

## Active Dedicated Military Satellites: January 2007<sup>1</sup>

Satellite name	Launch vehicle	Launching state	Function	Orbit	Launch date
<b>Chile</b>					
Fasat-Bravo	Zenit-2	Russia	Imaging	LEO	10/07/1998
<b>China</b>					
Zhongxing-22A	Chang Zheng 3A	China	Communications	GEO	12/09/2006
Zhongxing-20 (Feng Huo)	Chang Zheng 3A	China	Communications	HEO	14/11/2003
Feng Huo 1	Chang Zheng 3A	China	Communications	GEO	25/01/2000
Zi Yuan 2C	Chang Zheng 4B	China	Imaging	LEO	06/11/2004
Zi Yuan 2	Chang Zheng 4B	China	Imaging	LEO	27/10/2002
Beidou 3	Chang Zheng 3A	China	Navigation	GEO	24/05/2003
Beidou	Chang Zheng 3A	China	Navigation	GEO	20/12/2000
Beidou	Chang Zheng 3A	China	Navigation	HEO	30/10/2000
<b>France</b>					
Syracuse 3A	Ariane 5GS	France	Communications	GEO	13/10/2005
Syracuse 3B	Ariane 5ECA	France	Communications	GEO	08/11/2006
Helios 2A	Ariane 5G+	France	Imaging	LEO	18/12/2004
Helios 1A	Ariane 40	France	Imaging	LEO*	07/07/1995
Clementine	Ariane 40	France	Signals Intelligence	LEO	03/12/1999
Essaim 4	Ariane 5G+	France	Signals Intelligence	LEO	18/12/2004
Essaim 3	Ariane 5G+	France	Signals Intelligence	LEO	18/12/2004
Essaim 2	Ariane 5G+	France	Signals Intelligence	LEO	18/12/2004
Essaim 1	Ariane 5G+	France	Signals Intelligence	LEO	18/12/2004
CERISE	Ariane 40	France	Signals Intelligence	LEO*	07/07/1995
<b>Germany</b>					
SAR-Lupe 1	Kosmos-11K65M	Russia	Imaging	LEO	12/19/2006
<b>Israel</b>					
Ofeq-5	Shaviyt 1	Israel	Imaging	LEO	28/05/2002
<b>Italy</b>					
Sicral	Ariane 44L	France	Communications	GEO	07/02/2001
<b>Japan</b>					
IGS Opitcal-2	H-IIA 202	Japan	Imaging	LEO	11/09/2006
IGS-1b	H-IIA 2024	Japan	Imaging	LEO	28/03/2003
IGS-1a	H-IIA 2024	Japan	Imaging	LEO	28/03/2003
<b>Russia</b>					
Meridian No. 1	Soyuz-2-1A	Russia	Communications	HEO	24/12/2006
Gonets-D1	Kosmos-11K65M	Russia	Communications	LEO	21/12/2005
Kosmos-2409	Kosmos 11K65M	Russia	Communications	LEO	23/09/2004
Kosmos-2408	Kosmos 11K65M	Russia	Communications	LEO	23/09/2004
Raduga-1	Proton-K/DM-2	Russia	Communications	GEO	27/03/2004

<sup>1</sup> Based on Jonathan McDowell's Satellite Database (1 January 2007). Due to the nature of some military satellites, it is not always known when a satellite changes its status from operational and operational to in orbit but no longer operational. This list only discounts satellites which are publicly known to be inactive and as such is likely to overestimate the number of active satellites in some cases.

