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John F. Kennedy Space Center
IS-2004-03-003-KSC

Information Summaries

KSC Historical Report No. 1B (KHR-1B)

Space Shuttle Launches

Kennedy Space Center
1981 - 2003
Total Space Shuttle Launches - 113

Space Shuttles are launched from NASA facilities at the Kennedy Space Center (KSC) in Florida. Landings have occurred at KSC and Edwards Air Force Base (EAFB) in California, the two prime end-of-mission landing sites; and one at Space Harbor (SH), formerly known as Northrup Strip, White Sands, N.M. All liftoff and landing dates are determined using Eastern Standard and Eastern Daylight Times. For more detailed information on Space Shuttle missions and payloads, refer to Space Shuttle Mission Chronology 1981-1998, KSC Release No. 12-92, Revised February 1999, or Space Shuttle Mission Chronology 2000-2003. See PMS-031, Major NASA Launches, for information on missions and payloads using other launch vehicles. Challenger was destroyed Jan. 28, 1986, during launch. Columbia was destroyed Feb 1, 2003, while returning to KSC from research mission STS-107.

Columbia — OV-102 **Discovery — OV-103** **Endeavour — OV-105**
Challenger — OV-099 **Atlantis — OV-104**

Note: The numbers next to the orbiter names and crew names indicate how many Shuttle launches each has flown, including that flight. No number indicates first shuttle mission for that crew member.

Space Shuttle Missions

Operational Test Flights and Operational Flights

Mission Name	Crew	Launch Date/ Landing Date	Orbiter	Primary Payload	Launch Pad/ Runway
STS-1	Young, Crippen	4/12/81 4/14/81	Columbia[1]	—	39A 23 EAFB
STS-2	Engle, Truly	11/12/81 11/14/81	Columbia[2]	OSTA-1	39A 23 EAFB
STS-3	Lousma, Fullerton	3/22/82 3/30/82	Columbia[3]	OSS-1	39A 17 SH
STS-4	Mattingly, Hartsfield	6/27/82 7/4/82	Columbia[4]	DoD	39A 22 EAFB

Operational Flights

Mission Name	Crew	Launch Date Landing Date	Orbiter	Primary Payload	Launch Pad Runway
STS-5	Brand, Overmyer, Lenoir, J. Allen	11/11/82 11/16/82	Columbia[5]	SBS-3/Anik C-3	39A 22 EAFB
STS-6	Weitz, Bobko, Musgrave, Peterson	4/4/83 4/9/83	Challenger[1]	TDRS-1	39A 22 EAFB
STS-7	Crippen[2], Hauck, Ride, Fabian, Thagard	6/18/83 6/24/83	Challenger[2]	Anik C-2/ Palapa B-1	39A 15 EAFB
STS-8	Truly[2], Brandenstein, Bluford, Gardner, Thornton	8/30/83 9/5/83	Challenger[3]	INSAT 1B	39A 22 EAFB
STS—9	Young[2], Shaw, Parker, Garriott, Merbold, Lichtenberg	11/28/83 12/8/83	Columbia[6]	Spacelab 1	39A 17 EAFB
STS-41-B	Brand[2], Gibson, Stewart, McNair, McCandless	2/3/84 2/11/84	Challenger[4]	[a]Westar VI/ [a]Palapa B-2	39A 15 KSC
STS-41-C	Crippen[3], Scobee, van Hoften, Nelson, Hart	4/6/84 4/13/84	Challenger[5]	[c]Long Duration Exposure Facility	39A 17 EAFB
STS 41-D	Hartsfield[2], Coats, Hawley, Resnik, Mullane, Walker	8/30/84 9/5/84	Discovery[1]	SBS-4/ Telstar 3-C/ SYNCOM IV-2	39A 17 EAFB

Operational Flights (continued)

