

McDONNELL F-4 PHANTOM II

F-4 SERVICE

Manufacturer: McDonnell Aircraft Corp., St. Louis, Missouri, USA
(In 1967, became McDonnell Douglas Corp., McDonnell Aircraft Co. Division)

Model: 98

Designations: F-4; AH, F-110, F4H

Names: Phantom II; Spectre (temporary, F-110)

First official flight: YF4H-1 27 May 1958

Factory production period: 1957 – 1979

1972 – 1981 (Foreign built)

Primary service period: 1960 – 1980s

Last official flight: F-4S 14 May 1987 (US Navy)

08 Jan 1992 (USMC)

F-4G 20 Apr 1996 (USAF)

F-4 VARIANTS

1958 **Model 98** YF4H-1 2 **Total: 0002**

1958 **Model 98AM** F4H-1F (F-4A) 45

1961 **Model 98AM** F4H-1 (F-4B) 649

1965 **Model 98DH** RF-4B 46 **Total: 0740**

1963 **Model 98DE / DJ** F-4C 583

1963 **Model 98DF** YRF-4C 2

1964 **Model 98DF** RF-4C 503

1965 **Model 98EN** F-4D 825 **Total: 1913**

1967 **Model 98HO** F-4E 1387

1971 **Model 98HO** F-4E(J) 13

1970 **Model 98** RF-4E 132

1974 **Model 98** RF-4E(J) 14

1973 **Model 98** F-4F 175 **Total: 1721**

1966 **Model 98EV** F-4J 522 **Total: 0522**

1966 **Model 98** F-4K 52

1967 **Model 98** F-4M 118 **Total: 0170**

Total: 5068

Foreign built – Japan:

1973 **Model 98** F-4E(J) 127 **Total: 0127**

F-4 PRODUCTION

YF4H-1

Prototype twin-engined, 2-seater fighter-bomber for US Navy. Originally designed as the single seater XAH-1. Later redesignated as F4H-1, then as F-4A in 1962.

produced 1957 – 1958

McDonnell St. Louis, Missouri (H)

BuNo. 142259, 142260 1, 2

2 Total: 0002

F4H-1F

As YF4H-1, engine upgrade, minor changes.

Last 29 built to almost F4H-1 standard.

Redesignated as F-4A in 1962.

produced 1958 – 1961

McDonnell St. Louis, Missouri (H)

BuNo. 143388 / 143392 3 / 7

BuNo. 145307 / 145317 8 / 18

BuNo. 146817 / 146821 19 / 23

BuNo. 148252 / 148275 24 / 47

45 Total: 0045

F4H-1

As F-4A, engine upgrade, modified canopy, nose. 29 loaned to USAF as

F-4C s/n: 62-12168 / 62-12196.

Redesignated as F-4B in 1962.

produced 1961 – 1966

McDonnell St. Louis, Missouri (H)

BuNo. 148363 / 148434 48 / 119

BuNo. 149403 / 149474 120 / 191

BuNo. 150406 / 150493 *mixed 192 to 281*

BuNo. 150624 / 150653 *mixed 282 to 313*

BuNo. 150993 / 151021 *mixed 315 to 353*

BuNo. 151397 / 151519 *mixed 354 to 736*

BuNo. 152207 / 152331 *mixed 741 to 1279*

BuNo. 152965 / 153070 *mixed 1283 to 1770*

BuNo. 153912 / 153915 *mixed 1777 to 1796*

35 additional airframes cancelled.

649 Total: 0649

RF-4B

As F-4B, unarmed photo reconn. version for USMC. Original designation was F4H-1P.

produced 1965 – 1970

McDonnell St. Louis, Missouri (MC)

BuNo. 151975 / 151983 *mixed 671 to 1103*

BuNo. 153089 / 153115 *mixed 1161 to 1687*

BuNo. 157342 / 157351 *mixed 3689 to 3937*

46 Total: 0046

F-4C

As F-4B, version for USAF, engine upgrade, various changes. Original designation was F-110A Spectre. First as YF-4C prototype.

produced 1963 – 1966

McDonnell St. Louis, Missouri (MC)

62-12199 310

63-7407 / 63-7713 *mixed 311 to 863*
64-0654 / 64-0928 *mixed 866 to 1417* **583 Total: 0583**
27 additional airframes cancelled.

YRF-4C

As RF-4B, prototype version for USAF.

Original designation was YRF-110A.

F-4C s/n: 62-12168 also converted.

produced 1963

McDonnell St. Louis, Missouri (MC)

62-12200, 62-12201 266, 268

2 Total: 0002

RF-4C

As YRF-4C, production version for USAF.

