ASTRONAUTS

COSMONAUTS

TAIKONAUTS

Association of Space Explorers
(A S E)

Astronaut Class Patches

Astronaut Groups

Astronaut Personal Patches

Astronaut Groups / Astronaut Class Patches /
Astronaut Personal Patches

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ISBN

ISBN-10

Published Autumn 2023

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The **Association of Space Explorers (ASE)** is a non-profit organisation with a membership composed of people who have completed at least one Earth orbit in space (above 100 km (62 mi), as defined by the Federation Aeronautique Internationale.

It was founded in 1985, and its current membership stands at over 400 from 37 different countries.

The organization provides a forum for the promotion of space exploration, as well as space science and engineering and environmental awareness.

Inspired by his friendship with author
Michael Murphy and involvement in the
Esalen Institute's Soviet-American Exchange Program, NASA astronaut Rusty Schweickart established the Association along with cosmonauts Alexei Leonov, Vitaly Sevastyanov and Georgi Grechko

United States

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America

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Part I

Astronaut Groups

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Original Seven / Astronaut Group 1

The **Mercury Seven** were the group of seven astronauts selected to fly spacecraft for Project Mercury.
They are also referred to as the **Original Seven** and **Astronaut Group 1.**

Their names were publicly announced by NASA on April 9, 1959; these seven original American astronauts were :

Scott Carpenter, Gordon Cooper, John Glenn, Gus Grissom, Wally Schirra, Alan Shepard, and Deke Slayton

The 1959 NASA Astronaut Class : Mercury Seven

Alan Shepard: Second person, and the first American, to travel into space in 1961 - Mewrcury 3 – (suborbital flight)

Gus Grissom: Command Pilot for the first crewed Gemini mission in 1965 - Gemini 3 -

John Glenn: Piloted the first crewed American orbital spaceflight - Mercury 6 -

The 1959 NASA Astronaut Class , cont.

John Glenn's mission patches and personal emblem

Mercury 6 / Friendship 7
February 20, 1962

Space Shuttle STS-95 / Discovery
October 29, until November 07, 1998

Next Nine / New Nine Astronaut Group 2

NASA Astronaut Group 2, also known as the **Next Nine** and the **New Nine**, was the second group of astronauts selected by the NASA.

Their selection was announced on September 17, 1962.
The nine astronauts were :

Neil Armstrong, Frank Borman, Pete Conrad, Jim Lovell, James McDivitt, Elliot See, Tom Stafford, Ed White, and John Young

The 1962 NASA Astronaut Class : Next Nine

Neil Armstrong: Commander of the first manned lunar landing on July 20, 1969 - Apollo 11 - On July 21, 1969 at 02:56:20 UTC he set his left foot on the surface of the Moon

John Young: Commander of the first flight of the reusable Space Shuttle spacecraft – STS-1 - on April 12, 1981

Astronaut Group 3

Group 3 astronauts
(back row, left to right)
Collins, Cunningham, Eisele, Freeman, Gordon, Schweickart, Scott, Williams
(front row, left to right)
Aldrin, Anders, Bassett, Bean, Cernan, Chaffee

The 1963 NASA Astronaut Class : The Fourteen

Buzz Aldrin: Lunar Module Pilot of the first manned lunar landing on July 20, 1969 - Apollo 11 - On July 21, 1969 at 03:09:20 UTC he stepped on the surface of the moon as the second human being

Rusty Schweickart: First American person to perform an EVA on March 6, 1969 - Apollo 9 -

Astronaut Group 4

The 1965 NASA Astronaut Class : The Scientists

Group 4 astronauts

[top picture]

(back row, left to right)

Garriott, Gibson

(front row, left to right)

Michel, Schmitt, Kerwin

[bottom picture]

Graveline

Astronaut Group 5

Group 5 astronauts

(back row, left to right)
Swigert, Pogue, Evans, Weitz, Irwin,
Carr, Roosa, Worden, Mattingly, Lousma

(front row, from left to right)
Givens, Mitchell, Duke, Lind, Haise,
Engle, Brand, Bull, McCandless

The 1966 NASA Astronaut Class : The Original 19

McCandless: He becoming the first person to make an untethered spacewalk (EVA)
- Space Shuttle STS-41-B -
February 3, 1984 until February 11, 1984

XS-11 , Excess Eleven / Astronaut Group 6

Group 6 astronauts

(back row, left to right)
Henize, England, Holmquest, Musgrave, Lenoir

(front row, from left to right)
Chapman, Parker, Thornton, Llewellyn

(flanking the group)
Allen (left), O'Leary (right)

The 1967 NASA Astronaut Class : XS-11 (The Excess Eleven)

Astronaut Group 7

Group 7 astronauts

(left to right)
Bobko, Fullerton, Hartsfield, Crippen, Peterson, Truly and Overmyer

The 1969 NASA Astronaut Class : Group 7

Robert Crippen: Pilot of the first flight of the reusable Space Shuttle spacecraft – STS-1 - on April 12, 1981

Astronaut Group 8

Group of 35 Astronauts

The six women astronaut candidates pose with the Personal Rescue Enclosure (PRE)

The 1978 NASA Astronaut Class : TFNG (Thirty-Five New Guys)

Artwork by Robert McCall

Astronaut Group 8 , cont.

Pilots:

Daniel Brandenstein, Michael Coats, Richard Covey, John Creighton, Robert Gibson, Frederick D. Gregory, Frederick Hauck, Jon McBride, Francis "Dick" Scobee, Brewster Shaw, Loren Shriver, David Walker, Donald Williams

Mission specialists:

Guion Bluford, James Buchli, John Fabian, Anna Fisher, Dale Gardner, S. David Griggs, Terry Hart, Steven Hawley, Jeffrey Hoffman, Shannon Lucid, Ronald McNair, Richard Mullane, Steven Nagel, George Nelson, Ellison Onizuka, Judith Resnik, Sally Ride, Rhea Seddon, Robert Stewart, Kathryn D. Sullivan, Norman Thagard, James van Hoften

Sally Ride:

First American woman and the third woman to fly in space (1983)
- Space Shuttle STS-7 -
June 18, 1983 until June 24, 1983

Kathryn Sullivan:

First American woman to perform an EVA (1984)
- Space Shuttle STS-41-G -
October 5, until October 13, 1984

Astronaut Group 8 , cont.

From CollectSACE :

There appears to be two, possibly three variations of the original 1978 NASA astronaut class (TFNG, or "Thirty-Five New Guys") patch:

Yellow left side white ET/SRBs
Orange left side white ET/SRBs
Orange left side with two-toned ET/SRBs

On the right is a scan of two originals (top) and the later replica (bottom).
The top right original belonged to Shannon Lucid
I don't have provenance of the left patch, the construction is identical. They have the same thin, somewhat flexible construction as original STS-1 and STS-2 patches seemed to have. The fill style of the replica sets it apart, though it is an admirable replica.

Astronaut Group 8 , cont.

Tim Gagnon / KSCartist :

On the right is the remake

I did for the Thirty Five New Guys (TFNGs)

this year (2023)

Astronaut Group 9

Group 9 astronauts
(back row, left to right)
Gardner, Springer, O'Connor, Ockels, Smith, Lounge
(middle row, from left to right)
Bagian, Blaha, Nicollier, Hilmers, Fisher, Dunbar, Ross
(front row, from left to right)
Bolden, Chang-Diaz, Cleave, Leestma, Spring, Richards, Bridges

The group 9 marked the first time that non-Americans were trained as mission specialists with the selections of ESA astronauts Claude Nicollier and Wubbo Ockels

The 1980 NASA Astronaut Class : 19+80

The patch features nineteen stars representing the nineteen NASA astronauts belonging to the group

Astronaut Group 10

Pilots:

Kenneth Cameron, John Casper, Frank Culbertson, Sidney Gutierrez, Blaine Hammond, Michael McCulley, James Wetherbee

Mission specialists:

James Adamson, Ellen Baker, Mark Brown, Sonny Carter, Marsha Ivins, Mark Lee, David Low, William Shepherd, Kathryn Thornton, Charles "Lacy" Veach

William Shepherd: First International Space Station commander - ISS Expedition 1 - October 31, 2000 until March 19, 2001

The 1984 NASA Astronaut Class : The Maggots

Astronaut Group 11

Pilots:
Michael A. Baker, Robert D. Cabana, Brian Duffy,
Terence Henricks, Stephen Oswald, Stephen Thorne

Mission specialists:
Jerome Apt, Charles Gemar, Linda Godwin, Richard Hieb,
Tamara Jernigan, Carl Meade, Pierre Thuot

Robert Cabana: Commander of the first Space Shuttle mission to the ISS
- Space Shuttle STS-88 -
December 4, until December 16, 1998

The 1985 NASA Astronaut Class : NASA Astronaut Group 11

Brian Duffy: Commander of the 100th mission of the Space Shuttle
- Space Shuttle STS-92 -
October 11, until October 24, 2000

Astronaut Group 12

Pilots:
Andrew M. Allen, Kenneth Bowersox, Curtis Brown, Kevin Chilton, Donald McMonagle, William Readdy, Kenneth Reightler

Mission specialists:
Thomas Akers, Jan Davis, Michael Foale, Gregory Harbaugh, Mae Jemison, Bruce Melnick, Mario Runco, James Voss

Gregory Harbaugh: Commander of the first Space Shuttle mission to dock with the Russian Space Station MIR
- Space Shuttle STS-71 -
June 27, 1995 until July 7, 1995

The 1987 NASA Astronaut Class : The GAFFers

The group's informal nickname is an acronym for "George Abbey Final Fifteen" (GAFFers)
[George Abbey: former director of JSC]

Astronaut Group 13

Pilots:

Kenneth Cockrell, Eileen Collins, William G. Gregory, James Halsell, Charles Precourt, Richard Searfoss, Terrence Wilcutt

Mission specialists:

Daniel Bursch, Leroy Chiao, Michael R. Clifford, Bernard Harris, Susan Helms, Thomas David Jones, William McArthur, James Newman, Ellen Ochoa, Ronald Sega, Nancy Currie, Donald A. Thomas, Janice Voss, Carl E. Walz, Peter Wisoff, David Wolf

The 1990 NASA Astronaut Class : The Hairballs

The group name came from its selection of a black cat as a mascot, to play against the traditional unlucky connotations of the number 13

Astronaut Group 13 , cont.

Eileen Collins: First female pilot of a U.S. Spacecraft
- Space Shuttle STS-63 -
February 3, 1995 until February 11, 1995

First female commander of a U.S. Spacecraft
- Space Shuttle STS-93 -
July 23, 1999 until July 28, 1999

The 1990 NASA Astronaut Class , cont.

Astronaut Group 14

The group's name derived from *The Muppet Show* skit "Pigs in Space" and from the group's sponsorship of a pot-belliot pig at the Houston Zoo

The 1992 NASA Astronaut Class : The Hogs

Astronaut Group 14 , cont.

Pilots:

Scott Horowitz, Brent Jett, Kevin Kregel, Kent Rominger

Mission specialists:

Daniel T. Barry, Charles Brady, Catherine Coleman, Michael Gernhardt, John Grunsfeld, Wendy Lawrence, Jerry Linenger, Richard Linnehan, Michael Lopez-Alegria, Scott Parazynski, Winston Scott, Steven Smith, Joseph Tanner, Andy Thomas, Mary Weber

International mission specialists:

Marc Garneau (Canada) , Chris Hadfield (Canada), Maurizio Cheli (Italy) , Jean-François Clervoy (France), Koichi Wakata (Japan)

Marc Garneau:	First Canadian in outer space on October 1984 - Space Shuttle STS-41-G - October 5, until October 13, 1984
Chris Hadfield:	First Canadian national as commander of the ISS Expediton 35 March 13, 2013 until May 13, 2013
Koichi Wakata:	First Japanese national as commander of the ISS Expediton 39 March 09, 2014 until May 12, 2014

The 1992 NASA Astronaut Class , cont.