STS-41-G	Crippen[4], McBride, Sullivan, Ride[2], Leestma, Garneau, Scully-Power	10/5/84 10/13/84	Challenger[6]	ERBS/OSTA-3	39A 33 KSC
STS 51-A	Hauck[2], Walker, J. Allen[2], Fisher, Gardner[2]	11/8/84 11/16/84	Discovery[2]	Anik D-2/ SYNCOM IV-1	39A 15 KSC
STS 51-C	Mattingly[2], Shriver, Buchli, Onizuka, Payton	1/24/85 1/27/85	Discovery[3]	DoD	39A 15 KSC
STS 51-D	Bobko[2], Williams, Seddon, Griggs, Hoffman, Garn, Walker	4/12/85 4/19/85	Discovery[4]	Anik C-1/ [b]SYNCOM IV-3	39A 33 KSC
STS 51-B	Overmyer[2], Gregory, Lind, Thagard[2], Thornton, van den Berg, Wang	4/29/85 5/6/85	Challenger[7]	Spacelab 3	39A 17 EAFB
STS 51-G	Brandenstein[2], Creighton, Lucid, Nagel, Fabian[2], Baudry, Sultan Al-Saud	6/17/85 6/24/85	Discovery[5]	Arabsat 1-B/ Telstar 3-D/ Morelos-A	39A 23 EAFB
STS 51-F	Fullerton[2], Bridges, Musgrave[2], England, Henize, Acton, Bartoe	7/29/85 8/6/85	Challenger[8]	Spacelab 2	39A 23 EAFB
STS 51-I	Engle[2], Covey, van Hoften[2], Lounge, Fisher	8/27/85 9/3/85	Discovery[6]	AUSSAT 1/ASC 1/ SYNCOM IV-4	39A 23 EAFB
STS 51-J	Bobko[3], Grabe, Stewart[2], Hilmers, Pailes	10/3/85 10/7/85	Atlantis[1]	DoD	39A 23 EAFTB
STS-61-A	Hartsfield[3], Nagel[2], Buchli[2], Bluford[2], Dunbar, Furrer, Ockels, Messerschmid	10/30/85 11/6/85	Challenger[9]	Spacelab D-1	39A 17 EAFB
STS 61-B	Shaw[2], O'Connor, Cleave, Spring, Ross, Vela, Walker	11/26/85 12/3/85	Atlantis[2]	Morelos-B/ AUSSAT-2/ RCA SATCOM Ku-2	39A 22 EAFB
STS 61-C	Gibson[2], Bolden, Chang-Diaz, Hawley[2], Nelson[2], Cenker, Nelson	1/12/86 1/18/86	Columbia[7]	RCA SATCOM Ku-1	39A 22 EAFB
STS 51-L	Scobee[2], Smith, McNair, Resnik, Onizuka[2], Jarvis, McAuliffe	1/28/86	Challenger[10]	TDRS-B	39B