Original designation was RF-110A.

produced 1964 – 1973

McDonnell St. Louis, Missouri (MC)

63-7740 / 63-7763 *mixed 412 to 652*

64-0997 / 64-1085 *mixed 660 to 1186*

65-0818 / 65-0945 *mixed 1193 to 1800*

66-0383 / 66-0478 *mixed 1817 to 2713*

67-0428 / 67-0469 *mixed 2721 to 3308*

68-0548 / 68-0611 *mixed 3319 to 3674*

69-0349 / 69-0384 *mixed 3680 to 4031*

71-0248 / 71-0259 *mixed 4209 to 4268*

72-0145 / 72-0156 *mixed 4300 to 4396*

503 Total: 0503

129 additional airframes cancelled.

F-4D

As F-4C, weapons systems upgrade.

produced 1965 – 1969

McDonnell St. Louis, Missouri (MC)

64-0929 / 64-0980 *mixed 1219 to 1467*

65-0580 / 65-0801 *mixed 1470 to 1880*

66-0226 / 66-0283 *mixed 1881 to 1956*

66-7455 / 66-7774 *mixed 1957 to 2429*

66-8685 / 66-8825 *mixed 2430 to 2862*

67-14869 / 6714884 *mixed 3031 to 3311*

- 16 to Iran as 3-601 / 3-616.

68-6904 / 68-6919 *mixed 3323 to 3592*

825 Total: 0825

- 16 to Iran as 3-617 / 3-632.

65 additional airframes cancelled.

F-4E

As F-4D, engine upgrade, 20mm nose

cannon, various improvements.

produced 1967 – 1979

McDonnell St. Louis, Missouri (MC)

66-0284 / 66-0382 *mixed 2234 to 2809*

67-0208 / 67-0398 *mixed 2812 to 3315*

68-0303 / 68-0547 *mixed 3316 to 3755*

69-0236 / 69-0307 *mixed 3757 to 3851*

69-7201 / 69-7273 *mixed 3854 to 3961*

69-7286 / 69-7303 *mixed 3964 to 3987*

69-7546 / 69-7589 *mixed 3988 to 4087*

69-7711 / 69-7742	<i>mixed 4093 to 4200</i>	
- 32 to Iran as 3-692 / 3-722, 3-656.		
71-0224 / 71-0247	<i>mixed 4205 to 4237</i>	
- 14 to Israel.		
71-1070 / 71-1166	<i>mixed 4238 to 4591</i>	
- 73 to Iran as 3-723 / 3-795.		
71-1391 / 71-1402	<i>mixed 4269 to 4280</i>	
- 9 to Israel.		
71-1779 / 71-1796	<i>mixed 4299 to 4382</i>	
- 18 to Israel.		
72-0121 / 72-0144	<i>mixed 4281 to 4318</i>	
- 10 to Israel.		
72-0157 / 72-0168	<i>mixed 4322 to 4406</i>	
- 4 to Israel.		
72-1407	4398	
72-1476 / 72-1535	<i>mixed 4408 to 4573</i>	
- 11 to Israel.		
- 36 to Greece as 01500 / 01535.		
73-1016 / 73-1055	<i>mixed 4525 to 4722</i>	
- 40 to Turkey, same s/n.		
73-1157 / 73-1204	<i>mixed 4594 to 4780</i>	
- 13 to Israel.		
73-1519 / 73-1554	<i>mixed 4598 to 4754</i>	
- 36 to Iran as 3-796 / 3-831.		
74-0643 / 74-0666	<i>mixed 4794 to 4818</i>	
74-1014 / 74-1061	<i>mixed 4817 to 4848</i>	
- 24 to Israel.		
74-1618 / 74-1653	<i>mixed 4827 to 4913</i>	
- 2 to Greece as 01618, 01619.		
75-0222 / 75-0257	<i>mixed 4914 to 4965</i>	
- 36 to Iran.		
75-0628 / 75-0637	<i>mixed 4943 to 4964</i>	
- 10 to West Germany.		
76-0493 / 76-0511	4966 / 4984	
- 19 to South Korea.		
77-0277 / 77-0308	<i>mixed 4985 to 5030</i>	
- 32 to Turkey, same s/n.		
77-1743 / 77-1760	<i>mixed 4995 to 5042</i>	
- 18 to Greece as 71743 / 71760.		
78-0727 / 78-0744	5051 / 5068	1387 Total: 1387
- 18 to South Korea.		
272 additional airframes cancelled.		