Astronaut Group 15

Pilots:
Scott Altman, Jeffrey Ashby, Michael Bloomfield, Joe Edwards, Dominic Gorie, Rick Husband, Steven Lindsey, Pamela Melroy, Susan (Still) Kilrain, Frederick Sturckow

Mission specialists:
Michael Anderson, Kalpana Chawla, Robert Curbeam, Kathryn Hire, Janet Kavandi, Edward Lu, Carlos Noriega, James Reilly, Stephen Robinson

International mission specialists:
Jean–Loup Chrétien (France) , Takao Doi (Japan), Michel Tognini (France) , Dafydd Williams (Canada).

The 1994 NASA Astronaut Class : The Flying Escargot

Group members adopted *The Flying Escargot* as their moniker, in reference to two members of the group being from France

Jean–Loup Chrétien: First Frenchman and the first western European in space (1982) - Soyuz T-6 - First non-US or Soviet/Russian astronaut to perform a space walk (1988) - Soyuz TM-7 -

Astronaut Group 16

Pilots:
Duane G. Carey, Stephen Frick, Charles O. Hobaugh, James M. Kelly, Mark Kelly, Scott Kelly, Paul Lockhart, Christopher Loria, William Cameron McCool, Mark Polansky

Mission specialists:
David McDowell Brown, Daniel C. Burbank, Yvonne Cagle, Fernando Caldeiro, Charles Camarda, Laurel Clark, Michael Fincke, Patrick G. Forrester, John Herrington, Joan Higginbotham, Sandra Magnus, Michael J. Massimino, Richard Mastracchio, Lee Morin, Lisa Nowak, Donald Pettit, John L. Phillips, Paul W. Richards, Piers Sellers, Heidemarie Stefanyshyn-Piper, Daniel M. Tani, Rex Walheim, Peggy Whitson, Jeffrey Williams, Stephanie Wilson.

The 1996 NASA Astronaut Class : The Sardines

The class was nicknamed "The Sardines" for being such a large class (group of 44 astronauts), humorously implying that their training sessions would be as tightly packed as sardines in a can

Astronaut Group 16 , cont.

International mission specialists:

Pedro Duque (Spain) , Christer Fuglesang (Sweden),
Umberto Guidoni (Italy) , Steve MacLean (Canada),
Mamoru Mohri (Japan) , Soichi Noguchi (Japan),
Julie Payette (Canada) , Philippe Perrin (France),
Gerhard Thiele (Germany)

Peggy Whitson: First female commander of the ISS Expediton 16
October 19, 2007 until April 17, 2008

Scott Kelly: ISS year long mission
(March 2015 until March 2016)
Launch and landing vehicles for
ISS Expedition 43-46 :
- Soyuz TMA-16M (up) -
- Soyuz TMA-18M (down) -

The 1996 NASA Astronaut Class , cont.

Astronaut Group 17

Pilots:
Lee Archambault, Christopher Ferguson, Kenneth Ham, Gregory C. Johnson, Gregory H. Johnson, William Oefelein, Alan Poindexter, George Zamka

Mission specialists:
Clayton Anderson, Tracy Caldwell, Gregory Chamitoff, Timothy Creamer, Michael Foreman, Michael E. Fossum, Stanley Love, Leland Melvin, Barbara Morgan, John D. Olivas, Nicholas Patrick, Garrett Reisman, Patricia Robertson, Steven Swanson, Douglas Wheelock, Sunita Williams, Neil Woodward

The 1998 NASA Astronaut Class : The Penguins

International mission specialists:
Léopold Eyharts (France), Paolo Nespoli (Italy), Marcos Pontes (Brazil), Hans Schlegel (Germany), Robert Thirsk (Canada), Bjarni Tryggvason (Canada), Roberto Vittori (Italy)

Astronaut Group 18

Pilots:

Dominic A. Antonelli, Eric A. Boe, Kevin A. Ford, Ronald J. Garan, Jr., Douglas G. Hurley, Terry W. Virts, Jr., Barry E. Wilmore

Mission specialists:

Michael R. Barratt, Robert L. Behnken, Stephen G. Bowen, B. Alvin Drew, Andrew J. Feustel, Michael T. Good, Timothy L. Kopra, K. Megan McArthur, Karen L. Nyberg, Nicole P. Stott

The 2000 NASA Astronaut Class : The Bugs

Astronaut Group 19

Bresnik in 2009

The 2004 NASA Astronaut Class : The Peacocks

Pilots:

Randolph Bresnik, James Dutton

Mission specialists:

Thomas Marshburn, Christopher Cassidy, R. Shane Kimbrough, José M. Hernández, Robert Satcher, Shannon Walker

Educator mission specialists:

Joseph M. Acaba, Richard R. Arnold, Dorothy Metcalf–Lindenburger

International mission specialists:

Satoshi Furukawa (Japan) , Akihiko Hoshide (Japan), Naoko Yamazaki (Japan)

The 2004 NASA Astronaut Class , cont.
The Peacocks

From CollectSACE :

When NASA's 2004 astronaut candidate class unveiled its patch, it included elements that symbolize the unique aspects of the class.

The astronaut class of 2004 is the first since the announcement of the Vision of Space Exploration, which calls for NASA to return humans to the moon and then to send humans to Mars.

To symbolize the Vision, the patch features the moon and Mars.

There are also 14 stars, representing the class members. The stars are arranged in the constellation of Carina, the keel of the Argonauts' ship. Like the Argonauts, the astronauts will explore the unknown. In the foreground, an image of the Earth includes the 16 partner nations of the ISS program. The research on the station is providing knowledge that will allow NASA to conduct long-duration spaceflights to the moon and Mars. Since this is the 19th astronaut candidate class, the patch has an image of an open book with the Roman numeral for 19 on the cover. The open book represents the educator astronauts who are members of the class and the importance that education has in space exploration. This is the first astronaut candidate class to include educator astronauts. The U.S. and Japanese flags are on the upper border of the patch. There are 11 U.S. members and three Japanese members in the class.

Finally, the other three borders contain the Latin words "Explorandi Concitandi Docendi Gratia," the central theme of NASA's mission: for the sake of exploring, inspiring and teaching.

Astronaut Group 20

Mission specialists:

Serena M. Auñón, Jeanette J. Epps, Jack D. Fischer, Michael S. Hopkins, Kjell N. Lindgren, Kathleen (Kate) Rubins, Scott D. Tingle, Mark T. Vande Hei, Gregory R. (Reid) Wiseman

International mission specialists:

Jeremy Hansen (Canada) , Norishige Kanai (Japan), Takuya Onishi (Japan) , David Saint-Jacques (Canada), Kimiya Yui (Japan)

The 2009 NASA Astronaut Class : The Chumps

From CollectSACE :

Look closely at the Earth in the patch and you may see a cloud that is decidedly a banana-shape.

...Vande Hei said that the Chumps posed for a similar fun [crew photo]. "We posed with bananas," he described. But if they are the Chumps and not the chimps, how does that reflect the 2009 class? "Our mascot is Chump the Chimp," explained Vande Hei.

Astronaut Group 21

Josh A. Cassada, Victor J. Glover,

Tyler N. Hague, Christina M. Hammock,

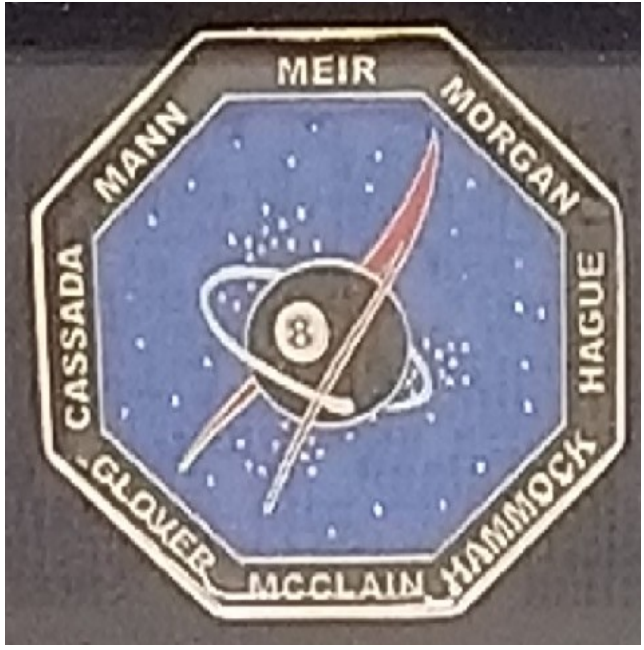
Nicole Aunapu Mann, Anne C. McClain,

Jessica U. Meir, Andrew R. Morgan

The 2013 NASA Astronaut Class : The 8 Balls

The 2013 NASA Astronaut Class , cont.
The 8 Balls

Traditionally, the upcoming class is given a nickname by the previous class.
Following this custom, the class of 2009 (also known as "The Chumps") christened the 2013 class the "Eight Balls" in reference to there being eight of them.
Bob Behnken, then Chief of the Astronaut Office, stated in an interview that the name further represents that, "The eight ball [in billiards or pool] is played last and the hope from the preceding class is that the [2013 astronaut candidates] will be assigned after all of them [fly]



Astronaut Group 22

The members of the 2017 NASA Astronaut Class are :
(from top left)

Matthew Dominick, Kayla Barron, Warren Hoburg, Josh Kutryk (Canada) , Bob Hines, Frank Rubio, Jenni Sidey_Gibbons (Canada) , Jasmin Moghbeli, Jessica Watkins, Raja Chari, Jonny Kim, Zena Cardman, and Loral O' Hara

The 2017 NASA Astronaut Class : The Turtles

The group earned their "Turtles" nickname after experiencing flooding from Hurricane Harvey shortly after arriving at NASA. The name was chosen by the preceding astronaut group, "The 8-Balls", according to NASA traditions

Astronaut Group 23

Portrait of NASA's 23rd class of astronaut candidates
(from the left)
Christopher Williams, Andre Douglas,
Mohammad Al Mulla (United Arab Emirates), Jessica Wittner,
Marcos Berríos, Deniz Burnham, Nichole Ayers,
Nora Al Matrooshi (United Arab Emirates) , Jack Hathaway,
Christina Birch, Luke Delaney and Anil Menon

From CollectSACE :

Where is stars on US flag?

It is not uncommon for patches to forgo the stars due to the limits of embroidery. At the size the flag will appear on the physical patch, it might be too small to stitch individual stars. Some patches also omit the stars for design purposes.

