	—	14.0	2.0	0.5	1.0	0.5	—	—	VH
HI	26–35	3.0 – 12.0	3.5 – 10.0	4.0 – 9.0	14.0	3.0	1.0	2.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 11.0	3.0 – 9.0	3.5 – 8.0	13.0	4.0	1.0	3.0	1.0	1.0	0.5	MH
ML	8–16	2.5 – 10.0	3.0 – 8.0	3.0 – 7.0	11.0	4.0	1.0	3.0	1.0	1.5	0.5	ML
LO	0–7	2.0 – 8.5	2.5 – 7.5	2.5 – 6.0	9.5	5.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	R-14A	**ECM:**	IFF
ECCM:	0	RWR:	A
Arcs:	180+	DDS:	A
Search:	60–15	DJM:	—
Track:	40–10	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	20 mm M61 Vulcan
To Hit:	7/5/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	6/8*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5 / 1/2: <11 / DT : ≥11

Weight Limit: 12,500

Station	Limit	Allowed Loads
1 and 5	1,000	BB RP RG WR EP MDR IRM ARM
2 and 4	3,500	BB RP RG WR EP ADR ARM FT
3	5,000	BB RP WR EP FT

Load Notes:

1. May only use AIM-9 IRMs, AGM-45 ARMs, and AGM-12 RGs.

Notes:

1.
2. Low transonic drag (LTD). Rapid acceleration (RA) if CL.
3. Radar in air-to-ground mode has: Gr. Nav. (180) and Gr. Attack (90).
4. Internal fuel includes 350 gal fuel tank in bomb bay.

VPs: 24/16/8/4

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F-105F Thunderchief (Late Wild Weasel)

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.0	2.0	9.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	-
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	7	Internal Fuel:	500
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.0	2.5	2.5
BT	2.5	3.0	3.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 38	DT 32	Dive Speed
EH+	46+	5.0 – 13.0	—	—	14.0
VH	36–45	4.0 – 13.5	4.0 – 11.0	—	14.0
HI	26–35	3.0 – 12.0	3.5 – 10.0	4.0 – 9.0	14.0
MH	17–25	2.5 – 11.0	3.0 – 9.0	3.5 – 8.0	13.0
ML	8–16	2.5 – 10.0	3.0 – 8.0	3.0 – 7.0	11.0
LO	0–7	2.0 – 8.5	2.5 – 7.5	2.5 – 6.0	9.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	—	—	—	—	EH+
VH	2.0	0.5	1.0	0.5	—	—	VH
HI	3.0	1.0	2.0	0.5	1.0	0.5	HI
MH	4.0	1.0	3.0	1.0	1.0	0.5	MH
ML	4.0	1.0	3.0	1.0	1.5	0.5	ML
LO	5.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	R-14A	**ECM:**	IFF
ECCM:	0	RWR:	B
Arcs:	180+	DDS:	A
Search:	60–15	DJM:	—
Track:	40–10	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	20 mm M61 Vulcan
To Hit:	7/5/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	6/8*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 5 / 1/2: <11 / DT : ≥11

Weight Limit: 12,500

Station	Limit	Allowed Loads
1 and 5	1,000	BB RP RG WR EP MDR IRM ARM
2 and 4	3,500	BB RP RG WR EP ADR ARM FT
3	5,000	BB RP WR EP FT

Load Notes:

1. May only use AIM-9 IRMs, AGM-45 and AGM-78 ARMs, and AGM-12 RGs.

Notes:

1.
2. Low transonic drag (LTD). Rapid acceleration (RA) if CL.
3. Radar in air-to-ground mode has: Gr. Nav. (180) and Gr. Attack (90).
4. Internal fuel includes 350 gal fuel tank in bomb bay.

VPs: 24/16/8/4

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F-105G Thunderchief (Early Wild Weasel)

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.0	2.5	2.5
BT	2.5	3.0	3.0
ET	—	—	—

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.0	2.0	9.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	-
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	7	Internal Fuel:	500
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Std

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 38	DT 32	Dive Speed
EH+	46+	5.0 – 13.0	—	—	14.0
VH	36–45	4.0 – 13.5	4.0 – 11.0	—	14.0
HI	26–35	3.0 – 12.0	3.5 – 10.0	4.0 – 9.0	14.0
MH	17–25	2.5 – 11.0	3.0 – 9.0	3.5 – 8.0	13.0
ML	8–16	2.5 – 10.0	3.0 – 8.0	3.0 – 7.0	11.0
LO	0–7	2.0 – 8.5	2.5 – 7.5	2.5 – 6.0	9.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	—	—	—	—	EH+
VH	2.0	0.5	1.0	0.5	—	—	VH
HI	3.0	1.0	2.0	0.5	1.0	0.5	HI
MH	4.0	1.0	3.0	1.0	1.0	0.5	MH
ML	4.0	1.0	3.0	1.0	1.5	0.5	ML
LO	5.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	R-14A	**ECM:**	IFF
ECCM:	0	RWR:	B
Arcs:	180+	DDS:	B
Search:	60–15	DJM:	A3
Track:	40–10	AJM:	A3
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	20 mm M61 Vulcan
To Hit:	7/5/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	6/8*
Bomb System:	Ballistic

Technology:

None

Load Point Limits: CL : < 5 / 1/2: <11 / DT : ≥11

Weight Limit: 12,500

Station	Limit	Allowed Loads
1 and 5	1,000	BB RP RG WR EP MDR IRM ARM
2 and 4	3,500	BB RP RG WR EP ADR ARM FT
3	5,000	BB RP WR EP FT

Load Notes:

1. May only use AIM-9 IRMs, AGM-45 and AGM-78 ARMs, and AGM-12 RGs.

Notes:

1.
2. Low transonic drag (LTD). Rapid acceleration (RA) if CL.
3. Radar in air-to-ground mode has: Gr. Nav. (180) and Gr. Attack (90).
4. Internal fuel includes 350 gal fuel tank in bomb bay.

VPs: 24/16/8/4

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F-105G Thunderchief (Late Wild Weasel)

Crew: Pilot

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.0	2.0	9.0
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	-
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	7	Internal Fuel:	500
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.0	2.5	2.5
BT	2.5	3.0	3.0
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 38	DT 32	Dive Speed
EH+	46+	5.0 – 13.0	—	—	14.0
VH	36–45	4.0 – 13.5	4.0 – 11.0	—	14.0
HI	26–35	3.0 – 12.0	3.5 – 10.0	4.0 – 9.0	14.0
MH	17–25	2.5 – 11.0	3.0 – 9.0	3.5 – 8.0	13.0
ML	8–16	2.5 – 10.0	3.0 – 8.0	3.0 – 7.0	11.0
LO	0–7	2.0 – 8.5	2.5 – 7.5	2.5 – 6.0	9.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	—	—	—	—	EH+
VH	2.0	0.5	1.0	0.5	—	—	VH
HI	3.0	1.0	2.0	0.5	1.0	0.5	HI
MH	4.0	1.0	3.0	1.0	1.0	0.5	MH
ML	4.0	1.0	3.0	1.0	1.5	0.5	ML
LO	5.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	R-14A	**ECM:**	IFF
ECCM:	0	RWR:	C
Arcs:	180+	DDS:	B
Search:	60–15	DJM:	A3
Track:	40–10	AJM:	B4
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	20 mm M61 Vulcan
To Hit:	7/5/3
Ammunition:	5.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	6/8*
Bomb System:	Ballistic

Technology:

None

Load Point Limits: CL : < 5 / 1/2: <11 / DT : ≥11

Weight Limit: 12,500

Station	Limit	Allowed Loads
1 and 5	1,000	BB RP RG WR EP MDR IRM ARM
2 and 4	3,500	BB RP RG WR EP ADR ARM FT
3	5,000	BB RP WR EP FT

Load Notes:

1. May only use AIM-9 IRMs, AGM-45 and AGM-78 ARMs, and AGM-12 RGs.

Notes:

1.
2. Low transonic drag (LTD). Rapid acceleration (RA) if CL.
3. Radar in air-to-ground mode has: Gr. Nav. (180) and Gr. Attack (90).
4. Internal fuel includes 350 gal fuel tank in bomb bay.

VPs: 24/16/8/4

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Convair F-106 Delta Dart

- F-106A
- F-106A (SIX SHOOTER)

F-106A Delta Dart

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.5	2.0	9.0
M	1.5	1.5	1.0	3.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	6.0	Restr. Arcs:	—
Climb Spd.:	4.0	Blind Arcs:	60–
Visibility:	7	Internal Fuel:	465
Size:	+0	AtA Refuel:	Yes
Vulnerability:	−1	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.25	1.75	1.75
HT	1.75	2.25	2.25
BT	2.25	2.75	2.75
ET	2.75	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 57	1/2 52	DT 48	Dive Speed
EH+	46+	4.0 – 13.0	4.0 – 11.0	4.5 – 10.0	15.0
VH	36–45	3.5 – 14.0	3.5 – 12.0	4.0 – 10.5	15.0
HI	26–35	3.0 – 12.5	3.5 – 12.0	4.0 – 10.5	14.0
MH	17–25	2.5 – 12.0	3.0 – 11.0	3.0 – 10.0	12.0
ML	8–16	2.5 – 10.0	2.5 – 9.0	2.5 – 8.0	10.0
LO	0–7	2.0 – 8.0	2.0 – 8.0	2.5 – 7.5	9.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	2.0	1.0	2.0	0.5	1.0	0.5	EH+
VH	2.0	1.0	2.0	1.0	1.0	0.5	VH
HI	3.0	1.0	3.0	1.0	2.0	1.0	HI
MH	4.0	2.0	3.0	1.0	2.0	1.0	MH
ML	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	5.0	2.0	4.0	2.0	3.0	1.0	LO

Radar:	Hughes MA-1	**ECM:**	IFF
ECCM:	2	RWR:	—
Arcs:	180+	DDS:	—
Search:	180–30	DJM:	—
Track:	60–30	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	None

Technology:

IRSTS-A

Load Point Limits: CL : < 6
1/2: < 9
DT : ≥ 9

Weight Limit: 7,000

Station	Limit	Allowed Loads
1 and 3	2,700	FT
2	1,600	IRM RHM Nuc RK

Load Notes:

1. Station 2 is the internal weapons bay. It can carry four RHMs or IRMs and one MB-1 (AIR-2A) Genie nuclear rocket.
2. May only use GAR-3/-3A (AIM-4E/-4F) RHMs and GAR-4/-4A (AIM-4H) IRMs.
3. Typical load is two IRMs and two RHMs plus the Genie.

Notes:

1.
2. High bleed rate (HBR). Low transonic drag (LTD). Poor supersonic maneuverability (PSSM).

VPs: 25/17/8/4

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F-106A Delta Dart (SIX SHOOTER)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	2.5	2.5	2.0	9.0
M	1.5	1.5	1.0	3.0
N	0.0	0.0	0.0	1.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	6.0	Restr. Arcs:	—
Climb Spd.:	4.0	Blind Arcs:	60–
Visibility:	7	Internal Fuel:	465
Size:	+0	AtA Refuel:	Yes
Vulnerability:	−1	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.25	1.75	1.75
HT	1.75	2.25	2.25
BT	2.25	2.75	2.75
ET	2.75	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 57	1/2 52	DT 48	Dive Speed
EH+	46+	4.0 – 13.0	4.0 – 11.0	4.5 – 10.0	15.0
VH	36–45	3.5 – 14.0	3.5 – 12.0	4.0 – 10.5	15.0
HI	26–35	3.0 – 12.5	3.5 – 12.0	4.0 – 10.5	14.0
MH	17–25	2.5 – 12.0	3.0 – 11.0	3.0 – 10.0	12.0
ML	8–16	2.5 – 10.0	2.5 – 9.0	2.5 – 8.0	10.0
LO	0–7	2.0 – 8.0	2.0 – 8.0	2.5 – 7.5	9.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	2.0	1.0	2.0	0.5	1.0	0.5	EH+
VH	2.0	1.0	2.0	1.0	1.0	0.5	VH
HI	3.0	1.0	3.0	1.0	2.0	1.0	HI
MH	4.0	2.0	3.0	1.0	2.0	1.0	MH
ML	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	5.0	2.0	4.0	2.0	3.0	1.0	LO

Radar:	Hughes MA-1	**ECM:**	IFF
ECCM:	2	RWR:	—
Arcs:	180+	DDS:	—
Search:	180–30	DJM:	—
Track:	60–30	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	20 mm M61A1 Vulcan
To Hit:	7/5/3
Ammunition:	3.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	6/8*
Bomb System:	None

Technology:

IRSTS-A

Load Point Limits: CL : < 6 / 1/2: < 9 / DT : ≥ 9

Weight Limit: 7,000

Station	Limit	Allowed Loads
1 and 3	2,700	FT
2	1,600	IRM RHM

Load Notes:

1. Station 2 is the internal weapons bay. It can carry four RHMs or IRMs and the M61A1 gun.
2. May only use GAR-3/-3A (AIM-4E/-4F) RHMs and GAR-4/-4A (AIM-4H) IRMs.
3. Typical load is two IRMs and two RHMs.

Notes:

1.
2. High bleed rate (HBR). Low transonic drag (LTD). Poor supersonic maneuverability (PSSM).

VPs: 25/17/8/4

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McDonnell F4H/F-4 Phantom II

- F4H-1
- F-4B
- F-4B (1966 Upgrade)
- F-4B (1967 Upgrade)
- F-4B (1971 Upgrade)
- F-4B (1975 Upgrade)
- F4H-1P
- RF-4B
- RF-4B (1966 Upgrade)
- RF-4B (1967 Upgrade)
- RF-4B (1971 Upgrade)
- RF-4B (1975 Upgrade)
- F-4C
- F-4C (1966 Upgrade)
- F-4C (1971 Upgrade)
- F-4C (1975 Upgrade)
- RF-4C
- RF-4C (1966 Upgrade)
- RF-4C (1971 Upgrade)
- RF-4C (1975 Upgrade)
- F-4E
- F-4E (1971 Upgrade)
- F-4E (1975 Upgrade)
- F-4J
- F-4J (1971 Upgrade)
- F-4J (1975 Upgrade)

F4H-1 Phantom II

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	10.0
M	1.5	1.0	1.0	3.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	640
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot and Radar Officer

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	2.0	2.0
BT	2.5	2.5	3.0
ET	3.0	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 62	1/2 50	DT 40	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	4.5 – 13.0	5.0 – 10.5	—	14.0	1.0	0.5	1.0	0.5	—	—	EH+
VH	36–45	3.5 – 13.5	4.0 – 11.0	4.5 – 8.5	14.0	2.0	1.0	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 12.0	3.0 – 10.0	3.5 – 8.0	13.0	3.0	1.0	2.0	1.0	1.0	0.5	HI
MH	17–25	2.5 – 10.0	3.0 – 9.0	3.5 – 7.0	12.0	4.0	1.5	3.0	1.0	1.0	0.5	MH
ML	8–16	2.0 – 9.0	2.5 – 8.0	3.0 – 6.5	10.0	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	0–7	2.0 – 8.0	2.0 – 7.0	3.0 – 6.0	8.5	6.0	2.0	4.0	1.0	2.0	1.0	LO

Radar:	APQ-72	**ECM:**	IFF
ECCM:	1	RWR:	—
Arcs:	180+	DDS:	—
Search:	70–10	DJM:	A3
Track:	60–10	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—
Bomb System:	Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 9, 1/2: <15, DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB RP WR EP FT
2 and 8	3,000	BB RP RG GP EP WR IRM RHM
3 and 7	500	RHM EP
4 and 6	500	RHM
5	4,500	BB RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 RHMs, AIM-9 IRMs, and AGM-12 RGs.

Notes:

1.
2. Rapid power response (RPR).

VPs: 25/17/8/4

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F-4B Phantom II

Crew: Pilot and Radar Officer

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	2.0	2.0
BT	2.5	2.5	3.0
ET	3.0	—	—

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	10.0
M	1.5	1.0	1.0	3.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	640
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 50	DT 40	Dive Speed
EH+	46+	4.5 – 13.0	5.0 – 10.5	—	14.0
VH	36–45	3.5 – 13.5	4.0 – 11.0	4.5 – 8.5	14.0
HI	26–35	3.0 – 12.0	3.0 – 10.0	3.5 – 8.0	13.0
MH	17–25	2.5 – 10.0	3.0 – 9.0	3.5 – 7.0	12.0
ML	8–16	2.0 – 9.0	2.5 – 8.0	3.0 – 6.5	10.0
LO	0–7	2.0 – 8.0	2.0 – 7.0	3.0 – 6.0	8.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	1.0	1.0	0.5	HI
MH	4.0	1.5	3.0	1.0	1.0	0.5	MH
ML	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	6.0	2.0	4.0	1.0	2.0	1.0	LO

Radar:	APQ-72	**ECM:**	IFF
ECCM:	1	RWR:	—
Arcs:	180+	DDS:	—
Search:	70–10	DJM:	A3
Track:	60–10	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—
Bomb System:	Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 9, 1/2: <15, DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB RP WR EP FT
2 and 8	3,000	BB RP RG GP EP WR IRM RHM
3 and 7	500	RHM EP
4 and 6	500	RHM
5	4,500	BB RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 RHMs, AIM-9 IRMs, and AGM-12 RGs.

Notes:

1.
2. Rapid power response (RPR).

VPs: 25/17/8/4

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F-4B Phantom II (1966 Upgrade)

Crew: Pilot and Radar Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	10.0
M	1.5	1.0	1.0	3.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	640
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	2.0	2.0
BT	2.5	2.5	3.0
ET	3.0	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 50	DT 40	Dive Speed
EH+	46+	4.5 – 13.0	5.0 – 10.5	—	14.0
VH	36–45	3.5 – 13.5	4.0 – 11.0	4.5 – 8.5	14.0
HI	26–35	3.0 – 12.0	3.0 – 10.0	3.5 – 8.0	13.0
MH	17–25	2.5 – 10.0	3.0 – 9.0	3.5 – 7.0	12.0
ML	8–16	2.0 – 9.0	2.5 – 8.0	3.0 – 6.5	10.0
LO	0–7	2.0 – 8.0	2.0 – 7.0	3.0 – 6.0	8.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	1.0	1.0	0.5	HI
MH	4.0	1.5	3.0	1.0	1.0	0.5	MH
ML	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	6.0	2.0	4.0	1.0	2.0	1.0	LO

Radar:	APQ-72	**ECM:**	IFF
ECCM:	1	RWR:	A
Arcs:	180+	DDS:	—
Search:	70–10	DJM:	A3
Track:	60–10	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—
Bomb System:	Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 9, 1/2: <15, DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB RP WR EP FT
2 and 8	3,000	BB RP RG GP EP WR IRM RHM
3 and 7	500	RHM EP
4 and 6	500	RHM
5	4,500	BB RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 RHMs, AIM-9 IRMs, and AGM-12 RGs.

Notes:

1.
2. Rapid power response (RPR).

VPs: 25/17/8/4

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F-4B Phantom II (1967 Upgrade)

Crew: Pilot and Radar Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	10.0
M	1.5	1.0	1.0	3.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	640
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	2.0	2.0
BT	2.5	2.5	3.0
ET	3.0	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 50	DT 40	Dive Speed
EH+	46+	4.5 – 13.0	5.0 – 10.5	—	14.0
VH	36–45	3.5 – 13.5	4.0 – 11.0	4.5 – 8.5	14.0
HI	26–35	3.0 – 12.0	3.0 – 10.0	3.5 – 8.0	13.0
MH	17–25	2.5 – 10.0	3.0 – 9.0	3.5 – 7.0	12.0
ML	8–16	2.0 – 9.0	2.5 – 8.0	3.0 – 6.5	10.0
LO	0–7	2.0 – 8.0	2.0 – 7.0	3.0 – 6.0	8.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	1.0	1.0	0.5	HI
MH	4.0	1.5	3.0	1.0	1.0	0.5	MH
ML	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	6.0	2.0	4.0	1.0	2.0	1.0	LO

Radar:	APQ-72
ECCM:	1
Arcs:	180+
Search:	70–10
Track:	60–10
Lock-On:	7

ECM:	IFF
RWR:	A
DDS:	A
DJM:	A3
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—

Bomb System: Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 9, 1/2: <15, DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB RP WR EP FT
2 and 8	3,000	BB RP RG GP EP WR IRM RHM
3 and 7	500	RHM EP
4 and 6	500	RHM
5	4,500	BB RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 RHMs, AIM-9 IRMs, and AGM-12 RGs.

Notes:

1.
2. Rapid power response (RPR).

VPs: 25/17/8/4

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F-4B Phantom II (1971 Upgrade)

Crew: Pilot and Radar Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	10.0
M	1.5	1.0	1.0	3.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	640
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	2.0	2.0
BT	2.5	2.5	3.0
ET	3.0	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 50	DT 40	Dive Speed
EH+	46+	4.5 – 13.0	5.0 – 10.5	—	14.0
VH	36–45	3.5 – 13.5	4.0 – 11.0	4.5 – 8.5	14.0
HI	26–35	3.0 – 12.0	3.0 – 10.0	3.5 – 8.0	13.0
MH	17–25	2.5 – 10.0	3.0 – 9.0	3.5 – 7.0	12.0
ML	8–16	2.0 – 9.0	2.5 – 8.0	3.0 – 6.5	10.0
LO	0–7	2.0 – 8.0	2.0 – 7.0	3.0 – 6.0	8.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	1.0	1.0	0.5	HI
MH	4.0	1.5	3.0	1.0	1.0	0.5	MH
ML	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	6.0	2.0	4.0	1.0	2.0	1.0	LO

Radar:	APQ-72
ECCM:	1
Arcs:	180+
Search:	70–10
Track:	60–10
Lock-On:	7

ECM:	IFF
RWR:	B
DDS:	A
DJM:	A3
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—

Bomb System: Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 9 / 1/2: <15 / DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB RP WR EP FT
2 and 8	3,000	BB RP RG GP EP WR IRM RHM
3 and 7	500	RHM EP
4 and 6	500	RHM
5	4,500	BB RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 RHMs, AIM-9 IRMs, and AGM-12 RGs.

Notes:

1.
2. Rapid power response (RPR).

VPs: 25/17/8/4

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F-4B Phantom II (1975 Upgrade)

Crew: Pilot and Radar Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	10.0
M	1.5	1.0	1.0	3.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	640
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	2.0	2.0
BT	2.5	2.5	3.0
ET	3.0	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 50	DT 40	Dive Speed
EH+	46+	4.5 – 13.0	5.0 – 10.5	—	14.0
VH	36–45	3.5 – 13.5	4.0 – 11.0	4.5 – 8.5	14.0
HI	26–35	3.0 – 12.0	3.0 – 10.0	3.5 – 8.0	13.0
MH	17–25	2.5 – 10.0	3.0 – 9.0	3.5 – 7.0	12.0
ML	8–16	2.0 – 9.0	2.5 – 8.0	3.0 – 6.5	10.0
LO	0–7	2.0 – 8.0	2.0 – 7.0	3.0 – 6.0	8.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	1.0	1.0	0.5	HI
MH	4.0	1.5	3.0	1.0	1.0	0.5	MH
ML	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	6.0	2.0	4.0	1.0	2.0	1.0	LO

Radar:	APQ-72
ECCM:	1
Arcs:	180+
Search:	70–10
Track:	60–10
Lock-On:	7

ECM:	IFF
RWR:	B
DDS:	B
DJM:	A3
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—

Bomb System: Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 9, 1/2: <15, DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB RP WR EP FT
2 and 8	3,000	BB RP RG GP EP WR IRM RHM
3 and 7	500	RHM EP
4 and 6	500	RHM
5	4,500	BB RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 RHMs, AIM-9 IRMs, and AGM-12 RGs.

Notes:

1.
2. Rapid power response (RPR).