Kosmos-2401	Kosmos 11K65M	Russia	Communications	LEO	19/08/2003
Kosmos-2400	Kosmos 11K65M	Russia	Communications	LEO	19/08/2003
Molniya-1T	Molniya 8K78M	Russia	Communications	HEO	02/04/2003
Molniya-1T	Molniya 8K78M	Russia	Communication	HEO	18/02/2004
Kosmos-2391	Kosmos 11K65M	Russia	Communications	LEO	08/07/2002
Kosmos-2390	Kosmos 11K65M	Russia	Communications	LEO	08/07/2002
Kosmos-2386	Tsiklon-3	Russia	Communications	LEO	28/12/2001
Kosmos-2385	Tsiklon-3	Russia	Communications	LEO	28/12/2001
Kosmos-2384	Tsiklon-3	Russia	Communications	LEO	28/12/2001
Kosmos-2371	Proton-K/DM-2	Russia	Communications	GEO	04/07/2000
Kosmos-2357	Tsiklon-3	Russia	Communications	MEO	15/06/1998
Kosmos-2356	Tsiklon-3	Russia	Communications	MEO	15/06/1998
Kosmos-2355	Tsiklon-3	Russia	Communications	MEO	15/06/1998
Kosmos-2354	Tsiklon-3	Russia	Communications	MEO	15/06/1998
Kosmos-2353	Tsiklon-3	Russia	Communications	MEO	15/06/1998
Kosmos-2352	Tsiklon-3	Russia	Communications	MEO	15/06/1998
Molniya-1T	Molniya 8K78M	Russia	Communications	HEO	24/09/1997
Kosmos-2339	Tsiklon-3	Russia	Communications	LEO	14/02/1997
Kosmos-2338	Tsiklon-3	Russia	Communications	LEO	14/02/1997
Kosmos-2337	Tsiklon-3	Russia	Communications	LEO	14/02/1997
Molniya-1T	Molniya 8K78M	Russia	Communications	HEO	28/09/1998
Raduga	Proton-K/DM-2	Russia	Communications	GEO*	30/09/1993
Raduga	Proton-K/DM-2	Russia	Communications	GEO*	25/03/1993
Kosmos-2422	Molniya 8K78M	Russia	Early Warning	HEO	21/07/2006
Kosmos-2393	Molniya 8K78M	Russia	Early Warning	HEO	24/12/2002
Kosmos-2388	Molniya 8K78M	Russia	Early Warning	HEO	01/04/2002
Kosmos-2379	Proton-K/DM-2	Russia	Early Warning	GEO	24/08/2001
Kosmos-2368	Molniya 8K78M	Russia	Early Warning	HEO	27/12/1999
Kosmos-2423	Soyuz-U	Russia	Imaging	LEO	14/09/2006
Kosmos-2420	Soyuz-U	Russia	Imaging	LEO	03/05/2006
Kosmos-2392	Proton-K/17S40	Russia	Imaging	MEO	25/07/2002
Kosmos-2425	Proton-K/DM-2	Russia	Navigation	UKN	25/12/2006
Kosmos-2426	Proton-K/DM-2	Russia	Navigation	UKN	25/12/2006
Kosmos-2424	Proton-K/DM-2	Russia	Navigation	UKN	25/12/2006
Kosmos-2419	Proton-K/DM-2	Russia	Navigation	MEO	25/12/2005
Kosmos-2418	Proton-K/DM-2	Russia	Navigation	MEO	25/12/2005
Kosmos-2417	Proton-K/DM-2	Russia	Navigation	MEO	25/12/2005
Kosmos-2413	Proton-K/DM-2	Russia	Navigation	MEO	26/12/2004
Kosmos-2412	Proton-K/DM-2	Russia	Navigation	MEO	26/12/2004
Kosmos-2411	Proton-K/DM-2	Russia	Navigation	MEO	26/12/2004
Kosmos-2407	Kosmos 11K65M	Russia	Navigation	LEO	22/07/2004
Kosmos-2404	Proton-K/Briz-M	Russia	Navigation	MEO	10/12/2003
Kosmos-2403	Proton-K/Briz-M	Russia	Navigation	MEO	10/12/2003
Kosmos-2402	Proton-K/Briz-M	Russia	Navigation	MEO	10/12/2003
Kosmos-2398	Kosmos 11K65M	Russia	Navigation	LEO	04/06/2003
Kosmos-2396	Proton-K/DM-2M	Russia	Navigation	MEO	25/12/2002
Kosmos-2395	Proton-K/DM-2M	Russia	Navigation	MEO	25/12/2002
Kosmos-2394	Proton-K/DM-2M	Russia	Navigation	MEO	25/12/2002