The 2021 NASA Astronaut Class : The Flies

Astronaut candidates' fly-shaped class patch is a lunar 'slam dunk'

The 12 spaceflight trainees were given their official nickname, "The Flies," continuing a tradition that began with NASA's first class of astronauts in 1959

Next Astronaut Group 24

The 202 . . NASA Astronaut Class :

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Space Shuttle - Payload Specialists

P a r t I I

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Spacelab - 1 Payload Specialists

May 1978

left :

Michael L. Lampton

right :

Byron K. Lichtenberg

Spacelab - 2 Payload Specialists
August 1978

George W. Simon

Dianne K. Prinz

Loren W. Acton

John-David F. Bartoe

Spacelab - 3 Payload Specialists
June 1983

Taylor G. Wang

Mary H. Johnston

Lodewijk van den Berg

Eugene H. Trinh

McDonnell Douglas Payload Specialists
July 1983

Robert J. Wood

Charles D. Walker

Spacelab – 4 Payload Specialists
January 1984

left :
Andrew Gaffney

right :
Millie E. Hughes-Fulford

Robert W. Phillips

Bill A. Williams

US Navy Civil Observer Selection
June 1984

left :

Paul Scully-Power

right :

Robert E. Stevenson

ASTRO – 1 Payload Specialists
June 1984

Kenneth H. Nordsieck

Ronald A. Parise

Samuel T. Durrance

Hughes Payload Specialists
July 1984

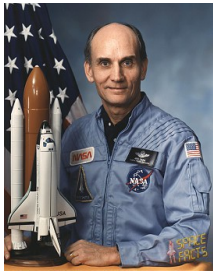
L. William Butterworth

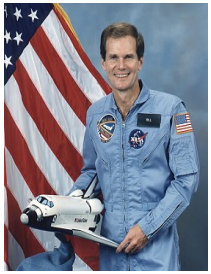
Gregory B. Jarvis

John H. Konrad

Stephen L. Cunningham

Congress Observer Selection
November 1984





left :

E. Jacob Garn

right .

C. William Nelson

RCA Payload Specialists
April 1985

Gerard E. Magilton

Robert J. Cenker

RCA Astro-Electronics

Teacher in Space Selection
July 1985

Barbara R. Morgan

S. Christa McAuliffe

Teacher in Space 1986 version

Teacher in Space 2007 version

Sunlab Payload Specialists
August 1985

John-David F. Bartoe

Dianne K. Prinz

STS 51-F mission patch

Terra Scout Selection
September 1988

Thomas J. Hennen

Michael E. Belt

John E. Hawker

IML – 1 Payload Specialists
January 1989

Roger K. Crouch

SLS - 1 Payload Specialists
February 1989

left :
F. Andrew Gaffney

right :
Millie E. Hughes-Fulford

Robert W. Phillips

ATLAS Payload Specialists
September 1989

Dirk Fremont (ESA)

Michael L. Lampton

Byron K. Lichtenberg

Charles R. Chappell

USML - 1 Payload Specialists
August 1990

Lawrence J. DeLucas

Joseph M. Prahl

Albert Sacco

Eugene H. Trinh

SLS - 2 Payload Specialists
December 1991

left :
Jay C. Buckey

right :
Martin J. Fettman

Laurence R. Young

ASTRO - 2 Payload Specialists
May 1993

left :
Samuel T. Durrance

right :
Ronald A. Parise

Scott D. Vangen

USML - 2 Payload Specialists

June 1994

left :
Fred W. Leslie

right :
Albert Sacco

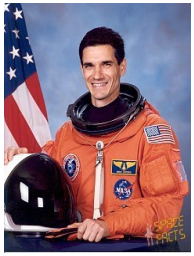
R. Glynn Holt

David Matthiesen

MSL – 1 Payload Specialists

February 1996

left :
Roger K. Crouch



right :
Gregory T. Linteris

Paul D. Ronney

Neurolab Payload Specialists

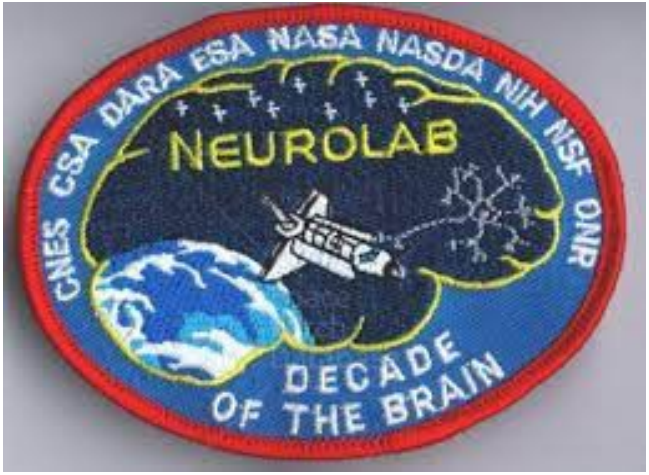
April 1996

Jay C. Buckey

James A. Pawelczyk

and

Alexander Dunlap



ATTACHMENT

E V A patch

ATTACHMENT

Space Shuttle accident with fatalities

Space Shuttle STS 51-L mission

Ellison S. Onizuka, S. Christa McAuliffe, Gregory B. Jarvis,

Judith A. Resnik, Michael J. Smith, Francis R. "Dick" Scobee,

Ronald E. McNair

Launch date: January 28, 1986, 11:38:00 am EST
Destroyed: January 28, 1986, 11:39:13 am EST

During the ascent phase, 73 seconds after liftoff, Space Shuttle „Challanger" experienced a catastrophic structural failure resulting in the loss of crew and vehicle

STS 51-L mission patch

STS 51-L „Challenger Crew" Memorial patch

Space Shuttle accident with fatalities

Space Shuttle STS 107 mission

David Brown, Laurel Clark, Michael Anderson, Ilan Ramon,

Rick Husband, Kalpana Chawla, William McCoo

Launch date: January 16, 2003, 15:39:00 UTC
Decay date: February 1, 2003, 13:59:32 UTC

KSC landing was planned after a 16-day mission, but „Columbia“ and crew were lost during re-entry over Texas, 16 minutes prior to the scheduled touchdown at KSC

STS 107 mission patch

STS 107 „Columbia Crew“ Memorial patch

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United States

of

America

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Part III

Astronaut
Personal Patches

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Astronaut Group 8 : **Shannon Lucid**

Astronaut Group 8 : **Norman Thagard**

Astronaut Group 9 : **John Blaha**

Astronaut Group 12 : **Michael Foale**

Astronaut Group 13 : **William McArthur**

Astronaut Group 14 : **Wendy Lawrence**

Astronaut Group 13 : **David Wolf**

Astronaut Group 14 : **Jerry Linenger**

Astronaut Group 14 : **Michael Lopez-Alegria**

Astronaut Group 14 : **Andrew Thomas**

Astronaut Group 15 : Edward Lu

Astronaut Group 16 : Jeffrey Williams

Astronaut Group 16 : Scott J. Kelly

Astronaut Group 17 : Michael Fossum

Astronaut Group 17 : **Barbara Morgan**

Astronaut Group 17 : **Douglas Wheelock**

Astronaut Group 18 : **Ronald Garan**

Astronaut Group 18 : **Megan McArthur**

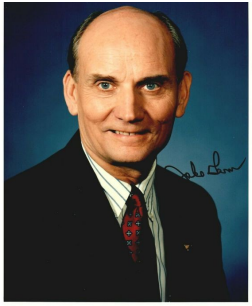
Astronaut Group 19 : **Thomas Marshburn**

U.S. Navy Payload Specialist : **Paul Scully-Power**

The 1988 Mission Operations „Space Shuttle“ patch

Congress Observer Selection :

Senator Jacob Garn



Congress Observer Selection :

Congressman William Nelson

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Russian

Federation

(Russia)

- - ROSCOSMOS - -

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Air Force Group 1 (USSR)
TsPK – 1 Selection
March 1960

Ivan Anikeyev, Pavel Belyayev, Valentin Bondarenko,
Valery Bykovsky, Valentin Filatyev, Yuri Gagarin,
Viktor Gorbatko, Anatoli Kartashov, Yevgeny Khrunov,
Vladimir Komarov, Alexei Leonov, Grigori Nelyubov,
Andrian Nikolayev, Pavel Popovich, Mars Rafikov,
Georgi Shonin, Gherman Titov, Valentin Varlamov,
Boris Volynov, and Dmitri Zaikin

Female Group (USSR)
March 1962

Tatyana Kuznetsova, Valentina Ponomaryova,
Irina Solovyova, Valentina Tereshkova, and Zhanna Yorkina

Gherman Titov

Vostok 2

Andrian Nikolayev

Vostok 3

Pavel Popovich

Vostok 4

Valery Bykovsky

Vostok 5

Vladimir Komarov

Voskhod 1

Pavel Belyayev

Voskhod 2

Air Force Group 1 (USSR) , cont.

Yuri Gagarin:

First human to travel into space

On April 12, 1961, at 6:07 UTC,
the Vostok 3KA-3 spacecraft launched
from the Baikonur Cosmodrome.
After a flight time of 1 hour , 48 minutes
and 1 Earth orbit, Gagarin exited
the descending capsule as planned at
an altitude of about 7,000 meters and
landed on a parachute - Vostok 1 -

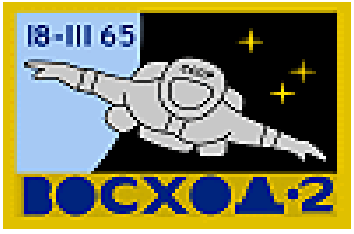
Vostok 1

LUCREATION :
YURI GAGARIN 1961 SPACEFLIGHT
COMMEMORATIVE PATCH

Air Force Group 1 (USSR) , cont.

Alexei Leonov:

On 18 March 1965, he became the
First person to conduct a spacewalk (EVA or VDK),
exiting the capsule during the Voskhod 2 mission,
March 18, 1965 until March 19, 1965,
for 12 minutes and 9 seconds



Voskhod 2

Female Group (USSR) , cont.

Valentina Tereshkova:

First woman in space ,
only woman to have flown into space solo, - Vostok 6 -
June 16, 1963 until June 19, 1963

Cosmonaut
Valentina Tereshkova
was the first woman
to wear a mission
emblemon on
her spacesuit,
although it was
hidden from view.

Air Force Group 2 (USSR)
TsPK – 2 Selection
January 1963

Yuri Artyukhin, Eduard Buinovski, Lev Dyomin, Georgy Dobrovolsky, Anatoly Filipchenko, Aleksei Gubarev, Vladislav Gulyayev, Pyotr Kolodin, Eduard Kugno, Anatoli Kuklin, Aleksandr Matinchenko, Vladimir Shatalov, Lev Vorobyov, Anatoly Voronov, and Vitaly Zholobov

and

Air Force Group 2 Supplemental (USSR)
January 1964

Georgi Beregovoi

Vladimir Shatalov

Anatoly Filipchenko

Aleksei Gubarev

Georgy Dobrovolsky

Voskhod - 1 Selection

Medical Group 1 (USSR)
May 1964

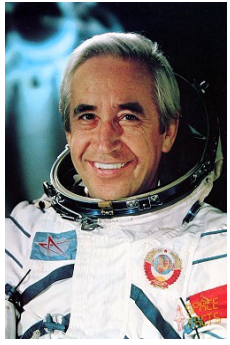
Vladimir Benderov, Georgy Katys, Vasili Lazarev, Boris Polyakov, Aleksei Sorokin, Boris Yegorov

and

Civilian Specialist Group 1 (USSR)
June 1964

Konstantin Feoktistov

Konstantin Feoktistov



Voskhod 1

Boris Yegorov

Voskhod 1

Voskhod - 2 Selection

Journalist Group 1 (USSR)
July 1965

Yaroslav Golovanov, Yuri Letunov, Mikhail Rebrov

and

Medical Group 2 (USSR)
July 1965

Yevgeni Illyin, Aleksandr Kiselyov, Yuri Senkevich.