VPs: 25/17/8/4

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F4H-1P Phantom II

Crew: Pilot and Radar Officer

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	2.0	2.0
BT	2.5	2.5	3.0
ET	3.0	—	—

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	10.0
M	1.5	1.0	1.0	3.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	640
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 50	DT 40	Dive Speed
EH+	46+	4.5 – 13.5	5.0 – 11.0	—	14.0
VH	36–45	3.5 – 14.0	4.0 – 11.5	4.5 – 9.0	14.0
HI	26–35	3.0 – 12.5	3.0 – 10.5	3.5 – 8.5	13.0
MH	17–25	2.5 – 10.5	3.0 – 9.5	3.5 – 7.5	12.0
ML	8–16	2.0 – 9.5	2.5 – 8.5	3.0 – 6.5	10.0
LO	0–7	2.0 – 8.5	2.0 – 7.5	3.0 – 6.5	8.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	1.0	1.0	0.5	HI
MH	4.0	1.5	3.0	1.0	1.0	0.5	MH
ML	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	6.0	2.0	4.0	1.0	2.0	1.0	LO

Radar:	APQ-99	**ECM:**	IFF
ECCM:	1	RWR:	—
Arcs:	180+	DDS:	—
Search:	Gr. Nav. (150)	DJM:	A3
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—
Bomb System:	Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 9, 1/2: <15, DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB RP WR EP FT
2 and 8	3,000	BB RP RG GP EP WR IRM
3 and 7	500	EP
4 and 6	500	
5	4,500	BB RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 IRMs and AGM-12 RGs.

Notes:

1.
2. Rapid power response (RPR).
3. Oblique, overhead, and infrared cameras. Side-looking radar.

VPs: 26/17/9/4

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RF-4B Phantom II

Crew: Pilot and Radar Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	10.0
M	1.5	1.0	1.0	3.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	640
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	2.0	2.0
BT	2.5	2.5	3.0
ET	3.0	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 50	DT 40	Dive Speed
EH+	46+	4.5 – 13.5	5.0 – 11.0	—	14.0
VH	36–45	3.5 – 14.0	4.0 – 11.5	4.5 – 9.0	14.0
HI	26–35	3.0 – 12.5	3.0 – 10.5	3.5 – 8.5	13.0
MH	17–25	2.5 – 10.5	3.0 – 9.5	3.5 – 7.5	12.0
ML	8–16	2.0 – 9.5	2.5 – 8.5	3.0 – 6.5	10.0
LO	0–7	2.0 – 8.5	2.0 – 7.5	3.0 – 6.5	8.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	1.0	1.0	0.5	HI
MH	4.0	1.5	3.0	1.0	1.0	0.5	MH
ML	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	6.0	2.0	4.0	1.0	2.0	1.0	LO

Radar:	APQ-99
ECCM:	1
Arcs:	180+
Search:	Gr. Nav. (150)
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	—
DDS:	—
DJM:	A3
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—

Bomb System: Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 9, 1/2: <15, DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB RP WR EP FT
2 and 8	3,000	BB RP RG GP EP WR IRM
3 and 7	500	EP
4 and 6	500	
5	4,500	BB RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 IRMs and AGM-12 RGs.

Notes:

1.
2. Rapid power response (RPR).
3. Oblique, overhead, and infrared cameras. Side-looking radar.

VPs: 26/17/9/4

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RF-4B Phantom II (1966 Upgrade)

Crew: Pilot and Radar Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	10.0
M	1.5	1.0	1.0	3.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	640
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	2.0	2.0
BT	2.5	2.5	3.0
ET	3.0	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 50	DT 40	Dive Speed
EH+	46+	4.5 – 13.5	5.0 – 11.0	—	14.0
VH	36–45	3.5 – 14.0	4.0 – 11.5	4.5 – 9.0	14.0
HI	26–35	3.0 – 12.5	3.0 – 10.5	3.5 – 8.5	13.0
MH	17–25	2.5 – 10.5	3.0 – 9.5	3.5 – 7.5	12.0
ML	8–16	2.0 – 9.5	2.5 – 8.5	3.0 – 6.5	10.0
LO	0–7	2.0 – 8.5	2.0 – 7.5	3.0 – 6.5	8.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	1.0	1.0	0.5	HI
MH	4.0	1.5	3.0	1.0	1.0	0.5	MH
ML	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	6.0	2.0	4.0	1.0	2.0	1.0	LO

Radar:	APQ-99
ECCM:	1
Arcs:	180+
Search:	Gr. Nav. (150)
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	A
DDS:	—
DJM:	A3
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—

Bomb System: Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 9, 1/2: <15, DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB RP WR EP FT
2 and 8	3,000	BB RP RG GP EP WR IRM
3 and 7	500	EP
4 and 6	500	
5	4,500	BB RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 IRMs and AGM-12 RGs.

Notes:

1.
2. Rapid power response (RPR).
3. Oblique, overhead, and infrared cameras. Side-looking radar.

VPs: 26/17/9/4

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RF-4B Phantom II (1967 Upgrade)

Crew: Pilot and Radar Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	10.0
M	1.5	1.0	1.0	3.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	640
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	2.0	2.0
BT	2.5	2.5	3.0
ET	3.0	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 50	DT 40	Dive Speed
EH+	46+	4.5 – 13.5	5.0 – 11.0	—	14.0
VH	36–45	3.5 – 14.0	4.0 – 11.5	4.5 – 9.0	14.0
HI	26–35	3.0 – 12.5	3.0 – 10.5	3.5 – 8.5	13.0
MH	17–25	2.5 – 10.5	3.0 – 9.5	3.5 – 7.5	12.0
ML	8–16	2.0 – 9.5	2.5 – 8.5	3.0 – 6.5	10.0
LO	0–7	2.0 – 8.5	2.0 – 7.5	3.0 – 6.5	8.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	1.0	1.0	0.5	HI
MH	4.0	1.5	3.0	1.0	1.0	0.5	MH
ML	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	6.0	2.0	4.0	1.0	2.0	1.0	LO

Radar:	APQ-99
ECCM:	1
Arcs:	180+
Search:	Gr. Nav. (150)
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	A
DDS:	A
DJM:	A3
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—

Bomb System: Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 9, 1/2: <15, DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB RP WR EP FT
2 and 8	3,000	BB RP RG GP EP WR IRM
3 and 7	500	EP
4 and 6	500	
5	4,500	BB RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 IRMs and AGM-12 RGs.

Notes:

1.
2. Rapid power response (RPR).
3. Oblique, overhead, and infrared cameras. Side-looking radar.

VPs: 26/17/9/4

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RF-4B Phantom II (1971 Upgrade)

Crew: Pilot and Radar Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	10.0
M	1.5	1.0	1.0	3.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	640
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	2.0	2.0
BT	2.5	2.5	3.0
ET	3.0	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 50	DT 40	Dive Speed
EH+	46+	4.5 – 13.5	5.0 – 11.0	—	14.0
VH	36–45	3.5 – 14.0	4.0 – 11.5	4.5 – 9.0	14.0
HI	26–35	3.0 – 12.5	3.0 – 10.5	3.5 – 8.5	13.0
MH	17–25	2.5 – 10.5	3.0 – 9.5	3.5 – 7.5	12.0
ML	8–16	2.0 – 9.5	2.5 – 8.5	3.0 – 6.5	10.0
LO	0–7	2.0 – 8.5	2.0 – 7.5	3.0 – 6.5	8.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	1.0	1.0	0.5	HI
MH	4.0	1.5	3.0	1.0	1.0	0.5	MH
ML	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	6.0	2.0	4.0	1.0	2.0	1.0	LO

Radar:	APQ-99
ECCM:	1
Arcs:	180+
Search:	Gr. Nav. (150)
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	B
DDS:	A
DJM:	A3
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—

Bomb System: Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 9, 1/2: <15, DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB RP WR EP FT
2 and 8	3,000	BB RP RG GP EP WR IRM
3 and 7	500	EP
4 and 6	500	
5	4,500	BB RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 IRMs and AGM-12 RGs.

Notes:

1.
2. Rapid power response (RPR).
3. Oblique, overhead, and infrared cameras. Side-looking radar.

VPs: 26/17/9/4

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RF-4B Phantom II (1975 Upgrade)

Crew: Pilot and Radar Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	10.0
M	1.5	1.0	1.0	3.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	640
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	2.0	2.0
BT	2.5	2.5	3.0
ET	3.0	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 50	DT 40	Dive Speed
EH+	46+	4.5 – 13.5	5.0 – 11.0	—	14.0
VH	36–45	3.5 – 14.0	4.0 – 11.5	4.5 – 9.0	14.0
HI	26–35	3.0 – 12.5	3.0 – 10.5	3.5 – 8.5	13.0
MH	17–25	2.5 – 10.5	3.0 – 9.5	3.5 – 7.5	12.0
ML	8–16	2.0 – 9.5	2.5 – 8.5	3.0 – 6.5	10.0
LO	0–7	2.0 – 8.5	2.0 – 7.5	3.0 – 6.5	8.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	1.0	1.0	0.5	HI
MH	4.0	1.5	3.0	1.0	1.0	0.5	MH
ML	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	6.0	2.0	4.0	1.0	2.0	1.0	LO

Radar:	APQ-99
ECCM:	1
Arcs:	180+
Search:	Gr. Nav. (150)
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	B
DDS:	B
DJM:	A3
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—

Bomb System: Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 9, 1/2: <15, DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB RP WR EP FT
2 and 8	3,000	BB RP RG GP EP WR IRM
3 and 7	500	EP
4 and 6	500	
5	4,500	BB RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 IRMs and AGM-12 RGs.

Notes:

1.
2. Rapid power response (RPR).
3. Oblique, overhead, and infrared cameras. Side-looking radar.

VPs: 26/17/9/4

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F-4C Phantom II

Crew: Pilot and Radar Officer

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	2.0	2.0
BT	2.5	2.5	3.0
ET	3.0	—	—

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	10.0
M	1.5	1.0	1.0	3.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	640
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 50	DT 40	Dive Speed
EH+	46+	4.5 – 13.0	5.0 – 10.5	—	14.0
VH	36–45	3.5 – 13.5	4.0 – 11.0	4.5 – 8.5	14.0
HI	26–35	3.0 – 12.0	3.0 – 10.0	3.5 – 8.0	13.0
MH	17–25	2.5 – 10.0	3.0 – 9.0	3.5 – 7.0	12.0
ML	8–16	2.0 – 9.0	2.5 – 8.0	3.0 – 6.5	10.0
LO	0–7	2.0 – 8.0	2.0 – 7.0	3.0 – 6.0	8.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	1.0	1.0	0.5	HI
MH	4.0	1.5	3.0	1.0	1.0	0.5	MH
ML	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	6.0	2.0	4.0	1.0	2.0	1.0	LO

Radar:	APQ-100	**ECM:**	IFF
ECCM:	1	RWR:	—
Arcs:	180+	DDS:	—
Search:	80–10	DJM:	—
Track:	60–10	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—
Bomb System:	Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 9, 1/2: <15, DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB RP WR EP FT
2 and 8	3,000	BB RP RG GP EP WR IRM RHM
3 and 7	500	RHM EP
4 and 6	500	RHM
5	4,500	BB RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 RHMs, AIM-9 IRMs, and AGM-12 RGs.

Notes:

1.
2. Rapid power response (RPR).

VPs: 25/17/8/4

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F-4C Phantom II (1966 Upgrade)

Crew: Pilot and Radar Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	10.0
M	1.5	1.0	1.0	3.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	640
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	2.0	2.0
BT	2.5	2.5	3.0
ET	3.0	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 50	DT 40	Dive Speed
EH+	46+	4.5 – 13.0	5.0 – 10.5	—	14.0
VH	36–45	3.5 – 13.5	4.0 – 11.0	4.5 – 8.5	14.0
HI	26–35	3.0 – 12.0	3.0 – 10.0	3.5 – 8.0	13.0
MH	17–25	2.5 – 10.0	3.0 – 9.0	3.5 – 7.0	12.0
ML	8–16	2.0 – 9.0	2.5 – 8.0	3.0 – 6.5	10.0
LO	0–7	2.0 – 8.0	2.0 – 7.0	3.0 – 6.0	8.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	1.0	1.0	0.5	HI
MH	4.0	1.5	3.0	1.0	1.0	0.5	MH
ML	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	6.0	2.0	4.0	1.0	2.0	1.0	LO

Radar:	APQ-100
ECCM:	1
Arcs:	180+
Search:	80–10
Track:	60–10
Lock-On:	7

ECM:	IFF
RWR:	A
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—

Bomb System: Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 9, 1/2: <15, DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB RP WR EP FT
2 and 8	3,000	BB RP RG GP EP WR IRM RHM
3 and 7	500	RHM EP
4 and 6	500	RHM
5	4,500	BB RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 RHMs, AIM-9 IRMs, and AGM-12 RGs.

Notes:

1.
2. Rapid power response (RPR).

VPs: 25/17/8/4

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F-4C Phantom II (1971 Upgrade)

Crew: Pilot and Radar Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	10.0
M	1.5	1.0	1.0	3.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	640
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	2.0	2.0
BT	2.5	2.5	3.0
ET	3.0	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 50	DT 40	Dive Speed
EH+	46+	4.5 – 13.0	5.0 – 10.5	—	14.0
VH	36–45	3.5 – 13.5	4.0 – 11.0	4.5 – 8.5	14.0
HI	26–35	3.0 – 12.0	3.0 – 10.0	3.5 – 8.0	13.0
MH	17–25	2.5 – 10.0	3.0 – 9.0	3.5 – 7.0	12.0
ML	8–16	2.0 – 9.0	2.5 – 8.0	3.0 – 6.5	10.0
LO	0–7	2.0 – 8.0	2.0 – 7.0	3.0 – 6.0	8.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	1.0	1.0	0.5	HI
MH	4.0	1.5	3.0	1.0	1.0	0.5	MH
ML	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	6.0	2.0	4.0	1.0	2.0	1.0	LO

Radar:	APQ-100
ECCM:	1
Arcs:	180+
Search:	80–10
Track:	60–10
Lock-On:	7

ECM:	IFF
RWR:	B
DDS:	A
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—

Bomb System: Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 9, 1/2: <15, DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB RP WR EP FT
2 and 8	3,000	BB RP RG GP EP WR IRM RHM
3 and 7	500	RHM EP
4 and 6	500	RHM
5	4,500	BB RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 RHMs, AIM-9 IRMs, and AGM-12 RGs.

Notes:

1.
2. Rapid power response (RPR).

VPs: 25/17/8/4

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F-4C Phantom II (1975 Upgrade)

Crew: Pilot and Radar Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	10.0
M	1.5	1.0	1.0	3.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	640
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	2.0	2.0
BT	2.5	2.5	3.0
ET	3.0	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 50	DT 40	Dive Speed
EH+	46+	4.5 – 13.0	5.0 – 10.5	—	14.0
VH	36–45	3.5 – 13.5	4.0 – 11.0	4.5 – 8.5	14.0
HI	26–35	3.0 – 12.0	3.0 – 10.0	3.5 – 8.0	13.0
MH	17–25	2.5 – 10.0	3.0 – 9.0	3.5 – 7.0	12.0
ML	8–16	2.0 – 9.0	2.5 – 8.0	3.0 – 6.5	10.0
LO	0–7	2.0 – 8.0	2.0 – 7.0	3.0 – 6.0	8.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	1.0	1.0	0.5	HI
MH	4.0	1.5	3.0	1.0	1.0	0.5	MH
ML	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	6.0	2.0	4.0	1.0	2.0	1.0	LO

Radar:	APQ-100
ECCM:	1
Arcs:	180+
Search:	80–10
Track:	60–10
Lock-On:	7

ECM:	IFF
RWR:	B
DDS:	B
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—

Bomb System: Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 9, 1/2: <15, DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB RP WR EP FT
2 and 8	3,000	BB RP RG GP EP WR IRM RHM
3 and 7	500	RHM EP
4 and 6	500	RHM
5	4,500	BB RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 RHMs, AIM-9 IRMs, and AGM-12 RGs.

Notes:

1.
2. Rapid power response (RPR).

VPs: 25/17/8/4

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RF-4C Phantom II

Crew: Pilot and Radar Officer

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	2.0	2.0
BT	2.5	2.5	3.0
ET	3.0	—	—

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	10.0
M	1.5	1.0	1.0	3.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	640
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 50	DT 40	Dive Speed
EH+	46+	4.5 – 13.5	5.0 – 11.0	—	14.0
VH	36–45	3.5 – 14.0	4.0 – 11.5	4.5 – 9.0	14.0
HI	26–35	3.0 – 12.5	3.0 – 10.5	3.5 – 8.5	13.0
MH	17–25	2.5 – 10.5	3.0 – 9.5	3.5 – 7.5	12.0
ML	8–16	2.0 – 9.5	2.5 – 8.5	3.0 – 6.5	10.0
LO	0–7	2.0 – 8.5	2.0 – 7.5	3.0 – 6.5	8.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	1.0	1.0	0.5	HI
MH	4.0	1.5	3.0	1.0	1.0	0.5	MH
ML	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	6.0	2.0	4.0	1.0	2.0	1.0	LO

Radar:	APQ-99
ECCM:	1
Arcs:	180+
Search:	Gr. Nav. (150)
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—

Bomb System: Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 9, 1/2: <15, DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB RP WR EP FT
2 and 8	3,000	BB RP RG GP EP WR IRM
3 and 7	500	EP
4 and 6	500	
5	4,500	BB RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 IRMs and AGM-12 RGs.

Notes:

1.
2. Rapid power response (RPR).
3. Oblique, overhead, and infrared cameras. Side-looking radar.

VPs: 26/17/9/4

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RF-4C Phantom II (1966 Upgrade)

Crew: Pilot and Radar Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	10.0
M	1.5	1.0	1.0	3.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	640
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	2.0	2.0
BT	2.5	2.5	3.0
ET	3.0	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 50	DT 40	Dive Speed
EH+	46+	4.5 – 13.5	5.0 – 11.0	—	14.0
VH	36–45	3.5 – 14.0	4.0 – 11.5	4.5 – 9.0	14.0
HI	26–35	3.0 – 12.5	3.0 – 10.5	3.5 – 8.5	13.0
MH	17–25	2.5 – 10.5	3.0 – 9.5	3.5 – 7.5	12.0
ML	8–16	2.0 – 9.5	2.5 – 8.5	3.0 – 6.5	10.0
LO	0–7	2.0 – 8.5	2.0 – 7.5	3.0 – 6.5	8.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	1.0	1.0	0.5	HI
MH	4.0	1.5	3.0	1.0	1.0	0.5	MH
ML	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	6.0	2.0	4.0	1.0	2.0	1.0	LO

Radar:	APQ-99
ECCM:	1
Arcs:	180+
Search:	Gr. Nav. (150)
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	A
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—

Bomb System: Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 9, 1/2: <15, DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB RP WR EP FT
2 and 8	3,000	BB RP RG GP EP WR IRM
3 and 7	500	EP
4 and 6	500	
5	4,500	BB RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 IRMs and AGM-12 RGs.

Notes:

1.
2. Rapid power response (RPR).
3. Oblique, overhead, and infrared cameras. Side-looking radar.

VPs: 26/17/9/4

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RF-4C Phantom II (1971 Upgrade)

Crew: Pilot and Radar Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	10.0
M	1.5	1.0	1.0	3.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	640
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	2.0	2.0
BT	2.5	2.5	3.0
ET	3.0	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 50	DT 40	Dive Speed
EH+	46+	4.5 – 13.5	5.0 – 11.0	—	14.0
VH	36–45	3.5 – 14.0	4.0 – 11.5	4.5 – 9.0	14.0
HI	26–35	3.0 – 12.5	3.0 – 10.5	3.5 – 8.5	13.0
MH	17–25	2.5 – 10.5	3.0 – 9.5	3.5 – 7.5	12.0
ML	8–16	2.0 – 9.5	2.5 – 8.5	3.0 – 6.5	10.0
LO	0–7	2.0 – 8.5	2.0 – 7.5	3.0 – 6.5	8.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	1.0	1.0	0.5	HI
MH	4.0	1.5	3.0	1.0	1.0	0.5	MH
ML	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	6.0	2.0	4.0	1.0	2.0	1.0	LO

Radar:	APQ-99
ECCM:	1
Arcs:	180+
Search:	Gr. Nav. (150)
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	B
DDS:	A
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—

Bomb System: Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 9, 1/2: <15, DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB RP WR EP FT
2 and 8	3,000	BB RP RG GP EP WR IRM
3 and 7	500	EP
4 and 6	500	
5	4,500	BB RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 IRMs and AGM-12 RGs.

Notes:

1.
2. Rapid power response (RPR).
3. Oblique, overhead, and infrared cameras. Side-looking radar.

VPs: 26/17/9/4

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RF-4C Phantom II (1975 Upgrade)

Crew: Pilot and Radar Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	10.0
M	1.5	1.0	1.0	3.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	640
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	2.0	2.0
BT	2.5	2.5	3.0
ET	3.0	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 50	DT 40	Dive Speed
EH+	46+	4.5 – 13.5	5.0 – 11.0	—	14.0
VH	36–45	3.5 – 14.0	4.0 – 11.5	4.5 – 9.0	14.0
HI	26–35	3.0 – 12.5	3.0 – 10.5	3.5 – 8.5	13.0
MH	17–25	2.5 – 10.5	3.0 – 9.5	3.5 – 7.5	12.0
ML	8–16	2.0 – 9.5	2.5 – 8.5	3.0 – 6.5	10.0
LO	0–7	2.0 – 8.5	2.0 – 7.5	3.0 – 6.5	8.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	1.0	1.0	0.5	HI
MH	4.0	1.5	3.0	1.0	1.0	0.5	MH
ML	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	6.0	2.0	4.0	1.0	2.0	1.0	LO

Radar:	APQ-99
ECCM:	1
Arcs:	180+
Search:	Gr. Nav. (150)
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	B
DDS:	B
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+1/BT+2
Ranging:	—
AtA/AtG:	—

Bomb System: Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 9, 1/2: <15, DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB RP WR EP FT
2 and 8	3,000	BB RP RG GP EP WR IRM
3 and 7	500	EP
4 and 6	500	
5	4,500	BB RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 IRMs and AGM-12 RGs.

Notes:

1.
2. Rapid power response (RPR).
3. Oblique, overhead, and infrared cameras. Side-looking radar.

VPs: 26/17/9/4

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F-4E Phantom II

Crew: Pilot and Radar Officer

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	1.5
HT	1.5	2.0	2.5
BT	2.5	3.0	3.5
ET	3.0	—	—

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	12.0
M	1.5	1.0	1.0	4.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	600
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 60	1/2 50	DT 40	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	4.5 – 13.0	5.0 – 11.0	—	14.0	1.0	0.5	1.0	0.5	—	—	EH+
VH	36–45	3.5 – 14.0	4.0 – 12.0	4.5 – 9.0	15.0	2.0	1.0	1.5	0.5	1.0	0.5	VH
HI	26–35	3.0 – 12.0	3.0 – 10.0	3.5 – 8.0	14.0	4.0	1.0	3.0	1.0	1.0	0.5	HI
MH	17–25	2.5 – 10.0	3.0 – 9.0	3.0 – 7.5	12.0	4.0	1.5	3.0	1.0	2.0	0.5	MH
ML	8–16	2.0 – 9.0	2.5 – 8.0	3.0 – 7.0	10.0	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	0–7	2.0 – 8.5	2.0 – 7.5	2.5 – 6.5	9.0	6.0	2.0	4.0	1.5	2.0	1.0	LO

Radar:	APQ-120	**ECM:**	IFF
ECCM:	2	RWR:	A
Arcs:	180+	DDS:	—
Search:	100–20	DJM:	—
Track:	80–20	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	20 mm M61 Vulcan
To Hit:	7/5/3
Ammunition:	3.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	6/8*
Bomb System:	Ballistic

Technology:

IRSTS-A

Load Point Limits: CL : < 9 / 1/2: <15 / DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB BG RP WR EP DP FT
2 and 8	3,000	BB BG BS RP RG LP GP EP WR DP IRM RHM
3 and 7	500	RHM EP LP
4 and 6	500	RHM
5	4,500	BB BG RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 RHMs and AIM-9 IRMs.