Kosmos-2381	Proton-K/DM-2	Russia	Navigation	MEO	01/12/2001
Kosmos-2382	Proton-K/DM-2	Russia	Navigation	MEO	01/12/2001
Kosmos-2378	Kosmos 11K65M	Russia	Navigation	LEO	08/06/2001
Kosmos-2375	Proton-K/DM-2	Russia	Navigation	MEO	13/10/2000
Kosmos-2374	Proton-K/DM-2	Russia	Navigation	MEO	13/10/2000
Kosmos-2361	Kosmos 11K65M	Russia	Navigation	LEO	24/12/1998
Kosmos-2421	Tsiklon-2	Russia	Signals Intelligence	LEO	25/06/2006
Kosmos-2406	Zenit-2	Russia	Signals Intelligence	LEO	10/06/2004
Kosmos-2369	Zenit-2	Russia	Signals Intelligence	LEO	03/02/2000
Kosmos-2360	Zenit-2	Russia	Signals Intelligence	LEO	28/07/1998
<b>South Korea</b>					
Koreasat 5	Zenit-3SL	France	Communications	GEO	22/08/2006
<b>Spain</b>					
XTAR-EUR	Ariane 5ECA	France	Communications	HEO	12/02/2005
Spainsat	Ariane 5ECA	France	Communications	GEO	11/03/2006
<b>UK</b>					
Skynet 4F	Ariane 44L	France	Communications	GEO	07/02/2001
Skynet 4E	Ariane 44L	France	Communications	GEO	26/02/1999
Skynet 4D	Delta 7925-9.5	US	Communications	GEO	10/01/1998
Skynet 4C	Ariane 44LP	France	Communications	GEO**	30/08/1990
Topsat	Kosmos 11K65M	Russia	Imaging	LEO	27/10/2005
<b>US</b>					
NMARS	Space Shuttle	US	Communications	LEO	10/12/2006
USA 169 (Milstar 6)	Titan 401B/Centaur	US	Communications	GEO	08/04/2003
DSCS III A-3	Delta 4M	US	Communications	GEO	11/03/2003
USA 164	Titan 401B/Centaur	US	Communications	UKN	16/01/2002
USA 162	Atlas IIAS	US	Communications	HEO	11/10/2001
USA 157	Titan 401B/Centaur	US	Communications	GEO	27/02/2001
USA 155	Atlas IIAS	US	Communications	HEO	06/12/2000
USA 153	Atlas IIA	US	Communications	GEO	20/10/2000
USA 179	Atlas IIAS	US	Communications	HEO	31/08/2004
UHF F/O F11 (USA 174)	Atlas 3B	US	Communications	GEO	18/12/2003
DSCS III B-6	Delta 4M	US	Communications	GEO	29/08/2003
USA 148	Atlas IIA	US	Communications	GEO	21/01/2000
UHF F/O F10	Atlas IIA	US	Communications	GEO	23/11/1999
MUBLCOM	Pegasus XL/HAPS	US	Communications	LEO	18/05/1999
UHF F/O F9	Atlas IIA	US	Communications	GEO	20/10/1998
UHF F/O F8	Atlas II	US	Communications	GEO	16/03/1998
CAPRICORN	Atlas IIA	US	Communications	HEO	29/01/1998
USA 135	Atlas IIA	US	Communications	GEO	25/10/1997
UFO F7	Atlas II	US	Communications	GEO*	25/07/1996
USA 125	Titan 405A	US	Communications	LEO*	03/07/1996
Milstar DFS 2	Titan 401A/Centaur	US	Communications	GEO*	06/11/1995
UFO F6	Atlas II	US	Communications	GEO*	22/10/1995
USA 113	Atlas IIA	US	Communications	UKN*	31/07/1995
UFO 5	Atlas II	US	Communications	GEO*	31/05/1995
Milstar DFS 1	Titan 401A/Centaur	US	Communications	GEO*	07/02/1994
NATO 4B	Delta 7925	US	Communications	GEO*	08/12/1993