All were subsequently canceled to make way for the Soviet Moon program and dismissed at the beginning of the following year

Civilian Specialist Group 2 (USSR) Korolyov-Group
September 1965

Sergei Anokhin, Vladimir Bugrov, Gennadi Dolgopolov, Georgi Grechko, Valeri Kubasov, Oleg Makarov, Nikolai Rukavishnikov, Vladislav Volkov, Valeri Yazdovsky, Aleksei Yeliseyev

and

Civilian Specialist Group 2 Supplemental (USSR)
May 1966

Nikolai Rukavishnikov and Vitali Sevastyanov

Georgi Grechko

Valeri Kubasov

Oleg Makarov

Nikolai Rukavishnikov

Vladislav Volkov

Aleksei Yeliseyev

Air Force Group 3 (USSR)
TsPK - 3 Selection
October 1965

Boris Belousov, Vladimir Degtyarov, Anatoli Fyodorov,
Yuri Glazkov, Vitali Grishchenko, Veygeni Khludeyev,
Leonid Kizim, Pyotr Klimuk, Gennadi Kolesnikov,
Aleksandr Kramarenko, Mikhail Lisun,
Aleksandr Petrushenko, Vladimir Preobrazhensky,
Valery Rozhdestvensky, Gennadi Sarafanov,
Ansar Sharafutdinov, Vasili Shcheglov, Aleksandr Skvortsov,
Eduard Stepanov, Valeri Voloshin, Oleg Yakovlev,
Vyacheslav Zudov

Leonid Kizim

Pyotr Klimuk

Military Cosmonaut Group 1 (USSR)
September 1966

Pavel Popovich, Alexei Gubarev, Yuri Artyukhin,
Vladimir Gulyaev, Boris Belousov, and
Gennadiy Kolesnikov

Military Cosmonaut Group 2 (USSR)
1966 / 1967

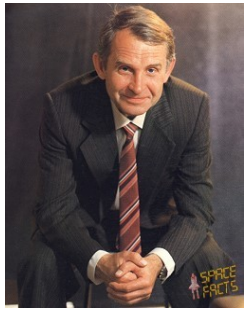
German Titov , Anatoly Kuklin , Vasily Lazarev ,
Anatoly Filipchenko , Leonid Kizim , Vladimir Kozelskiy,
Vladimir Lyakhov , Yury Malyshev , Alex. Petrushenko,
Anatoly Berezovoy , Anatoly Dedkov , Vladimir Dzhanibeko ,
Yuri Romanenko, and Lev Vorobyov

Civilian Specialist Group 3 (USSR)
Mishin-Group
May 1966

Sergei Anokhin, Vladimir Bugrov, Gennadi Dolgopolov, Georgi Grechko, Valeri Kubasov, Oleg Makarov, Vladislav Volkov, Aleksei Yeliseyev, Nikolai Rukavishnikov, Vitali Sevastiyanov, Valeri Yazdovsky

Georgi Grechko

Valeri Kubasov



Oleg Makarov

Vladislav Volkov

Aleksei Yeliseyev

Nikolai Rukavishnikov

Air Force Grou p 4 (USSR)
TsPK - 4 Selection
April / May 1967

Vladimir Alekseyev, Vladimir Beloborodov,
Mikhail Burdayev, Sergei Gaidukov, Vladimir Isakov,
Vladimir Kovalyonok, Vladimir Kozelsky, Vladimir Lyakhov,
Yuri Malyshev, Viktor Pisarev, Nikolai Porvatkin, and
Mikhail Sologub

Academy of Sciences Group (USSR)
AN - 1 Selection
May 1967

Mars Fathulin, Rudolf Gulyayev, Georgi Katys,
Ordinard Kolomitsev, Vsevolod Yegorov, and
Valentin Yershov

Cosmonaut Group (USSR)
TsKBEM - 1 Selection
May 1968

Vladimir Fartushny, Konstantin Feoktistov, Georgi Grchko,
Valeri Kubasov, Oleg Makarov, Viktor Patsayev,
Nikolai Rukavishnikov, Vitali Sevastiyanov, Vladislav Volkov,
Valeri Yazdovsky, Aleksei Yeliseyev

Vladimir Kovalyonok

Vladimir Kozelsky

Vladimir Lyakhov

Yuri Malyshev

Viktor Patsayev

Konstantin Feoktistov

Voskhod 1

Air Force Group 5 (USSR)
TsPK - 5 Selection
April 1970

Anatoli Berezovoi, Aleksandr Dedkov, Vladimir Dzhanibekov,
Nikolai Fefelov, Valeri Illarianov, Yuri Isaulov,
Vladimir Kozlov, Leonid Popov, and Yuri Romanenko

Yuri Romanenko

Leonid Popov

Anatoli Berezovoi

Vladimir Dzhanibekov

Civilian Specialist Group 4 (USSR)

TsKBEM - 2 Selection

March 1972

Boris Andreyev, Valentin Lebedev, and Yuri Ponomaryov

and

Medical Group 3 (USSR)

March 1972

Georgi Machinski, Valeri Makrushin,
Valeri Polyakov, and
Lev Smirenny

Valentin Lebedev

Valeri Polyakov

Civilian Specialist Group 5 (USSR)
TsKBEM - 3 Selection
March 1973

Vladimir Aksyonov, Vladimir Gevorkyan,
Aleksandr Ivanchenkov, Valeri Romanov, Valery Ryumin,
Dimitri Yuyukov and Gennady Strekalov

Valery Ryumin

Gennady Strekalov

Air Force Group 6 (USSR)
TsPK – 6 Selection
(Space Shuttle Buran crew)
August 1976

Leonid Ivanov, Leonid Kadenyuk, Nikolai Moskalenko,
Sergei Protchenko, Yevgeni Saley, Anatoly Solovyev,
Vladimir Titov, Vladimir Vasyutin, and Alexander Volkov

Air Force Group 6 (USSR) , cont.

Vladimir Titov

Alexander Volkov

Anatoly Solovyev

Intercosmos Group 1 (USSR)

November 1976

Mirosław Hermaszewski (Poland),
Zenon Jankowski (Poland),
Sigmund Jähn (East Germany),
Eberhard Köllner (East Germany),
Oldřich Pelčák (Czechoslovakia),
Vladimír Remek (Czechoslovakia)

Sigmund Jähn:

First East German to fly into space
to the Salyut 6 space station
- Soyuz 31 / Soyuz 29 -
August 26, 1978 until September 03, 1978

The first group of test pilots for Buran (USSR)

July 1977

Igor Volk, Oleg Grigoriyevich Kononenko, Anatoly Levchenko, Nikolai Sadovnikov, Rimantas Stankevicius, and Alexander Schukin

Cosmonaut Group (USSR)
NPOE - 5 Selection

June 1977

Oleg Kononenko, Anatoly Levchenko, Alexandr Shchukin, Rimantas Stankevicius, Igor Volk, Galina Amelkina, Yelena Dobrokvashina, Larisa Pozharskaya, Tamara Zakharova, Svetlana Savitskaya , Yekaterina Ivanova, Natalya Kuleshova, Irina Pronina, and Irina Latysheva

Intercosmos Group 2 (USSR)

March 1978

Aleksandr P. Aleksandrov (Bulgaria), Dumitru Dediu (Romania), Jose Lopez Falcon (Cuba) , Bertalan Farkas (Hungary), Maidarjavyn Ganzorig (Mongolia), Jügderdemidiin Gürragchaa (Mongolia), Georgi Ivanov (Bulgaria), Béla Magyari (Hungary), Arnaldo Tamayo Méndez (Cuba), and Dumitru Prunariu (Romania)

Cosmonaut Group (USSR)
TsPK – 7 Selection , NPOE - 4 Selection

May / December 1978

Vladimir Gevorkyan, Aleksei Grechanik, Valeri Khatulev, Valeri Romanov, Aleksandr Aleksandrov, Aleksandr Balandin, Aleksandr Laveykin, Musa Manarov, Viktor Savinykh, Aleksandr Serebrov, Vladimir Soloviyov, Nikolai Grkov, Aleksandr Viktorenko, German Arzamazov, Aleksandr Borodin, and Mikhail Potapov

Aleksandr Serebrov

TsPK – 7 Selection , NPOE - 4 Selection , cont.

Aleksandr Viktorenko

German Arzamazov

U.S.S.R. Soviet Space Program Sleeve Patch

Intercosmos Group 3 (USSR)
January 1979

Tuân Pham (Vietnam), and Thanh Liem Bui (Vietnam)

Cosmonaut Group (USSR)
GKNII - 1 Selection
February 1979

Ivan Bachurin, Aleksei Boroday, Viktor Chirkin, Leonid Kadenyuk, Vladimir Mosolov, Nail Sattarov, Anatoli Sokovykh

The second group of test pilots for Buran (USSR)
April 1983

Oleg Atkov, Ural Sultanov and Magomed Tolboev

Cosmonaut Group (Soviet Union)
NPOE - 6 Selection
February 1984

Aleksandr Kaleri and Sergei Yemelyanov
and
The third group of test pilots forBuran (USSR)
June 1984

Victor Zabolotski

Aleksandr Kaleri

Cosmonaut Group (Soviet Union)
NPOE - 7 Selection , GKNII – 2 Selection
September 1985

Viktor Afanasyev, Anatoly Artsebarsky, Gennadi Manakov
Sergei Krikalyov, Yuri Stepanov and Andrei Zaytsev
and

The fourth group of test pilots for Buran (USSR)
January 1986

Sergey Tresvyatski and Yuri Schaeffer

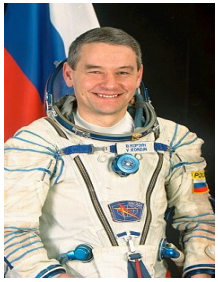
Sergei Krikalyov

Viktor Afanasyev

Genadi Manakov

Cosmonaut Group (Soviet Union)
TsPK – 8 Selection , NPOE - 8 Selection
March 1987

Valery Korzun, Vladimir Dezhurov, Yuri Gidzenko,
Yuri Malenchenko, Vasily Tsibliyev, and Sergei Avdeyev



Valery Korzun

Vladimir Dezhurov

TsPK – 8 Selection , NPOE - 8 Selection , cont.

Yuri Gidzenko

Yuri Malenchenko

TsPK – 8 Selection , NPOE - 8 Selection , cont.

Vasily Tsibliyev

Sergei Avdeyev

Cosmonaut Group (Soviet Union)
TsPK – 9 Selection
January 1988

Viktor Afanasiyev, Anatoli Artsebarsky, and Gennadi Manakov

Viktor Afanasiyev

Gennadi Manakov

The fifth group of test pilots for Buran (USSR)
March 1989

Yuri Prikhodko

Cosmonaut Group (Soviet Union)
TsPK – 10 Selection , NPOE - 9 Selection
GKNII – 3 Selection
January 1989

Vladimir Karashtin, Vasili Lukiyanyuk, Boris Morukov
Anatoli Polonsky, Valeri Tokarev, Aleksandr Yablontsev
Nikolai Budarin, Yelena Kondakova, Aleksandr Poleshchuk,
Yuri Usachyov, Sergei Kirchevsky, Yuri Prikhodko,
Gennady Padalka, and Yuri Onufriyenko

Yuri Usachyov: First Russian Commander of the ISS
- Space Shuttle STS 102 (up) -
- ISS Expedition 2 -
- Space Shuttle STS-105 (down) -
March 19, until August 18, 2001

TsPK – 10 Selection , NPOE - 9 Selection , GKNII – 3 Selection , cont.

Valeri Tokarev

Nikolai Budarin

TsPK – 10 Selection , NPOE - 9 Selection , GKNII – 3 Selection , cont.

Yelena Kondakova

Aleksandr Poleshchuk

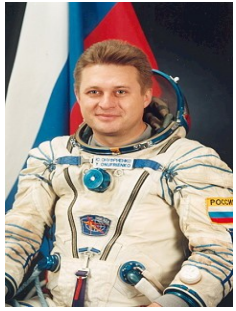
TsPK – 10 Selection , NPOE - 9 Selection , GKNII – 3 Selection , cont.