Notes:

1.
2. Rapid power response (RPR).

VPs: 30/20/10/5

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F-4E Phantom II (1971 Upgrade)

Crew: Pilot and Radar Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	12.0
M	1.5	1.0	1.0	4.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	600
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	1.5
HT	1.5	2.0	2.5
BT	2.5	3.0	3.5
ET	3.0	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 60	1/2 50	DT 40	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	4.5 – 13.0	5.0 – 11.0	—	14.0	1.0	0.5	1.0	0.5	—	—	EH+
VH	36–45	3.5 – 14.0	4.0 – 12.0	4.5 – 9.0	15.0	2.0	1.0	1.5	0.5	1.0	0.5	VH
HI	26–35	3.0 – 12.0	3.0 – 10.0	3.5 – 8.0	14.0	4.0	1.0	3.0	1.0	1.0	0.5	HI
MH	17–25	2.5 – 10.0	3.0 – 9.0	3.0 – 7.5	12.0	4.0	1.5	3.0	1.0	2.0	0.5	MH
ML	8–16	2.0 – 9.0	2.5 – 8.0	3.0 – 7.0	10.0	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	0–7	2.0 – 8.5	2.0 – 7.5	2.5 – 6.5	9.0	6.0	2.0	4.0	1.5	2.0	1.0	LO

Radar:	APQ-120	**ECM:**	IFF
ECCM:	2	RWR:	B
Arcs:	180+	DDS:	A
Search:	100–20	DJM:	—
Track:	80–20	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	20 mm M61 Vulcan
To Hit:	7/5/3
Ammunition:	3.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	6/8*
Bomb System:	Ballistic

Technology:

IRSTS-A

Load Point Limits: CL : < 9; 1/2: <15; DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB BG RP WR EP DP FT
2 and 8	3,000	BB BG BS RP RG LP GP EP WR DP IRM RHM
3 and 7	500	RHM EP LP
4 and 6	500	RHM
5	4,500	BB BG RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 RHMs and AIM-9 IRMs.

Notes:

1.
2. Rapid power response (RPR).

VPs: 30/20/10/5

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F-4E Phantom II (1975 Upgrade)

Crew: Pilot and Radar Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	12.0
M	1.5	1.0	1.0	4.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	600
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	1.5
HT	1.5	2.0	2.5
BT	2.5	3.0	3.5
ET	3.0	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 60	1/2 50	DT 40	Dive Speed
EH+	46+	4.5 – 13.0	5.0 – 11.0	—	14.0
VH	36–45	3.5 – 14.0	4.0 – 12.0	4.5 – 9.0	15.0
HI	26–35	3.0 – 12.0	3.0 – 10.0	3.5 – 8.0	14.0
MH	17–25	2.5 – 10.0	3.0 – 9.0	3.0 – 7.5	12.0
ML	8–16	2.0 – 9.0	2.5 – 8.0	3.0 – 7.0	10.0
LO	0–7	2.0 – 8.5	2.0 – 7.5	2.5 – 6.5	9.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.5	0.5	1.0	0.5	VH
HI	4.0	1.0	3.0	1.0	1.0	0.5	HI
MH	4.0	1.5	3.0	1.0	2.0	0.5	MH
ML	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	6.0	2.0	4.0	1.5	2.0	1.0	LO

Radar:	APQ-120
ECCM:	2
Arcs:	180+
Search:	100–20
Track:	80–20
Lock-On:	7

ECM:	IFF
RWR:	B
DDS:	B
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	20 mm M61 Vulcan
To Hit:	7/5/3
Ammunition:	3.0
Gunsight:	TT+0/HT+1/BT+2
Ranging:	RE
AtA/AtG:	6/8*

Bomb System: Ballistic

Technology:

IRSTS-A

Load Point Limits: CL : < 9, 1/2: <15, DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB BG RP WR EP DP FT
2 and 8	3,000	BB BG BS RP RG LP GP EP WR DP IRM RHM
3 and 7	500	RHM EP LP
4 and 6	500	RHM
5	4,500	BB BG RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 RHMs and AIM-9 IRMs.

Notes:

1.
2. Rapid power response (RPR).

VPs: 30/20/10/5

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F-4J Phantom II

Crew: Pilot and Radar Officer

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	1.5
HT	1.5	2.0	2.5
BT	2.5	3.0	3.5
ET	3.0	—	—

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	12.0
M	1.5	1.0	1.0	4.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	610
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 48	DT 40	Dive Speed
EH+	46+	4.5 – 13.0	5.0 – 11.0	—	14.0
VH	36–45	3.5 – 14.0	4.0 – 12.0	4.5 – 9.0	15.0
HI	26–35	3.0 – 12.0	3.0 – 10.0	3.5 – 8.0	14.0
MH	17–25	2.5 – 10.0	3.0 – 9.0	3.0 – 7.5	12.0
ML	8–16	2.0 – 9.0	2.5 – 8.0	3.0 – 7.0	10.0
LO	0–7	2.0 – 8.5	2.0 – 7.5	2.5 – 6.5	9.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.5	0.5	1.0	0.5	VH
HI	4.0	1.0	3.0	1.0	1.0	0.5	HI
MH	4.0	1.5	3.0	1.0	2.0	0.5	MH
ML	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	6.0	2.0	4.0	1.5	2.0	1.0	LO

Radar:	AWG-10
ECCM:	2
Arcs:	180+
Search:	120–20
Track:	80–20
Lock-On:	7

ECM:	IFF
RWR:	A
DDS:	A
DJM:	A3
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+1/HT+2/BT+3
Ranging:	RE
AtA/AtG:	—

Bomb System: Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 9, 1/2: <15, DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB BG RP WR EP FT
2 and 8	3,000	BB BG RP RG GP EP WR IRM RHM
3 and 7	500	RHM EP
4 and 6	500	RHM
5	4,500	BB BG RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 RHMs and AIM-9 IRMs.

Notes:

1.
2. Rapid power response (RPR).

VPs: 28/19/9/5

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F-4J Phantom II (1971 Upgrade)

Crew: Pilot and Radar Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	12.0
M	1.5	1.0	1.0	4.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	610
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	1.5
HT	1.5	2.0	2.5
BT	2.5	3.0	3.5
ET	3.0	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 48	DT 40	Dive Speed
EH+	46+	4.5 – 13.0	5.0 – 11.0	—	14.0
VH	36–45	3.5 – 14.0	4.0 – 12.0	4.5 – 9.0	15.0
HI	26–35	3.0 – 12.0	3.0 – 10.0	3.5 – 8.0	14.0
MH	17–25	2.5 – 10.0	3.0 – 9.0	3.0 – 7.5	12.0
ML	8–16	2.0 – 9.0	2.5 – 8.0	3.0 – 7.0	10.0
LO	0–7	2.0 – 8.5	2.0 – 7.5	2.5 – 6.5	9.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.5	0.5	1.0	0.5	VH
HI	4.0	1.0	3.0	1.0	1.0	0.5	HI
MH	4.0	1.5	3.0	1.0	2.0	0.5	MH
ML	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	6.0	2.0	4.0	1.5	2.0	1.0	LO

Radar:	AWG-10
ECCM:	2
Arcs:	180+
Search:	120–20
Track:	80–20
Lock-On:	7

ECM:	IFF
RWR:	B
DDS:	A
DJM:	A3
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+1/HT+2/BT+3
Ranging:	RE
AtA/AtG:	—

Bomb System: Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 9 / 1/2: <15 / DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB BG RP WR EP FT
2 and 8	3,000	BB BG RP RG GP EP WR IRM RHM
3 and 7	500	RHM EP
4 and 6	500	RHM
5	4,500	BB BG RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 RHMs and AIM-9 IRMs.

Notes:

1.
2. Rapid power response (RPR).

VPs: 28/19/9/5

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F-4J Phantom II (1975 Upgrade)

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	3.0	2.5	2.0	12.0
M	1.5	1.0	1.0	4.0
N	0.0	0.0	0.0	2.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	610
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot and Radar Officer

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.5	1.5
HT	1.5	2.0	2.5
BT	2.5	3.0	3.5
ET	3.0	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 48	DT 40	Dive Speed
EH+	46+	4.5 – 13.0	5.0 – 11.0	—	14.0
VH	36–45	3.5 – 14.0	4.0 – 12.0	4.5 – 9.0	15.0
HI	26–35	3.0 – 12.0	3.0 – 10.0	3.5 – 8.0	14.0
MH	17–25	2.5 – 10.0	3.0 – 9.0	3.0 – 7.5	12.0
ML	8–16	2.0 – 9.0	2.5 – 8.0	3.0 – 7.0	10.0
LO	0–7	2.0 – 8.5	2.0 – 7.5	2.5 – 6.5	9.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	1.0	0.5	—	—	EH+
VH	2.0	1.0	1.5	0.5	1.0	0.5	VH
HI	4.0	1.0	3.0	1.0	1.0	0.5	HI
MH	4.0	1.5	3.0	1.0	2.0	0.5	MH
ML	5.0	2.0	3.0	1.0	2.0	1.0	ML
LO	6.0	2.0	4.0	1.5	2.0	1.0	LO

Radar:	AWG-10
ECCM:	2
Arcs:	180+
Search:	120–20
Track:	80–20
Lock-On:	7

ECM:	IFF
RWR:	B
DDS:	B
DJM:	A3
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+1/HT+2/BT+3
Ranging:	RE
AtA/AtG:	—

Bomb System: Manual

Technology:

IRSTS-A

Load Point Limits: CL : < 9 / 1/2: <15 / DT : ≥15

Weight Limit: 16,000

Station	Limit	Allowed Loads
1 and 9	2,700	BB BG RP WR EP FT
2 and 8	3,000	BB BG RP RG GP EP WR IRM RHM
3 and 7	500	RHM EP
4 and 6	500	RHM
5	4,500	BB BG RP WR GP FT

Load Notes:

1. Stations 2 and 8 may each carry two AIM-9 IRMs in addition to other non-missile stores.
2. Stations 3, 4, 6, and 7 are the recessed fuselage stations. Stations 3 and 7 are the forward ones and stations 4 and 6 are the rear ones.
3. May only use AIM-7 RHMs and AIM-9 IRMs.

Notes:

1.
2. Rapid power response (RPR).

VPs: 28/19/9/5

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North American A3J/A-5 Vigilante

- A3J-1
- A-5A
- A3J-2
- A-5B
- A3J-3P
- RA-5C
- RA-5C (1967 Upgrade)
- RA-5C (1971 Upgrade)

A3J-1 Vigilante

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	2.0	1.5	1.5	12.0
M	1.0	1.0	1.0	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	90–
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	720
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot and Navigator

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.5	2.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 62	1/2 58	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	4.0 – 12.5	4.5 – 10.5	5.0 – 10.0	14.0	2.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.5 – 13.5	4.0 – 11.5	4.0 – 10.5	14.0	2.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 11.5	3.5 – 10.0	3.5 – 9.0	12.0	3.0	1.0	2.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 9.5	3.0 – 8.5	3.0 – 8.0	10.0	3.0	1.0	2.0	1.0	2.0	0.5	MH
ML	8–16	2.0 – 7.5	2.5 – 7.0	2.5 – 6.5	8.0	4.0	2.0	3.0	1.0	2.0	1.0	ML
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	7.5	4.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	ASB-12	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	Gr. Nav. (420)	DJM:	—
Track:	Gr. Attack (90)	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	Ballistic computed

Technology:

Terrain Following-A

Load Point Limits: CL : < 3 / 1/2: <11 / DT : ≥11

Weight Limit: 12,000

Station	Limit	Allowed Loads
1 and 3	3,200	BB RP RG WR FT
2	0	Nuc BB FT

Load Notes:

1. Station 2 is the internal weapons tube. It can carry one nuclear BB and two FTs or three FTs. The special FTs have a capacity of 295 gal (1100L).
2. May only use AGM-12 RGs.

Notes:

1.
2. Good supersonic maneuverability (GSSM). Rapid acceleration (RA). Rapid power response (RPR).
3. Bomb system is computed for level or radar bombing and ballistic otherwise.

VPs: 32/21/11/5

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A-5A Vigilante

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	2.0	1.5	1.5	12.0
M	1.0	1.0	1.0	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	90–
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	720
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot and Navigator

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.5	2.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 62	1/2 58	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	4.0 – 12.5	4.5 – 10.5	5.0 – 10.0	14.0	2.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.5 – 13.5	4.0 – 11.5	4.0 – 10.5	14.0	2.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 11.5	3.5 – 10.0	3.5 – 9.0	12.0	3.0	1.0	2.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 9.5	3.0 – 8.5	3.0 – 8.0	10.0	3.0	1.0	2.0	1.0	2.0	0.5	MH
ML	8–16	2.0 – 7.5	2.5 – 7.0	2.5 – 6.5	8.0	4.0	2.0	3.0	1.0	2.0	1.0	ML
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	7.5	4.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	ASB-12	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	Gr. Nav. (420)	DJM:	—
Track:	Gr. Attack (90)	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	Ballistic computed

Technology:

Terrain Following-A

Load Point Limits: CL : < 3 / 1/2: <11 / DT : ≥11

Weight Limit: 12,000

Station	Limit	Allowed Loads
1 and 3	3,200	BB RP RG WR FT
2	0	Nuc BB FT

Load Notes:

1. Station 2 is the internal weapons tube. It can carry one nuclear BB and two FTs or three FTs. The special FTs have a capacity of 295 gal (1100L).
2. May only use AGM-12 RGs.

Notes:

1.
2. Good supersonic maneuverability (GSSM). Rapid acceleration (RA). Rapid power response (RPR).
3. Bomb system is computed for level or radar bombing and ballistic otherwise.

VPs: 32/21/11/5

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A3J-2 Vigilante

Crew: Pilot and Navigator

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	2.0	1.5	1.5	12.0
M	1.0	1.0	1.0	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	90–
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	880
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.5	2.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 58	DT 48	Dive Speed
EH+	46+	4.0 – 12.5	4.5 – 10.5	5.0 – 10.0	14.0
VH	36–45	3.5 – 13.5	4.0 – 11.5	4.0 – 10.5	14.0
HI	26–35	3.0 – 11.5	3.5 – 10.0	3.5 – 9.0	12.0
MH	17–25	2.5 – 9.5	3.0 – 8.5	3.0 – 8.0	10.0
ML	8–16	2.0 – 7.5	2.5 – 7.0	2.5 – 6.5	8.0
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	7.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	2.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	2.0	0.5	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	0.5	1.0	0.5	HI
MH	3.0	1.0	2.0	1.0	2.0	0.5	MH
ML	4.0	2.0	3.0	1.0	2.0	1.0	ML
LO	4.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	ASB-12	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	Gr. Nav. (420)	DJM:	—
Track:	Gr. Attack (90)	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	Ballistic computed

Technology:

Terrain Following-A

Load Point Limits: CL : < 3, 1/2: <11, DT : ≥11

Weight Limit: 12,000

Station	Limit	Allowed Loads
1 and 5	3,200	BB RP RG WR FT
2 and 3	3,200	BB RP RG WR FT
3	0	Nuc BB FT

Load Notes:

1. Station 3 is the internal weapons tube. It can carry one nuclear BB and two FTs or three FTs. The special FTs have a capacity of 295 gal (1100L).
2. May only use AGM-12 RGs.

Notes:

1.
2. Good supersonic maneuverability (GSSM). Rapid acceleration (RA). Rapid power response (RPR).
3. Bomb system is computed for level or radar bombing and ballistic otherwise.

VPs: 32/21/11/5

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A-5B Vigilante

Crew: Pilot and Navigator

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	2.0	1.5	1.5	12.0
M	1.0	1.0	1.0	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	90–
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	880
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.5	2.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 58	DT 48	Dive Speed
EH+	46+	4.0 – 12.5	4.5 – 10.5	5.0 – 10.0	14.0
VH	36–45	3.5 – 13.5	4.0 – 11.5	4.0 – 10.5	14.0
HI	26–35	3.0 – 11.5	3.5 – 10.0	3.5 – 9.0	12.0
MH	17–25	2.5 – 9.5	3.0 – 8.5	3.0 – 8.0	10.0
ML	8–16	2.0 – 7.5	2.5 – 7.0	2.5 – 6.5	8.0
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	7.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	2.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	2.0	0.5	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	0.5	1.0	0.5	HI
MH	3.0	1.0	2.0	1.0	2.0	0.5	MH
ML	4.0	2.0	3.0	1.0	2.0	1.0	ML
LO	4.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	ASB-12	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	Gr. Nav. (420)	DJM:	—
Track:	Gr. Attack (90)	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	Ballistic computed

Technology:

Terrain Following-A

Load Point Limits: CL : < 3, 1/2: <11, DT : ≥11

Weight Limit: 12,000

Station	Limit	Allowed Loads
1 and 5	3,200	BB RP RG WR FT
2 and 3	3,200	BB RP RG WR FT
3	0	Nuc BB FT

Load Notes:

1. Station 3 is the internal weapons tube. It can carry one nuclear BB and two FTs or three FTs. The special FTs have a capacity of 295 gal (1100L).
2. May only use AGM-12 RGs.

Notes:

1.
2. Good supersonic maneuverability (GSSM). Rapid acceleration (RA). Rapid power response (RPR).
3. Bomb system is computed for level or radar bombing and ballistic otherwise.

VPs: 32/21/11/5

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A3J-3P Vigilante

Crew: Pilot and Navigator

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	2.0	1.5	1.5	12.0
M	1.0	1.0	1.0	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	90–
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	880
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.5	2.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 62	1/2 58	DT 48	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	4.0 – 12.5	4.5 – 10.5	5.0 – 10.0	14.0	2.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	36–45	3.5 – 13.5	4.0 – 11.5	4.0 – 10.5	14.0	2.0	0.5	1.0	0.5	1.0	0.5	VH
HI	26–35	3.0 – 11.5	3.5 – 10.0	3.5 – 9.0	12.0	3.0	1.0	2.0	0.5	1.0	0.5	HI
MH	17–25	2.5 – 9.5	3.0 – 8.5	3.0 – 8.0	10.0	3.0	1.0	2.0	1.0	2.0	0.5	MH
ML	8–16	2.0 – 7.5	2.5 – 7.0	2.5 – 6.5	8.0	4.0	2.0	3.0	1.0	2.0	1.0	ML
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	7.5	4.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	ASB-12	**ECM:**	IFF
ECCM:	0	RWR:	A
Arcs:	180+	DDS:	A
Search:	Gr. Nav. (420)	DJM:	A3
Track:	Gr. Attack (90)	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	Ballistic computed

Technology:

Terrain Following-A

Load Point Limits: CL : < 3; 1/2: <11; DT : ≥11

Weight Limit: 12,000

Station	Limit	Allowed Loads
1 and 5	3,200	BB RP RG WR FT
2 and 3	3,200	BB RP RG WR FT
3	0	Nuc BB FT

Load Notes:

1. Station 3 is the internal weapons tube. It can carry one nuclear BB and two FTs or three FTs. The special FTs have a capacity of 295 gal (1100L).
2. May only use AGM-12 RGs.
3. Although capable of carrying weapons internally and externally, in practice only three internal FTs and no external weapons or FTs were carried. The total fuel in this configuration is 1165.

Notes:

1.
2. Good supersonic maneuverability (GSSM). Rapid acceleration (RA). Rapid power response (RPR).
3. Reconnaissance options include an oblique camera, overhead cameras, IR camera, side-looking radar, and electronic emissions recording equipment.
4. Bomb system is computed for level or radar bombing and ballistic otherwise.

VPs: 40/27/13/7

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RA-5C Vigilante

Crew: Pilot and Navigator

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.5	2.5
ET	—	—	—

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	2.0	1.5	1.5	12.0
M	1.0	1.0	1.0	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	90–
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	880
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 58	DT 48	Dive Speed
EH+	46+	4.0 – 12.5	4.5 – 10.5	5.0 – 10.0	14.0
VH	36–45	3.5 – 13.5	4.0 – 11.5	4.0 – 10.5	14.0
HI	26–35	3.0 – 11.5	3.5 – 10.0	3.5 – 9.0	12.0
MH	17–25	2.5 – 9.5	3.0 – 8.5	3.0 – 8.0	10.0
ML	8–16	2.0 – 7.5	2.5 – 7.0	2.5 – 6.5	8.0
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	7.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	2.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	2.0	0.5	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	0.5	1.0	0.5	HI
MH	3.0	1.0	2.0	1.0	2.0	0.5	MH
ML	4.0	2.0	3.0	1.0	2.0	1.0	ML
LO	4.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	ASB-12	**ECM:**	IFF
ECCM:	0	RWR:	A
Arcs:	180+	DDS:	A
Search:	Gr. Nav. (420)	DJM:	A3
Track:	Gr. Attack (90)	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	Ballistic computed

Technology:

Terrain Following-A

Load Point Limits: CL : < 3 / 1/2: <11 / DT : ≥11

Weight Limit: 12,000

Station	Limit	Allowed Loads
1 and 5	3,200	BB RP RG WR FT
2 and 3	3,200	BB RP RG WR FT
3	0	Nuc BB FT

Load Notes:

1. Station 3 is the internal weapons tube. It can carry one nuclear BB and two FTs or three FTs. The special FTs have a capacity of 295 gal (1100L).
2. May only use AGM-12 RGs.
3. Although capable of carrying weapons internally and externally, in practice only three internal FTs and no external weapons or FTs were carried. The total fuel in this configuration is 1165.

Notes:

1.
2. Good supersonic maneuverability (GSSM). Rapid acceleration (RA). Rapid power response (RPR).
3. Reconnaissance options include an oblique camera, overhead cameras, IR camera, side-looking radar, and electronic emissions recording equipment.
4. Bomb system is computed for level or radar bombing and ballistic otherwise.

VPs: 40/27/13/7

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RA-5C Vigilante (1967 Upgrade)

Crew: Pilot and Navigator

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	2.0	1.5	1.5	12.0
M	1.0	1.0	1.0	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	90–
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	880
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.5	2.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 58	DT 48	Dive Speed
EH+	46+	4.0 – 12.5	4.5 – 10.5	5.0 – 10.0	14.0
VH	36–45	3.5 – 13.5	4.0 – 11.5	4.0 – 10.5	14.0
HI	26–35	3.0 – 11.5	3.5 – 10.0	3.5 – 9.0	12.0
MH	17–25	2.5 – 9.5	3.0 – 8.5	3.0 – 8.0	10.0
ML	8–16	2.0 – 7.5	2.5 – 7.0	2.5 – 6.5	8.0
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	7.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	2.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	2.0	0.5	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	0.5	1.0	0.5	HI
MH	3.0	1.0	2.0	1.0	2.0	0.5	MH
ML	4.0	2.0	3.0	1.0	2.0	1.0	ML
LO	4.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	ASB-12	**ECM:**	IFF
ECCM:	0	RWR:	B
Arcs:	180+	DDS:	A
Search:	Gr. Nav. (420)	DJM:	B3
Track:	Gr. Attack (90)	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	Ballistic computed

Technology:

Terrain Following-A

Load Point Limits: CL : < 3; 1/2: <11; DT : ≥11

Weight Limit: 12,000

Station	Limit	Allowed Loads
1 and 5	3,200	BB RP RG WR FT
2 and 3	3,200	BB RP RG WR FT
3	0	Nuc BB FT

Load Notes:

1. Station 3 is the internal weapons tube. It can carry one nuclear BB and two FTs or three FTs. The special FTs have a capacity of 295 gal (1100L).
2. May only use AGM-12 RGs.
3. Although capable of carrying weapons internally and externally, in practice only three internal FTs and no external weapons or FTs were carried. The total fuel in this configuration is 1165.