STS-26	Hauck[3], Covey[2], Lounge[2], Hilmers[2], Nelson[3]	9/29/88 10/3/88	Discovery[7]	TDRS-3	39B 17 EAFB
STS-27	Gibson[3], Gardner[1], Shepherd, Mullane[2], Ross[2]	12/2/88 12/6/88	Atlantis[3]	DoD	39B 17 EAFB
STS-29	Coats[2], Blaha, Buchli[3], Springer, Bagian	3/13/89 3/18/89	Discovery[8]	TDRS-4	39B 22 EAFB
STS-30	Walker,[2] Grabe[2], Thagard[3], Cleave[2], Lee	5/4/89 5/8/89	Atlantis[4]	Magellan	39B 22 EAFB
STS-28	Shaw[3], Richards, Leestma[2], Adamson, Brown	8/8/89 8/13/89	Columbia[8]	DoD	39B 17 EAFB
STS-34	Williams[2], McCulley, E. Baker, Chang-Diaz[2], Lucid[2]	10/18/89 10/23/89	Atlantis[5]	Galileo	39B 23 EAFB
STS-33	Gregory[2], Blaha[2], Musgrave[3], Thornton[3], Carter	11/22/89 11/27/89	Discovery[9]	DoD	39B 4 EAFB
STS-32	Brandenstein[3], Wetherbee, Dunbar[2], Ivins, Low	1/9/90 1/20/90	Columbia[9]	SYNCOM IV-5/ [c]LDEF	39A 22 EAFB
STS-36	Creighton[2], Casper, Hilmers[3], Mullane[3], Thuot	2/28/90 3/4/90	Atlantis[6]	DoD	39A 23 EAFB
STS-31	Shriver[2], Bolden[2], Hawley[3], McCandless[2], Sullivan[2]	4/24/90 4/29/90	Discovery[10]	Hubble Space Telescope	39B 22 EAFB
STS-41	Richards[2], Cabana, Shepherd[2], Melnick, Akers	10/6/90 10/10/90	Discovery[11]	Ulysses	39B 22 EAFB
STS-38	Covey[3], Culbertson, Meade, Springer[2], Gemar	11/15/90 11/20/90	Atlantis[7]	DoD	39A 33 KSC
STS-35	Brand[3], Gardner[2], Lounge[3], Hoffman[2], Parker[2], Parise, Durrance	12/2/90 12/11/90	Columbia[10]	Astro-1	39B 22 EAFB
STS-37	Nagel[3], Cameron, Apt, Godwin, Ross[3]	4/5/91 4/11/91	Atlantis[8]	[f]Gamma Ray Observatory	39B 33 EAFB
STS-39	Coats[3], Hammond, Harbaugh, McMonagle, Bluford[3], Hieb, Veach	4/28/91 5/6/91	Discovery[12]	DoD	39A 15 KSC

