

NASA Spacewalk History				SpaceCalc	
Year	Program	HH	MM	General Statistics (as of 04/22/01)	
1965-66	Gemini Program	011	35	103 EVAs by astronauts on American missions	
1969-72	Apollo Program	166	39	96 EVAs by Russian cosmonauts	
1973-74	Skylab Program	083	15	13 EVAs by non-Russian Mir crew members	
1983-	Shuttle Program	812	40	03 EVAs by U.S. Mir crew members	
				05 EVAs by U.S. astronauts outside Mir	
	63 Shuttle EVAs				
	32 Shuttle EVA flights			Longest single STS EVA: 08:56 (STS-102)	
				Shortest STS EVA: 03:05 (STS-41C)	
	Total Crew Hours	1074	09	Most EVA time in a single flight: 35:26 (STS-61)	
No.	Mission	Spacewalk Date	HH	MM	International Space Station EVA Notes
3	STS-88	12/07/98	07	21	ISS-2A: Node 1 connection to Zarya (Ross, Newman)
		12/09/98	07	02	ISS-2A
		12/12/98	06	59	ISS-2A
1	STS-96	05/29/99	07	55	ISS-2A.1: Station outfitting (Jernigan, Barry)
1	STS-101	05/21/00	06	44	ISS-2A.2a: Station outfitting (Voss, Williams)
1	STS-106	09/11/00	06	14	ISS-2A.2b: Zvezda connections (Lu, Malenchenko)
4	STS-92	10/15/00	06	28	ISS-3A: Z1, PMA-3 (Chiao, McArthur)
		10/16/00	07	07	ISS-3A (Wisoff, Lopez-Alegria)
		10/17/00	06	48	ISS-3A (Chiao, McArthur)
		10/18/00	06	56	ISS-3A (Wisoff, Lopez-Alegria)
3	STS-97	12/03/00	07	33	ISS-4A: P6 solar array truss (Tanner, Noriega)
		12/05/00	06	37	ISS-4A
		12/07/00	05	10	ISS-4A
3	STS-98	02/10/01	07	34	ISS-5A: Destiny lab module (Jones, Curbeam)
		02/12/01	06	50	ISS-5A
		02/14/01	05	25	ISS-5A

2 STS-102	03/11/01	08	56	ISS-5A.1: Station outfitting (Voss and Helms)
	03/13/01	06	21	ISS-5A.1 (Thomas and Richards)
1 STS-100	04/22/01	07	10	ISS-6A: SSRMS installation (Hadfield, Parazynski)
19 ISS EVAs	Total EVA time: 131 10			by 21 U.S. astronauts, 1 Russian cosmonaut
Compiled by William Harwood				

Gemini		Total:	11	35	Gemini Notes
1	Gemini 4	Edward White	00	23	1st U.S. spacewalk; jet gun used
2	Gemini 9	Eugene Cernan	02	08	Jetpack test called off; fogged visor
3	Gemini 10	Michael Collins	01	30	2 EVAs; visit to Agena rocket
4	Gemini 11	Richard Gordon	01	57	2 EVAs; "rode" Agena rocket
5	Gemini 12	Edwin Buzz Aldrin	05	37	3 EVAs
Apollo		Total:	166	39	Apollo Notes
6	Apollo 9	David Scott	01	01	Earth-orbit crew transfer from CM
		Russell Schweickart	01	07	to LM
7	Apollo 11	Neil Armstrong	02	32	First lunar surface EVA
		Edwin Buzz Aldrin	02	15	
8	Apollo 12	Pete Conrad	07	45	2 4-hour moonwalks in Ocean of
		Alan Bean	07	45	Storms; Surveyor 3 visit
9	Apollo 14	Alan Shepard	09	23	Lunar rickshaw used; crew misses
		Edgar Mitchell	09	23	Cone crater; golf shots on moon
10	Apollo 15	Alfred Worden	00	39	Hadley Rille; Lunar rover used for
		David Scott	19	08	1st time; Worden: CIS-Lunar EVA
		James Irwin	18	35	
11	Apollo 16	Ken Mattingly	01	24	Descartes area; Lunar rover used;
		John Young	20	14	Mattingly: CIS-Lunar EVA
		Charles Duke	20	14	
12	Apollo 17	Ronald Evans	01	06	Taurus-Littrow region; final moon-
		Eugene Cernan	22	04	walks; Evans: CIS-Lunar EVA
		Harrison Schmitt	22	04	