Notes:

1.
2. Good supersonic maneuverability (GSSM). Rapid acceleration (RA). Rapid power response (RPR).
3. Reconnaissance options include an oblique camera, overhead cameras, IR camera, side-looking radar, and electronic emissions recording equipment.
4. Bomb system is computed for level or radar bombing and ballistic otherwise.

VPs: 40/27/13/7

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RA-5C Vigilante (1971 Upgrade)

Crew: Pilot and Navigator

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	2.0	1.5	1.5	12.0
M	1.0	1.0	1.0	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	1.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	90–
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	880
Size:	+0	AtA Refuel:	No
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.5	2.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 62	1/2 58	DT 48	Dive Speed
EH+	46+	4.0 – 12.5	4.5 – 10.5	5.0 – 10.0	14.0
VH	36–45	3.5 – 13.5	4.0 – 11.5	4.0 – 10.5	14.0
HI	26–35	3.0 – 11.5	3.5 – 10.0	3.5 – 9.0	12.0
MH	17–25	2.5 – 9.5	3.0 – 8.5	3.0 – 8.0	10.0
ML	8–16	2.0 – 7.5	2.5 – 7.0	2.5 – 6.5	8.0
LO	0–7	2.0 – 7.0	2.5 – 6.5	2.5 – 6.0	7.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	2.0	0.5	1.0	0.5	1.0	0.5	EH+
VH	2.0	0.5	1.0	0.5	1.0	0.5	VH
HI	3.0	1.0	2.0	0.5	1.0	0.5	HI
MH	3.0	1.0	2.0	1.0	2.0	0.5	MH
ML	4.0	2.0	3.0	1.0	2.0	1.0	ML
LO	4.0	2.0	3.0	1.0	2.0	1.0	LO

Radar:	ASB-12	**ECM:**	IFF
ECCM:	0	RWR:	B
Arcs:	180+	DDS:	A
Search:	Gr. Nav. (420)	DJM:	B4
Track:	Gr. Attack (90)	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	Ballistic computed

Technology:

Terrain Following-A

Load Point Limits: CL : < 3 / 1/2: <11 / DT : ≥11

Weight Limit: 12,000

Station	Limit	Allowed Loads
1 and 5	3,200	BB RP RG WR FT
2 and 3	3,200	BB RP RG WR FT
3	0	Nuc BB FT

Load Notes:

1. Station 3 is the internal weapons tube. It can carry one nuclear BB and two FTs or three FTs. The special FTs have a capacity of 295 gal (1100L).
2. May only use AGM-12 RGs.
3. Although capable of carrying weapons internally and externally, in practice only three internal FTs and no external weapons or FTs were carried. The total fuel in this configuration is 1165.

Notes:

1.
2. Good supersonic maneuverability (GSSM). Rapid acceleration (RA). Rapid power response (RPR).
3. Reconnaissance options include an oblique camera, overhead cameras, IR camera, side-looking radar, and electronic emissions recording equipment.
4. Bomb system is computed for level or radar bombing and ballistic otherwise.

VPs: 40/27/13/7

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Grumman A-6 Intruder

- A-6A
- A-6A (1965 Upgrade)
- A-6B
- A-6E
- A-6E (1978 TRAM Upgrade)

A-6A Intruder

Crew: Pilot and Weapons Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	3.0
N	0.0	0.0	0.0	1.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.0	Restr. Arcs:	60L
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	780
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	1.5	2.0
BT	2.0	2.5	2.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 40	1/2 36	DT 32	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	3.0 – 5.5	3.0 – 5.0	—	6.0	—	0.5	—	0.5	—	—	VH
HI	26–35	2.5 – 6.0	3.0 – 5.0	3.5 – 5.0	6.5	—	1.0	—	1.0	—	0.5	HI
MH	17–25	2.0 – 6.0	2.5 – 5.5	3.0 – 5.0	6.5	—	1.0	—	1.0	—	1.0	MH
ML	8–16	1.5 – 6.0	2.5 – 5.5	2.5 – 5.0	6.5	—	1.5	—	1.0	—	1.0	ML
LO	0–7	1.5 – 6.5	2.0 – 6.0	2.0 – 5.0	7.0	—	2.0	—	1.5	—	1.0	LO

Radar:	APQ-92	**ECM:**	IFF
ECCM:	0	RWR:	—
Arcs:	180+	DDS:	—
Search:	Gr. Nav. (150)	DJM:	—
Track:	Gr. Attack (120)	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+1/HT+2/BT+3
Ranging:	—
AtA/AtG:	—
Bomb System:	Ballistic

Technology:

Terrain Following-A

Load Point Limits: CL : < 7 / 1/2: <15 / DT : ≥15

Weight Limit: 15,000

Station	Limit	Allowed Loads
1 and 5	3,600	BB RP RG WR GP EP FT IRM
2 and 4	3,600	BB RP RG WR GP EP FT
3	3,600	BB RP WR EP FT

Load Notes:

1. May only use AIM-9B IRMs.

Notes:

1.
2. High roll rate (HRR). High transonic drag (HTD).

VPs: 24/16/8/4

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A-6A Intruder (1965 Upgrade)

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	3.0
N	0.0	0.0	0.0	1.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.0	Restr. Arcs:	60L
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	780
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot and Weapons Officer

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	1.5	2.0
BT	2.0	2.5	2.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 40	1/2 36	DT 32	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	3.0 – 5.5	3.0 – 5.0	—	6.0	—	0.5	—	0.5	—	—	VH
HI	26–35	2.5 – 6.0	3.0 – 5.0	3.5 – 5.0	6.5	—	1.0	—	1.0	—	0.5	HI
MH	17–25	2.0 – 6.0	2.5 – 5.5	3.0 – 5.0	6.5	—	1.0	—	1.0	—	1.0	MH
ML	8–16	1.5 – 6.0	2.5 – 5.5	2.5 – 5.0	6.5	—	1.5	—	1.0	—	1.0	ML
LO	0–7	1.5 – 6.5	2.0 – 6.0	2.0 – 5.0	7.0	—	2.0	—	1.5	—	1.0	LO

Radar:	APQ-92
ECCM:	0
Arcs:	180+
Search:	Gr. Nav. (150)
Track:	Gr. Attack (120)
Lock-On:	7

ECM:	IFF
RWR:	A
DDS:	A
DJM:	A3
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+1/HT+2/BT+3
Ranging:	—
AtA/AtG:	—

Bomb System: Ballistic

Technology:

Terrain Following-A

Load Point Limits: CL : < 7, 1/2: <15, DT : ≥15

Weight Limit: 15,000

Station	Limit	Allowed Loads
1 and 5	3,600	BB RP RG WR GP EP FT IRM
2 and 4	3,600	BB RP RG WR GP EP FT
3	3,600	BB RP WR EP FT

Load Notes:

1. May only use AIM-9B IRMs.

Notes:

1.
2. High roll rate (HRR). High transonic drag (HTD).

VPs: 24/16/8/4

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A-6B Intruder

Crew: Pilot and Weapons Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	3.0
N	0.0	0.0	0.0	1.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.0	Restr. Arcs:	60L
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	780
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	1.5	2.0
BT	2.0	2.5	2.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 40	1/2 36	DT 32	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	3.0 – 5.5	3.0 – 5.0	—	6.0	—	0.5	—	0.5	—	—	VH
HI	26–35	2.5 – 6.0	3.0 – 5.0	3.5 – 5.0	6.5	—	1.0	—	1.0	—	0.5	HI
MH	17–25	2.0 – 6.0	2.5 – 5.5	3.0 – 5.0	6.5	—	1.0	—	1.0	—	1.0	MH
ML	8–16	1.5 – 6.0	2.5 – 5.5	2.5 – 5.0	6.5	—	1.5	—	1.0	—	1.0	ML
LO	0–7	1.5 – 6.5	2.0 – 6.0	2.0 – 5.0	7.0	—	2.0	—	1.5	—	1.0	LO

Radar:	APQ-92	**ECM:**	IFF
ECCM:	0	RWR:	B
Arcs:	180+	DDS:	A
Search:	Gr. Nav. (150)	DJM:	A3
Track:	Gr. Attack (120)	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+1/HT+2/BT+3
Ranging:	—
AtA/AtG:	—
Bomb System:	Ballistic

Technology:

Terrain Following-A

Load Point Limits: CL : < 7 / 1/2: <15 / DT : ≥15

Weight Limit: 15,000

Station	Limit	Allowed Loads
1 and 5	3,600	BB RP RG WR GP EP FT ARM IRM
2 and 4	3,600	BB RP RG WR GP EP FT ARM
3	3,600	BB RP WR EP FT

Load Notes:

1. May only use AIM-9B IRMs.
2. May only use AGM-45 and AGM-78 ARMs.

Notes:

1.
2. High roll rate (HRR). High transonic drag (HTD).

VPs: 26/17/9/4

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A-6E Intruder

Crew: Pilot and Weapons Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	3.0
N	0.0	0.0	0.0	1.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.0	Restr. Arcs:	60L
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	780
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	1.5	2.0
BT	2.0	2.5	2.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 45	1/2 40	DT 35	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.5	3.0 – 5.0	—	6.0
HI	26–35	2.5 – 6.0	3.0 – 5.0	3.5 – 5.0	6.5
MH	17–25	2.0 – 6.0	2.5 – 5.5	3.0 – 5.0	6.5
ML	8–16	1.5 – 6.0	2.5 – 5.5	2.5 – 5.0	6.5
LO	0–7	1.5 – 6.5	2.0 – 6.0	2.0 – 5.0	7.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	0.5	—	—	VH
HI	—	1.0	—	1.0	—	0.5	HI
MH	—	1.0	—	1.0	—	1.0	MH
ML	—	1.5	—	1.0	—	1.0	ML
LO	—	2.0	—	1.5	—	1.0	LO

Radar:	APQ-148	**ECM:**	IFF
ECCM:	0	RWR:	B
Arcs:	180+	DDS:	B
Search:	Gr. Nav. (180)	DJM:	B4
Track:	Gr. Attack (150)	AJM:	—
Lock-On:	8	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+1/HT+2/BT+3
Ranging:	—
AtA/AtG:	—
Bomb System:	Computed

Technology:

Terrain Following-B

Load Point Limits: CL : < 7, 1/2: <15, DT : ≥15

Weight Limit: 17,200

Station	Limit	Allowed Loads
1 and 5	3,600	BB BG BS RP RG WR GP EP FT ARM DP IRM
2 and 4	3,600	BB BG BS RP RG WR GP EP FT ARM DP
3	3,600	BB BG RP WR EP FT DP

Load Notes:

1. May only use AIM-9B IRMs.
2. May only use AGM-45 ARMs.

Notes:

1.
2. High roll rate (HRR). High transonic drag (HTD).

VPs: 28/19/9/5

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A-6E Intruder (1978 TRAM Upgrade)

Crew: Pilot and Weapons Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	3.0
N	0.0	0.0	0.0	1.0
I	1.0	2.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.0	Restr. Arcs:	60L
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	7	Internal Fuel:	780
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	1.5	2.0
BT	2.0	2.5	2.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 45	1/2 40	DT 35	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.5	3.0 – 5.0	—	6.0
HI	26–35	2.5 – 6.0	3.0 – 5.0	3.5 – 5.0	6.5
MH	17–25	2.0 – 6.0	2.5 – 5.5	3.0 – 5.0	6.5
ML	8–16	1.5 – 6.0	2.5 – 5.5	2.5 – 5.0	6.5
LO	0–7	1.5 – 6.5	2.0 – 6.0	2.0 – 5.0	7.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
—	—	—	—	—	—	EH+
—	0.5	—	0.5	—	—	VH
—	1.0	—	1.0	—	0.5	HI
—	1.0	—	1.0	—	1.0	MH
—	1.5	—	1.0	—	1.0	ML
—	2.0	—	1.5	—	1.0	LO

Radar:	APQ-148
ECCM:	0
Arcs:	180+
Search:	Gr. Nav. (180)
Track:	Gr. Attack (150)
Lock-On:	8

ECM:	IFF
RWR:	B
DDS:	B
DJM:	B4
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+1/HT+2/BT+3
Ranging:	—
AtA/AtG:	—

Bomb System: Computed

Technology:

Terrain Following-B, Laser Designator-C, and TV/IR Optics

Load Point Limits: CL : < 7
1/2: <15
DT : ≥15

Weight Limit: 17,200

Station	Limit	Allowed Loads
1 and 5	3,600	BB BG BS RP RG WR GP EP FT ARM DP ASM IRM
2 and 4	3,600	BB BG BS RP RG WR GP EP FT ARM DP ASM
3	3,600	BB BG RP WR EP FT DP

Load Notes:

1. May only use AIM-9B IRMs.
2. May only use AGM-45, AGM-78, and AGM-88 ARMs.
3. May only use AGM-84 ASMs.

Notes:

1.
2. High roll rate (HRR). High transonic drag (HTD).

VPs: 30/20/10/5

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Northrop F-5 Freedom Fighter

- F-5A
- RF-5A
- F-5C

F-5A Freedom Fighter

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	2.5	2.0	1.5	3.0
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	1.5	2.0
BT	2.0	2.5	2.5
ET	—	—	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	185
Size:	+1	AtA Refuel:	No
Vulnerability:	−1	Ejection Seat:	Std

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 42	DT 34	Dive Speed
EH+	46+	4.0 – 9.0	—	—	10.0
VH	36–45	3.5 – 9.0	4.0 – 8.0	—	10.0
HI	26–35	3.0 – 8.5	3.5 – 7.5	4.0 – 6.5	10.0
MH	17–25	2.5 – 8.0	3.0 – 7.0	3.0 – 6.0	9.0
ML	8–16	2.0 – 7.5	2.5 – 7.0	2.5 – 6.0	8.5
LO	0–7	1.5 – 7.0	2.0 – 6.5	2.5 – 6.0	7.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	—	—	—	—	EH+
VH	1.0	0.5	1.0	0.5	—	—	VH
HI	2.0	1.0	1.0	0.5	1.0	0.5	HI
MH	2.0	1.0	1.5	1.0	1.0	0.5	MH
ML	3.0	1.0	2.0	1.0	1.5	0.5	ML
LO	3.0	2.0	2.0	1.0	2.0	1.0	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm M39
To Hit:	5/3/1
Ammunition:	5.5
Gunsight:	TT+1/HT+2/BT+3
Ranging:	—
AtA/AtG:	4/4*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 6 / 1/2: <10 / DT : ≥10

Weight Limit: 6,200

Station	Limit	Allowed Loads
1 and 7	350	IRM FT
2 and 6	750	BB BG RP RG EP
3 and 5	1,100	BB BG RP RG EP WR GP FT
4	2,200	BB BG RP WR GP EP PP FT

Load Notes:

1. May only use AIM-9 IRMs and AGM-12 RGs.
2. Stations 1 and 7 are the wing-tip stations. They may carry IRMs or special supersonic 50 US gal (190L) FTs.

Notes:

1.
2. High roll rate (HRR). Low transonic drag (LTD). Rapid power response (RPR).

VPs: 16/11/5/3

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RF-5A Freedom Fighter

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	2.5	2.0	1.5	3.0
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	185
Size:	+1	AtA Refuel:	No
Vulnerability:	−1	Ejection Seat:	Std

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	1.5	2.0
BT	2.0	2.5	2.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 42	DT 34	Dive Speed
EH+	46+	4.0 – 9.0	—	—	10.0
VH	36–45	3.5 – 9.0	4.0 – 8.0	—	10.0
HI	26–35	3.0 – 8.5	3.5 – 7.5	4.0 – 6.5	10.0
MH	17–25	2.5 – 8.0	3.0 – 7.0	3.0 – 6.0	9.0
ML	8–16	2.0 – 7.5	2.5 – 7.0	2.5 – 6.0	8.5
LO	0–7	1.5 – 7.0	2.0 – 6.5	2.5 – 6.0	7.5

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
1.0	0.5	—	—	—	—	EH+
1.0	0.5	1.0	0.5	—	—	VH
2.0	1.0	1.0	0.5	1.0	0.5	HI
2.0	1.0	1.5	1.0	1.0	0.5	MH
3.0	1.0	2.0	1.0	1.5	0.5	ML
3.0	2.0	2.0	1.0	2.0	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm M39
To Hit:	5/3/1
Ammunition:	5.5
Gunsight:	TT+1/HT+2/BT+3
Ranging:	—
AtA/AtG:	4/4*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 6; 1/2: <10; DT : ≥10

Weight Limit: 6,200

Station	Limit	Allowed Loads
1 and 7	350	IRM FT
2 and 6	750	BB BG RP RG EP
3 and 5	1,100	BB BG RP RG EP WR GP FT
4	2,200	BB BG RP WR GP EP PP FT

Load Notes:

1. May only use AIM-9 IRMs and AGM-12 RGs.
2. Stations 1 and 7 are the wing-tip stations. They may carry IRMs or special supersonic 50 US gal (190L) FTs.

Notes:

1.
2. High roll rate (HRR). Low transonic drag (LTD). Rapid power response (RPR).
3. Overhead and oblique cameras in extended nose.

VPs: 18/12/6/3

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F-5C Freedom Fighter

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	2.5	2.0	1.5	3.0
M	1.0	1.0	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	2.0	0.0
SPBR	1.0	1.0	2.0	—

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.5
HT	1.5	1.5	2.0
BT	2.0	2.5	2.5
ET	—	—	—

Cruise Spd. CL:	5.5	Restr. Arcs:	60–
Climb Spd.:	4.5	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	185
Size:	+1	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 48	1/2 42	DT 34	Dive Speed
EH+	46+	4.0 – 9.0	—	—	10.0
VH	36–45	3.5 – 9.0	4.0 – 8.0	—	10.0
HI	26–35	3.0 – 8.5	3.5 – 7.5	4.0 – 6.5	10.0
MH	17–25	2.5 – 8.0	3.0 – 7.0	3.0 – 6.0	9.0
ML	8–16	2.0 – 7.5	2.5 – 7.0	2.5 – 6.0	8.5
LO	0–7	1.5 – 7.0	2.0 – 6.5	2.5 – 6.0	7.5

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
1.0	0.5	—	—	—	—	EH+
1.0	0.5	1.0	0.5	—	—	VH
2.0	1.0	1.0	0.5	1.0	0.5	HI
2.0	1.0	1.5	1.0	1.0	0.5	MH
3.0	1.0	2.0	1.0	1.5	0.5	ML
3.0	2.0	2.0	1.0	2.0	1.0	LO

Radar:	—	**ECM:**	IFF
ECCM:	—	RWR:	—
Arcs:	—	DDS:	—
Search:	—	DJM:	—
Track:	—	AJM:	—
Lock-On:	—	BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm M39
To Hit:	5/3/1
Ammunition:	5.5
Gunsight:	TT+1/HT+2/BT+3
Ranging:	—
AtA/AtG:	4/4*
Bomb System:	Manual

Technology:

None

Load Point Limits: CL : < 6
1/2: <10
DT : ≥10

Weight Limit: 6,200

Station	Limit	Allowed Loads
1 and 7	350	IRM FT
2 and 6	750	BB BG RP RG EP
3 and 5	1,100	BB BG RP RG EP WR GP FT
4	2,200	BB BG RP WR GP EP PP FT

Load Notes:

1. May only use AIM-9 IRMs and AGM-12 RGs.
2. Stations 1 and 7 are the wing-tip stations. They may carry IRMs or special supersonic 50 US gal (190L) FTs.

Notes:

1.
2. High roll rate (HRR). Low transonic drag (LTD). Rapid power response (RPR).

VPs: 18/12/6/3

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LTV A-7 Corsair II

- A-7A
- A-7B
- A-7C
- A-7D
- A-7D (1975 Upgrade)
- A-7D (1981 Upgrade)
- A-7E
- A-7E (1980 Upgrade)
- A-7E (1985 Upgrade)
- A-7P

A-7A Corsair II

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	2.0	2.0	0.0
SPBR	2.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	480
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.5	2.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 40	1/2 32	DT 26	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.0	—	—	6.5
HI	26–35	3.0 – 5.0	3.0 – 4.5	3.5 – 4.5	7.0
MH	17–25	2.5 – 5.0	2.5 – 5.0	3.0 – 4.5	7.0
ML	8–16	2.0 – 5.5	2.0 – 5.0	2.5 – 5.0	7.5
LO	0–7	1.5 – 5.5	2.0 – 5.5	2.5 – 5.0	7.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	—	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.0	—	1.0	—	0.5	LO

Radar:	APQ-116
ECCM:	0
Arcs:	180+
Search:	Gr. Nav. (90)
Track:	Gr. Attack (30)
Lock-On:	6

ECM:	IFF
RWR:	A
DDS:	A
DJM:	A3
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm Mk 12
To Hit:	5/3/1
Ammunition:	8.0
Gunsight:	TT+1/HT+2/BT+3
Ranging:	—
AtA/AtG:	4/4*

Bomb System: Ballistic

Technology:

None

Load Point Limits: CL : < 7
1/2: <13
DT : ≥13

Weight Limit: 10,000

Station	Limit	Allowed Loads
1 and 8	3,500	BB BG RP RG WR EP ARM IRM FT
2 and 7	3,500	BB BG RP RG WR EP ARM PP GP
3 and 6	2,500	BB BG RP RG WR EP ARM PP FT
4 and 5	250	IRM

Load Notes:

1. May only used AIM-9 IRMs, AGM-12 RGs, and AGM-45 ARMs.

Notes:

1.
2. High transonic drag (HTD).

VPs: 18/12/6/3

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A-7B Corsair II

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	2.0	2.0	0.0
SPBR	2.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	480
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.5	2.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 40	1/2 32	DT 26	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.0	—	—	6.5
HI	26–35	3.0 – 5.0	3.0 – 4.5	3.5 – 4.5	7.0
MH	17–25	2.5 – 5.0	2.5 – 5.0	3.0 – 4.5	7.0
ML	8–16	2.0 – 5.5	2.0 – 5.0	2.5 – 5.0	7.5
LO	0–7	1.5 – 5.5	2.0 – 5.5	2.5 – 5.0	7.5

Climb Capabilities

Band	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	—	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.0	—	1.0	—	0.5	LO

Radar:	APQ-116	**ECM:**	IFF
ECCM:	0	RWR:	A
Arcs:	180+	DDS:	A
Search:	Gr. Nav. (90)	DJM:	A3
Track:	Gr. Attack (30)	AJM:	—
Lock-On:	6	BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm Mk 12
To Hit:	5/3/1
Ammunition:	8.0
Gunsight:	TT+1/HT+2/BT+3
Ranging:	—
AtA/AtG:	4/4*
Bomb System:	Ballistic

Technology:

None

Load Point Limits: CL : < 7
1/2: <13
DT : ≥13

Weight Limit: 15,000

Station	Limit	Allowed Loads
1 and 8	3,500	BB BG RP RG WR EP ARM IRM FT
2 and 7	3,500	BB BG RP RG WR EP ARM PP GP
3 and 6	2,500	BB BG RP RG WR EP ARM PP FT
4 and 5	250	IRM

Load Notes:
1. May only used AIM-9 IRMs, AGM-12 RGs, and AGM-45 ARMs.

Notes:
1.
2. High transonic drag (HTD).