Yuri Usachyov

Sergei Kirchevsky

TsPK – 10 Selection , NPOE - 9 Selection , GKNII – 3 Selection , cont.

Gennady Padalka



Yuri Onufriyenko

Cosmonaut Group (Soviet Union)
TsPK – 11 Selection , GKNII – 4 Selection
May 1990

Aleksandr Andryushkov, Valeri Baberdin, Yuri Krikun, Pavel Mukhortov, Svetlana Omelchenko, Valeri Sharov, Valeri Maksimenko, Aleksandr Puchkov, Nikolai Pushenko, Talgat Musabayev, Vladimir Severin, Salizhan Sharipov, Sergei Vozovikov, and Sergei Zalyotin

Sergei Zalyotin

Salizhan Sharipov

Soyuz TM-30 / MIR

Cooperation flight with Kazakhstan
(Soviet Union)
January 1991

Toktar Aubakirov, Talgat Musabayev

Talgat Musabayev

Cosmonaut Group (Soviet Union)
NPOE - 10 Selection
March 1992

Aleksandr Lazutkin, Sergei Treshchov, and Pavel Vinogradov

Aleksandr Lazutkin

Sergei Treshchov

Pavel Vinogradov

Cosmonaut Group (Russia)
NPOE - 11 Selection
April 1994

Nadezhda Kuzhelnaya and Mikhail Tyurin

Mikhail Tyurin

Mikhai Tyurin personal patches

Group (Russia)
RKKE - 12 Selection
February / March 1996

Oleg Kotov, Yuri Shargin, Konstantin Kozeyev,
Sergei Revin and Oleg Kononenko

Oleg Kononenko

Konstantin Kozeyev

Sergei Revin

Oleg Kotov

Yuri Shargin

Cosmonaut Group (Russia)
TsPK – 12 Selection , RKKE - 13 Selection
July 1997

Dmitri Kondratyev, Yury Lonchakov, Sergei Moshchenko, Oleg Moshkin, Roman Romanenko, Aleksandr Skvortsov, Maksim Surayev, Konstantin Valkov, Sergey Volkov , Oleg Skripochka, Fyodor Yurchikhin, and Valeri Tokarev

and

Cosmonaut Group (Russia)
RKKE - 14 Selection
February 1998

Mikhail Korniyenko

- - - - - - - - - - - - - - - - -

Cosmonaut Group (Russia)
August 1997

Yuri Baturin

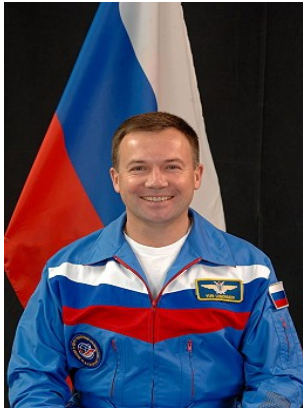
Mikhail Korniyenko:

ISS year long mission
(March 2015 until March 2016)
- Soyuz TMA-16M (up) -
- ISS Expedition 43-46 -
- Soyuz TMA-18M (down) -

- - - - - - - - - - - - - - - - -

Yuri Baturin

TsPK – 12 Selection , RKKE - 13 Selection
RKKE - 14 Selection , cont.



Yury Lonchakov

Aleksandr Skvortsov

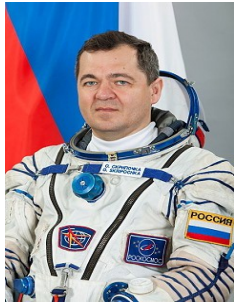
TsPK – 12 Selection , RKKE - 13 Selection RKKE - 14 Selection , cont.

Valeri Tokarev

Mikhail Korniyenko

One Year Patch

TsPK – 12 Selection , RKKE - 13 Selection RKKE - 14 Selection , cont.



Oleg Skripochka

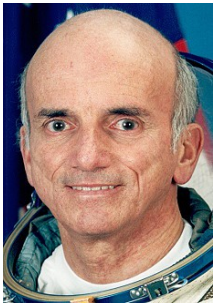
VKD / EVA Patch

Fyodor Yurchikhin

Space Tourist 1

October 2000

Dennis Anthony Tito / USA



1 st ISS Visiting Expedition
April 30, 2001 - May 6, 2001
- Soyuz TM 32 - (up)
- ISS Expedition 2 -
- Soyuz TM 31 - (down)

Personal patch

Space Tourist 2

December 2001

Mark Richard "Buranov" Shuttleworth / Rpublic South Africa

3 rd ISS Visiting Expedition / Marco Polo Program
April 27, 2002 - May 5, 2002
- Soyuz TM 34 - (up)
- ISS Expedition 4 -
- Soyuz TM 34 - (down)

Personal patch

Cosmonaut Group (Russia)
TsPK – 13 Selection , RKKE – 15 Selection
May 2003

Aydyn Aimbetov, Mukhtar Aymakhanov, Anatoli Ivanishin, Aleksandr Samokutyayev, Anton Shkaplerov, Evgeny Tarelkin, Sergei Zhukov, Oleg Artemyev, Andrei Borisenko, Mark Serov and Sergey Ryazansky

Space Tourist 3

July 2005

Gregory "Greg"Olsen / USA

and

Sergei Kostenko / Russia

Gregory "Greg"Olsen / USA

9 th ISS Visiting Expedition
October 3, - October 10, 2005
- Soyuz TMA 7 - (up)
- ISS Expedition 11 / 12 -
- Soyuz TMA 6 - (down)

Space Tourist 4

March 2006

Ansari Anousheh / USA

and

Daisuke "Dice-K" Enomoto / Japan

Ansari Anousheh / USA

11 th ISS Visiting Expedition

September 20, 2006 - September 29, 2006

- Soyuz TMA 9 - (up)
- ISS Expedition 13 / 14 -
- Soyuz TMA 8 - (down)

Cosmonaut Group (Russia)
TsPK – 14 Selection , RKKE - 16 Selection
October 2006

Aleksandr Misurkin

Oleg Novitskiy

Aleksey Ovchinin

Maksim Ponomaryov

Sergey Ryzhikov

Yelena Serova

Nikolai Tikhonov

Space Tourist 5

April 2006

Charles "Károly" Simonyi / USA

12 th ISS Visiting Expedition
April 9, 2007 - April 21, 2007
- Soyuz TMA 10 - (up)
- ISS Expedition 14 / 15 -
– Soyuz TMA 9 - (down

Space Tourist 6

September 2007 / November 2007

Richard Allen Garriott de Cayeux / USA

and

Nikos "Nik" Halik / Australia

Richard Allen Garriott de Cayeux / USA

15 th ISS Visiting Expedition
Generation II Astronaut

October 14, - October 24, 2008
- Soyuz TMA 13 - (up)
- ISS Expedition 17 / 18 -
- Soyuz TMA 12 - (down)

Space Tourist 7

October 2008

Charles "Károly" Simonyi / USA

and

Esther Dyson / USA

Charles "Károly" Simonyi / USA

12 th ISS Visiting Expedition
April 9, 2007 - April 21, 2007
- Soyuz TMA 10 - (up)
- ISS Expedition 14 / 15 -
- Soyuz TMA 9 - (down

Esther Dyson / USA

Space Tourist 8

June 2009

Guy Laliberté / CAN

and

Barbara Barrett / USA

Guy Laliberté / CAN

17th Visiting Expedition
Poetic Social Mission
October 2, 2009 - October 11, 2009
- Soyuz TMA 16 - (up)
- ISS Expedition 20 / 21 -
- Soyuz TMA 14 - (down

Barbara Barrett / USA

Cosmonaut Group (Russia)
TsPK - 15 Selection
RKKE – 17 Selection
RKKE – 18 Selection
October 2010

Sergey Kud-Sverchkov

Andrei Babkin

Aleksey Khomenchuk

Denis Matveev

Sergey Prokopyev

Ivan Vagner

Svyatoslav Morozov

TsPK - 15 Selection , RKKE – 17 Selection , RKKE – 18 Selection , cont

Sergey Kud-Sverchkov

Denis Matveev

Ivan Vagner

Sergey Prokopyev

Andrei Babkin

Aleksey Khomenchuk

Svyatoslav Morozov

Since January 1, 2011,
the Research Institute of the
Y. A. Gagarin Cosmonaut Training Center
(GCTC) / (TsPK)
has been solely responsible for the training
of
Russian cosmonauts

Enrolled in a United squad of Roscosmos cosmonauts (Russia)
January / February 2011

Oleg Artemyev, Andrei Babkin, Ivan Vagner,
Andrei Borisenko, Sergei Zhukov, Oleg Kononenko,
Mikhail Kornienko, Sergey Kud-Sverchkov,
Svyatoslav Morozov, Sergei Revin, Sergey Ryazansky,
Yelena Serova, and Nikolai Tikhonov

Enrolled in a United squad of Roscosmos cosmonauts (Russia)
February 2012

Fyodor Yurchikhin

New generic Roscosmos logo

The two pairs of three stars symbolize the ISS crews flown to and from the International Space Station by the Russian Soyuz vehicles

Addition Group (Russia)
TsPK – 16 Selection
October 2012

Oleg Blinov, Nikolay Chub,

Pyotr Dubrov, Andrey Fedyaev,

Ignat Ignatov, Anna Kikina,

Sergey Korsakov, Dmitriy Petelin

Cosmonaut Group (Russia)
TsPK – 17 Selection
August 2018

The members of Russia's 17th class of cosmonaut candidates
(from left to right)

Konstantin Borisov, Alexander Gorbunov,
Sergei Mikayev, Alexander Grebenkin, Oleg Platonov,
Kirill Peskov, Alexei Zubritsky, Yevgeny Prokopyev

The insignia for the 2018 class of Roscosmos cosmonauts depicts the Soyuz and Orel spacecraft that they may fly on board and the destinations they may launch to, including the International Space Station and the moon. (Roscosmos)

Cosmonaut Group (Russia)
TsPK – 18 Selection
January 2021

Roscosmos' 2021 cosmonaut candidates :

(from left to right)

Sergey Irtuganov,

Alexander Kolyabin,

Sergey Teteryatnikov,

Harutyun Kiviryan

Roscosmos 2020 / 2021 cosmonauts patch

The emblem features two stations: the ISS and our ROSS.
We plan to visit these stations in the future as astronaut-testers, as part of long-term expeditions.The Moon and Mars are two celestial objects that we may also visit: we plan to land on the Moon's surface and eventually start exploring Mars. Achieving spaceflight, studying the Moon and planets of our Solar System is only possible through diligent and persistent learning, acquiring new knowledge (the open book represents knowledge and diligence), and studying and combining the knowledge of all sciences on Earth (the atom with electrons symbolizes science, with different colors of elements representing the four elements of Earth (air, water, fire, and earth), symbolizing science in all directions). To research and explore other planets, we need peaceful (scientific) development of the space industry and collaboration with other countries, combining all achievements together – we can succeed together (the dove of peace).The path to spaceflight is not easy – this is summarized by the inscription "Per aspera ad astra." Our planet, space and its exploration, science, knowledge, and the whole world are all interconnected, and further development is only possible through unification (this is symbolized by the Yin-Yang symbol and its features)

patch from TsPK
This patch design was done by Sergei Irtuganov,
one of four of the 2020 class

Next Cosmonaut Selection 202 . .

July 2023 :

Roscosmos State Corporation and
the Cosmonaut Training Center
announce the start of a
new selection for the cosmonaut corps!