Skylab	Total:	83	15	Skylab Notes
13 Skylab 2	Pete Conrad Joseph Kerwin P.J. Weitz	05 03 01	51 30 44	Repair spacewalk to install a shade over station after solar panel ripped off in launch
14 Skylab 3	Alan Bean Owen Garriott Jack Lousma	02 13 10	45 44 59	Maintenance/science EVAs
15 Skylab 4	Gerald Carr Gibson Pogue	15 15 13	48 20 34	Maintenance/science EVAs
Shuttle	Total:	812	40	Shuttle Notes
16 STS-6 1 1 EVA	Story Musgrave Donald Peterson	04 04	17 17	04/83: First shuttle spacewalk
17 STS-41B 3 2 EVAs	Bruce McCandless Robert Stewart	06 06 05 06	00 17 35 02	02/84: Flight test of manned maneuvering unit; famous photo of McCandless against limb of Earth
18 STS-41C 5 2 EVAs	George Nelson James van Hoften	03 07 02 06	05 07 59 30	04/84: Solar Max repair spacewalks; MMU fails to grapple SMM; Terry Hart uses RMS to capture satellite; EVA-2 repair successful
19 STS-41G 6 1 EVA	David Leestma Kathryn Sullivan	03 03	29 29	10/84: First EVA by an American female; orbital refueling tested
20 STS-51A 8 2 EVAs	Joseph Allen Dale Gardner	12 12	14 14	11/84: Westar, Palapa satellite retrieval and repair; MMUs and stinger used to snag satellites; most visually dramatic EVA in shuttle history?

21	STS-51D	David Griggs	03	10	04/85: First contingency spacewalk; Leasat fails to activate	
9	1 EVA	Jeffrey Hoffman	03	10		
22	STS-51I	William Fisher	07	07	08/85: Leasat satellite stranded during STS-51D successfully hot wired and relaunched	
11	2EVAs		04	31		
		James van Hoften	07	20		
			04	31		
23	STS-61B	Sherwood Spring	05	34	11/85: Space station construction; EASE/ACCESS payload	
13	2 EVAs		06	46		
		Jerry Ross	05	34		
			06	46		
24	STS-37	Jerry Ross	04	27	04/91: 1st post-Challenger EVAs; Gamma Ray Observatory antenna freed in contingency work	
15	2 EVAs		05	57		
		Jay Apt	04	27		
			05	57		
25	STS-49	Pierre Thuot	03	43	05/92: Intelsat repair mission; 4 EVAs; 2 attempts by Thuot and Hieb to capture satellite; 3rd EVA, with Akers, succeeds when three astronauts manually grab satellite; 4th EVA by Akers and Thornton to practice space station construction Total: 33:56	
19	4 EVAs		05	30		
		Richard Hieb	03	43		
			05	30		
			08	29		
		Thomas Akers	08	29		
			07	45		
		Kathryn Thornton	07	45		
26	STS-54	Mario Runco	04	28		01/93: First generic space station EVA
20	1 EVA	Gregory Harbaugh	04	28		
27	STS-57	David Low	05	50	06/93: Eureka antennas stowed; HST tools, techniques, tested	
21	1 EVA	Jeff Wisoff	05	50		

28	STS-51	Carl Walz	07	05	09/93: Third generic ISS EVA
22	1 EVA	James Newman	07	05	
29	STS-61	Story Musgrave	07	53	12/93: Hubble repair mission; 1st flight with five back-to-back EVAs, three by Musgrave and Hoffman, two by Akers and Thornton; all mission objectives met Total EVA time: 35 :26 SINGLE FLIGHT RECORD
27	5 EVAs		06	47	
		Thomas Akers	07	21	
			06	35	
		Jeffrey Hoffman	06	50	
			07	53	
			06	47	
		Kathryn Thornton	07	21	
			06	35	
			06	50	
30	STS-64	Mark Lee	06	51	09/94: Tested SAFER backpack
28	1 EVA	Carl Meade	06	51	
31	STS-63	Michael Foale	06	39	02/95: ISS EVA cut short due to low temps in spacesuits
29	1 EVA	Bernard Harris	06	39	
32	STS-69	Michael Gernhardt	06	46	09/95: Suit modifications tested; low temps no problem
30	1 EVA	James Voss	06	46	
33	STS-72	Leroy Chiao	06	09	01/96: ISS connectors, tools tested
32	2 EVAs		06	53	
		Daniel Barry	06	09	
		Winston Scott	06	53	
34	STS-76	Rich Clifford	06	02	03/96: ISS tools tested; experiments mounted on Mir module
33	1 EVA	Linda Godwin	06	02	