Operational Flights (continued)

STS-40	O'Connor[2], Gutierrez, Jernigan, Seddon[2], Bagian[2], Gaffney, Hughes-Fulford	6/5/91 6/14/91	Columbia[11]	Spacelab Life Sciences-1	39B 22 EAFB
STS-43	Blaha[3], M. Baker, Adamson[2], Low[2], Lucid[3]	8/2/91 8/11/91	Atlantis[9]	TDRS-5	39A 15 KSC
STS-48	Creighton[3], Reightler, Buchli, Brown, Gemar[2]	9/12/91 9/18/91	Discovery[13]	Upper Atmosphere Research Satellite	39A 22 EAFB
STS-44	Gregory[3], Henricks, Musgrave[4], Runco, J. S. Voss, Hennen	11/24/91 12/1/91	Atlantis[10]	Defense Support Program Satellite	39A 5 EAFB
STS-42	Grabe[3], Oswald, Readdy, Thagard[4], Hilmers[4], Bondar, Merbold	1/22/92 1/30/92	Discovery[14]	IML-1	39A 22 EAFB
STS-45	Bolden[3], Duffy, Sullivan[3], Leestma[3], Foale, Frimout, Lichtenberg[2]	3/24/92 4/2/92	Atlantis[11]	ATLAS-1	39A 33 KSC
STS-49	Brandenstein[4], Chilton, Melnick[2], Akers[2], Thornton[2], Hieb[2], Thuot[2]	5/7/92 5/16/92	Endeavour[1]	[g]INTELSAT rescue and deployment	39B 22 EAFB
STS-50	Richards[3], Bowersox, Dunbar[3], Meade[2], Baker[2], Trinh, DeLucas	6/25/92 7/9/92	Columbia[12]	USML-1	39A 33 KSC
STS-46	Shriver[3], A. Allen, Hoffman[3], Ivins[2], Chang-Diaz[3], Nicollier, Malerba	7/31/92 8/8/92	Atlantis[12]	TSS-1/ [i]EURECA	39B 33 KSC
STS-47	Gibson[4], Brown, Lee[2], Davis, Apt[2], Jemison, Mohri	9/12/92 9/20/92	Endeavour[2]	Spacelab-J	39B 33 KSC
STS-52	Wetherbee[2], M. Baker[2], Shepherd[3], Jernigan[2], Veach[2], MacLean	10/22/92 11/1/92	Columbia[13]	[h]Lageos II/ USMP-1	39B 33 KSC
STS-53	Walker[3], Cabana[2], Bluford[4], J. S.Voss[2], Clifford	12/2/92 12/9/92	Discovery[15]	DoD	39B 22 EAFB
STS-54	Casper[2], McMonagle[2], Runco Jr.[2], Harbaugh[2], Helms	1/13/93 1/19/93	Endeavour[3]	TDRS-6	39B 33 KSC
STS-56	Cameron[2], Oswald[2], Cockrell, Foale[2], Ochoa	4/8/93 4/17/93	Discovery[16]	ATLAS-2	39B 33 KSC
STS-55	Nagel[4], Henricks[2], Ross[4], Precourt, Harris Jr., Walter, Schlegel	4/26/93 5/6/93	Columbia[14]	Spacelab D-2	39A 22 EAFB
STS-57	Grabe[4], Duffy[2] Low[3], Sherlock, J. E. Voss, Wisoff	6/21/93 7/1/93	Endeavour[4]	SPACEHAB-1/ [i]EURECA retrieval	39B 33 KSC
STS-51	Culbertson Jr.[2], Readdy[2], Newman, Bursch, Walz	9/12/93 9/22/93	Discovery[17]	ACTS-TOS ORFEUS-SPAS	39B 15 KSC
STS-58	Blaha[4], Searfoss, Seddon[3], McArthur Jr., Wolf, Lucid[4], Fettman	10/18/93 11/1/93	Columbia[15]	Spacelab Life Sciences-2	39B 22 EAFB