November 2023 :

Russia's Gagarin Center
selects 16 candidates for cosmonaut team.
The Russian cosmonaut corps
could be replenished
by four to six cosmonaut candidates

The 202 . . Cosmonaut

A T T A T C H M E N T

Vimpel 'Diamond'

Spacepatches.nl :

„ The circular logo with a yellow sun, a globe with the outline of the Soviet union, a horizontal rocket and the letters CCCP first appeared during the Soyuz-9 mission (1970) on the left shoulder of the new Trenirovochnyi-Nagruzochnogo Kostuma-1 (Training Load Costume; TNK-1) exercise suit. The short-sleeved singlet, with elastic bands at the upper part of the body and docking straps for the KTF-exercise treadmill in the living compartment of the Soyuz-ship, was especially designed for use aboard long-duration missions. It was part of an excercise package called 'Diamond', produced by the company Vimpel. We believe the circular CCCP-logo was originally refering to the entire 'Diamond' package (note the diamond shape outline around the earth) and later became the standard logo sewn to all cosmonaut-related equipment produced by the Vimpel company, like the Zvezda 'Rocket' was sewn to Zvezda-made equipment. We will further refer to this patch as the Vimpel 'Diamond'. The crew of Soyuz-9 was the first to take part of the 'Diamond'-package, including the TNK-1 suits, into space. The next mission, Soyuz-10, also carried the long-sleeved 'Athlete' TNK-suit, designed to be worn not only for short 45 minute exercise periods, but during the entire workday, just like the Zvezda 'Penguin'-suit in modern days. The 'Athlete' suit proably came in three colors (orange, green and blue). Since the crew of Soyuz-10 did not manage to board Salyut-1, the TNK-1 and TNK 'Athlete' suits were not used on that flight. Vimpel's TNK-1, and TNK-'Athlete' were used by the ill-fated Soyuz-11 crew aboard Salyut-1 in 1971. The crew also carried the TNK 'Penguin' suit, manufactured by Zvezda, for the first time, but did not wear it as often as they should. . . . . .„

(1971 - 1991)

(New: 1990 - Mir-program -)

Soyuz accident with fatalitie

Vladimir Komarov

Soyuz 1

Launch date :
April 23, 1967, 00:35:00 GMT

Landing date :
April 24, 1967, 03:22:52 GMT

Komarov was killed when the descent module of Soyuz 1 crashed into the ground due to a parachute failure

Soyuz 1 patch

Incident involving a Soyuz spacecraft with fatalities

Georgy Dobrovolsky

Vladislav Volkov

Viktor Patsayev

The crew capsule depressurised during preparations for re-entry, killing the three-man crew

Soyuz 11
(Russian: Союз 11,
lit. 'Union 11')

Launch date :
June 6, 1971, 04:55:09 GMT

Landing date :
June 29, 1971, 23:16:52 GMT

Zvezda Rocket patch

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Europe

-- E S A --

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Spacelab Payload Specialists Group 1 (ESA)
ESA group 1
May 1978

Ulf Merbold (West Germany), Claude Nicollier (Switzerland), Wubbo Ockels (Netherlands), and

Franco Malerba (Italy)

Ulf Merbold personal patch

ESA group 1 , cont.

Claude Nicollier personal patch

Ulf Merbold: First West Germany citizen in space
First non-American to fly on a
NASA spacecraft
- Space Shuttle STS-9 -
November 28, 1983 until December 8, 1983

Claude Nicollier: First astronaut from Switzerland
- Space Shuttle STS-46 -
July 31, 1992 until August 8, 1992

Wubbo Ockels: First Dutch citizen in space
- Space Shuttle STS-61-A -
October 30, until November 6, 1985

Franco Malerba: First citizen of Italy to travel to space
- Space Shuttle STS-46 -
July 31, 1992 until August 8, 1992

CNES Group 1 (France)

June 1980

Jean-Loup Chretien (left), Patrick Baudry (right)

Jean-Loup Chrétien: First Frenchmen in space
- Soyuz T-6 - / - Salyut 7 -
June 24, 1982 until July 02, 1982

Jean-Loup Chretien STS-86 personal patch

Patrick Baudry personal patch

Spacelab Payload Specialists Group 1 (Germany)
DLR-Gruppe 1
December 1982

Reinhard Furrer (left) , Ernst Messerscgmid (right)

Note: center :
Wubbo Ockels (Netherlands),
belonged to ESA group 1 (1978)

CNES Group 2 (France)

September 1985

Claudie (André-Deshays) Haigneré , Jean–François Clervoy, Jean–Jacques Favier, Jean–Pierre Haigneré, Frédéric Patat, Michel Tognini, Michel Viso

Claudie (André-Deshays) Haigneré:

First French woman to go to space
- Soyuz TM-24 (up) -
- MIR -
- Soyuz TM-23 (down) -
August 17, until September 2, 1996

Claudie (André-Deshays) Haigneré personal patches

CNES Group 2 (France) , cont.

Jean–Pierre Haigneré personal patches

CNES Group 2 (France) , cont.

Michel Tognini Personal patches

ATLAS – 1 (ESA)

December 1985

Dirk D. Frimout (Belgium)

Dirk D. Frimout: First Belgian in space
- Space Shuttle STS-45 -
March 24, 1992 until April 2, 1992

1987 German Group
DLR-Gruppe 2
August 1987

Renate Brümmer, Hans Schlegel, Gerhard Thiele,
Heike Walpot, Ulrich Walter

Note: third from left :
Ulf Merbold, belonged to ESA group 1
(1978)

1989 Italian Group
ASI Group 2
May 1989

Franco Malerba
Franco Rossitto
Umberto Guidoni
Cristiano Batalli Cosmovici

Umberto Guidoni:

First European to visit the ISS
- Space Shuttle STS-100 -
- ISS Expedition 2 -
April 19, 2001 until May 1, 2001

agenzia spaziale italiana

Guest Cosmonauts Austria
October 1989

Franz Viehböck (left), Clemens Lothaller (right)

Franz Viehböck: First Austrian to fly in space
- Soyuz TM-13 - MIR - Soyuz TM-12 -
October 2, 1991 until October 10, 1991

Franz Viehböck personal patch

Project Juno (UK / Soviet Union)

November 1989

Timothy Mace (left), Helen Sharman (right)

Helen Sharman: First British-born women to go into spac
- Soyuz TM-12 - MIR - Soyuz TM-11 -
May 8, 1991 until May 26, 1991

Helen Sharman personal patch

Timothy Mace personal patch

CNES Group 3 (France)

February 1990

Léopold Eyharts, Jean-Marc Gasparini,

Philippe Perrin, Benoit Silve

Léopold Eyharts

Jean-Marc Gasparini

Philippe Perrin

Benoit Silve

Group 3 was the last group of CNES astronauts chosen. Rremaining active CNES astronauts were transferred to the ESA Astronaut Corps

Léopold Eyharts personal patch

Philippe Perrin personal patch

1990 German Group
DLR-Gruppe 3
October 1990

Reinhold Ewald (left), Klaus-Dietrich Flade (right)

Reinhold Ewald personal patch

Klaus-Dietrich Flade personal patch

1992 ESA Group (ESA)
ESA-Gruppe 2
May 1992

Maurizio Cheli (Italy) , Jean–François Clervoy (France),

Pedro Duque (Spain) , Christer Fuglesang (Sweden),

Marianne Merchez (Belgium) , Thomas Reiter (Germany)

Christer Fuglesang: First Swedish citizen in space
- Space Shuttle STS-116 -
December 10, until Dec. 22, 2006

Thomas Reiter: First German astronaut to perform a spacewalk on October 20, 1995
- Soyuz TM-22 - / - MIR -
September 3, 1995 until February 29, 1996

Jean–François Clervoy personal patch

Pedro Duque personal patch

Christer Fuglesang personal patch

Thomas Reiter personal patch

Thomas Reiter personal patch

1998 ESA Group (ESA)
EAC Selections
October 1998

Frank De Winne (Belgium), Léopold Eyharts (France),
André Kuipers (Netherlands), Paolo Nespoli (Italy),
Hans Schlegel (Germany), Roberto Vittori (Italy)
Claude Nicollier (Switzerland)

[The photo shows the ESA astronauts from 1998 to 2002]

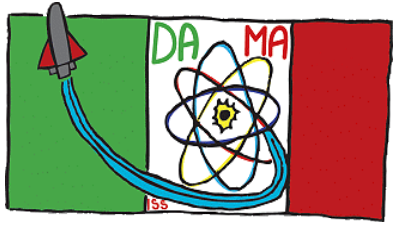
Frank De Winne: First Belgian national as ISS Commander
First ESA as ISS Commander
First non-American or non-Russian
as ISS Commander
- ISS Expedition 21 -
October 9, 2009 until December 1, 2009

1998 ESA Group (ESA) , EAC Selections , cont.

Personal patches :

Frank De Winne

Roberto Vittori



1998 ESA Group (ESA) , EAC Selections , cont.

Personal patches :

Claude Nicollier

André Kuipers

1999 ESA Group (Europe)

November 1999

Claudie (André-Deshays) Haigneré , Philippe Perrin,
Michel Tognini

[The three remaining CNES (France) astronauts transferred to the ESA's astronaut corps in 1999]

ESA Astronaut Corps

July 2015

Matthias Maurer (Germany)

2017 Die Astronautin Selection (Germany)

April 2017

Insa Thiele-Eich, Nicola Baumann
(Baumann was later replaced by Suzanna Randall)

ESA Group – *The Shenanigans* (ESA)

ESA Group 3

May 2009

Samantha Cristoforetti (Italy) , Alexander Gerst (Germany),

Andreas Mogensen (Denmark) , Luca Parmitano (Italy),

Timothy Peake (United Kingdom) , Thomas Pesquet (France)

ESA Group 3 , cont.
The Shenanigans

Samantha Cristoforetti: First Italian woman in space
- Soyuz TMA-42 -
-ISS Expedition 42/43 -
Nov. 23, 2014 until June 11, 2015

Alexander Gerst: First German national as
ISS Commander
- ISS Expedition 57 -
October 4, until December 18, 2018

Andreas Mogensen: First Dane citizen in space
-Soyuz TMA-18M -
- ISS Expedition 44 / 45 -
- Soyuz TMA-16M -
- September 2, until Sep. 12, 2015
First Dane citizen as ISS Commander
- ISS Expedition 70 -
September 27, 2023 until tbd

Luca Parmitano: First Italian national as
ISS Commander
- ISS Expedition 61 -
October 2, 2019 until Feb. 6, 2020

Timothy Peake: first British ESA astronaut
- Soyuz TMA-19M -
- ISS Expedition 46 / 47 -
Dec. 15, 2015 until June18, 2016

Thomas Pesquet: First Franch national as
ISS Commander
- ISS Expedition 65 / 66 -
October 4, until November 8, 2021

2022 ESA Astronaut Group

November 2022

Career:

Sophie Adenot (France),
Pablo Álvarez Fernández (Spain),
Rosemary Coogan (UK),
Raphaël Liégeois (Belgium),
Marco Alain Sieber (Switzerland)

Reserve/Project:

Meganne Christian (UK), Anthea Comellini (Italy),
Sara García Alonso (Spain), Andrea Patassa (Italy),
Carmen Possnig (Austria), Arnaud Prost (France),
Amelie Schoenenwald (Germany),
Aleš Svoboda (Czech Republic),
Sławosz Uznański (Poland),
Marcus Wandt (Sweden), Nicola Winter (Germany)

"astronaut with a disability" feasibility study:

John McFall (UK)

2022 ESA Astronaut Group , cont.

Career: Sophie Adenot (France),
Pablo Álvarez Fernández (Spain),
Rosemary Coogan (UK),
Raphaël Liégeois (Belgium),
Marco Alain Sieber (Switzerland)

front row left :
Katherine Bennell-Pegg
is an Australian citicens preparing to undergo training
to become an astronaut at the ESA in Germany,
after having applied to join the EAC as a
British dual citizen in early 2021

[Along with the five selected "career astronauts", the campaign recruited a "reserve" pool of astronauts who

"...will not be permanent ESA staff, but could have the opportunity to be selected for specific projects, as project astronauts."