35	STS-82	Mark Lee	06	42	02/97: HST servicing mission No. 2; 5th spacewalk added to repair ripped insulation on telescope; all flight objectives met Total: 33:11
38	5 EVAs		07	11	
		Steven Smith	05	17	
			06	42	
			07	11	
		Gregory Harbaugh	05	17	
			07	27	
		Joseph Tanner	06	34	
			07	27	
			06	34	
36	STS-86	Scott Parazynski	05	01	10/97: Shuttle-Mir docking mission No. 7; experiment retrieval from Mir; SAFER tests
39	1 EVA	Vladimir Titov (CIS)			
37	STS-87	Winston Scott	7	43	11-12/97: Manual Spartan-201 retrieval; problems with deploy on 11/21; ISS crane ops; additional crane tests added in second, unplanned EVA
41	2 EVAs		4	59	
		Takao Doi	7	43	
			4	43	
38	STS-88	Jerry Ross	07	21	12/7-12/98: First space station assembly EVAs to connect and outfit Unity, Zarya modules; highly successful Total: 21:22
44	3 EVAs		07	02	
			06	59	
		James Newman	07	21	
			07	02	
			06	59	
39	STS-96	Tamara Jernigan	07	55	05/29-30/99: 2nd ISS assembly spacewalk; U.S., Russian crane, tools mounted
45	1 EVA	Daniel Barry	07	55	
40	STS-103	Steven Smith	08	15	12/22-24/99: Hubble Space Telescope Servicing Mission 3A; Six new gyroscopes installed, new computer, fine guidance sensor, S-band transmitter, insulation Total: 24:33
48	3 EVAs		08	08	
		John Grunsfeld	08	15	
			08	08	
		Michael Foale	08	15	
		Claude Nicollier	08	15	

41	STS-101	James Voss	06	44	05/21-22/00: ISS 2A.2a: Installation of Strela boom on PMA-1; replacement of early communications antenna on Unity; insulation on handrails; TV cable
49	1 EVA	Jeffrey Williams	06	44	
42	STS-106	Edward Lu	06	14	9/11/00: ISS 2A.2b: Work to electrically connect Russian Zvezda command module; magnetometer installation; tool boxes
50	1 EVA	Yuri Malenchenko	06	14	
43	STS-92	Leroy Chiao	06	28	10/15-18/00: ISS 3A: EVA crew members staged four back-to-back spacewalks to electrically connect Z1 truss; attach PMA-3; complete umbilicals connections and other work Total: 27:19
54	4 EVAs	William McArthur	06	28	
		Jeff Wisoff	06	48	
			07	07	
		Mike Lopez-Alegria	06	56	
			07	07	
44	STS-97	Joseph Tanner	07	33	11/30/00-12/11/00: ISS 4A: Install P6 solar arrays; starboard wing deployed during first spacewalk; port array deployed the next day after trouble with sprung tension wires on starboard array. P6 wired into station system during second EVA; loose array blanket fixed during third EVA. Total: 19:20
57	3 EVAs		06	37	
			05	10	
		Carlos Noriega	07	33	
			06	37	
			05	10	
45	STS-98	Thomas Jones	07	34	02/07-18/01: The Destiny lab module was attached to the space station with the shuttle Atlantis' RMS; Jones and Curbeam then hooked it into the station's electrical system; attached four ammonia coolant lines; helped re-attach PMA-2; helped deploy a P6 radiator; installed a shutter on the lab's window; inspected the P6 four-bar linkage; mounted spare SASA S-band antenna array on Z1. Total: 19:49
60	3 EVAs		06	50	
			06	25	
		Robert Curbeam	07	34	
			06	50	
			06	25	
46	STS-102	James Voss	08	56	03/08-20/01: PMA-3 was moved from the Unity module's nadir hatch to the module's port hatch during a spacewalk by Voss and Helms.
62	2 EVAs	Susan Helms	08	56	

	Andrew Thomas	06	21	They also installed the station robot arm cradle assembly on the Destiny module and a cable tray carrying SSRMS video and data. Thomas and Richards: Additional outfitting. EVA RECORD: 8:56 Total: 15:17
	Paul Richards	06	21	
47 STS-100	Chris Hadfield	07	10	04/19-30/01: The Canadarm 2 space crane was installed on the hull of the U.S. laboratory module, Destiny, during the first of two planned spacewalks to install and activate the \$900 million crane.
63 2 EVAs	Scott Parazynski	07	10	