STS-61	Covey[4], Bowersox[2], Musgrave[5], Hoffman[4], Thornton[3], Akers[3], Nicollier[2]	12/2/93 12/13/93	Endeavour[5]	Hubble Space Telescope (HST) Servicing	39B 33 KSC
STS-60	Bolden[4], Reightler[2], Chang-Diaz[4], Davis[2], Sega, Krikalev (Russian cosmonaut)	2/3/94 2/11/94	Discovery[18]	SPACEHAB-2 Wake Shield Facility-1	39A 15 KSC
STS-62	Casper[3], A. Allen[2], Gemar[3], Ivins[3], Thuot[3]	3/4/94 3/18/94	Columbia[16]	USMP-2/ OAST-2	39B 33 KSC
STS-59	Gutierrez[2], Chilton[2], Godwin[2], Apt[3], Clifford[2], Jones	4/9/94 4/20/94	Endeavour[6]	Space Radar Laboratory-1 (SRL-1)	39A 22 EAFB
STS-65	Cabana[3], Halsell, Hieb[3], Thomas, Walz[2], Chiao, Naito-Mukai	7/8/94 7/23/94	Columbia[17]	IML-2	39A 33 KSC

LEGEND:

- a - Entered unplanned orbit; recovered on STS 51-A and returned to Earth on November 16, 1984.
- b - Failed to activate after deployment; was successfully repaired during STS 51-I and later entered normal service.
- c - The Long Duration Exposure Facility (LDEF) was deployed on STS 41-C on April 7, 1984, and retrieved from space during STS-32 on January 12, 1990. It was returned to KSC on 1/26/90, where the experiment trays were removed.
- d - NASA's Space Shuttle liftoff, routine space operations and orbiter landing were successful. The Department of Defense (DoD) does not discuss the success of its payloads or experiments on classified missions.
- e - Most or all payloads on these DoD missions are unclassified.
- f - When deployed on April 7, 1991, the 35,000-pound spacecraft was called the Gamma Ray Observatory (GRO). NASA announced on September 23, 1991, that it was renaming the satellite the Arthur Holly Compton Gamma Ray Observatory or Compton Observatory in honor of the late Nobel Prize-winning physicist.
- g - INTELSAT VI (F3) was launched into space aboard a Titan launch vehicle in March 1990. The Titan's second stage failed to separate from the satellite's perigee kick motor; without the extra boost from the kick motor, the INTELSAT satellite remained in an unusable low orbit. The STS-49 crew retrieved the satellite in the final of three space walks, and redeployed it with a new kick motor.
- h - LAGEOS 1 was launched in 1976 on a Delta expendable vehicle.
- i - The European Retrievable Carrier, or EURECA, was deployed on August 2, 1992, during STS-46. The free-flying platform with 15 scientific instruments was retrieved during Mission STS-57, on June 24, 1993.