VPs: 18/12/6/3

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A-7C Corsair II

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	2.0	2.0	0.0
SPBR	2.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	480
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.5	2.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 40	1/2 32	DT 26	Dive Speed
EH+	46+	—	—	—	—
VH	36–45	3.0 – 5.0	—	—	6.5
HI	26–35	3.0 – 5.0	3.0 – 4.5	3.5 – 4.5	7.0
MH	17–25	2.5 – 5.0	2.5 – 5.0	3.0 – 4.5	7.0
ML	8–16	2.0 – 5.5	2.0 – 5.0	2.5 – 5.0	7.5
LO	0–7	1.5 – 5.5	2.0 – 5.5	2.5 – 5.0	7.5

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	—	—	—	—	—	—	EH+
VH	—	0.5	—	—	—	—	VH
HI	—	0.5	—	0.5	—	0.5	HI
MH	—	1.0	—	0.5	—	0.5	MH
ML	—	1.0	—	1.0	—	0.5	ML
LO	—	1.0	—	1.0	—	0.5	LO

Radar:	APQ-126
ECCM:	0
Arcs:	180+
Search:	Gr. Nav. (120)
Track:	Gr. Attack (30)
Lock-On:	7

ECM:	IFF
RWR:	B
DDS:	B
DJM:	B4
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	20 mm M61A1 Vulcan
To Hit:	6/3/1
Ammunition:	5.0
Gunsight:	HT+2/BT+3
Ranging:	—
AtA/AtG:	6/8*

Bomb System: Computed

Technology:

Terrain Following - A

Load Point Limits: CL : < 7
1/2: <13
DT : ≥13

Weight Limit: 15,000

Station	Limit	Allowed Loads
1 and 8	3,500	BB BG RP RG WR EP ARM IRM FT
2 and 7	3,500	BB BG RP RG WR EP ARM PP GP
3 and 6	2,500	BB BG RP RG WR EP ARM PP FT
4 and 5	250	IRM

Load Notes:

1. May only used AIM-9 IRMs, AGM-12 RGs, and AGM-45 ARMs.

Notes:

1.
2. High transonic drag (HTD).

VPs: 20/13/7/3

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A-7D Corsair II

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	2.0	2.0	0.0
SPBR	2.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	4.0	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	500
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.0	1.0	1.5
BT	2.0	2.0	2.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 45	1/2 35	DT 28	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	3.5 – 6.0	—	—	7.0	—	0.5	—	—	—	—	VH
HI	26–35	3.0 – 6.5	3.0 – 6.0	3.5 – 5.0	7.0	—	1.0	—	0.5	—	0.5	HI
MH	17–25	2.5 – 6.5	3.0 – 6.0	3.0 – 5.0	7.0	—	1.0	—	1.0	—	0.5	MH
ML	8–16	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	7.5	—	1.0	—	1.0	—	1.0	ML
LO	0–7	2.0 – 6.0	2.0 – 5.5	2.5 – 5.0	7.5	—	2.0	—	1.0	—	1.0	LO

Radar:	APQ-126
ECCM:	0
Arcs:	180+
Search:	Gr. Nav. (120)
Track:	Gr. Attack (30)
Lock-On:	7

ECM:	IFF
RWR:	B
DDS:	B
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	20 mm M61A1 Vulcan
To Hit:	6/3/1
Ammunition:	5.0
Gunsight:	HT+2/BT+3
Ranging:	—
AtA/AtG:	6/8*

Bomb System: Computed

Technology:

Terrain Following - A

Load Point Limits: CL : < 7 / 1/2: <15 / DT : ≥15

Weight Limit: 15,000

Station	Limit	Allowed Loads
1 and 8	3,500	BB BG RP RG WR EP DP IRM FT
2 and 7	3,500	BB BG BS RP RG RS WR EP DP PP GP
3 and 6	2,500	BB BG BS RP RG RS WR EP DP PP OP FT
4 and 5	250	IRM

Load Notes:

1. May only used AIM-9 IRMs, AGM-12 RGs, and AGM-45 ARMs.

Notes:

1.
2. High transonic drag (HTD).

VPs: 24/16/8/4

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A-7D Corsair II (1975 Upgrade)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	2.0	2.0	0.0
SPBR	2.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	4.0	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	500
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0/1.0	1.0/1.0	1.0/1.5
HT	1.0/1.5	1.0/1.5	1.5/2.0
BT	2.0/2.5	2.0/2.5	2.5/3.0
ET	—	—	—

Automatic maneuvering flaps. If speed ≤ 3.5, use higher drag and reduce minimum speeds by 0.5.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 45	1/2 35	DT 28	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	3.5 – 6.0	—	—	7.0	—	0.5	—	—	—	—	VH
HI	26–35	3.0 – 6.5	3.0 – 6.0	3.5 – 5.0	7.0	—	1.0	—	0.5	—	0.5	HI
MH	17–25	2.5 – 6.5	3.0 – 6.0	3.0 – 5.0	7.0	—	1.0	—	1.0	—	0.5	MH
ML	8–16	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	7.5	—	1.0	—	1.0	—	1.0	ML
LO	0–7	2.0 – 6.0	2.0 – 5.5	2.5 – 5.0	7.5	—	2.0	—	1.0	—	1.0	LO

Radar:	APQ-126	**ECM:**	IFF
ECCM:	0	RWR:	B
Arcs:	180+	DDS:	B
Search:	Gr. Nav. (120)	DJM:	—
Track:	Gr. Attack (30)	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	20 mm M61A1 Vulcan
To Hit:	6/3/1
Ammunition:	5.0
Gunsight:	HT+2/BT+3
Ranging:	—
AtA/AtG:	6/8*
Bomb System:	Computed

Technology:

Terrain Following - A and Laser Spot Tracker

Load Point Limits: CL : < 7 / 1/2: <15 / DT : ≥15

Weight Limit: 15,000

Station	Limit	Allowed Loads
1 and 8	3,500	BB BG RP RG WR EP DP IRM FT
2 and 7	3,500	BB BG BS RP RG RS WR EP DP PP GP
3 and 6	2,500	BB BG BS RP RG RS WR EP DP PP OP FT
4 and 5	250	IRM

Load Notes:

1. May only used AIM-9 IRMs, AGM-12 RGs, and AGM-45 ARMs.

Notes:

1.
2. High transonic drag (HTD).

VPs: 24/16/8/4

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A-7D Corsair II (1981 Upgrade)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	2.0	2.0	0.0
SPBR	2.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	4.0	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	500
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.0	1.0	1.5
BT	2.0	2.0	2.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 45	1/2 35	DT 28	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	3.5 – 6.0	—	—	7.0	—	0.5	—	—	—	—	VH
HI	26–35	3.0 – 6.5	3.0 – 6.0	3.5 – 5.0	7.0	—	1.0	—	0.5	—	0.5	HI
MH	17–25	2.5 – 6.5	3.0 – 6.0	3.0 – 5.0	7.0	—	1.0	—	1.0	—	0.5	MH
ML	8–16	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	7.5	—	1.0	—	1.0	—	1.0	ML
LO	0–7	2.0 – 6.0	2.0 – 5.5	2.5 – 5.0	7.5	—	2.0	—	1.0	—	1.0	LO

Radar:	APQ-126
ECCM:	0
Arcs:	180+
Search:	Gr. Nav. (120)
Track:	Gr. Attack (30)
Lock-On:	7

ECM:	IFF
RWR:	C
DDS:	B
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	20 mm M61A1 Vulcan
To Hit:	6/3/1
Ammunition:	5.0
Gunsight:	HT+2/BT+3
Ranging:	—
AtA/AtG:	6/8*

Bomb System: Computed

Technology:

Terrain Following - A

Load Point Limits: CL : < 7 / 1/2: <15 / DT : ≥15

Weight Limit: 15,000

Station	Limit	Allowed Loads
1 and 8	3,500	BB BG RP RG WR EP DP IRM FT
2 and 7	3,500	BB BG BS RP RG RS WR EP DP PP GP
3 and 6	2,500	BB BG BS RP RG RS WR EP DP PP OP FT
4 and 5	250	IRM

Load Notes:

1. May only used AIM-9 IRMs, AGM-12 RGs, and AGM-45 ARMs.

Notes:

1.
2. High transonic drag (HTD).

VPs: 24/16/8/4

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A-7E Corsair II

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	2.0	2.0	0.0
SPBR	2.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	4.0	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	500
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.0	1.0	1.5
BT	2.0	2.0	2.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 45	1/2 35	DT 28	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	3.5 – 6.0	—	—	7.0	—	0.5	—	—	—	—	VH
HI	26–35	3.0 – 6.5	3.0 – 6.0	3.5 – 5.0	7.0	—	1.0	—	0.5	—	0.5	HI
MH	17–25	2.5 – 6.5	3.0 – 6.0	3.0 – 5.0	7.0	—	1.0	—	1.0	—	0.5	MH
ML	8–16	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	7.5	—	1.0	—	1.0	—	1.0	ML
LO	0–7	2.0 – 6.0	2.0 – 5.5	2.5 – 5.0	7.5	—	2.0	—	1.0	—	1.0	LO

Radar:	APQ-126
ECCM:	0
Arcs:	180+
Search:	Gr. Nav. (120)
Track:	Gr. Attack (30)
Lock-On:	7

ECM:	IFF
RWR:	B
DDS:	B
DJM:	B4
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	20 mm M61A1 Vulcan
To Hit:	6/3/1
Ammunition:	5.0
Gunsight:	HT+2/BT+3
Ranging:	—
AtA/AtG:	6/8*

Bomb System: Computed

Technology:

Terrain Following - A

Load Point Limits: CL : < 7
1/2: <15
DT : ≥15

Weight Limit: 15,000

Station	Limit	Allowed Loads
1 and 8	3,500	BB BG RP RG WR EP ARM DP IRM FT
2 and 7	3,500	BB BG BS RP RG RS WR EP ARM DP PP GP
3 and 6	2,500	BB BG BS RP RG RS WR EP ARM DP PP OP FT
4 and 5	250	IRM

Load Notes:

1. May only used AIM-9 IRMs, AGM-12 RGs, and AGM-45 ARMs.

Notes:

1.
2. High transonic drag (HTD).

VPs: 24/16/8/4

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A-7E Corsair II (1980 Upgrade)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	2.0	2.0	0.0
SPBR	2.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	4.0	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	500
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0/1.0	1.0/1.0	1.0/1.5
HT	1.0/1.5	1.0/1.5	1.5/2.0
BT	2.0/2.5	2.0/2.5	2.5/3.0
ET	—	—	—

Automatic maneuvering flaps. If speed ≤ 3.5, use higher drag and reduce minimum speeds by 0.5.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 45	1/2 35	DT 28	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	3.5 – 6.0	—	—	7.0	—	0.5	—	—	—	—	VH
HI	26–35	3.0 – 6.5	3.0 – 6.0	3.5 – 5.0	7.0	—	1.0	—	0.5	—	0.5	HI
MH	17–25	2.5 – 6.5	3.0 – 6.0	3.0 – 5.0	7.0	—	1.0	—	1.0	—	0.5	MH
ML	8–16	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	7.5	—	1.0	—	1.0	—	1.0	ML
LO	0–7	2.0 – 6.0	2.0 – 5.5	2.5 – 5.0	7.5	—	2.0	—	1.0	—	1.0	LO

Radar:	APQ-126	**ECM:**	IFF
ECCM:	0	RWR:	B
Arcs:	180+	DDS:	B
Search:	Gr. Nav. (120)	DJM:	B4
Track:	Gr. Attack (30)	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	20 mm M61A1 Vulcan
To Hit:	6/3/1
Ammunition:	5.0
Gunsight:	HT+2/BT+3
Ranging:	—
AtA/AtG:	6/8*
Bomb System:	Computed

Technology:

Terrain Following - A

Load Point Limits: CL : < 7 / 1/2: <15 / DT : ≥15

Weight Limit: 15,000

Station	Limit	Allowed Loads
1 and 8	3,500	BB BG RP RG WR EP ARM DP IRM FT
2 and 7	3,500	BB BG BS RP RG RS WR EP ARM DP PP GP
3 and 6	2,500	BB BG BS RP RG RS WR EP ARM DP PP OP FT
4 and 5	250	IRM

Load Notes:

1. May only used AIM-9 IRMs, AGM-12 RGs, and AGM-45 ARMs.

Notes:

1.
2. High transonic drag (HTD).

VPs: 24/16/8/4

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A-7E Corsair II (1985 Upgrade)

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.5	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	2.0	2.0	0.0
SPBR	2.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	4.0	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	500
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0/1.0	1.0/1.0	1.0/1.5
HT	1.0/1.5	1.0/1.5	1.5/2.0
BT	2.0/2.5	2.0/2.5	2.5/3.0
ET	—	—	—

Automatic maneuvering flaps. If speed ≤ 3.5, use higher drag and reduce minimum speeds by 0.5.

Speeds and Ceilings						Climb Capabilities						
Alt. Band	Conf. Ceil.	CL 45	1/2 35	DT 28	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	3.5 – 6.0	—	—	7.0	—	0.5	—	—	—	—	VH
HI	26–35	3.0 – 6.5	3.0 – 6.0	3.5 – 5.0	7.0	—	1.0	—	0.5	—	0.5	HI
MH	17–25	2.5 – 6.5	3.0 – 6.0	3.0 – 5.0	7.0	—	1.0	—	1.0	—	0.5	MH
ML	8–16	2.0 – 6.0	2.5 – 5.5	2.5 – 5.0	7.5	—	1.0	—	1.0	—	1.0	ML
LO	0–7	2.0 – 6.0	2.0 – 5.5	2.5 – 5.0	7.5	—	2.0	—	1.0	—	1.0	LO

Radar:	APQ-126
ECCM:	0
Arcs:	180+
Search:	Gr. Nav. (120)
Track:	Gr. Attack (30)
Lock-On:	7

ECM:	IFF
RWR:	C
DDS:	B
DJM:	C4
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	20 mm M61A1 Vulcan
To Hit:	6/3/1
Ammunition:	5.0
Gunsight:	HT+2/BT+3
Ranging:	—
AtA/AtG:	6/8*
Bomb System:	Computed

Technology:

Terrain Following - A

Load Point Limits: CL : < 7
1/2: <15
DT : ≥15

Weight Limit: 15,000

Station	Limit	Allowed Loads
1 and 8	3,500	BB BG RP RG WR EP ARM DP IRM FT
2 and 7	3,500	BB BG BS RP RG RS WR EP ARM DP PP GP
3 and 6	2,500	BB BG BS RP RG RS WR EP ARM DP PP OP FT
4 and 5	250	IRM

Load Notes:

1. May only used AIM-9 IRMs, AGM-12 RGs, and AGM-45 and AGM-88 ARMs.

Notes:

1.
2. High transonic drag (HTD).

VPs: 24/16/8/4

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A-7P Corsair II

Power APs/DPs: ○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	1.0	1.0	1.0	2.0
N	0.0	0.0	0.0	1.0
I	1.0	2.0	2.0	0.0
SPBR	2.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	4.5	Restr. Arcs:	60–
Climb Spd.:	3.5	Blind Arcs:	30–
Visibility:	6	Internal Fuel:	480
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0	1.0	1.0
HT	1.5	1.5	1.5
BT	2.0	2.5	2.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 40	1/2 32	DT 26	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	3.0 – 5.0	—	—	6.5	—	0.5	—	—	—	—	VH
HI	26–35	3.0 – 5.0	3.0 – 4.5	3.5 – 4.5	7.0	—	0.5	—	0.5	—	0.5	HI
MH	17–25	2.5 – 5.0	2.5 – 5.0	3.0 – 4.5	7.0	—	1.0	—	0.5	—	0.5	MH
ML	8–16	2.0 – 5.5	2.0 – 5.0	2.5 – 5.0	7.5	—	1.0	—	1.0	—	0.5	ML
LO	0–7	1.5 – 5.5	2.0 – 5.5	2.5 – 5.0	7.5	—	1.0	—	1.0	—	0.5	LO

Radar:	APQ-126
ECCM:	0
Arcs:	180+
Search:	Gr. Nav. (120)
Track:	Gr. Attack (30)
Lock-On:	7

ECM:	IFF
RWR:	B
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	Two 20 mm Mk 12
To Hit:	5/3/1
Ammunition:	8.0
Gunsight:	TT+1/HT+2/BT+3
Ranging:	—
AtA/AtG:	4/4*

Bomb System: Computed

Technology:

Terrain Following - A

Load Point Limits: CL : < 7 / 1/2: <13 / DT : ≥13

Weight Limit: 15,000

Station	Limit	Allowed Loads
1 and 8	3,500	BB BG RP RG WR EP ARM IRM FT
2 and 7	3,500	BB BG RP RG WR EP ARM PP GP
3 and 6	2,500	BB BG RP RG WR EP ARM PP FT
4 and 5	250	IRM

Load Notes:

1. May only used AIM-9 IRMs, AGM-12 RGs, and AGM-45 ARMs.

Notes:

1.
2. High transonic drag (HTD).

VPs: 20/13/7/3

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General Dynamics F-111 Aardvark

- F-111A — forward geometry
- F-111A — mid geometry
- F-111A — aft geometry
- F-111E — forward geometry
- F-111E — mid geometry
- F-111E — aft geometry

F-111A Aardvark (Wings Forward)

Crew: Pilot and Weapons Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	2.0	1.5	1.0	16.0
M	1.0	1.0	0.5	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	1600
Size:	−1	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.5	2.5	2.5
BT	—	—	—
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 51	1/2 36	DT 24	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	3.5	1.0	0.5	—	—	—	—	EH+
VH	36–45	3.5 – 3.5	3.5 – 3.5	—	3.5	1.0	0.5	1.0	0.5	—	—	VH
HI	26–35	2.5 – 3.5	3.5 – 3.5	—	3.5	2.0	1.0	1.0	0.5	—	—	HI
MH	17–25	2.5 – 3.5	3.0 – 3.5	3.0 – 3.5	3.5	2.0	1.0	1.0	0.5	1.0	0.5	MH
ML	8–16	2.0 – 3.5	2.5 – 3.5	2.5 – 3.5	3.5	3.0	1.0	2.0	1.0	1.0	0.5	ML
LO	0–7	1.5 – 3.5	2.5 – 3.5	2.5 – 3.5	3.5	3.0	1.0	2.0	1.0	1.5	0.5	LO

Radar:	APQ-110/113	**ECM:**	IFF
ECCM:	1	RWR:	A
Arcs:	180+	DDS:	A
Search:	Gr. Nav. (420)	DJM:	A3
Track:	Gr. Attack (120)	AJM:	—
Lock-On:	8	BJM:	—

Weapon Stations Diagram:

Guns:	One 20 mm M61A1 gun pack
To Hit:	5/3/2
Ammunition:	10.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	6/8*
Bomb System:	Ballistic computed

Technology:

Terrain Following-B

Load Point Limits: CL : < 9; 1/2: <19; DT : ≥19

Weight Limit: 34,000

Station	Limit	Allowed Loads
1 and 11	2,500	BB WR
2 and 10	5,000	BB WR FT
3–4 and 8–9	5,000	BB BG WR FT IRM
5	4,000	Nuc BB GP
6 and 7	600	EP

Load Notes:

1. The wing stations (1 to 4 and 8 to 11) may only carry a total weight of 30,000.
2. Stations 1, 2, 10, and 11 do not swivel. If used, wings must remain forward until all stores carried on them are expended or jettisoned.
3. Stations 1 and 11 were never used operationally.
4. Stations 3, 4, 8, and 9 may carry one AIM-9 IRM in addition to other non-missile stores.
5. Station 5 is the internal weapon bay. It may carry a 20 mm M61A1 gun pack (weight 2000 and load 1) and a nuclear BB or two nuclear BBs.
6. Stations 6 and 7 are the rear centerline stations.

Notes:

1.
2. This is a variable-geometry aircraft with allowed geometries of forward, mid, and aft. The geometry may be changed by one step at the end of each turn. The data shown here are for the forward geometry.

VPs: 32/21/11/5

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F-111A Aardvark (Wings Mid)

Crew: Pilot and Weapons Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	2.0	1.5	1.0	16.0
M	1.0	1.0	0.5	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	1600
Size:	−1	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.5	2.5	2.5
BT	3.5	3.5	3.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 51	1/2 36	DT 24	Dive Speed
EH+	46+	4.0 – 8.0	—	—	8.0
VH	36–45	3.5 – 8.0	3.5 – 8.0	—	8.0
HI	26–35	2.5 – 8.0	3.5 – 8.0	—	8.0
MH	17–25	2.5 – 8.0	3.0 – 8.0	3.0 – 7.5	8.0
ML	8–16	2.0 – 8.0	2.5 – 8.0	2.5 – 7.0	8.0
LO	0–7	2.0 – 8.0	3.0 – 7.5	3.0 – 6.5	8.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	—	—	—	—	EH+
VH	1.0	0.5	1.0	0.5	—	—	VH
HI	2.0	1.0	1.0	0.5	—	—	HI
MH	2.0	1.0	1.0	0.5	1.0	0.5	MH
ML	3.0	1.0	2.0	1.0	1.0	0.5	ML
LO	3.0	1.0	2.0	1.0	1.5	0.5	LO

Radar:	APQ-110/113	**ECM:**	IFF
ECCM:	1	RWR:	A
Arcs:	180+	DDS:	A
Search:	Gr. Nav. (420)	DJM:	A3
Track:	Gr. Attack (120)	AJM:	—
Lock-On:	8	BJM:	—

Weapon Stations Diagram:

Guns:	One 20 mm M61A1 gun pack
To Hit:	5/3/2
Ammunition:	10.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	6/8*
Bomb System:	Ballistic computed

Technology:

Terrain Following-B

Load Point Limits: CL : < 9; 1/2: <19; DT : ≥19

Weight Limit: 34,000

Station	Limit	Allowed Loads
1 and 11	2,500	BB WR
2 and 10	5,000	BB WR FT
3–4 and 8–9	5,000	BB BG WR FT IRM
5	4,000	Nuc BB GP
6 and 7	600	EP

Load Notes:

1. The wing stations (1 to 4 and 8 to 11) may only carry a total weight of 30,000.
2. Stations 1, 2, 10, and 11 do not swivel. If used, wings must remain forward until all stores carried on them are expended or jettisoned.
3. Stations 1 and 11 were never used operationally.
4. Stations 3, 4, 8, and 9 may carry one AIM-9 IRM in addition to other non-missile stores.
5. Station 5 is the internal weapon bay. It may carry a 20 mm M61A1 gun pack (weight 2000 and load 1) and a nuclear BB or two nuclear BBs.
6. Stations 6 and 7 are the rear centerline stations.

Notes:

1.
2. This is a variable-geometry aircraft with allowed geometries of forward, mid, and aft. The geometry may be changed by one step at the end of each turn. The data shown here are for the mid geometry.
3. Low transonic drag (LTD). Poor supersonic maneuverability (PSSM).

VPs: 32/21/11/5

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F-111A Aardvark (Wings Aft)

Crew: Pilot and Weapons Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	2.0	1.5	1.0	16.0
M	1.0	1.0	0.5	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	1600
Size:	−1	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	2.25	2.25	2.25
HT	3.25	3.25	3.25
BT	3.75	3.75	3.75
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 51	1/2 36	DT 24	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	4.5 – 13.0	—	—	15.0	1.0	0.5	—	—	—	—	EH+
VH	36–45	4.0 – 14.0	4.0 – 11.0	—	14.0	1.0	0.5	1.0	0.5	—	—	VH
HI	26–35	3.0 – 12.0	4.0 – 10.0	—	13.0	2.0	1.0	1.0	0.5	—	—	HI
MH	17–25	3.0 – 10.0	3.5 – 9.0	3.5 – 7.5	12.0	2.0	1.0	1.0	0.5	1.0	0.5	MH
ML	8–16	2.5 – 9.5	3.0 – 8.5	3.0 – 7.0	10.0	3.0	1.0	2.0	1.0	1.0	0.5	ML
LO	0–7	2.0 – 8.5	3.0 – 7.5	3.0 – 6.5	9.0	3.0	1.0	2.0	1.0	1.5	0.5	LO

Radar:	APQ-110/113	**ECM:**	IFF
ECCM:	1	RWR:	A
Arcs:	180+	DDS:	A
Search:	Gr. Nav. (420)	DJM:	A3
Track:	Gr. Attack (120)	AJM:	—
Lock-On:	8	BJM:	—

Weapon Stations Diagram:

Guns:	One 20 mm M61A1 gun pack
To Hit:	5/3/2
Ammunition:	10.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	6/8*
Bomb System:	Ballistic computed

Technology:

Terrain Following-B

Load Point Limits: CL : < 9; 1/2: <19; DT : ≥19

Weight Limit: 34,000

Station	Limit	Allowed Loads
1 and 11	2,500	BB WR
2 and 10	5,000	BB WR FT
3–4 and 8–9	5,000	BB BG WR FT IRM
5	4,000	Nuc BB GP
6 and 7	600	EP

Load Notes:

1. The wing stations (1 to 4 and 8 to 11) may only carry a total weight of 30,000.
2. Stations 1, 2, 10, and 11 do not swivel. If used, wings must remain forward until all stores carried on them are expended or jettisoned.
3. Stations 1 and 11 were never used operationally.
4. Stations 3, 4, 8, and 9 may carry one AIM-9 IRM in addition to other non-missile stores.
5. Station 5 is the internal weapon bay. It may carry a 20 mm M61A1 gun pack (weight 2000 and load 1) and a nuclear BB or two nuclear BBs.
6. Stations 6 and 7 are the rear centerline stations.