USA 97	Atlas II	US	Communications	GEO*	28/11/1993
UHF F/O F2	Atlas I	US	Communications	GEO*	03/09/1993
USA 93	Atlas II	US	Communications	UKN*	19/07/1993
USA 89	Space Shuttle	US	Communications	LEO**	02/12/1992
USA 82	Atlas II	US	Communications	GEO*	02/07/1992
USA 78	Atlas II	US	Communications	UKN*	11/02/1992
NATO 4A	Delta 7925	US	Communications	GEO**	08/01/1991
DSCS III B-5	Space Shuttle	US	Communications	UKN**	03/10/1985
DSCS III B-4	Space Shuttle	US	Communications	UKN**	03/10/1985
LES 9	Titan IIC	US	Communications	GEO**	15/03/1976
DSP F21 (USA 159)	Titan 402B/IUS	US	Early Warning	GEO	06/08/2001
DSP F20 (USA 149)	Titan 402B/IUS	US	Early Warning	GEO	08/05/2000
DSP F22	Titan 402B/IUS	US	Early Warning	GEO	14/02/2004
DSP F18	Titan 402B/IUS	US	Early Warning	GEO	23/02/1997
DSP F17	Titan 402A/IUS	US	Early Warning	UKN*	22/12/1994
DSP F16	Space Shuttle	US	Early Warning	GEO**	24/11/1991
DSP F15	Titan 402A/IUS	US	Early Warning	MEO**	13/11/1990
DSP F13	Titan 34D/Transtage	US	Early Warning	UKN**	29/11/1987
Tacsat 2	Minotaur	US	Imaging	LEO	16/12/2006
USA 186	Titan 404B	US	Imaging	LEO	19/10/2005
USA 182	Titan 405B	US	Imaging	LEO	30/04/2005
USA 161	Titan 404B	US	Imaging	LEO	05/10/2001
USA 152	Titan 403B	US	Imaging	LEO	17/08/2000
USA 144	Titan 404B	US	Imaging	LEO	22/05/1999
DMSP 5D-3 F-16	Titan II SLV	US	Imaging	LEO	18/10/2003
DMSP 5D-3 F-15	Titan II SLV	US	Imaging	LEO	12/12/1999
USA 133	Titan 403A	US	Imaging	LEO	24/10/1997
USA 129	Titan 404A	US	Imaging	LEO*	20/12/1996
USA 69	Titan 403A	US	Imaging	LEO**	08/03/1991
Navstar GPS IIR-M3	Delta 7925-9.5	US	Navigation	MEO	17/11/2006
Navstar GPS IIR-M2	Delta 7925-9.5	US	Navigation	HEO	25/09/2006
Navstar GPS IIR-M1	Delta 7925-9.5	US	Navigation	MEO	26/09/2005
Navstar GPS IIR-13	Delta 7925-9.5	US	Navigation	HEO	06/11/2004
Navstar GPS IIR-12	Delta 7925-9.5	US	Navigation	MEO	23/06/2004
Navstar GPS IIR-11	Delta 7925-9.5	US	Navigation	MEO	20/03/2004
Navstar GPS IIR-10 (USA 175)	Delta 7925-9.5	US	Navigation	MEO	21/12/2003
Navstar GPS IIR-9 (USA 168)	Delta 7925-9.5	US	Navigation	MEO	31/03/2003
Navstar GPS IIR-8 (USA 166)	Delta 7925-9.5	US	Navigation	MEO	29/01/2003
GPS IIR-7	Delta 7925-9.5	US	Navigation	MEO	30/01/2001
GPS IIR-6	Delta 7925-9.5	US	Navigation	MEO	10/11/2000
GPS IIR-5	Delta 7925-9.5	US	Navigation	MEO	16/07/2000
GPS IIR-4	Delta 7925-9.5	US	Navigation	MEO	11/05/2000
GPS SVN 46	Delta 7925-9.5	US	Navigation	MEO	07/10/1999
GPS SVN 38	Delta 7925	US	Navigation	MEO	06/11/1997
GPS SVN 43	Delta 7925	US	Navigation	MEO	23/07/1997
Navstar SVN 30	Delta 7925	US	Navigation	MEO*	12/09/1996