Operational Flights (continued)

Mission Name	Crew	Launch Date/ Landing Date	Orbiter	Primary Payload	Launch Pad/ Runway
STS-64	Richards[4], Hammond[2], Helms[2], Meade[3], Lee[3], Linenger	9/9/94 9/20/94	Discovery[19]	Lidar In-Space Technology Experiment (LITE)	39B 04 EAFB
STS-68	M. Baker[3], Wilcutt, Jones[2], Bursch[2], Wisoff[2], Smith	9/30/94 10/11/94	Endeavour[7]	SRL-2	39A 22 EAFB
STS-66	McMonagle[3], Brown[2], Ochoa[2], Tanner, Parazynski, Clervoy	11/3/94 11/14/94	Atlantis[13]	ATLAS-3/ CRISTA-SPAS	39B 22 EAFB
STS-63	Wetherbee[3], Collins, Foale[3], J.E. Voss[2], Harris Jr.[2], Titov[4]	2/3/95 2/11/95	Discovery[20]	SPACEHAB-3/ MIR Spartan-204	39B 15 KSC
STS-67	Oswald[3], Gregory, Jernigan[3], Grunsfeld, Lawrence, Parise[2], Durrance[2]	3/2/95 3/18/95	Endeavour[8]	Astro-2	32A 22EAFB
STS-71	Gibson[5], Precourt[2], E. Baker[3], Dunbar[4], Harbaugh[3], Solovyev[4], Budarin, Return from MIR: Dezhurov, Strekalov[6], Thagard; Solovyev[4], Budarin stay on MIR	6/27/95 7/7/95	Atlantis[14]	1st MIR docking/ crew transfer	39A 15 KSC
STS-70	Henricks[3], Kregel, Currie[2], Thomas[2], Weber	7/13/95 7/22/95	Discovery[21]	TDRS-7	39B 33 KSC
STS-69	Walker[4], Cockrell[2], J.S. Voss[3], Newman[2], Gernhardt	9/7/95 9/18/95	Endeavour[9]	Spartan 201-03/ Wake Shield Facility-2	39A 33 KSC
STS-73	Bowersox[3], Rominger, Thornton[4], Coleman, Lopez-Alegria, Leslie, Sacco Jr.	10/20/95 11/5/95	Columbia[18]	USML-2	39B 33 KSC
STS-74	Cameron[3], Halsell Jr.[2], Ross[5], McArthur Jr.[2], Hadfield	11/12/95 11/20/95	Atlantis[15]	MIR docking-2	39A 33 KSC
STS-72	Duffy[3], Jett, Chiao[2], Barry, Scott, Wakata	1/11/96 1/20/96	Endeavour[10]	SFU retrieval/ OAST Flyer	39B 15 KSC
STS-75	A. Allen[3], Horowitz, Chang-Diaz[5], Cheli, Hoffman[5], Nicollier[3], Guidoni	2/22/96 3/9/96	Columbia[19]	TSS-1R/ USMP-03	39B 33 KSC
STS-76	Chilton[3], Searfoss[2], Lucid[5], Godwin[3], Clifford[3], Sega[2] Lucid stays on Mir	3/22/96 3/31/96	Atlantis[16]	SPACEHAB-SM/ MIR docking-3/ crew transfer	39B 22EAFB
STS-77	Casper[4], Brown Jr.[3], Bursch[3], Runco Jr.[3], Garneau[2], Thomas	5/19/96 5/29/96	Endeavour[11]	SPACEHAB-4/ Spartan-207/IAE	39B 33 KSC
STS-78	Henricks[4], Kregel[2], Helms[3], Linnehan, Brady Jr., Favier, Thirsk	6/20/96 7/7/96	Columbia[20]	SPACELAB-LMS	39B 33 KSC
STS-79	Readdy[3], Wilcutt[2], Akers[4], Blaha[5], Apt[4], Walz[3] Return from MIR: Lucid; Blaha replaces her	9/16/96 9/26/96	Atlantis[17]	SPACEHAB/ MIR docking-4/ crew transfer	39A 15 KSC
STS-80	Cockrell[3], Rominger[2], Jernigan[4], Jones[3], Musgrave[6]	11/19/96 12/7/96	Columbia[21]	ORFEUS-SPAS II	39B 33 KSC
STS-81	M. Baker[4], Jett[2], Grunsfeld[2], Ivins[4], Wisoff[3], Linenger[2] Return from MIR: Blaha; Linenger replaces him	1/12/97 1/22/97	Atlantis[18]	SPACEHAB-DM MIR docking-5/ crew transfer	39B 33 KSC
STS-82	Bowersox[4], Horowitz[2], Lee[4], Hawley[4], Harbaugh[4], Smith[2], Tanner[2]	2/11/97 2/21/97	Discovery[22]	Hubble Servicing Mission 2	39A 33 KSC
STS-83	Halsell Jr.[3], Still, J.E. Voss[3], Thomas[3], Gernhardt[2], Crouch, Linteris	4/4/97 4/8/97	Columbia[22]	MSL/ SAREX	39A 15 KSC
STS-84	Precourt[3], Collins[2], Foale[4], Noriega, Lu, Clervoy[2], Kondakova[2] Return from MIR: Linenger; Foale replaces him	5/15/97 5/24/97	Atlantis[19]	SPACEHAB-DM MIR docking-6/ crew transfer	39A 33 KSC

