

Flights of Discovery (OV-103)

Times Flown	Mission Name	Crew	Launch Pad	Launch Date	Landing Date & Site	Primary Payload
1	STS-41D	Hartsfield, Coats, Resnik, Mullane, Hawley, Walker	39A	08/30/84	09/05/84 at EAFB	SBS-D; SYNCOM IV-2; Solar Wing TELSTAR
2	STS-51A	Hauck, Walker, Fisher, Gardner, Allen	39A	11/08/84	11/16/84 at KSC	TELESAT-H; SYNCOM IV-1
3	STS-51C	Mattingly, Shriver, Buchli, Onizuka, Payton	39A	01/24/85	01/27/85 at KSC	DoD
4	STS-51D	Bobko, Williams, Seddon, Griggs, Hoffman, Walker, Garn	39A	04/12/85	04/19/85 at KSC	TELESAT-1; SYNCOM IV-3
5	STS-51G	Brandenstein, Creighton, Lucid, Nagel, Fabian, Baudry, Salman Al-Saud	39A	06/17/85	06/24/85 at EAFB	MORELOS-A; ARABSAT-A; TELSTAR-3D
6	STS-51I	Engle, Covey, Van Hoften, Lounge, Fisher	39A	08/27/85	09/03/85 at EAFB	ASC-1; AUSSAT-1; SYNCOM IV-4
7	STS-26	Hauck, Covey, Lounge, Hilmers, Nelson	39B	09/29/88	10/03/88 at EAFB	TDRS-C
8	STS-29	Coats, Blaha, Buchli, Springer, Bagian	39B	03/13/89	03/18/89 at EAFB	TDRS-4
9	STS-33	Gregory, Blaha, Musgrave, Thornton, Carter	39B	11/22/89	11/27/89 at EAFB	DoD
10	STS-31	Shriver, Bolden, Hawley, McCandless, S ullivan	39B	04/24/90	04/29/90 at EAFB	Deploy of NASA's Hubble Space Telescope
11	STS-41	Richards, Cabana, Shepherd, Melnick, Akers	39B	10/06/90	10/10/90 at EAFB	Ulysses; SSBUV; ISAC
12	STS-39	Coats, Hammond, Bluford, Hieb, Harbaugh, McMonagle, Veach	39A	04/28/91	05/06/91 at KSC	DoD
13	STS-48	Creighton, Reightler, Brown, Gemar, Buchli	39A	09/12/91	09/18/91 at EAFB	UARS
14	STS-42	Grabe, Oswald, Readdy, Merbold, Thagard, Hilmers, Bondar	39A	01/22/92	01/30/92 at EAFB	IML-1
15	STS-53	Walker, Cabana, Bluford, Voss, Clifford	39A	12/02/92	12/09/92 at EAFB	DoD
16	STS-56	Cameron, Oswald, Cockrell, Foale, Ochoa	39B	04/08/93	04/17/93 at KSC	ATLAS-2; SPARTAN-201
17	STS-51	Culbertson, Readdy, Newman, Bursch, Walz	39B	09/12/93	09/22/93 at KSC	ACTS/TOS; ORFEUS-SPAS
18	STS-60	Bolden, Reightler, Chang-Diaz, Davis, Sega, Krikalev	39A	02/03/94	02/11/94 at KSC	1st Shuttle-Mir Mission - Wake Shield Facility-1; SPACEHAB-2
19	STS-64	Richards, Hammond, Helms, Meade, Lee, Linenger	39B	09/09/94	09/20/94 at EAFB	LITE; SPARTAN-201
20	STS-63	Wetherbee, Collins, Harris, Voss, Foale, Titov	39B	02/03/95	02/11/95 at KSC	2nd Shuttle-Mir Mission - 1st rendezvous; SPACEHAB-3
21	STS-70	Henricks, Kregel, Currie, Thomas, Weber	39B	07/13/95	07/22/95 at KSC	TDRS-G
22	STS-82	Bowersox, Horowitz, Lee, Hawley, Harbaugh, Smith, Tanner	39A	02/11/97	02/21/97 at KSC	2nd Hubble Space Telescope servicing mission
23	STS-85	Brown, Rominger, Davis, Curbeam, Robinson, Tryggvason	39A	08/07/97	08/19/97 at KSC	CRISTA-SPAS-02; Japanese MFD; TAS-1; IEH-02
24	STS-91	Precourt, Gorie, Lawrence, Chang-Diaz, Kavandi, Ryumin; Thomas (down from Mir)	39A	06/02/98	06/12/98 at KSC	11th Shuttle-Mir Mission - 9th and final docking
25	STS-95	Brown, Lindsey, Parazynski, Robinson, Duque, Mukai, Glenn	39B	10/29/98	11/07/98 at KSC	SPACEHAB- SM; Spartan-201; HOST; IEH-03
26	STS-96	Rominger, Husband, Ochoa, Jernigan, Barry, Payette, Tokarev	39B	05/27/99	06/06/99 at KSC	2nd ISS Mission - Orbital Transfer Device; Strela; supplies
27	STS-103	Brown, Kelly, Smith, Foale, Grunsfeld, Nicollier, Clervoy	39B	12/19/99	12/27/99 at KSC	3rd Hubble Space Telescope servicing mission
28	STS-92	Duffy, Melroy, Chiao, McArthur, Wisoff, Lopez-Alegria, Wakata	39A	10/11/00	10/24/00 at EAFB	5th ISS Mission (100th Shuttle Flight) - Zenith Z1 Truss; PMA 3
29	STS-102	Wetherbee, Kelly, Thomas, Richards; Voss, Helms, Usachev (up to ISS); Shepherd, Gidzenko, Krikalev (down from ISS)	39B	03/08/01	03/21/01 at KSC	8th ISS Mission - MPLM Leonardo
30	STS-105	Horowitz, Sturckow, Barry, Forrester; Culbertson, Tyurin, Dezhurov (up to ISS); Usachev, Voss, Helms (down from ISS)	39A	08/10/01	08/22/01 at KSC	11th ISS Mission - Early Ammonia Servicer; MPLM Leonardo
31	STS-114	Collins, Kelly, Robinson, Thomas, Camarda, Lawrence, Noguchi	39B	07/26/05	08/09/05 at EAFB	17th ISS Mission (Return to Flight) - MPLM Raffaello; HRF-2; OBSS
32	STS-121	Lindsey, Kelly, Fossum, Nowak, Wilson, Sellers; Reiter (up to ISS)	39B	07/04/06	07/17/06 at KSC	18th ISS Mission - MPLM Leonardo
33	STS-116	Polansky, Oefelein, Curbeam, Higginbotham, Patrick, Fuglesang; Williams (up to ISS); Rieter (down from ISS)	39B	12/09/06	12/22/06 at KSC	20th ISS Mission - P5 truss; SPACEHAB
34	STS-120	Melroy, Zamka, Parazynski, Wheelock, Wilson, Nespoli; Tani (up to ISS); Anderson (down from ISS)	39A	10/23/07	11/07/07 at KSC	23rd ISS Mission - Harmony Node 2
35	STS-124	Kelly, Ham, Nyberg, Garan, Fossum, Hoshide; Chamitoff (up to ISS); Reisman (down from ISS)	39A	05/31/08	06/14/08 at KSC	26th ISS Mission - Kibo Pressurized Module
36	STS-119	Archambault, Antonelli, Acaba, Arnold, Phillips, Swanson; Wakata (up to ISS); Magnus (down from ISS)	39A	03/15/09	03/28/09 at KSC	28th ISS Mission - S6 truss
37	STS-128	Sturckow, Ford, Olivas, Forrester, Hernandez, Fuglesang; Stott (up to ISS); Kopra (down from ISS)	39A	08/28/09	09/11/09 at EAFB	30th ISS Mission - MPLM Leonardo
38	STS-131	Poindexter, Dutton, Anderson, Mastracchio, Metcalf-Lindenburger, Wilson, Yamazaki	39A	04/05/10	04/20/10 at KSC	33rd ISS Mission - MPLM Leonardo
39	STS-133	Lindsey, Boe, Drew, Barratt, Bowen, Stott	39A	02/24/11	03/09/11 at KSC	35th ISS Mission (final mission for Discovery) - PMM; ELC-4; Robonaut 2