The campaign also recruited a person with a physical disability through the "parastronaut feasibility project"]

Next ESA-Group . .

The 202 . . ESA Astronaut Class

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Japan

-- JAXA --

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Japan Aerospace Exploration Agency
(JAXA)

宇宙航空研究開発機構
Uchū Kōkū Kenkyū Kaihatsu Kikō

National Space Development Agency of Japan
(NASDA)

宇宙開発事業団

NASDA Group 1

August 1985

(from left to right)

Mamoru Mohri, Chiaki Mukai, Takao Doi

Chiaki Mukai (向井千秋 :

First Japanese woman to fly in space
First Japanese citizen to have
two space flights
First Asian woman in space
- Space Shuttle STS-65 -
July 8, 1994 until July 23, 1994

Guest cosmonauts TBS Corp. (Japan)

August 1989

Ryoko Kikuchi (left), Toyohiro Akiyama (right)

Toyohiro Akiyama 秋山豊寛 :

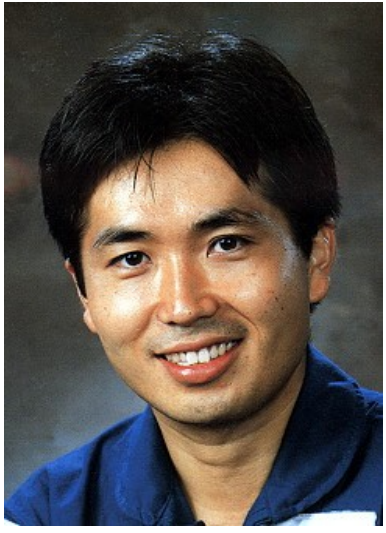
First Japanese nationality to fly in space
- Soyuz TM-11 - MIR - Soyuz TM-10 -
December 2, until December 10, 1990

TV journalist Toyohiro Akiyama
and
camerawoman Ryoko Kikuchi
were selected as the two final candidates

On 17 August 1989, Akiyama was selected for a commercial Soviet-Japanese flight.

The flight was sponsored by the TBS Corporation
(media company)
to celebrate its fortieth anniversary

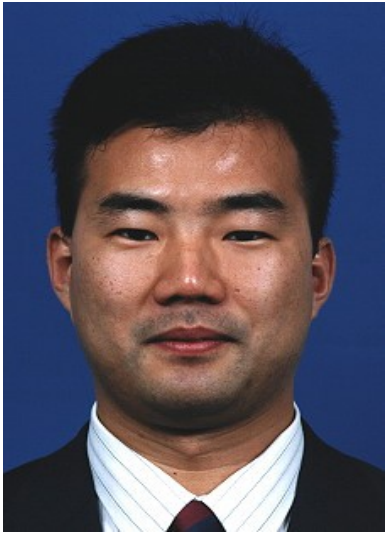
NASDA Group 2
April 1992



Koichi Wakata

First Japanese commander of the ISS
- ISS Expedition 39 -
March 9, 2014 until May 12, 2014

NASDA Group 3
May 1996



Soichi Nogutchi

NASDA Group 3 ， cont.

Soichi Noguchi personal patch

The shape of this logo, a hexagon, represents our eagerness to promote full-scale space utilization, such as scientific experiments to be performed by the six astronauts onboard ISS over six-month cycle.

The six stars in the upper left symbolize the JAXA logo, and, at the same time, stand for the sixth visit to the ISS by a JAXA astronaut.

The colors of the outer frame, white, blue and red, come from the national flags of Japan, America and Russia and express the cooperation among the three astronauts who will be aboard Soyuz despite their language differences.

The two ribbons connecting the Earth and Kibo indicate the first trip to and from the ISS by a Japanese astronaut qualified as a Soyuz pilot.

Simultaneously, they represent our hope that the ISS will become a bridge across the borders for international friendship.

NASDA Group 4

February 1999

(from left to right)

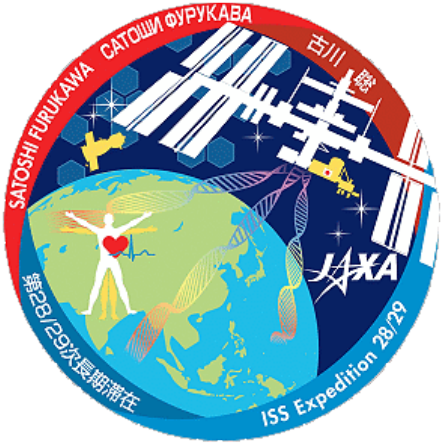
Satoshi Furukawa,

Naoko (Sumino) Yamazaki,

Akihiko Hoshide

NASDA Group 4 ， cont.

Satoshi Furukawa personal patch



To represent the life science experiment at "Kibo" (Japanese experiment station), the logo is designed with the double spiral structure of DNA, crystallization, and the human body to image the experiment of the space medical field. It also expresses that the experiments at "Kibo" stretch to earth.
In addition, to further promote the ISS, which is a symbol of international cooperation, JAXA is promoting the fact that the cooperation with Asian countries has become widespread in Asia.

Akihiko Hoshide personal patches

NASDA Group 4 , cont.

Naoko (Sumino) Yamazaki personal patch

The image on the logo is of a seed encompassing life in space and continuing to grow into a new life, a new age in space.

It was designed with the hope of leading all life within the universe to a better future.

Moreover, the logo is made with the hope that the technology and knowledge cultivated through ISS missions, including those in the Japanese Experiment Module "Kibo," will be used to enrich the future of the Earth, the Moon, and Mars.

Finally, we hope that life in the future will grow to play an active role on both the Earth and in space.

JAXA Group 5

February / September 2009

(from left to right)

Kimiya Yui,
[„My name "Kimiya" means "Beautiful turtle" in Japanese. That's why a beautiful turtle on my JAXA mission patch“]

Takuya Onishi,

Norishige Kanai

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Canada

- - C S A - -

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CSA Group 1
NRC Group
December 1983

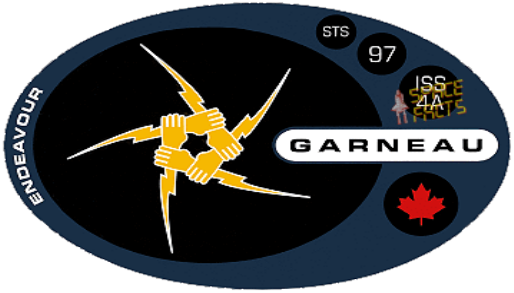
Roberta Bondar, Marc Garneau, Steve MacLean,
Ken Money, Robert Thirsk, and Bjarni Tryggvason

[This first Canadian astronaut group was selected by the National Research Council (NRC) and were transferred to the Canadian Space Agency (CSA)]

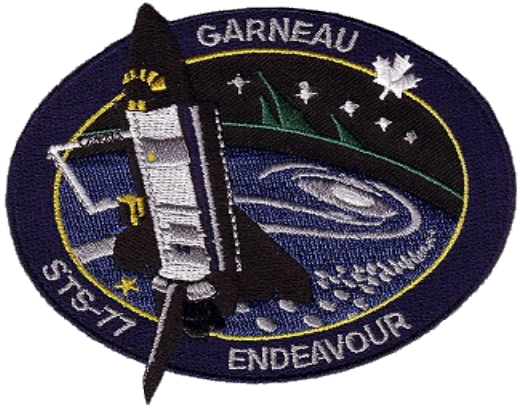
Canadian Shuttle Program Patch

CSA Group 1 , cont.

Marc Garneau: First Canadian to fly in space
- Space Suttle STS-41-G -
October 5, until October 13 1984



Bjarni Tryggvason: - Space Shuttle STS-85 -
August 7, until August 19, 1997



CSA Group 1 , cont.

Roberta Bondar: First Canadian woman to fly in space
- Space Shuttle STS-42 -
January 22, until January 30, 1992

CSA Group 1 , cont.

Robert Thirsk personal patch ISS Exp. 21/22 description :

Thirsk suggested the powerful thunderbird as the centrepiece, which fits in well with Helin's own background as a Tsimshian native artist. The feathers and wings represent the men and women in the space program (which includes Japanese and Europeans).
The sun in the bird's heart was also in the original patch, providing continuity, and inside the stomach is an open book, speaking to the knowledge to be learned from the mission.
"The bear symbol is symbolic of the Russian involvement," Helin said, while the fluke on the bird's head stands for the Canadarm. The raven and moon symbolize future stations on the moon.

This patch commemorates Canada's first long duration Expedition onboard the International Space Station (ISS). Canadian Space Agency astronaut Dr. Robert Thirsk will live and work in the Station for six months. Robert is an admirer of Pacific Northwest Indigenous art, and is honoured that Bill Helin, a renowned Tsimshian artist has accepted to portray his mission through the use of several of its mythical figures.
The International Space Station has now become the largest and most powerful spacecraft in history. As viewed from above, the ISS resembles a great soaring bird. The legendary Thunderbird is a creature of great power and strength and is featured as the central element of this patch design. It resembles the near-complete Station during the mid-2009 timeframe.

Robert Thirsk: First Canadian to live on the ISS
- Soyuz TMA-15 -
- ISS Expedition 21 / 22 -
May 27, 2009 until 1 December 2009

CSA Group 1 , cont.

Thirsk personal patch ISS Exp. 21/22 description , cont. :

Several of the structural components of the International Space Station are abstractly depicted by anatomical elements of the Thunderbird. The Space Station's eight solar arrays are depicted by the outermost large feathers of the Thunderbird's great outstretched wings. The inner triplets of smaller feathers represent the thermal radiators that provide cooling to the Station's onboard systems and astronaut inhabitants. The head and beak represent the modules of the Japanese and European partners. Canada's contributions to the international partnership, the ISS robotic manipulators, are represented by the curled appendages on the back of the head. The blue ovoid of the Thunderbird's eye indicates the location of the Node 2 docking port, where the new Japanese cargo vehicle, HTV, will be berthed with the aid of Canadarm2. Human faces adorn each wing. These faces are identical in form and kinship. One face symbolizes the astronaut crew in orbit, while the other symbolizes the large support team on Earth. The two faces gaze with trust and respect at one another in their common pursuit of the Expedition objectives. This unique partnership between the crew and the ground support team is the basis of the first Canadian Expedition. A bear head is stylistically depicted within the tail of the Thunderbird and signifies the Russian portion of the Station. The tail feathers identify the four Russian modules including the MRM2 module that will be added to the Station in late 2009. The Thunderbird's two claws are outstretched and symbolize they are ready to grasp the American, Russian and Japanese spacecraft that will dock with the Station during the Increment 20/21 timeframe. The torso of the Thunderbird represents the American Laboratory as well as the laboratories of the partner nations. The ribs represent the research racks and experiment facilities - the settings for innovative research in science, engineering and medicine. The knowledge gained from the onboard research activities during Increments 20 and 21 will benefit people on Earth. A radiating Sun occupies the position of the heart within the Thunderbird's torso. As the most important aboriginal symbol of life, the Sun represents the enhanced life support system, which now provides the Station with the capability to support a crew of six astronauts. The silver outline of the Thunderbird recalls the glistening exterior of the Station when sunlight sparkles off of its aluminum structure. The golden yellow and brown of the wings are similar in the coloration to the Station's solar arrays. The head of a Raven is depicted within the Moon. In its partially-open beak is a sun disk. It was the cunning Raven, according to Northwest Coast native legend, who stole the sun from a box in a powerful chief's house many years ago and flung it into the sky to bring light to the world for the first time.