Operational Flights (continued)

Mission Name	Crew	Launch Date/ Landing Date	Orbiter	Primary Payload	Launch Pad/ Runway
STS-94	Halsell Jr.[4], Still[2], J.E. Voss[4], Thomas[4], Gernhardt[3], Crouch[2], Linteris[2]	7/1/97 7/17/97	Columbia[23]	MSL/ SAREX	39A 33 KSC
STS-85	Brown Jr.[4], Rominger[3], Davis[3], Curbeam Jr., Robinson , Tryggvason	8/7/97 8/19/97	Discovery[23]	CRISTA-SPAS (DARA)	39A 33 KSC
STS-86	Wetherbee[4], Bloomfield, Titov[5], Parazynski[2], Chretien[3], Lawrence[2], Wolf[2] Return from MIR: Foale; Wolf replaces him	9/25/97 10/6/97	Atlantis[20]	SPACEHAB-DM MIR docking-7/ crew transfer	39A 15 KSC
STS-87	Kregel[3], Lindsey, Scott[2], Chawla, Doi, Kadenyuk	11/19/97 12/5/97	Columbia[24]	USMP-4/ Spartan-201-04	39B 33 KSC
STS-89	Wilcutt[3], Edwards Jr., Dunbar[5], Anderson, Reilly II, Sharipov, Thomas[2] Return from MIR: Wolf; Thomas replaces him	1/22/98 1/31/98	Endeavour[12]	SPACEHAB-DM MIR-docking-8/ crew transfer	39A 15 KSC
STS-90	Searfoss[3], Altman, Linnehan[2], Williams, Hire, Buckey, Pawelczyk	4/17/98 5/3/98	Columbia[25]	Neurolab/ GAS	39B 33KSC
STS-91	Precourt[4], Gorie, Lawrence[3], Chang-Diaz[6], Kavandi, Ryumin[4] Return from MIR: Thomas	6/2/98 6/12/98	Discovery[24]	SPACEHAB-SM/ GAS /AMS MIR docking-9/ crew transfer	39A KSC
STS-95	Brown[5], Lindsey[2], Parazynski[3], Robinson[2], Duque, Mukai[2], Glenn	10/29/98 11/7/98	Discovery[25]	SPACEHAB-SM/ Spartan-201/ HOST/IEH-03	39B 33 KSC
STS-88	Cabana[4], Sturckow, Currie[3], Ross[6], Newman[3], Krikalev[2]	12/4/98 12/15/98	Endeavour[13]	Space Station Assembly flight 2A/ Unity/Hitchhiker/ MightySat-1/SAC-A	39A 15 KSC
STS-96	Rominger[4], Husband, Ochoa[3], Jernigan[5], Barry[2], Payette, Tokarev	5/27/99 6/6/99	Discovery [26]	2nd flight to Space Station, carrying OTD, STRELA, STARSHINE	39B 15 KSC
STS-93	Collins[3], Ashby, Hawley[5], Coleman[2], Tognini[2]	7/23/99 7/27/99	Columbia [26]	Chandra X-ray Observatory	39B 33 KSC
STS-103	Brown Jr.[6], Kelly, Smith[3], Foale[5], Grunsfeld[3], Nicollier[4], Clervoy[3]	12/19/99 12/27/99	Discovery [27]	Rate Sensor Units, computer, solid state digital recorder, for repair/maintenance of Hubble Space Telescope	39B 33 KSC
STS-99	Kregel[4], Gorie[2], Kavandi[2], Voss[5], Mohri[2], Thiele	2/11/00 2/22/00	Endeavour[14]	Shuttle Radar Topography Mission	39A 33 KSC
STS-101	Halsell Jr.[5], Horowitz[3], Weber[2], Voss[4], Williams, Helms[4], Usachev	5/19/00 5/29/00	Atlantis[21]	SPACEHAB	39A 15 KSC
STS-106	Wilcutt[4], Altman[2], Lu[2], Malenchenko, Morokov, Mastracchio, Burbank	9/8/00 9/20/00	Atlantis[22]	Hardware, Supplies for ISS	39B 15 KSC
STS-92	Duffy[4], Melroy, Chiao[3], McArthur[3], Wisoff[4], Lopez-Alegria[2], Wakata[2]	10/11/00 10/24/00	Discovery[28]	Z1 truss, PMA-3 for ISS	39B 22 EAFB, Cal.
STS-97	Jettl[3], Bloomfield[2], Tanner[3], Noriega[2], Garneau[3]	11/30/00 12/11/00	Endeavour[15]	Solar Arrays on P6 truss, Floating Potential Probes, supplies for ISS	39B 15 KSC
STS-98	Cockrell[4], Polansky, Curbeam[2], Jones[4], Ivins[5]	2/7/01 2/20/01	Atlantis[23]	U.S. Lab Destiny, PMA2	39A 22 EAFB
STS-102	Wetherbee[5], Kelly, Thomas[3], Richards Expedition 2 up: Voss[4], Helms[4], Usachev[2] (RSA); Expedition 1 down: Shepherd, Gidzenko (RSA), Krikalev (RSA)	3/8/01 3/21/01	Discovery[29]	MPLM Leonardo	39B 15 KSC