DISCOVERY (OV-103)

Discovery was NASA's third space shuttle orbiter to join the fleet at Kennedy Space Center in Florida. Discovery also is known inside the space agency by its designation Orbiter Vehicle-103, or OV-103.

Discovery was the first space shuttle retired from NASA's fleet in 2011.

The spacecraft will be transported to the Udvar-Hazy Center of the Smithsonian Institution's National Air and Space Museum in Chantilly, Va., near Washington, D.C., in 2012 to be put on permanent public display.

Construction of Discovery began on Aug. 27, 1979 and was completed four years later.

Discovery rolled out of the assembly plant building in Palmdale, Calif., in October 1983 and first launched Aug. 30, 1984.

When first flown, Discovery became the third operational orbiter, and it currently is the oldest in service.

It was named after two historic, Earth-bound exploring ships of the past. One was a vessel used by Henry Hudson in the early 1600s to explore the Hudson Bay and search for a northwest passage from the Atlantic to the Pacific.

The other was one of two ships used by the British explorer James Cook in the 1770s. Cook's voyages in the South Pacific led to the discovery of the Hawaiian Islands. Another of his ships was the Endeavour, the namesake of NASA's newest shuttle.

Discovery has had many notable flights and was the Return to Flight shuttle following the Challenger and Columbia accidents.

KEY DISCOVERY MISSIONS

STS-41D - Maiden Flight
STS-26 - Return to Flight after Challenger accident
STS-31 - Launch of Hubble Space Telescope
STS-60 - First flight of a Russian cosmonaut on a shuttle
STS-63 - First Mir rendezvous; first female pilot
STS-70 - First on-orbit shift in new Mission Control Center
STS-82 - Highest altitude known for a shuttle flight
STS-91 - Final shuttle-Mir docking
STS-95 - Flight to return John Glenn to orbit as oldest human to fly in space
STS-92 - Installation of the Z1 Integrated Truss Structure and PMA-3 to the International Space Station
STS-102 - First ISS crew rotation
STS-114 - Return to Flight after Columbia accident

STS-116 - P5 Truss installed
STS-124 - Delivery of Japan's Kibo Laboratory to ISS
STS-119 - Completed ISS Integrated Truss Segment
STS-128 - Final use of the shuttle for full ISS crew rotation
STS-131: Longest mission for Discovery, 15 days
STS-133: Final mission

THE NUMBERS

Total miles traveled: 148,221,675
Total time in space: 365 days
Total orbits: 5,830
Total flights: 39
Total crew members: 252
Mir dockings: 1
International Space Station dockings: 13
Pounds of hardware to the space station - 31,459



NASA Facts