Notes:

1.
2. This is a variable-geometry aircraft with allowed geometries of forward, mid, and aft. The geometry may be changed by one step at the end of each turn. The data shown here are for the aft geometry.
3. High bleed rate (HBR). Low transonic drag (LTD). Poor supersonic maneuverability (PSSM).

VPs: 32/21/11/5

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F-111B
(Wings Forward)

Crew: Pilot and Weapons Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	2.0	1.5	1.0	16.0
M	1.0	1.0	0.5	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	1600
Size:	−1	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.5	2.5	2.5
BT	—	—	—
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 51	1/2 36	DT 24	Dive Speed
EH+	46+	—	—	—	3.5
VH	36–45	3.5 – 3.5	3.5 – 3.5	—	3.5
HI	26–35	2.5 – 3.5	3.5 – 3.5	—	3.5
MH	17–25	2.5 – 3.5	3.0 – 3.5	3.0 – 3.5	3.5
ML	8–16	2.0 – 3.5	2.5 – 3.5	2.5 – 3.5	3.5
LO	0–7	1.5 – 3.5	2.5 – 3.5	2.5 – 3.5	3.5

Climb Capabilities

Band	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	—	—	—	—	EH+
VH	1.0	0.5	1.0	0.5	—	—	VH
HI	2.0	1.0	1.0	0.5	—	—	HI
MH	2.0	1.0	1.0	0.5	1.0	0.5	MH
ML	3.0	1.0	2.0	1.0	1.0	0.5	ML
LO	3.0	1.0	2.0	1.0	1.5	0.5	LO

Radar:	AWG-9	**ECM:**	IFF
ECCM:	3	RWR:	B
Arcs:	150+	DDS:	B
Search:	500–60	DJM:	A3
Track:	360–60	AJM:	—
Lock-On:	7	BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+0/BT+2
Ranging:	RE
AtA/AtG:	—
Bomb System:	Manual

Technology:

Autotrack, Look-Down Radar, Track-While-Scan (18), Multi-Target (6), and IRSTS-A

Load Point Limits: CL : < 9 / 1/2: <19 / DT : ≥19

Weight Limit: 34,000

Station	Limit	Allowed Loads
1 and 7	5,000	FT
2–3 and 5–6	5,000	AHM IRM
4	2,000	AHM

Load Notes:

1. May use AIM-54 AHMs, AIM-9 IRMs, and 2300L (600 gal) FTs.
2. Stations 1 and 7 do not swivel. If used, the wings must remain forward until all stores carried on them are expended or jettisoned.
3. Stations 2, 3, 5, and 7 may each carry one AHM and one IRM.
4. Station 4 is the internal bay. It may carry two AHMs (contributing only half their normal load) or a 20 mm M61A1 gun pack (weight 2000 and load 1). The gun pack has hit rolls of 5/3/2, 10.0 ammunition, and AtA/AtG damage ratings of 6/8*.

Notes:

1. The General Dynamics-Grumman F-111B is prototype carrier-based interceptor.
2. This is a variable-geometry aircraft with allowed geometries of forward, mid, and aft. The geometry may be changed by one step at the end of each turn. The data shown here are for the forward geometry.

VPs: 32/21/11/5

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F-111B
(Wings Mid)

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	2.0	1.5	1.0	16.0
M	1.0	1.0	0.5	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	1600
Size:	−1	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot and Weapons Officer

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.5	2.5	2.5
BT	3.5	3.5	3.5
ET	—	—	—

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 51	1/2 36	DT 24	Dive Speed
EH+	46+	4.0 – 8.0	—	—	8.0
VH	36–45	3.5 – 8.0	3.5 – 8.0	—	8.0
HI	26–35	2.5 – 8.0	3.5 – 8.0	—	8.0
MH	17–25	2.5 – 8.0	3.0 – 8.0	3.0 – 7.5	8.0
ML	8–16	2.0 – 8.0	2.5 – 8.0	2.5 – 7.0	8.0
LO	0–7	2.0 – 8.0	3.0 – 7.5	3.0 – 6.5	8.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	—	—	—	—	EH+
VH	1.0	0.5	1.0	0.5	—	—	VH
HI	2.0	1.0	1.0	0.5	—	—	HI
MH	2.0	1.0	1.0	0.5	1.0	0.5	MH
ML	3.0	1.0	2.0	1.0	1.0	0.5	ML
LO	3.0	1.0	2.0	1.0	1.5	0.5	LO

Radar:	AWG-9
ECCM:	3
Arcs:	150+
Search:	500–60
Track:	360–60
Lock-On:	7

ECM:	IFF
RWR:	B
DDS:	B
DJM:	A3
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+0/BT+2
Ranging:	RE
AtA/AtG:	—
Bomb System:	Manual

Technology:

Autotrack, Look-Down Radar, Track-While-Scan (18), Multi-Target (6), and IRSTS-A

Load Point Limits: CL : < 9 / 1/2: <19 / DT : ≥19

Weight Limit: 34,000

Station	Limit	Allowed Loads
1 and 7	5,000	FT
2–3 and 5–6	5,000	AHM IRM
4	2,000	AHM

Load Notes:

1. May use AIM-54 AHMs, AIM-9 IRMs, and 2300L (600 gal) FTs.
2. Stations 1 and 7 do not swivel. If used, the wings must remain forward until all stores carried on them are expended or jettisoned.
3. Stations 2, 3, 5, and 7 may each carry one AHM and one IRM.
4. Station 4 is the internal bay. It may carry two AHMs (contributing only half their normal load) or a 20 mm M61A1 gun pack (weight 2000 and load 1). The gun pack has hit rolls of 5/3/2, 10.0 ammunition, and AtA/AtG damage ratings of 6/8*.

Notes:

1. The General Dynamics-Grumman F-111B is prototype carrier-based interceptor.
2. This is a variable-geometry aircraft with allowed geometries of forward, mid, and aft. The geometry may be changed by one step at the end of each turn. The data shown here are for the mid geometry.
3. Low transonic drag (LTD). Poor supersonic maneuverability (PSSM).

VPs: 32/21/11/5

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F-111B
(Wings Aft)

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	2.0	1.5	1.0	16.0
M	1.0	1.0	0.5	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	1600
Size:	−1	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Crew: Pilot and Weapons Officer

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	2.25	2.25	2.25
HT	3.25	3.25	3.25
BT	3.75	3.75	3.75
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 51	1/2 36	DT 24	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	4.5 – 13.0	—	—	15.0	1.0	0.5	—	—	—	—	EH+
VH	36–45	4.0 – 14.0	4.0 – 11.0	—	14.0	1.0	0.5	1.0	0.5	—	—	VH
HI	26–35	3.0 – 12.0	4.0 – 10.0	—	13.0	2.0	1.0	1.0	0.5	—	—	HI
MH	17–25	3.0 – 10.0	3.5 – 9.0	3.5 – 7.5	12.0	2.0	1.0	1.0	0.5	1.0	0.5	MH
ML	8–16	2.5 – 9.5	3.0 – 8.5	3.0 – 7.0	10.0	3.0	1.0	2.0	1.0	1.0	0.5	ML
LO	0–7	2.0 – 8.5	3.0 – 7.5	3.0 – 6.5	9.0	3.0	1.0	2.0	1.0	1.5	0.5	LO

Radar:	AWG-9
ECCM:	3
Arcs:	150+
Search:	500–60
Track:	360–60
Lock-On:	7

ECM:	IFF
RWR:	B
DDS:	B
DJM:	A3
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	TT+0/HT+0/BT+2
Ranging:	RE
AtA/AtG:	—

Bomb System: Manual

Technology:

Autotrack, Look-Down Radar, Track-While-Scan (18), Multi-Target (6), and IRSTS-A

Load Point Limits: CL : < 9 / 1/2: <19 / DT : ≥19

Weight Limit: 34,000

Station	Limit	Allowed Loads
1 and 7	5,000	FT
2–3 and 5–6	5,000	AHM IRM
4	2,000	AHM

Load Notes:

1. May use AIM-54 AHMs, AIM-9 IRMs, and 2300L (600 gal) FTs.
2. Stations 1 and 7 do not swivel. If used, the wings must remain forward until all stores carried on them are expended or jettisoned.
3. Stations 2, 3, 5, and 7 may each carry one AHM and one IRM.
4. Station 4 is the internal bay. It may carry two AHMs (contributing only half their normal load) or a 20 mm M61A1 gun pack (weight 2000 and load 1). The gun pack has hit rolls of 5/3/2, 10.0 ammunition, and AtA/AtG damage ratings of 6/8*.

Notes:

1. The General Dynamics-Grumman F-111B is prototype carrier-based interceptor.
2. This is a variable-geometry aircraft with allowed geometries of forward, mid, and aft. The geometry may be changed by one step at the end of each turn. The data shown here are for the aft geometry.
3. High bleed rate (HBR). Low transonic drag (LTD). Poor supersonic maneuverability (PSSM).

VPs: 32/21/11/5

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F-111E Aardvark (Wings Forward)

Crew: Pilot and Weapons Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	2.0	1.5	1.0	16.0
M	1.0	1.0	0.5	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	1600
Size:	−1	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.5	2.5	2.5
BT	—	—	—
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 51	1/2 36	DT 24	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	3.5	1.0	0.5	—	—	—	—	EH+
VH	36–45	3.5 – 3.5	3.5 – 3.5	—	3.5	1.0	0.5	1.0	0.5	—	—	VH
HI	26–35	2.5 – 3.5	3.5 – 3.5	—	3.5	2.0	1.0	1.0	0.5	—	—	HI
MH	17–25	2.5 – 3.5	3.0 – 3.5	3.0 – 3.5	3.5	2.0	1.0	1.0	0.5	1.0	0.5	MH
ML	8–16	2.0 – 3.5	2.5 – 3.5	2.5 – 3.5	3.5	3.0	1.0	2.0	1.0	1.0	0.5	ML
LO	0–7	1.5 – 3.5	2.5 – 3.5	2.5 – 3.5	3.5	3.0	1.0	2.0	1.0	1.5	0.5	LO

Radar:	APQ-110/113	**ECM:**	IFF
ECCM:	1	RWR:	B
Arcs:	180+	DDS:	A
Search:	Gr. Nav. (420)	DJM:	B4
Track:	Gr. Attack (120)	AJM:	—
Lock-On:	8	BJM:	—

Weapon Stations Diagram:

Guns:	One 20 mm M61A1 gun pack
To Hit:	5/3/2
Ammunition:	10.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	6/8*
Bomb System:	Computed

Technology:

Terrain Following-B

Load Point Limits: CL : < 9, 1/2: <19, DT : ≥19

Weight Limit: 34,000

Station	Limit	Allowed Loads
1 and 11	2,500	BB WR
2 and 10	5,000	BB WR FT
3–4 and 8–9	5,000	BB BG WR FT IRM
5	4,000	Nuc BB GP
6 and 7	600	EP

Load Notes:

1. The wing stations (1 to 4 and 8 to 11) may only carry a total weight of 30,000.
2. Stations 1, 2, 10, and 11 do not swivel. If used, wings must remain forward until all stores carried on them are expended or jettisoned.
3. Stations 1 and 11 were never used operationally.
4. Stations 3, 4, 8, and 9 may carry one AIM-9 IRM in addition to other non-missile stores.
5. Station 5 is the internal weapon bay. It may carry a 20 mm M61A1 gun pack (weight 2000 and load 1) and a nuclear BB or two nuclear BBs.
6. Stations 6 and 7 are the rear centerline stations.

Notes:

1.
2. This is a variable-geometry aircraft with allowed geometries of forward, mid, and aft. The geometry may be changed by one step at the end of each turn. The data shown here are for the forward geometry.

VPs: 32/21/11/5

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F-111E Aardvark (Wings Mid)

Crew: Pilot and Weapons Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	2.0	1.5	1.0	16.0
M	1.0	1.0	0.5	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	1600
Size:	−1	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	1.5	1.5	1.5
HT	2.5	2.5	2.5
BT	3.5	3.5	3.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 51	1/2 36	DT 24	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	4.0 – 8.0	—	—	8.0	1.0	0.5	—	—	—	—	EH+
VH	36–45	3.5 – 8.0	3.5 – 8.0	—	8.0	1.0	0.5	1.0	0.5	—	—	VH
HI	26–35	2.5 – 8.0	3.5 – 8.0	—	8.0	2.0	1.0	1.0	0.5	—	—	HI
MH	17–25	2.5 – 8.0	3.0 – 8.0	3.0 – 7.5	8.0	2.0	1.0	1.0	0.5	1.0	0.5	MH
ML	8–16	2.0 – 8.0	2.5 – 8.0	2.5 – 7.0	8.0	3.0	1.0	2.0	1.0	1.0	0.5	ML
LO	0–7	2.0 – 8.0	3.0 – 7.5	3.0 – 6.5	8.0	3.0	1.0	2.0	1.0	1.5	0.5	LO

Radar:	APQ-110/113	**ECM:**	IFF
ECCM:	1	RWR:	B
Arcs:	180+	DDS:	A
Search:	Gr. Nav. (420)	DJM:	B4
Track:	Gr. Attack (120)	AJM:	—
Lock-On:	8	BJM:	—

Weapon Stations Diagram:

Guns:	One 20 mm M61A1 gun pack
To Hit:	5/3/2
Ammunition:	10.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	6/8*
Bomb System:	Computed

Technology:

Terrain Following-B

Load Point Limits: CL : < 9, 1/2: <19, DT : ≥19

Weight Limit: 34,000

Station	Limit	Allowed Loads
1 and 11	2,500	BB WR
2 and 10	5,000	BB WR FT
3–4 and 8–9	5,000	BB BG WR FT IRM
5	4,000	Nuc BB GP
6 and 7	600	EP

Load Notes:

1. The wing stations (1 to 4 and 8 to 11) may only carry a total weight of 30,000.
2. Stations 1, 2, 10, and 11 do not swivel. If used, wings must remain forward until all stores carried on them are expended or jettisoned.
3. Stations 1 and 11 were never used operationally.
4. Stations 3, 4, 8, and 9 may carry one AIM-9 IRM in addition to other non-missile stores.
5. Station 5 is the internal weapon bay. It may carry a 20 mm M61A1 gun pack (weight 2000 and load 1) and a nuclear BB or two nuclear BBs.
6. Stations 6 and 7 are the rear centerline stations.

Notes:

1.
2. This is a variable-geometry aircraft with allowed geometries of forward, mid, and aft. The geometry may be changed by one step at the end of each turn. The data shown here are for the mid geometry.
3. Low transonic drag (LTD). Poor supersonic maneuverability (PSSM).

VPs: 32/21/11/5

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F-111E Aardvark (Wings Aft)

Crew: Pilot and Weapons Officer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	2.0	1.5	1.0	16.0
M	1.0	1.0	0.5	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	2.0	0.0
SPBR	1.0	2.0	2.0	—

Smoker in military power (SMP).

Cruise Spd. CL:	5.5	Restr. Arcs:	—
Climb Spd.:	4.5	Blind Arcs:	60–
Visibility:	8	Internal Fuel:	1600
Size:	−1	AtA Refuel:	Yes
Vulnerability:	+0	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.5
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	2.25	2.25	2.25
HT	3.25	3.25	3.25
BT	3.75	3.75	3.75
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 51	1/2 36	DT 24	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	4.5 – 13.0	—	—	15.0	1.0	0.5	—	—	—	—	EH+
VH	36–45	4.0 – 14.0	4.0 – 11.0	—	14.0	1.0	0.5	1.0	0.5	—	—	VH
HI	26–35	3.0 – 12.0	4.0 – 10.0	—	13.0	2.0	1.0	1.0	0.5	—	—	HI
MH	17–25	3.0 – 10.0	3.5 – 9.0	3.5 – 7.5	12.0	2.0	1.0	1.0	0.5	1.0	0.5	MH
ML	8–16	2.5 – 9.5	3.0 – 8.5	3.0 – 7.0	10.0	3.0	1.0	2.0	1.0	1.0	0.5	ML
LO	0–7	2.0 – 8.5	3.0 – 7.5	3.0 – 6.5	9.0	3.0	1.0	2.0	1.0	1.5	0.5	LO

Radar:	APQ-110/113	**ECM:**	IFF
ECCM:	1	RWR:	B
Arcs:	180+	DDS:	A
Search:	Gr. Nav. (420)	DJM:	B4
Track:	Gr. Attack (120)	AJM:	—
Lock-On:	8	BJM:	—

Weapon Stations Diagram:

Guns:	One 20 mm M61A1 gun pack
To Hit:	5/3/2
Ammunition:	10.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	6/8*
Bomb System:	Computed

Technology:

Terrain Following-B

Load Point Limits: CL : < 9, 1/2: <19, DT : ≥19

Weight Limit: 34,000

Station	Limit	Allowed Loads
1 and 11	2,500	BB WR
2 and 10	5,000	BB WR FT
3–4 and 8–9	5,000	BB BG WR FT IRM
5	4,000	Nuc BB GP
6 and 7	600	EP

Load Notes:

1. The wing stations (1 to 4 and 8 to 11) may only carry a total weight of 30,000.
2. Stations 1, 2, 10, and 11 do not swivel. If used, wings must remain forward until all stores carried on them are expended or jettisoned.
3. Stations 1 and 11 were never used operationally.
4. Stations 3, 4, 8, and 9 may carry one AIM-9 IRM in addition to other non-missile stores.
5. Station 5 is the internal weapon bay. It may carry a 20 mm M61A1 gun pack (weight 2000 and load 1) and a nuclear BB or two nuclear BBs.
6. Stations 6 and 7 are the rear centerline stations.

Notes:

1.
2. This is a variable-geometry aircraft with allowed geometries of forward, mid, and aft. The geometry may be changed by one step at the end of each turn. The data shown here are for the aft geometry.
3. High bleed rate (HBR). Low transonic drag (LTD). Poor supersonic maneuverability (PSSM).

VPs: 32/21/11/5

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Cessna A-37 Dragonfly

- A-37B
- OA-37B

See Also

- Cessna T-37 Tweet

A-37B Dragonfly

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	2.0	1.5	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.0	Restr. Arcs:	-
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	130
Size:	+1	AtA Refuel:	Yes
Vulnerability:	−1	Ejection Seat:	Std

Crew: Pilot and Observer

Maneuver DPs:

LR/DR	2.0
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	1.0
HT	1.0	1.0	1.5
BT	1.0	1.5	1.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 40	1/2 35	DT 25	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	2.0 – 4.5	—	—	5.5	—	0.5	—	—	—	—	VH
HI	26–35	2.0 – 4.5	2.0 – 4.0	—	5.5	—	0.5	—	0.5	—	—	HI
MH	17–25	1.5 – 5.0	2.0 – 4.0	2.0 – 4.0	5.5	—	1.0	—	0.5	—	0.5	MH
ML	8–16	1.0 – 5.0	1.5 – 4.5	1.5 – 4.0	5.5	—	1.0	—	1.0	—	0.5	ML
LO	0–7	1.0 – 5.0	1.0 – 4.5	1.5 – 4.0	5.5	—	1.0	—	1.0	—	1.0	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	7.62 mm GAU-2B
To Hit:	5/1/–
Ammunition:	8.0
Gunsight:	TT+1/HT+2/BT+3
Ranging:	—
AtA/AtG:	2/2**

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 5, 1/2: < 8, DT : ≥ 8

Weight Limit: 5,700

Station	Limit	Allowed Loads
1 and 8	500	BB RP GP
2 and 7	600	BB RP GP
3–4 and 5–6	870	BB BG RP GP FT

Notes:

1.
2. High transonic drag (HTD).

VPs: 10/7/3/2

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OA-37B Dragonfly

Crew: Pilot and Observer

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	2.0	1.5	1.0	1.0
N	0.0	0.0	0.0	0.5
I	1.0	1.0	1.0	0.0
SPBR	1.0	1.0	2.0	—

Cruise Spd. CL:	4.0	Restr. Arcs:	-
Climb Spd.:	3.0	Blind Arcs:	30–
Visibility:	4	Internal Fuel:	130
Size:	+1	AtA Refuel:	Yes
Vulnerability:	−1	Ejection Seat:	Std

Maneuver DPs:

LR/DR	2.0
VR	1.5

Turn DPs:

	CL	1/2	DT
TT	0.5	0.5	1.0
HT	1.0	1.0	1.5
BT	1.0	1.5	1.5
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 40	1/2 35	DT 25	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	2.0 – 4.5	—	—	5.5	—	0.5	—	—	—	—	VH
HI	26–35	2.0 – 4.5	2.0 – 4.0	—	5.5	—	0.5	—	0.5	—	—	HI
MH	17–25	1.5 – 5.0	2.0 – 4.0	2.0 – 4.0	5.5	—	1.0	—	0.5	—	0.5	MH
ML	8–16	1.0 – 5.0	1.5 – 4.5	1.5 – 4.0	5.5	—	1.0	—	1.0	—	0.5	ML
LO	0–7	1.0 – 5.0	1.0 – 4.5	1.5 – 4.0	5.5	—	1.0	—	1.0	—	1.0	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	—
DDS:	—
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	7.62 mm GAU-2B
To Hit:	5/1/–
Ammunition:	8.0
Gunsight:	TT+1/HT+2/BT+3
Ranging:	—
AtA/AtG:	2/2**

Bomb System: Manual

Technology:

None

Load Point Limits: CL : < 5, 1/2: < 8, DT : ≥ 8

Weight Limit: 5,700

Station	Limit	Allowed Loads
1 and 8	500	BB RP GP
2 and 7	600	BB RP GP
3–4 and 5–6	870	BB BG RP GP FT

Notes:

1.
2. High transonic drag (HTD).