Mission Name	Crew	Launch Date/ Landing Date	Orbiter	Primary Payload	Launch Pad/ Runway
STS-100	Rominger[5], Ashby[2], Hadfield[2], Parazynski[4], Phillips, Guidoni[2], Lonchakov[1]	4/19/01 5/1/01	Endeavour[16]	Canadarm2, MPLM Raffaello	39A 22 EAFB
STS-104	Lindsey[3], Hobaugh, Kavandi[3], Gernhardt[4] , Reilly[2]	7/12/01 7/24/01	Atlantis[24]	Quest joint airlock	39B 15 KSC
STS-105	Horowitz[4], Sturckow[2], Barry[3], Forrester Expedition 3 up: Culbertson[3], Dezhurov, Tyurin; Expedition 2 down: Usachev[2], Helms[4], Voss[4]	8/10/01 8/22/01	Discovery[30]	Early Ammonia Servicer	39A 15 KSC
STS-108	Gorie[3], M. Kelly, Godwin[4], Tani Expedition 4 up: Onufrienko, Bursch[4], Walz[4]; Expedition 3 down: Culbertson[3], Dezhurov, Tyurin	12/5/01 12/17/01	Endeavour[17]	MPLM Raffaello	39B 15 KSC
STS-109	Altman[3], Carey, Grunsfeld[4], Currie[4], Linnehan[3], Newman[4], Massimino	3/1/02 3/12/02	Columbia[27]	Hubble Service: solar array, NIC-MOS, RWA, PCU	39A 33 KSC
STS-110	Bloomfield[3], Frick, Ross[7], Smith[4], Ochoa[4], Morin, Walheim	4/8/02 4/19/02	Atlantis[25]	S0 truss, Mobile Transporter	39B 33 KSC
STS-111	Cockrell[5], Lockhart, Chang-Diaz[7], Perrin (CNES); Expedition 5 up: Korzun[2], Whitson, Treschev; Expedition 4 down: Onufriyenko, Bursch[4], Walz[4]	6/5/02 6/19/02	Endeavour[18]	MBS, MPLM Leonardo	39A 22 EAFB
STS-112	Ashby[3], Melroy[2], Wolf[3], Sellers, Magnus, Yurchikhin (RSA)	10/7/02 10/18/02	Atlantis[26]	S1 truss, CETA Cart A	39B 33 KSC
STS-113	Wetherbee[6], Lockhart[2], Lopez-Alegria[3], Herrington; Expedition 6 (up): Bowersox[5], Budarin[2], Pettit; Expedition 5 (down): Korzun, Whitson, Treschev	11/23/02 12/7/02	Endeavour[19]	P1 truss, CETA Cart B	39A 33 KSC
STS-107	Husband[2], McCool[1], Anderson[2], Chawla[2], Brown[1], Clark[1], Ramon[1]	01/16/03	Columbia[28]	SPACEHAB, FREESTAR, SIMPLEX, RAMBO	39A Columbia and crew were lost in an explosion over E. Texas

LEGEND:

a - Entered unplanned orbit; recovered on STS 51-A and returned to Earth on November 16, 1984.

b - Failed to activate after deployment; was successfully repaired during STS 51-I and later entered normal service.

c - The Long Duration Exposure Facility (LDEF) was deployed on STS 41-C on April 7, 1984, and retrieved from space during STS-32 on January 12, 1990. It was returned to KSC on January 26, 1990, where the experiment trays were removed.

d - NASA's Space Shuttle liftoff, routine space operations and orbiter landing were successful. The Department of Defense (DoD) does not discuss the success of its payloads or experiments on classified missions.

e - Most or all payloads on these DoD missions are unclassified.

f - When deployed on April 7, 1991, the 35,000-pound spacecraft was called the Gamma Ray Observatory (GRO). NASA announced on September 23, 1991, that it was renaming the satellite the Arthur Holly Compton Gamma Ray Observatory or Compton Observatory in honor of the late Nobel Prize-winning physicist.

g - INTELSAT VI (F3) was launched into space aboard a Titan launch vehicle in March 1990. The Titan's second stage failed to separate from the satellite's perigee kick motor; without the extra boost from the kick motor, the INTELSAT satellite remained in an unusable low orbit. The STS-49 crew retrieved the satellite in the final of three space walks, and redeployed it with a new kick motor.

h - LAGEOS 1 was launched in 1976 on a Delta expendable vehicle.

i - The European Retrievable Carrier, or EURECA, was deployed on August 2, 1992, during STS-46. The free-flying platform with 15 scientific instruments was retrieved during Mission STS-57, on June 24, 1993.