F-4E(J)

As F-4E, version for Japan. First two as prototypes, last 11 delivered to Mitsubishi in component form.

produced 1970 – 1972

McDonnell St. Louis, Missouri (MC)

(JASDF)

17-8301, 17-8302	4038, 4044	
27-8303 / 27-8306	<i>mixed 4049 to 4065</i>	
37-8307 / 37-8313	<i>mixed 4070 to 4204</i>	13 Total: 0013

RF-4E

*As F-4E, unarmed tactical reconn.
version for export.*

produced 1969 – 1978

McDonnell St. Louis, Missouri (MC)

69-7448 / 69-7535 *mixed 3861 to 4199*

- 88 to West Germany as 35+01 / 35+88.

69-7590 / 69-7595 *mixed 4041 to 4088*

- 6 to Israel as 144 / 149.

72-0266 / 72-0269 *mixed 4206 to 4211*

- 4 to Iran as 2-433 / 2-436.

74-1725 / 74-1736 *mixed 4836 to 4912*

- 12 to Iran.

75-0418 / 75-0423 *mixed 4930 to 4946*

- 6 to Israel.

77-0309 / 77-0316 *mixed 5024 to 5047*

- 8 to Turkey, same s/n.

77-0357, 77-0358 5049, 5050

- 2 to Greece as 70357, 70358.

77-1761 / 77-1766 *mixed 5029 to 5048*

- 6 to Greece as 71761 / 71766.

29 additional airframes cancelled.

132 **Total: 0132**

RF-4E(J)

As RF-4E, version for Japan.

produced 1974 – 1975

McDonnell St. Louis, Missouri (MC)

(JASDF)

47-6901 / 47-6905 *mixed 4551 to 4590*

57-6906 / 57-6914 *mixed 4596 to 4645*

14 **Total: 0014**

F-4F

*As F-4E, version for West Germany. Sub-
assemblies built by MBB and VFW-Fokker.*

produced 1973 – 1976

McDonnell St. Louis, Missouri (MC)

72-1111 / 72-1285 *mixed 4330 to 4793*

All delivered as:

(Luftwaffe) 37+01 / 38+75

175 **Total: 0175**

F-4H – Not used to avoid confusion with F4H designation.

F-4I – Not used.

F-4J

As YF-4J, production version for US Navy.

produced 1966 – 1971

McDonnell St. Louis, Missouri (MC)

BuNo. 153071 / 153088 *mixed 1488 to 1683*

BuNo. 153768 / 153911 *mixed 1692 to 2628*

BuNo. 154781 / 154788 *mixed 2634 to 2670*

BuNo. 155504 / 155580 *mixed 2672 to 2895*

BuNo. 155731 / 155902 *mixed 2898 to 3588*

BuNo. 155903 3756

BuNo. 157242 / 157309 *mixed 3596 to 4034*

BuNo. 158346 / 158379 mixed 4039 to 4201
13 additional airframes cancelled.

522 **Total: 0522**

F-4K

As F-4J, version for Royal Navy, RR engine
upgrade, many other changes. First two
designated as **YF-4K** prototypes.

19 diverted to RAF on delivery.

produced 1966 – 1969

McDonnell St. Louis, Missouri (MC)

All delivered as **Phantom FG.Mk. 1** to:

(RN) XT595 / XT598 mixed 1449 to 1669

(RN) XT857 / XT876 mixed 2097 to 2856

(RN) XV565 / XV592 mixed 2872 to 3424

7 additional airframes cancelled.

52 **Total: 0052**

F-4L – 1963, proposed version with advanced upgrades.

F-4M

As F-4K, version for RAF, minor equipment
changes. First two designated as **YF-4M**
prototypes.

produced 1966 – 1969

McDonnell St. Louis, Missouri (MC)

All delivered as **Phantom FGR.Mk. 2** to:

(RAF) XT852, XT853 1950, 2020

(RAF) XT891 / XT914 mixed 2250 to 2771

(RAF) XV393 / XV442 mixed 2791 to 3226

(RAF) XV460 / XV501 mixed 3231 to 3507

46 additional airframes cancelled.

118 **Total: 0118**

F-4(HL) – 1966, proposed F-4M version for RN with enhanced performance, cancelled.

F-4(FV)S – 1966, proposed swing wing design for F-4J / M production, cancelled.

F-4T – Proposed lightweight, fighter only version, cancelled.

Total: 5068

Foreign built – Japan:

F-4E(J)

As F-4E, version for Japan.

produced 1972 – 1981

Mitsubishi Heavy Industries Ltd.,

Nagoya, Japan

(JASDF)

37-8314 / 37-8332 M11-001 / M11-019

- 37-8324 / 37-8332, prefix to 47.