VPs: 10/7/3/2

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Fairchild A-10 Thunderbolt II

An ADC is provided for the:

– A-10A

A-10A Thunderbolt II

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	—	—	—	—
M	2.0	1.5	1.0	3.0
N	0.0	0.0	0.0	1.0
I	1.0	2.0	2.0	0.0
SPBR	2.0	2.0	3.0	—

Cruise Spd. CL:	3.5	Restr. Arcs:	—
Climb Spd.:	3.0	Blind Arcs:	30L
Visibility:	7	Internal Fuel:	550
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+3	Ejection Seat:	Adv

Crew: Pilot

Maneuver DPs:

LR/DR	2.0
VR	1.0

Turn DPs:

	CL	1/2	DT
TT	0.5	1.0	1.0
HT	1.0	1.5	1.5
BT	1.5	1.5	2.0
ET	—	—	—

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 35	1/2 28	DT 20	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+
VH	36–45	—	—	—	—	—	—	—	—	—	—	VH
HI	26–35	1.5 – 5.0	2.0 – 5.0	—	6.0	—	0.5	—	0.5	—	—	HI
MH	17–25	1.5 – 4.5	1.5 – 4.5	2.0 – 4.0	5.5	—	1.0	—	0.5	—	0.5	MH
ML	8–16	1.0 – 4.5	1.0 – 4.5	1.5 – 4.0	5.0	—	1.0	—	1.0	—	0.5	ML
LO	0–7	1.0 – 4.5	1.0 – 4.5	1.0 – 4.0	5.0	—	1.0	—	1.0	—	1.0	LO

Radar:	—
ECCM:	—
Arcs:	—
Search:	—
Track:	—
Lock-On:	—

ECM:	IFF
RWR:	B
DDS:	B
DJM:	—
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	One 30 mm GAU-8
To Hit:	5/3/2
Ammunition:	9.0
Gunsight:	TT+0/HT+2/BT+3
Ranging:	—
AtA/AtG:	7/12
Bomb System:	Ballistic

Technology:

Laser-spot tracker

Load Point Limits: CL : < 9 / 1/2: <17 / DT : ≥17

Weight Limit: 16,000

Station	Limit	Allowed Loads
1–2 and 10–11	1,000	BB BG RP EP ARM DR IRM MDR
3 and 9	2,500	BB BG BS RP RG RS WR WP
4 and 8	3,500	BB BG BS RP RG WR FT OP LP GP
5 and 7	3,500	BB BG BS RP RG WR OP LP
6	5,000	BB BG RP RG WR FT

Load Notes:

1. The load limit with full internal fuel is 14,300. Reducing internal fuel allows stores to be carried beyond this limit, at the rate of 1 fuel point for an increase of 20 in load, up to the limit of 16,000.
2. May use AIM-9 IRMs and ARMs.
3. May not use GPS-guided BS.
4. May use the AAQ-29 Litening OP.

Notes:

1. The Fairchild Republic A-10A Thunderbolt II is a close-air-support aircraft. It is commonly referred to as the “Warthog” or “Hog.”
2. High transonic drag (HTD).

VPs: 22/15/7/4

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McDonnell Douglas F/A-18 Hornet

An ADC is provided for the:

– F/A-18A

F/A-18A Hornet

Power APs/DPs: ○○

	CL	1/2	DT	Fuel
AB	4.0	3.0	2.5	12.0
M	2.0	1.5	1.0	4.0
N	0.0	0.0	0.0	2.0
I	1.0	1.0	2.0	0.0
SPBR	2.0	2.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	-
Climb Spd.:	4.5	Blind Arcs:	30L
Visibility:	7	Internal Fuel:	540
Size:	+0	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Adv

Crew: Pilot

Maneuver DPs:

LR/DR	1.5
VR	0.5

Turn DPs:

	CL	1/2	DT
TT	1.0/1.0	1.0/1.0	1.0/1.0
HT	1.0/1.5	1.0/1.5	1.5/2.0
BT	1.5/2.0	2.0/2.5	2.0/2.5
ET	2.0/2.5	2.5/3.0	—

Automatic maneuvering flaps. If speed ≤ 3.5, use higher drag.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 60	1/2 56	DT 49	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 12.0	3.5 – 11.0	4.0 – 9.5	14.0	2.0	1.0	1.0	0.5	1.0	0.0	EH+
VH	36–45	2.5 – 12.0	3.0 – 11.0	3.5 – 9.0	14.0	3.0	1.0	2.0	0.5	1.0	0.5	VH
HI	26–35	2.0 – 11.5	2.0 – 10.5	2.5 – 9.0	13.0	4.0	1.0	3.0	1.0	1.0	0.5	HI
MH	17–25	1.5 – 11.0	1.5 – 10.0	2.0 – 8.0	12.0	6.0	2.0	4.0	1.0	2.0	1.0	MH
ML	8–16	1.5 – 10.0	1.5 – 9.0	2.0 – 8.0	12.0	6.0	2.0	6.0	1.0	2.0	1.0	ML
LO	0–7	1.0 – 9.0	1.5 – 8.0	2.0 – 7.0	11.0	8.0	3.0	8.0	2.0	3.0	1.0	LO

Radar:	APG-65
ECCM:	3
Arcs:	150+
Search:	180–40
Track:	120–40
Lock-On:	8

ECM:	IFF
RWR:	B
DDS:	B
DJM:	B4
AJM:	—
BJM:	—

Weapon Stations Diagram:

Guns:	20 mm M61 Vulcan
To Hit:	7/5/3
Ammunition:	3.0
Gunsight:	TT+0/HT+0/BT+1
Ranging:	IG
AtA/AtG:	6/8*

Bomb System: Advanced

Technology:

Look-Down Radar, Auto-Track Radar, Track-While-Scan Radar (10), Target-ID Radar, HUD Interface, and IR Uncage

Load Point Limits: CL : < 7 / 1/2: <13 / DT : ≥13

Weight Limit: 17,000

Station	Limit	Allowed Loads
1 and 9	250	IRM
2 and 8	2,500	BB BG BS RP RG RS WR ARM ASM IRM RHM EP DP LP
3 and 7	3,000	BB BG BS RP RG RS GP FT WR ARM ASM EP DP LP
4 and 6	500	RHM OP LP
5	3,000	BB BG BS DR TR GP WP DP FT

Load Notes:

1. Weight limit for catapult take-off is 13,400.
2. Stations 2 and 8 may each carry two IRMs in addition to other non-missile stores.
3. May use AIM-9 IRMs and AIM-7 RHMs.
4. May use AGM-88 and AGM-122 ARMs.
5. May use 330 US gal (1250L) FTs. May use 480 US gal (1800L) FTs for ferry flights.

Notes:

1. The McDonnell Douglas F/A-18A Hortnet is a carrier-capable all-weather fighter and attack aircraft. The version described here is the initial one that entered service in 1983, equipped with the APG-65 radar and ALQ-126B DJM.
2. Fly-by-wire (FBW). Good supersonic maneuverability (GSSM). High pitch rate (HPR). High roll rate (HRR). Rapid power response (RPR).
3. Maneuvering flaps at speed ≤ 3.5.

VPs: 36/24/12/6

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Rockwell B-1 Lancer

The Rockwell B-1 is a long-range strategic bomber.

Versions

B-1A

The original B-1A was designed and developed as a long-range, high-speed strategic nuclear bomber to replace the B-52. Four prototype aircraft were built. However, the project was cancelled in 1977 to a large degree because it was thought that the B-52 with air-launched cruise missiles could provide an equivalent capability at a lower cost.

The B-1A did not progress past the prototype stage.

B-1B

The B-1 project was revived in the 1980s. A total of 100 B-1Bs were acquired by the USAF, with modifications that gave lower radar cross-section and higher speed at low altitude at the cost of much reduced speed at high altitude, an improved defensive countermeasures suite, and a secondary conventional role. Although the B-1B is formally named the "Lancer," informally it is called the "Bone".

The B-1B entered service with the USAF in 1986, although full operability of its TFR and ECM systems took several years.

B-1R

The B-1R is a proposed modernization of the B-1B presented in 2004. It would have had more powerful Pratt & Whitney F119 engines, the air intakes reverted to a high-speed configuration (with a concomitant increase in radar cross-section), provision for weapons on the external stations, including AIM-120 AMRAAM AHMs for self-defense, a dual-mode radar able to combine air-to-air and air-to-ground modes, and improved defensive countermeasures.

The B-1R did not progress beyond a conceptual proposal.

Armament and Stores

B-1A

The B-1A is equipped with three internal bays. Each internal bay can carry a rotary launcher with either eight AGM-69A SRAM nuclear ASMs or eight B43 or B61 nuclear BBs or a 2,975 gal (11,200L) fuel tank.

Had in entered service, possible upgrades could have included the AGM-69B SRAM nuclear ASM and the B77 nuclear BB.

B-1B

The B-1B is equipped with three internal bays and eight external weapon stations on the fuselage and wing gloves. The six fuselage stations have higher capacity than the two wing-glove stations. Use of the external stations causes a significant increase in the radar cross-section.

Each internal bay can carry either a Multi-Purpose Rotary Launcher (MPRL), a Conventional Bomb Module (CBM), or a 2,975 gal (11,200L) fuel tank. Except for in the first few aircraft, the two forward bays can also be combined to carry a Common Strategic Rotary Launcher (CSRL) and a 1,500 gal (5,700L) fuel tank.

At its entry to service in 1986, the nuclear weapon options of the B-1B were eight B61/B63 nuclear BB or eight AGM-69A SRAM nuclear ASM in each MPRL. The SRAM was retired in 1990, the B-1B removed from the nuclear role in 1997, and the ability to carry nuclear weapons was disabled in 2011 to comply with the New START treaty.

The B-1B was tested for the internal carriage of eight AGM-86B ALCM or AGM-129A ACM nuclear ASMs in the CSRL and for the external carriage of fourteen ALCMs or ACMs on the external stations (two on each of the six fuselage stations and one on each of the two wing-glove stations). The vibration levels were too severe for the external carriage of the ALCM, but external carriage of the more robust ACM was feasible. Nevertheless, neither of these options became operational as the USAF deployed the ALCM and ACM exclusively on the B-52 in compliance with the (unratified) SALT II treaty.

In addition to cruise missiles, the fuselage external stations were designed to each carry six Mk 84 bombs or one 1,000 gal (3,800L) FTs, and the wing-glove stations were

designed to each carry four Mk 82 bombs, but these options were never deployed.

The conventional weapons load was initially restricted to twenty-eight Mk 82 500 lb bombs in a CBM. The Mk 82 bombs could be high-drag or low-drag, and the similar Mk 36 or Mk 62 mines could be used as well.

The conventional weapons options were expanded considerably during the aircraft's service with a series of upgrades:

- The 1996 upgrade allowed each CBM to carry ten CBU-87/89/97 cluster BBs.
- The 1998 upgrade allowed each MPRL to carry eight Mk 84 2,000 lb BBs or eight GBU-31 2,000 lb JDAM BSes, specifically the GBU-31(V)1/B with the standard Mk 84 2000 lb bomb as a warhead and the GBU-31(V)3/B with the BLU-109/B 2000 lb penetration bomb.
- The 2003 upgrade allowed the MPRL to carry eight AGM-154A JSOW BSes, but this weapon was not deployed operationally. It also allowed each CBM to carry ten CBU-103/104/105 wind-corrected cluster BBs or five GBU-38 JDAM BSes with a Mk 82 500 lb bomb as a warhead.
- The 2005 upgrade allowed each MPRL to carry eight AGM-158A JASSM ASMs. It also allowed each weapon bay to carry a different conventional weapon option. Prior to this, all weapon bays had to carry the same type of launcher and each launcher had to carry the same type of weapon.
- The 2008 upgrade recommissioned external station 1 for the AAQ-33 Sniper DP/LP and allowed the use of the laser-guided GBU-54 JDAM BS/BG in place of the GBU-38 BS.
- The 2014 upgrade allowed each MPRL to carry eight AGM-158B JASSM-ER ASMs.
- The 2018 upgrade allowed each MPRL to carry eight AGM-158C LRASM ASMs.
- The 2022 upgrade allowed each MPRL to carry a mixture of GBU-31 and GBU-38 JDAM BSes, with two GBU-38s replacing one GBU-31.

B-1R

I have assumed that the internal weapon options for the B-1R are the same as for the B-1B. I have assumed the external weapon stations can each carry two AMRAAMs or any air-to-ground weapon that can be carried internally.

Combat

The B-1B saw combat in 1998 in the Operation Desert Fox bombing campaign against Iraq, in 1999 in the Operation Allied Force armed intervention in Serbia and Kosovo, in the 2001-2021 War in Afghanistan, in the 2003 Invasion of Iraq, and in the 2011-2024 Syrian Civil War.

ADCs

- B-1A
- B-1B
- B-1R

Photo Credit

- B-1B: Andy Dunaway (Public Domain)

B-1A
(Wings Forward)

Power APs/DPs: ○○○○

	CL	1/2	DT	Fuel
AB	3.5	2.5	1.5	36.0
M	2.5	2.0	1.0	9.0
N	0.0	0.0	0.0	4.0
I	1.0	2.0	2.0	1.0
SPBR	2.0	2.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	-
Climb Spd.:	4.5	Blind Arcs:	90–
Visibility:	11	Internal Fuel:	9800
Size:	−2	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Adv

Crew: Pilot, Copilot, Offensive Systems Operator, and Defensive Systems Operator

Maneuver DPs:

LR/DR	2.5
VR	2.0

Turn DPs:

	CL	1/2	DT
TT	2.25	2.25	2.75
HT	3.25	3.25	3.75
BT	3.75	4.25	4.75
ET	—	—	—

Rolling maneuvers only if CL.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 55	1/2 48	DT 40	Dive Speed
EH+	46+	3.0 – 3.5	3.0 – 3.5	—	13.0
VH	36–45	3.0 – 3.5	3.0 – 3.5	3.0 – 3.5	12.0
HI	26–35	2.5 – 3.5	3.0 – 3.5	3.0 – 3.5	11.0
MH	17–25	2.5 – 3.5	2.5 – 3.5	2.5 – 3.5	11.0
ML	8–16	2.5 – 3.5	2.5 – 3.5	2.5 – 3.5	10.0
LO	0–7	1.5 – 3.5	2.0 – 3.5	2.0 – 3.5	10.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	0.5	0.0	—	—	EH+
VH	1.0	1.0	0.5	0.5	0.5	—	VH
HI	2.0	1.0	1.0	0.5	0.5	0.5	HI
MH	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	4.0	2.0	3.0	2.0	1.0	0.5	ML
LO	4.0	2.0	3.0	2.0	2.0	1.0	LO

Radar:	APQ-144	**ECM:**	IFF
ECCM:	3	RWR:	C
Arcs:	120+	DDS:	D
Search:	Gr. Nav. (475)	DJM:	C4
Track:	Gr. Attack (250)	AJM:	C4
Lock-On:	8	BJM:	B3

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	Advanced

Technology:

LPI Radar, TFR-B, and TV/IR Optics

Load Point Limits: CL : <65, 1/2: <89, DT : ≥89

Weight Limit: 75,000

Station	Limit	Allowed Loads
1–3	26,000	RL FT

Load Notes:

1. Stations 1-3 are internal bays and may each carry a rotary launcher with eight AGM-68A SRAM nuclear ASM or eight B43/B61 nuclear BB or an 11,200L FT (960 fuel points).
2. As an exception to the normal rules, internal stores and fuel contribute 1 load point for each 1,000 of weight or 50 fuel points. A return mission will typically require leaving the target with at least 3200 fuel points (64 load points).

Notes:

1. The Rockwell B-1A Lancer is a strategic nuclear bomber.
2. This is a variable-geometry aircraft with allowed geometries of forward, mid, and aft. The geometry changes automatically at the end of each turn according to the speed. The data shown here are for the forward geometry and are used if the speed is 3.5 or less.
3. High bleed rate (HBR). High transonic drag (HTD). Low roll rate (LRR). Poor supersonic maneuverability (PSSM). Rapid acceleration (RA).
4. DDS capacity is 250 decoys.

VPs: 90/60/30/15

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B-1A
(Wings Mid)

Power APs/DPs: ○○○○

	CL	1/2	DT	Fuel
AB	3.5	2.5	1.5	36.0
M	2.5	2.0	1.0	9.0
N	0.0	0.0	0.0	4.0
I	1.0	2.0	2.0	1.0
SPBR	2.0	2.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	-
Climb Spd.:	4.5	Blind Arcs:	90–
Visibility:	11	Internal Fuel:	9800
Size:	−2	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Adv

Crew: Pilot, Copilot, Offensive Systems Operator, and Defensive Systems Operator

Maneuver DPs:

LR/DR	2.5
VR	2.0

Turn DPs:

	CL	1/2	DT
TT	2.25	2.75	3.25
HT	3.25	3.75	4.25
BT	4.25	4.25	4.75
ET	—	—	—

Rolling maneuvers only if CL.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 55	1/2 48	DT 40	Dive Speed
EH+	46+	3.0 – 5.0	3.0 – 5.0	—	13.0
VH	36–45	3.0 – 5.0	3.0 – 5.0	3.0 – 5.0	12.0
HI	26–35	2.5 – 5.0	3.0 – 5.0	3.0 – 5.0	11.0
MH	17–25	2.5 – 5.0	2.5 – 5.0	2.5 – 5.0	11.0
ML	8–16	2.5 – 5.0	2.5 – 5.0	2.5 – 5.0	10.0
LO	0–7	1.5 – 5.0	2.0 – 5.0	2.0 – 5.0	10.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	0.5	0.0	—	—	EH+
VH	1.0	1.0	0.5	0.5	0.5	—	VH
HI	2.0	1.0	1.0	0.5	0.5	0.5	HI
MH	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	4.0	2.0	3.0	2.0	1.0	0.5	ML
LO	4.0	2.0	3.0	2.0	2.0	1.0	LO

Radar:	APQ-144	**ECM:**	IFF
ECCM:	3	RWR:	C
Arcs:	120+	DDS:	D
Search:	Gr. Nav. (475)	DJM:	C4
Track:	Gr. Attack (250)	AJM:	C4
Lock-On:	8	BJM:	B3

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	Advanced

Technology:

LPI Radar, TFR-B, and TV/IR Optics

Load Point Limits: CL : <65, 1/2: <89, DT : ≥89

Weight Limit: 75,000

Station	Limit	Allowed Loads
1–3	26,000	RL FT

Load Notes:

1. Stations 1-3 are internal bays and may each carry a rotary launcher with eight AGM-68A SRAM nuclear ASM or eight B43/B61 nuclear BB or an 11,200L FT (960 fuel points).
2. As an exception to the normal rules, internal stores and fuel contribute 1 load point for each 1,000 of weight or 50 fuel points. A return mission will typically require leaving the target with at least 3200 fuel points (64 load points).

Notes:

1. The Rockwell B-1A Lancer is a strategic nuclear bomber.
2. This is a variable-geometry aircraft with allowed geometries of forward, mid, and aft. The geometry changes automatically at the end of each turn according to the speed. The data shown here are for the mid geometry and are used if the speed is 4.0 to 5.0.
3. High bleed rate (HBR). Low roll rate (LRR). Poor supersonic maneuverability (PSSM). Rapid acceleration (RA).
4. DDS capacity is 250 decoys.

VPs: 90/60/30/15

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B-1A
(Wings Aft)

Power APs/DPs: ○○○○

	CL	1/2	DT	Fuel
AB	3.5	2.5	1.5	36.0
M	2.5	2.0	1.0	9.0
N	0.0	0.0	0.0	4.0
I	1.0	2.0	2.0	1.0
SPBR	2.0	2.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	-
Climb Spd.:	4.5	Blind Arcs:	90–
Visibility:	11	Internal Fuel:	9800
Size:	−2	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Adv

Crew: Pilot, Copilot, Offensive Systems Operator, and Defensive Systems Operator

Maneuver DPs:

LR/DR	2.5
VR	2.0

Turn DPs:

	CL	1/2	DT
TT	2.75	3.25	3.25
HT	3.75	4.25	4.25
BT	4.25	4.75	5.25
ET	—	—	—

Rolling maneuvers only if CL.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 55	1/2 48	DT 40	Dive Speed
EH+	46+	3.0 – 14.0	3.0 – 12.0	—	15.0
VH	36–45	3.0 – 14.0	3.0 – 12.0	3.0 – 11.0	15.0
HI	26–35	2.5 – 12.0	3.0 – 11.0	3.0 – 10.0	14.0
MH	17–25	2.5 – 10.0	2.5 – 9.0	2.5 – 8.0	13.0
ML	8–16	2.5 – 8.0	2.5 – 7.0	2.5 – 6.5	11.0
LO	0–7	2.0 – 6.5	2.0 – 6.0	2.0 – 5.5	10.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
1.0	0.5	0.5	0.0	—	—	EH+
1.0	1.0	0.5	0.5	0.5	—	VH
2.0	1.0	1.0	0.5	0.5	0.5	HI
3.0	1.0	2.0	1.0	1.0	0.5	MH
4.0	2.0	3.0	2.0	1.0	0.5	ML
4.0	2.0	3.0	2.0	2.0	1.0	LO

Radar:	APQ-144	**ECM:**	IFF
ECCM:	3	RWR:	C
Arcs:	120+	DDS:	D
Search:	Gr. Nav. (475)	DJM:	C4
Track:	Gr. Attack (250)	AJM:	C4
Lock-On:	8	BJM:	B3

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	Advanced

Technology:

LPI Radar, TFR-B, and TV/IR Optics

Load Point Limits: CL : <65 / 1/2: <89 / DT : ≥89

Weight Limit: 75,000

Station	Limit	Allowed Loads
1–3	26,000	RL FT

Load Notes:

1. Stations 1-3 are internal bays and may each carry a rotary launcher with eight AGM-68A SRAM nuclear ASM or eight B43/B61 nuclear BB or an 11,200L FT (960 fuel points).
2. As an exception to the normal rules, internal stores and fuel contribute 1 load point for each 1,000 of weight or 50 fuel points. A return mission will typically require leaving the target with at least 3200 fuel points (64 load points).

Notes:

1. The Rockwell B-1A Lancer is a strategic nuclear bomber.
2. This is a variable-geometry aircraft with allowed geometries of forward, mid, and aft. The geometry changes automatically at the end of each turn according to the speed. The data shown here are for the aft geometry and are used if the speed is 5.5 or more.
3. High bleed rate (HBR). Low roll rate (LRR). Low transonic drag (LTD). Poor supersonic maneuverability (PSSM). Rapid acceleration (RA).
4. DDS capacity is 250 decoys.

VPs: 90/60/30/15

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B-1B Lancer (Wings Forward)

Crew: Pilot, Copilot, Offensive Systems Operator, and Defensive Systems Operator

Power APs/DPs: ○○○○

	CL	1/2	DT	Fuel
AB	3.5	2.5	1.5	36.0
M	2.5	2.0	1.0	9.0
N	0.0	0.0	0.0	4.0
I	1.0	2.0	2.0	1.0
SPBR	2.0	2.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	-
Climb Spd.:	4.5	Blind Arcs:	90–
Visibility:	11	Internal Fuel:	9800
Size:	–2	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Adv

Maneuver DPs:

LR/DR	2.5
VR	2.0

Turn DPs:

	CL	1/2	DT
TT	2.25	2.25	2.75
HT	3.25	3.25	3.75
BT	3.75	4.25	4.75
ET	—	—	—

Rolling maneuvers only if CL.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 55	1/2 48	DT 40	Dive Speed
EH+	46+	3.0 – 3.5	3.0 – 3.5	—	13.0
VH	36–45	3.0 – 3.5	3.0 – 3.5	3.0 – 3.5	12.0
HI	26–35	2.5 – 3.5	3.0 – 3.5	3.0 – 3.5	11.0
MH	17–25	2.5 – 3.5	2.5 – 3.5	2.5 – 3.5	11.0
ML	8–16	2.5 – 3.5	2.5 – 3.5	2.5 – 3.5	10.0
LO	0–7	1.5 – 3.5	2.0 – 3.5	2.0 – 3.5	10.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	0.5	0.0	—	—	EH+
VH	1.0	1.0	0.5	0.5	0.5	—	VH
HI	2.0	1.0	1.0	0.5	0.5	0.5	HI
MH	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	4.0	2.0	3.0	2.0	1.0	0.5	ML
LO	4.0	2.0	3.0	2.0	2.0	1.0	LO

Radar:	APQ-164	**ECM:**	IFF
ECCM:	3	RWR:	D
Arcs:	120+	DDS:	D
Search:	Gr. Nav. (475)	DJM:	C4
Track:	Gr. Attack (250)	AJM:	C4
Lock-On:	8	BJM:	D4

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	Advanced

Technology:

TFR-B, Stealth (2), LPI Radar, and Towed Decoy (+2)

Load Point Limits: CL : <65 / 1/2: <89 / DT : ≥89

Weight Limit: 75,000

Station	Limit	Allowed Loads
1–3 and 9–11	7,000	ASM BB FT OP/LP
4 and 8	3,500	ASM BB
5–7	26,000	CBM MPRL CSRL FT

Load Notes:

1. Stations 1-3 and 9-11 are the fuselage stations.
2. Stations 4 and 8 are the wing-glove stations.
3. Stations 5 to 7 are internal bays and may each carry a MPRL, CBM, or 11,200L FT (960 fuel points). Stations 5 and 6 may be combined to carry a CSRL and a 5,600L FT (480 fuel points).
4. See the extended notes for load options and restrictions for the MPRL, CBM, and CSRL.
5. Station 1 may carry an AAQ-33 Sniper DP/LP.
6. As an exception to the normal rules, internal stores and fuel contribute 1 load point for each 1,000 of weight or 50 fuel points. A return mission will typically require leaving the target with at least 3200 fuel points (64 load points).