Navstar SVN 40	Delta 7925	US	Navigation	MEO	16/07/1996
Navstar GPS 33	Delta 7925	US	Navigation	MEO	28/03/1996
Navstar GPS 36	Delta 7925	US	Navigation	MEO*	10/03/1994
Navstar GPS 34	Delta 7925	US	Navigation	MEO*	26/10/1993
Navstar GPS 35	Delta 7925	US	Navigation	MEO*	30/08/1993
Navstar GPS 39	Delta 7925	US	Navigation	MEO*	26/06/1993
Navstar GPS 37	Delta 7925	US	Navigation	MEO*	13/05/1993
Navstar GPS 31	Delta 7925	US	Navigation	MEO*	30/03/1993
Navstar GPS 22	Delta 7925	US	Navigation	MEO*	03/02/1993
Navstar GPS 29	Delta 7925	US	Navigation	MEO*	18/12/1992
Navstar GPS 32	Delta 7925	US	Navigation	MEO*	22/11/1992
Navstar GPS 27	Delta 7925	US	Navigation	MEO*	09/09/1992
Navstar GPS 26	Delta 7925	US	Navigation	MEO*	07/07/1992
Navstar GPS 28	Delta 7925	US	Navigation	MEO*	10/04/1992
Navstar GPS 25	Delta 7925	US	Navigation	MEO*	23/02/1992
Navstar GPS 24	Delta 7925	US	Navigation	MEO**	04/07/1991
Navstar GPS 23	Delta 7925	US	Navigation	MEO**	26/11/1990
Navstar GPS 15	Delta 6925	US	Navigation	MEO**	01/10/1990
NNS O-23	Scout G-1	US	Navigation	LEO**	
NNS O-25	Scout G-1	US	Navigation	LEO**	
NNS O-31	Scout G-1	US	Navigation	LEO**	25/08/1988
NNS O-32	Scout G-1	US	Navigation	LEO**	26/04/1988
NNS O-29	Scout G-1	US	Navigation	LEO**	16/09/1987
USA 184	Delta 4M+(4,2)	US	Signals Intelligence	HEO	28/06/2006
USA-181 P/L 2	Atlas 3B	US	Signals Intelligence	LEO	03/02/2005
USA 181	Atlas 3B	US	Signals Intelligence	LEO	03/02/2005
USA 173 P/L 2	Atlas IIAS	US	Signals Intelligence	LEO	02/12/2003
USA 173	Atlas IIAS	US	Signals Intelligence	LEO	02/12/2003
USA 171	Titan 401B/Centaur	US	Signals Intelligence	GEO	09/09/2003
USA 160 P/L 2	Atlas IIAS	US	Signals Intelligence	LEO	08/09/2001
USA 160	Atlas IIAS	US	Signals Intelligence	LEO	08/09/2001
USA 139	Titan 401B/Centaur	US	Signals Intelligence	GEO	09/05/1998
USA 136	Titan 401A/Centaur	US	Signals Intelligence	HEO	08/11/1997
USA 122	Titan 403A	US	Signals Intelligence	LEO	12/05/1996
USA 121	Titan 403A	US	Signals Intelligence	LEO*	12/05/1996
USA 120	Titan 403A	US	Signals Intelligence	LEO*	12/05/1996
USA 119	Titan 403A	US	Signals Intelligence	LEO*	12/05/1996
USA 118	Titan 401A/Centaur	US	Signals Intelligence	GEO*	24/04/1996
USA 116	Titan 404A	US	Signals Intelligence	LEO*	05/12/1995
USA 112	Titan 401A/Centaur	US	Signals Intelligence	HEO*	10/07/1995
USA 110	Titan401A/Centaur	US	Signals Intelligence	UKN**	14/05/1995
USA 105	Titan 401A/Centaur	US	Signals Intelligence	UKN**	27/08/1994
USA 103	Titan 401A/Centaur	US	Signals Intelligence	HEO*	03/05/1994
USA 81	Titan II SLV	US	Signals Intelligence	LEO**	25/04/1992
USA 48	Space Shuttle	US	Signals Intelligence	GEO**	23/11/1989
USA 37	Titan 34D/Transtage	US	Signals Intelligence	UKN**	10/05/1989
ANDE-FCAL	Space Shuttle	US	Calibration	LEO	10/12/2006
RAFT1	Space Shuttle	US	Calibration	LEO	10/12/2006

RADCAL	Scout G-1	US	Calibration	LEO*	25/06/1993
DMSP 5D-3 F-17 (USA 191)	Delta 4M	US	Meteorology	LEO	04/11/2006
DMSP 5D-2 F-14	Titan II SLV	US	Meteorology	LEO	04/04/1997
DMSP 24547	Atlas E	US	Meteorology	LEO**	24/03/1995
DMSP 23545	Atlas E	US	Meteorology	LEO*	29/08/1994
ANDE-MAA	Space Shuttle	US	Science	UKN	10/12/2006
MTI	Taurus 1110	US	Science	LEO	12/03/2000
USA 193	Delta 7920-10C	US	Technology	LEO	14/12/2006
MEPSI 2A/2B	Space Shuttle	US	Technology	LEO	10/12/2006
USA 189	Delta 7925-9.5	US	Technology	GEO	21/06/2006
USA 188	Delta 7925-9.5	US	Technology	GEO	21/06/2006
USA 187	Delta 7925-9.5	US	Technology	GEO	21/06/2006
XSS-11 (USA 165)	Minotaur	US	Technology	LEO	11/04/2005
GeoLITE	Delta 7925-9.5	US	Technology	GEO	18/05/2001
TSX-5	Pegasus XL	US	Technology	LEO	07/06/2000
MSX	Delta 7920-10	US	Technology	LEO*	24/04/1996
STEP M0	ARPA Taurus	US	Technology	LEO**	13/03/1994

**Key:**

\* Older than 10 years

\*\* Older than 15 years (or suspected of being dead)