47-8333 / 47-8352 M11-020 / M11-039

57-8353 / 57-8376 M11-040 / M11-063

67-8377 / 67-8391 M11-064 / M11-078

77-8392 / 77-8403 M11-079 / M11-090

87-8404 / 87-8415 M11-091 / M11-102

97-8416 / 97-8427 M11-103 / M11-114

07-8428 / 07-8436 M11-115 / M11-123

F-4 CONVERSIONS & TRANSFERS**US Navy / USAF**

EF-4B	1	F-4B (BuNo. 153070), 1976-1978, conversion for ECM training.
JF-4B	1	F-4B (F-4C 62-12169), temporary conversion for tests.
QF-4B	21	F-4B, 1971-1987, USN target drone conversions.
F-4C WW	36	F-4C, 1966, "Wild Weasel IV" conversions. Unofficially EF-4C.
GF-4C	16	F-4C, ground instructional conversions.
NF-4C	6	F-4C, permanent conversions for tests.
GRF-4C	7	1 YRF-4C / 6 RF-4C, ground instructional conversions.
NRF-4C	6	RF-4C, permanent conversions for tests.
QRF-4C *	6+	RF-4C, 1996-1998, USAF target drone conversions.
EF-4D	4	F-4D (65-0657, 65-0660, 66-7635, 66-7647), "Wild Weasel IV / V" test-beds.
GF-4D	5	F-4D, ground instructional conversions.
NF-4D	3	F-4D, permanent conversions for tests.
YF-4E	3	YRF-4C (62-12200), 1965-1979, prototype for F-4E tests. 1 F-4C (63-7445) / 1 F-4D (65-0713) later converted for YF-4E tests.
GF-4E	4	F-4E, ground instructional conversions.
NF-4E	9	F-4E, permanent conversions for tests.
QF-4E *	61+	F-4E / F-4G, 1994-2016, USAF target drone conversions.
TF-4F	12	F-4F, unofficial designation for US based Luftwaffe trainers.
(NTF-4F)	1	TF-4F, permanent conversion for test duties.
F-4G	12	F-4B, 1964-1970, US Navy Data Link upgrades for use in Vietnam.
	134	F-4E, 1975-1996, USAF "Wild Weasel V" conversions. Original designation was to be EF-4E.
(QF-4G) *	96+	F-4G, 1997-2002, USAF target drone conversions.
YF-4J	3	F-4B (BuNo. 151473, 151496, 151497), 1965, factory prototypes for US Navy, engine / weapons upgrade, various improvements.
EF-4J	2	F-4J (BuNo. 153076, 153084), conversions for ECM duties. Later redesignated as QF-4J and DF-4J.
NF-4J	1	F-4J (BuNo. 151496), 1988, permanent conversion for tests. Was designated QF-4J 1982-1988.
F-4N	226	F-4B, 1972-1985, life-extension / avionics upgrades for US Navy. Airframe codes: P001 / P226.
(QF-4N)	64+	F-4N, 1992-2004, USN target drone conversions.
F-4S	264	F-4J, 1978-1992, life-extension / avionics upgrades for US Navy. Airframe codes: J001 / J264.
(QF-4S)	30+	F-4S, 1992-2004, USN target drone conversions, many later upgraded with new avionics as QF-4S+.
F / RF-4X	1	F-4E, 1974, mock-up reconn. prototype with various upgrades, cancelled before completion. Conversion by General Dynamics Corp., Missouri.

Foreign Conversions

F-4F ICE	110	F-4F, 1990-2013, "Improved Combat Efficiency" upgrades for West Germany.
F-4E(S)	3	F-4E, 1976-2004, avionics upgrades for Israel. Conversions by General Dynamics Corp., Missouri.
F-4EJ Kai	89	F-4E(J), 1984-2020, avionics / weapons upgrades for Japan.
RF-4EJ Kai	25	15 F-4E(J) / 10 RF-4E(J), 1984-2020, reconn. upgrades for Japan, the F-4E(J) batch were assigned new JASDF s/n.

C.12	36	F-4C, 1971-2002, designation for Spain.
RC.12	4	RF-4C, 1978-2002, designation for Spain.
F-4J(UK)	15	F-4J, 1984-1992, British avionics upgrades for the RAF. Assigned RAF s/n: ZE350 / ZE364.

FOREIGN MILITARY SERVICE

- *F-4 Phantom II aircraft in foreign military service with Australia, Egypt, West Germany, Greece, Iran, Israel, Japan, South Korea, Spain, Turkey and the United Kingdom.*
- *Limited civilian use, mostly by NASA, for test duties.*

* A total of 318 QF-4 by BAE Systems, California for USAF from 1992-2013.