Notes:

1. The Rockwell B-1B Lancer is a strategic nuclear and conventional bomber that also serves as a long-endurance close-support aircraft. Its nickname is "Bone".
2. This is a variable-geometry aircraft with allowed geometries of forward, mid, and aft. The geometry changes automatically at the end of each turn according to the speed. The data shown here are for the forward geometry and are used if the speed is 3.5 or less.
3. High bleed rate (HBR). High transonic drag (HTD). Low roll rate (LRR). Poor supersonic maneuverability (PSSM). Rapid acceleration (RA).
4. Tail Radar. Equiped with a ALQ-153 tail radar with ECCM 2, arc 60–, search 40-20, track 25-8, and lock-on 8–.
5. DDS capacity is 250 decoys.
6. DDS/DJM/AJM/BJM from 1991. TFR-B from 1992. Towed decoy technology from 1998.
7. Stealth technology is reduced to 1 if the OP/DP is carried and 0 if any other external store is carried.

VPs: 100/67/33/17

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B-1B Lancer (Wings Mid)

Crew: Pilot, Copilot, Offensive Systems Operator, and Defensive Systems Operator

Power APs/DPs: ○○○○

	CL	1/2	DT	Fuel
AB	3.5	2.5	1.5	36.0
M	2.5	2.0	1.0	9.0
N	0.0	0.0	0.0	4.0
I	1.0	2.0	2.0	1.0
SPBR	2.0	2.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	-
Climb Spd.:	4.5	Blind Arcs:	90–
Visibility:	11	Internal Fuel:	9800
Size:	–2	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Adv

Maneuver DPs:

LR/DR	2.5
VR	2.0

Turn DPs:

	CL	1/2	DT
TT	2.25	2.75	3.25
HT	3.25	3.75	4.25
BT	4.25	4.25	4.75
ET	—	—	—

Rolling maneuvers only if CL.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 55	1/2 48	DT 40	Dive Speed
EH+	46+	3.0 – 5.0	3.0 – 5.0	—	13.0
VH	36–45	3.0 – 5.0	3.0 – 5.0	3.0 – 5.0	12.0
HI	26–35	2.5 – 5.0	3.0 – 5.0	3.0 – 5.0	11.0
MH	17–25	2.5 – 5.0	2.5 – 5.0	2.5 – 5.0	11.0
ML	8–16	2.5 – 5.0	2.5 – 5.0	2.5 – 5.0	10.0
LO	0–7	1.5 – 5.0	2.0 – 5.0	2.0 – 5.0	10.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	0.5	0.0	—	—	EH+
VH	1.0	1.0	0.5	0.5	0.5	—	VH
HI	2.0	1.0	1.0	0.5	0.5	0.5	HI
MH	3.0	1.0	2.0	1.0	1.0	0.5	MH
ML	4.0	2.0	3.0	2.0	1.0	0.5	ML
LO	4.0	2.0	3.0	2.0	2.0	1.0	LO

Radar:	APQ-164	**ECM:**	IFF
ECCM:	3	RWR:	D
Arcs:	120+	DDS:	D
Search:	Gr. Nav. (475)	DJM:	C4
Track:	Gr. Attack (250)	AJM:	C4
Lock-On:	8	BJM:	D4

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	Advanced

Technology:

TFR-B, Stealth (2), LPI Radar, and Towed Decoy (+2)

Load Point Limits: CL : <65 / 1/2: <89 / DT : ≥89

Weight Limit: 75,000

Station	Limit	Allowed Loads
1–3 and 9–11	7,000	ASM BB FT OP/LP
4 and 8	3,500	ASM BB
5–7	26,000	CBM MPRL CSRL FT

Load Notes:

1. Stations 1-3 and 9-11 are the fuselage stations.
2. Stations 4 and 8 are the wing-glove stations.
3. Stations 5 to 7 are internal bays and may each carry a MPRL, CBM, or 11,200L FT (960 fuel points). Stations 5 and 6 may be combined to carry a CSRL and a 5,600L FT (480 fuel points).
4. See the extended notes for load options and restrictions for the MPRL, CBM, and CSRL.
5. Station 1 may carry an AAQ-33 Sniper DP/LP.
6. As an exception to the normal rules, internal stores and fuel contribute 1 load point for each 1,000 of weight or 50 fuel points. A return mission will typically require leaving the target with at least 3200 fuel points (64 load points).

Notes:

1. The Rockwell B-1B Lancer is a strategic nuclear and conventional bomber that also serves as a long-endurance close-support aircraft. Its nickname is "Bone".
2. This is a variable-geometry aircraft with allowed geometries of forward, mid, and aft. The geometry changes automatically at the end of each turn according to the speed. The data shown here are for the mid geometry and are used if the speed is 4.0 to 5.0.
3. High bleed rate (HBR). Low roll rate (LRR). Poor supersonic maneuverability (PSSM). Rapid acceleration (RA).
4. Tail Radar. Equiped with a ALQ-153 tail radar with ECCM 2, arc 60–, search 40-20, track 25-8, and lock-on 8–.
5. DDS capacity is 250 decoys.
6. DDS/DJM/AJM/BJM from 1991. TFR-B from 1992. Towed decoy technology from 1998.
7. Stealth technology is reduced to 1 if the OP/DP is carried and 0 if any other external store is carried.

VPs: 100/67/33/17

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B-1B Lancer (Wings Aft)

Power APs/DPs: ○○○○

	CL	1/2	DT	Fuel
AB	3.5	2.5	1.5	36.0
M	2.5	2.0	1.0	9.0
N	0.0	0.0	0.0	4.0
I	1.0	2.0	2.0	1.0
SPBR	2.0	2.0	2.0	—

Cruise Spd. CL:	5.0	Restr. Arcs:	-
Climb Spd.:	4.5	Blind Arcs:	90–
Visibility:	11	Internal Fuel:	9800
Size:	–2	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Adv

Crew: Pilot, Copilot, Offensive Systems Operator, and Defensive Systems Operator

Maneuver DPs:

LR/DR	2.5
VR	2.0

Turn DPs:

	CL	1/2	DT
TT	2.75	3.25	3.25
HT	3.75	4.25	4.25
BT	4.25	4.75	5.25
ET	—	—	—

Rolling maneuvers only if CL.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 55	1/2 48	DT 40	Dive Speed
EH+	46+	3.0 – 8.0	3.0 – 7.5	—	13.0
VH	36–45	3.0 – 8.0	3.0 – 7.5	3.0 – 6.5	12.0
HI	26–35	2.5 – 8.5	3.0 – 8.0	3.0 – 7.5	11.0
MH	17–25	2.5 – 8.0	2.5 – 7.5	2.5 – 7.0	11.0
ML	8–16	2.5 – 7.5	2.5 – 7.0	2.5 – 6.5	10.0
LO	0–7	2.0 – 7.0	2.0 – 6.5	2.0 – 6.0	10.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
1.0	0.5	0.5	0.0	—	—	EH+
1.0	1.0	0.5	0.5	0.5	—	VH
2.0	1.0	1.0	0.5	0.5	0.5	HI
3.0	1.0	2.0	1.0	1.0	0.5	MH
4.0	2.0	3.0	2.0	1.0	0.5	ML
4.0	2.0	3.0	2.0	2.0	1.0	LO

Radar:	APQ-164	**ECM:**	IFF
ECCM:	3	RWR:	D
Arcs:	120+	DDS:	D
Search:	Gr. Nav. (475)	DJM:	C4
Track:	Gr. Attack (250)	AJM:	C4
Lock-On:	8	BJM:	D4

Weapon Stations Diagram:

Guns:	—
To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—
Bomb System:	Advanced

Technology:

TFR-B, Stealth (2), LPI Radar, and Towed Decoy (+2)

Load Point Limits: CL : <65 / 1/2: <89 / DT : ≥89

Weight Limit: 75,000

Station	Limit	Allowed Loads
1–3 and 9–11	7,000	ASM BB FT OP/LP
4 and 8	3,500	ASM BB
5–7	26,000	CBM MPRL CSRL FT

Load Notes:

1. Stations 1-3 and 9-11 are the fuselage stations.
2. Stations 4 and 8 are the wing-glove stations.
3. Stations 5 to 7 are internal bays and may each carry a MPRL, CBM, or 11,200L FT (960 fuel points). Stations 5 and 6 may be combined to carry a CSRL and a 5,600L FT (480 fuel points).
4. See the extended notes for load options and restrictions for the MPRL, CBM, and CSRL.
5. Station 1 may carry an AAQ-33 Sniper DP/LP.
6. As an exception to the normal rules, internal stores and fuel contribute 1 load point for each 1,000 of weight or 50 fuel points. A return mission will typically require leaving the target with at least 3200 fuel points (64 load points).

Notes:

1. The Rockwell B-1B Lancer is a strategic nuclear and conventional bomber that also serves as a long-endurance close-support aircraft. Its nickname is "Bone".
2. This is a variable-geometry aircraft with allowed geometries of forward, mid, and aft. The geometry changes automatically at the end of each turn according to the speed. The data shown here are for the aft geometry and are used if the speed is 5.5 or more.
3. High bleed rate (HBR). Low roll rate (LRR). Low transonic drag (LTD). Poor supersonic maneuverability (PSSM). Rapid acceleration (RA).
4. Tail Radar. Equiped with a ALQ-153 tail radar with ECCM 2, arc 60–, search 40-20, track 25-8, and lock-on 8–.
5. DDS capacity is 250 decoys.
6. DDS/DJM/AJM/BJM from 1991. TFR-B from 1992. Towed decoy technology from 1998.
7. Stealth technology is reduced to 1 if the OP/DP is carried and 0 if any other external store is carried.

VPs: 100/67/33/17

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B-1R Lancer (Wings Forward)

Crew: Pilot, Copilot, Offensive Systems Operator, and Defensive Systems Operator

Power APs/DPs: ○○○○

	CL	1/2	DT	Fuel
AB	4.0	3.0	2.0	42.0
M	3.5	2.5	1.5	12.0
N	0.0	0.0	0.0	5.0
I	1.0	2.0	2.0	1.0
SPBR	2.0	2.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	-
Climb Spd.:	4.5	Blind Arcs:	90–
Visibility:	11	Internal Fuel:	9800
Size:	–2	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Adv

Maneuver DPs:

LR/DR	2.5
VR	2.0

Turn DPs:

	CL	1/2	DT
TT	2.25	2.25	2.75
HT	3.25	3.25	3.75
BT	3.75	4.25	4.75
ET	—	—	—

Rolling maneuvers only if CL.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 57	1/2 50	DT 42	Dive Speed
EH+	46+	3.0 – 3.5	3.0 – 3.5	—	13.0
VH	36–45	3.0 – 3.5	3.0 – 3.5	3.0 – 3.5	12.0
HI	26–35	2.5 – 3.5	3.0 – 3.5	3.0 – 3.5	11.0
MH	17–25	2.5 – 3.5	2.5 – 3.5	2.5 – 3.5	11.0
ML	8–16	2.5 – 3.5	2.5 – 3.5	2.5 – 3.5	10.0
LO	0–7	1.5 – 3.5	2.0 – 3.5	2.0 – 3.5	10.0

Climb Capabilities

	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	1.0	0.5	0.5	0.0	—	—	EH+
VH	1.0	1.0	0.5	0.5	0.5	—	VH
HI	2.5	1.5	1.5	1.0	0.5	0.5	HI
MH	3.5	1.5	2.5	1.5	1.0	0.5	MH
ML	4.5	3.0	3.5	3.0	1.5	1.0	ML
LO	5.0	3.0	3.5	3.0	2.5	1.5	LO

Radar:

ECCM:	4
Arcs:	120+
Search:	360–60
Track:	300–60
Lock-On:	8

ECM: IFF

RWR:	D
DDS:	D
DJM:	D5
AJM:	D5
BJM:	D5

Weapon Stations Diagram:

Guns: —

To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—

Bomb System: Advanced

Technology:

Auto-Track, Look-Down Radar, LPI Radar, Multi-Target (6), Target ID, TFR-B, Towed Decoy (+2), and Track-While-Scan (100)

Load Point Limits: CL : <65 / 1/2: <89 / DT : ≥89

Weight Limit: 75,000

Station	Limit	Allowed Loads
1–3 and 9–11	7,000	MDR AHM BB BS BG ASM OP/LP
4 and 8	3,500	MDR AHM BB BS BG ASM
5–7	26,000	CBM MPRL FT

Load Notes:

1. Stations 1-3 and 9-11 are the fuselage stations.
2. Stations 4 and 8 are the wing-glove stations.
3. Stations 5 to 7 are internal bays and may each carry any internal load allowed for the B-1B.
4. Stations 1-4 and 8-11 may carry any BB, BG, BG, or ASM weapon that can be carried internally or a MDR with two AIM-120 AHMs. Stations 1-3 and 9-11 may each carry two 2,000 lb weapons or six 500 lb weapons. Stations 4 and 8 may each carry one 2,000 lb weapon or four 500 lb weapons. Station 1 may carry an AAQ-33 Sniper OP/DP.
5. As an exception to the normal rules, internal stores and fuel contribute 1 load point for each 1,000 of weight or 50 fuel points. A return mission will typically require leaving the target with at least 3200 fuel points (64 load points).

Notes:

1. The Rockwell B-1R Lancer is a strategic conventional bomber. Its nickname is “Bone”.
2. This is a variable-geometry aircraft with allowed geometries of forward, mid, and aft. The geometry changes automatically at the end of each turn according to the speed. The data shown here are for the forward geometry and are used if the speed is 3.5 or less.
3. High bleed rate (HBR). High transonic drag (HTD). Low roll rate (LRR). Poor supersonic maneuverability (PSSM). Rapid acceleration (RA).
4. DDS capacity is 250 decoys.
5. Dual-Mode Radar. The radar may also function as a navigation/attack radar with a search range of 475, tracking range of 250, and a lock-on roll of 8–.

VPs: 110/73/37/18

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B-1R Lancer (Wings Mid)

Power APs/DPs: ○○○○

	CL	1/2	DT	Fuel
AB	4.0	3.0	2.0	42.0
M	3.5	2.5	1.5	12.0
N	0.0	0.0	0.0	5.0
I	1.0	2.0	2.0	1.0
SPBR	2.0	2.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	-
Climb Spd.:	4.5	Blind Arcs:	90–
Visibility:	11	Internal Fuel:	9800
Size:	–2	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Adv

Crew: Pilot, Copilot, Offensive Systems Operator, and Defensive Systems Operator

Maneuver DPs:

LR/DR	2.5
VR	2.0

Turn DPs:

	CL	1/2	DT
TT	2.25	2.75	3.25
HT	3.25	3.75	4.25
BT	4.25	4.25	4.75
ET	—	—	—

Rolling maneuvers only if CL.

Speeds and Ceilings / **Climb Capabilities**

Alt. Band	Conf. Ceil.	CL 57	1/2 50	DT 42	Dive Speed	CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
EH+	46+	3.0 – 5.0	3.0 – 5.0	—	13.0	1.0	0.5	0.5	0.0	—	—	EH+
VH	36–45	3.0 – 5.0	3.0 – 5.0	3.0 – 5.0	12.0	1.0	1.0	0.5	0.5	0.5	—	VH
HI	26–35	2.5 – 5.0	3.0 – 5.0	3.0 – 5.0	11.0	2.5	1.5	1.5	1.0	0.5	0.5	HI
MH	17–25	2.5 – 5.0	2.5 – 5.0	2.5 – 5.0	11.0	3.5	1.5	2.5	1.5	1.0	0.5	MH
ML	8–16	2.5 – 5.0	2.5 – 5.0	2.5 – 5.0	10.0	4.5	3.0	3.5	3.0	1.5	1.0	ML
LO	0–7	1.5 – 5.0	2.0 – 5.0	2.0 – 5.0	10.0	5.0	3.0	3.5	3.0	2.5	1.5	LO

Radar:

ECCM:	4
Arcs:	120+
Search:	360–60
Track:	300–60
Lock-On:	8

ECM: IFF

RWR:	D
DDS:	D
DJM:	D5
AJM:	D5
BJM:	D5

Weapon Stations Diagram:

Guns: —

To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—

Bomb System: Advanced

Technology:

Auto-Track, Look-Down Radar, LPI Radar, Multi-Target (6), Target ID, TFR-B, Towed Decoy (+2), and Track-While-Scan (100)

Load Point Limits: CL : <65 / 1/2: <89 / DT : ≥89

Weight Limit: 75,000

Station	Limit	Allowed Loads
1–3 and 9–11	7,000	MDR AHM BB BS BG ASM OP/LP
4 and 8	3,500	MDR AHM BB BS BG ASM
5–7	26,000	CBM MPRL FT

Load Notes:

1. Stations 1-3 and 9-11 are the fuselage stations.
2. Stations 4 and 8 are the wing-glove stations.
3. Stations 5 to 7 are internal bays and may each carry any internal load allowed for the B-1B.
4. Stations 1-4 and 8-11 may carry any BB, BG, BG, or ASM weapon that can be carried internally or a MDR with two AIM-120 AHMs. Stations 1-3 and 9-11 may each carry two 2,000 lb weapons or six 500 lb weapons. Stations 4 and 8 may each carry one 2,000 lb weapon or four 500 lb weapons. Station 1 may carry an AAQ-33 Sniper OP/DP.
5. As an exception to the normal rules, internal stores and fuel contribute 1 load point for each 1,000 of weight or 50 fuel points. A return mission will typically require leaving the target with at least 3200 fuel points (64 load points).

Notes:

1. The Rockwell B-1R Lancer is a strategic conventional bomber. Its nickname is “Bone”.
2. This is a variable-geometry aircraft with allowed geometries of forward, mid, and aft. The geometry changes automatically at the end of each turn according to the speed. The data shown here are for the mid geometry and are used if the speed is 4.0 to 5.0.
3. High bleed rate (HBR). Low roll rate (LRR). Poor supersonic maneuverability (PSSM). Rapid acceleration (RA).
4. DDS capacity is 250 decoys.
5. Dual-Mode Radar. The radar may also function as a navigation/attack radar with a search range of 475, tracking range of 250, and a lock-on roll of 8–.

VPs: 110/73/37/18

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B-1R Lancer (Wings Aft)

Crew: Pilot, Copilot, Offensive Systems Operator, and Defensive Systems Operator

Power APs/DPs: ○○○○

	CL	1/2	DT	Fuel
AB	4.0	3.0	2.0	42.0
M	3.5	2.5	1.5	12.0
N	0.0	0.0	0.0	5.0
I	1.0	2.0	2.0	1.0
SPBR	2.0	2.0	2.0	—

Cruise Spd. CL:	5.5	Restr. Arcs:	-
Climb Spd.:	4.5	Blind Arcs:	90–
Visibility:	11	Internal Fuel:	9800
Size:	−2	AtA Refuel:	Yes
Vulnerability:	+1	Ejection Seat:	Adv

Maneuver DPs:

LR/DR	2.5
VR	2.0

Turn DPs:

	CL	1/2	DT
TT	2.75	3.25	3.25
HT	3.75	4.25	4.25
BT	4.25	4.75	5.25
ET	—	—	—

Rolling maneuvers only if CL.

Speeds and Ceilings

Alt. Band	Conf. Ceil.	CL 57	1/2 50	DT 42	Dive Speed
EH+	46+	3.0 – 14.0	3.0 – 12.5	—	15.0
VH	36–45	3.0 – 14.0	3.0 – 12.5	3.0 – 11.5	15.0
HI	26–35	2.5 – 12.5	3.0 – 11.5	3.0 – 10.5	14.0
MH	17–25	2.5 – 11.0	2.5 – 10.0	2.5 – 9.0	13.0
ML	8–16	2.5 – 9.0	2.5 – 8.5	2.5 – 7.5	11.0
LO	0–7	2.0 – 7.5	2.0 – 7.0	2.0 – 6.5	10.0

Climb Capabilities

CL AB	CL Oth	1/2 AB	1/2 Oth	DT AB	DT Oth	
1.0	0.5	0.5	0.0	—	—	EH+
1.0	1.0	0.5	0.5	0.5	—	VH
2.5	1.5	1.5	1.0	0.5	0.5	HI
3.5	1.5	2.5	1.5	1.0	0.5	MH
4.5	3.0	3.5	3.0	1.5	1.0	ML
5.0	3.0	3.5	3.0	2.5	1.5	LO

Radar:

ECCM:	4
Arcs:	120+
Search:	360–60
Track:	300–60
Lock-On:	8

ECM: IFF

RWR:	D
DDS:	D
DJM:	D5
AJM:	D5
BJM:	D5

Weapon Stations Diagram:

Guns: —

To Hit:	—
Ammunition:	—
Gunsight:	—
Ranging:	—
AtA/AtG:	—

Bomb System: Advanced

Technology:

Auto-Track, Look-Down Radar, LPI Radar, Multi-Target (6), Target ID, TFR-B, Towed Decoy (+2), and Track-While-Scan (100)

Load Point Limits: CL : <65 / 1/2: <89 / DT : ≥89

Weight Limit: 75,000

Station	Limit	Allowed Loads
1–3 and 9–11	7,000	MDR AHM BB BS BG ASM OP/LP
4 and 8	3,500	MDR AHM BB BS BG ASM
5–7	26,000	CBM MPRL FT

Load Notes:

1. Stations 1-3 and 9-11 are the fuselage stations.
2. Stations 4 and 8 are the wing-glove stations.
3. Stations 5 to 7 are internal bays and may each carry any internal load allowed for the B-1B.
4. Stations 1-4 and 8-11 may carry any BB, BG, BG, or ASM weapon that can be carried internally or a MDR with two AIM-120 AHMs. Stations 1-3 and 9-11 may each carry two 2,000 lb weapons or six 500 lb weapons. Stations 4 and 8 may each carry one 2,000 lb weapon or four 500 lb weapons. Station 1 may carry an AAQ-33 Sniper OP/DP.
5. As an exception to the normal rules, internal stores and fuel contribute 1 load point for each 1,000 of weight or 50 fuel points. A return mission will typically require leaving the target with at least 3200 fuel points (64 load points).

Notes:

1. The Rockwell B-1R Lancer is a strategic conventional bomber. Its nickname is “Bone”.
2. This is a variable-geometry aircraft with allowed geometries of forward, mid, and aft. The geometry changes automatically at the end of each turn according to the speed. The data shown here are for the aft geometry and are used if the speed is 5.5 or more.
3. High bleed rate (HBR). Low roll rate (LRR). Low transonic drag (LTD). Poor supersonic maneuverability (PSSM). Rapid acceleration (RA).
4. DDS capacity is 250 decoys.
5. Dual-Mode Radar. The radar may also function as a navigation/attack radar with a search range of 475, tracking range of 250, and a lock-on roll of 8–.

VPs: 110/73/37/18

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