While the Thunderbird is revered as the chief of Earth's skies, he has the heart of an explorer. His gaze is directed toward the Moon. He yearns to explore new destinations in space and to undertake new adventures. Similarly the first Canadian Expedition aboard the International Space Station rekindles a national spirit of exploration. Our enhanced abilities to live and work in space will enable Canada to participate with other nations in the exploration of future destinations in space. This patch was designed by Tsimshian artist, Bill Helin, a friend and supporter of the Canadian space program.

CSA Group 2

June 1992

Dafydd Williams, Julie Payette,

Chris Hadfield and Michael McKay

[The photo shows the CSA astronauts 1992]

Julie Payette: First Canadian to visit the ISS
- Space Shuttle STS-96 -
May 27, 1999 until June 6, 1999

Julie Payette personal patches

CSA Group 2 , cont.

Chris Hadfield: Only Canadian to fly to the Russian MIR space station
- Space Shuttle STS-74 -
November 15, until Nov. 20, 1995

First Canadian spacewalker
on April 22, 2001
- Space Shuttle STS-100 -
April 19, 2001 until May 1, 2001

First Canadian commander of the ISS
- ISS Expedition 35 -
May 13, 2013 until May 13, 2013

Chris Hadfield personal patch STS-74/MIR

Chris Hadfield personal patch STS-100

CSA Group 2 , cont.

This crest commemorates Expedition 34/35, Canada's second long-duration mission on board the International Space Station.
The border and living quarters highlighted in red mark the first time that a Canadian will command a spaceship, an honor bestowed on Canadian Space Agency Astronaut Chris Hadfield.
The central element portrays the International Space Station -- the world's only space science and research facility supporting long-term studies in the weightless environment of space.
Scientific discoveries and technological innovations produced aboard the ISS have applications to both terrestrial science and planetary exploration, represented by the white, silver and red arcs symbolic of the Earth, Moon and Mars.
The stars represent Hadfield's three voyages into space, and his three children. The ring around one of the stars illustrates the recent discovery of hundreds of other stars with planets circling them.
The azure pool at the point of the crest signifies water -- the fundamental basis for life on Earth and a resource that requires careful management. Bringing attention to the need for fresh water conservation is one of Chris Hadfield's underlying goals during this mission.
The astronaut wings at the top were conferred on Colonel Hadfield by the Prime Minister of Canada in 1995 in recognition of his qualification as Canada's first military pilot astronaut.
All these elements are defined by the shape of a guitar pick, symbolic of Chris's musical interests with an emphasis on science and art, a distinguishing feature of Expedition 34/35.

Chris Hadfieldpersonal patch ISS Exp. 34/35

Dafydd Williams personal patch STS-90

Dafydd Williams personal patch STS-118

CSA Group 2 , cont.

Dafydd Williams personal patch STS-118 description :

This patch celebrates Canada's role in STS-118, the 22nd assembly mission of the International Space Station. It depicts Canadian Space Agency Astronaut Dr. Dave Williams installing the S5 truss segment to the backbone of the International Space Station. It marks his role as the only Canadian to perform three spacewalks in support of a human space mission. The Station's stylized solar arrays symbolize an infinite quest for knowledge through exploration. The inclusion of waves in the design, an ancient symbol of exploration, draws attention to the history of sea and space discovery while highlighting Dr. Williams' experience as the first Canadian to be both an astronaut and an aquanaut. The STS-118 appears just above the MS in WILLIAMS to underscore his role as Mission Specialist. The caduceus, symbolizing medicine, appearing in Dr. Williams' name represents his pride in being a physician and his role as crew medical officer during the flight. This Canadian emblem was designed by Mustapha Kerouch, a Faculty of Engineering student at McGill University in Montreal.

CSA Group 3

May 2009

David Saint-Jacques, Jeremy Hansen

Inspired by the European Space Agency's tradition of naming astronaut missions, David chose the name "Perspective" for this mission. It refers to the unique experience of seeing the Earth from space. From the ground, it can be difficult to fully appreciate the complexity and intricacy of our planet, but the astronaut's vantage point gives them the chance to appreciate our home from a distance and to get a better perspective on its beauty, fragility and history.

Very proud to unveil my mission patch that represents the power of dreams!

"When I was a young child, I saw one of those photos of the Earth from the Moon, and it opened my eyes to a different way of viewing the world. I'm looking forward to seeing our home from space for myself, without borders or differences, and can't wait to share my experience and new perspective with others." — David Saint-Jacques

CSA Group 3 , cont.

David Saint-Jacques personal patch description :

David Saint Jacques' mission patch represents the power of dreams. By igniting human creativity and genius, dreams lead to progress. It also evokes the central role that space exploration has played in the evolution of our perspective of life on Earth.
The North Star (dreams) and compass rose (reason) make up the central element of the patch. In the same way that these have provided direction for explorers, dreams guide and inspire us without becoming an end in themselves.

The trail of the star is composed of four colours. Red (energy and passion), orange (creativity) and white (science) stand for the human ability to innovate and push the limits of what is possible. The blue portion is crescent-shaped, resembling the reflection off a lens, and symbolizes the international collaboration so crucial to the space program in the past, present and future.

The other four stars represent the men and women who work behind the scenes, putting all their talent to work to ensure this Canadian mission is a success. They also signify the astronaut's family, the shining constellation of which he is most proud.
Finally, like a blue jewel in the universe, Earth figures prominently on the patch. From space, our planet can be seen in its full splendour but also in all its fragility. Space exploration gives us a new perspective on our world, fosters our environmental responsibility, and fuels our dreams of peace.

CSA Group 4

July 2017

Joshua Kutryk

Jenni Sidey-Gibbons

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People's Republic

of China

(P R C)

-- C N S A --

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China Manned Space Program
(CMS)
also known as Project 921

Logo of CMS in the shape of a space station,
or the Chinese character "中" as in "中国" (China)

People's Liberation Army Astronaut Corps
(PLAAC)
also known as the Chinese Astronaut Corps

Emblem of the People's Liberation Army

China Group 1996

November 1996

Li Qinglong, Wu Jie

Trained at Yuri Gagarin Cosmonaut Training Center,

joined other twelve pilots as Chinese Group 1 in 1998

Li Qinglong

Wu Jie

Chinese Space Council MOA Ministry Aerospace Industry

China Group 1

January 1998

Astronaut Center of China

Chen Quan 陈全, Deng Qingming □□ □ ,

Fei Junlong 费俊龙, Jing Haipeng 景海□ ,

Liu Boming 刘伯明, Liu Wang 刘旺,

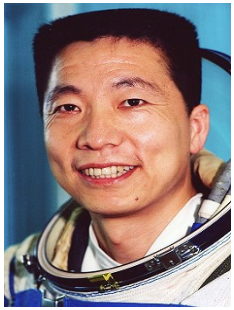
Nie Haisheng □□ □ , Pan Zhanchun 潘占春,

Yang Liwei 杨利伟, Zhai Zhigang 翟志□ ,

Zhang Xiaoguang 张晓光, Zhao Chuandong 赵传东

China Group 1 , cont.

Liu Wang 刘旺 First man to be sent into space
by the „space program of China“
- Shenzhou - 5 -
October 15, 2003



China Group 1 , cont.

Zhai Zhigang: First Chinese person to perform an EVA
(September 27, 2008)
- Shenzhou - 7 -
Sept. 25, 2008 until Sept. 28, 2008

Zhai Zhigang personal patch – EVA -

China Group 2
May 2010

Cai Xuzhe, Chen Dong,
Liu Yang, Tang Hongbo,
Wang Yaping, Ye Guangfu,
Zhang Lu

Chen Dong

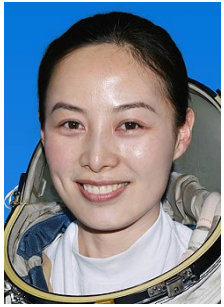
Tang Hongbo

China Manned Space Engineering

China Group 2 , cont.

Liu Yang: First Chinese woman in space
First Chinese woman aboard
a space station
- Shenhzou-9 -
- Tiangong space station -
June 16, 2012 until June 29, 2012

Wang Yaping: First Chinese woman to spacewalk
November 7, 2021
- Shenhzou-13 -
- Tiangong space station -
Oct. 15, 2021 until April 16, 2022



China Group 3
October 2020

China announced the selection of 18 new astronauts
(17 men, 1 woman),
whose names were not revealed,
in the following categories:

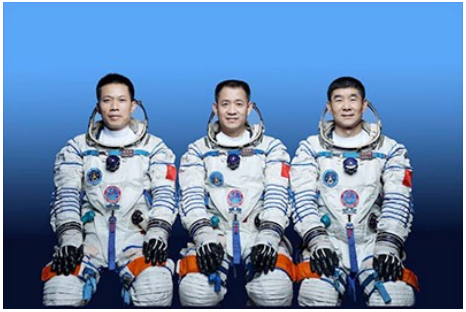
7 spacecraft pilots :	tbd
7 flight engineers :	Zhu Yangzhu, and
	tbd
4 mission payload specialists :	Gui Haichao, and
	tbd

China Group 4
October 2022

China announced the selection of 12-14 new astronauts,
whose names were not revealed,
in the following categories:

7-8 spacecraft pilots :	tbd
5-6 flight engineers :	tbd
2 mission payload specialists :	tbd

These are the Taikonauts who flew to the Space Station „Tiangong“ by the end of 2023



Nie Haisheng, Liu Boming,
Tang Hongbo

Ye Guangfu, Zhai Zhigang,
Wang Yaping

Cai Xuzhe, Chen Dong, Liu Yang

Fei Junlong, Deng Qingming, Zhang Lu

Gui Haichao, Zhu Yangzhu,
Jing Haipeng

Jiang Xinlin, Tang Hongbo
Tang Shengjie

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Acronyms

N A S A - - **National Aeronautics and Space Administration**

- **Spacelab** — **Space Laboratory**
- **ASTRO** — **Spacelab Observatory consiting of Telescopes**
- **IML** — **International Microgfravity Laboratory**
- **SLS** — **Spacelab Life Science**
- **ATLAS** — **Atmospheric Laboratory for Applications and Scientific**
- **USML** — **United States Microgravity Laboratory**
- **Neurolab** — **"Decade of the Brain" : understanding of the brain and central nervous system's response to microgravity**
- **EVA** — **ExtraVehicular Activities**
- **MMU** — **Manned Maneuvering Unit**

ROSCOSMOS - - **State Corporation for Space Activities**

- **NPOE** — **PAO S. P. Korolev Rocket and Space Corporation Energia (RSC Energia)**
- **TsPK** — **Yuri A. Gagarin State Scientific Research and Testing Cosmonaut Training Center (GCTC)**
- **RKKE** — **PAO S. P. Korolev Rocket and Space Corporation Energia (RKK Energiya)**
- **AN** — **Academy of Sciences**
- **TsKBEM** — **Central Desiogne Bureau of Experimental Machine Building**
- **GKNII** — **State Red Banner Scientific Researche Institute**

ESA - - **European Space Agency**

- **CNES** **National Centre for Space Studies (French: *Centre national d'études spatiales*)**
- **DLR** **Deutsche Zentrum für Luft- und Raumfahrt e. V.**
- **ATLAS-1** **The First Atmospheric Laboratory for Applications and Scientific**
- **ASI** **Italian Space Agency (Italian: *Agenzia Spaziale Italiana*)**
- **EAC** **European Astronaut Corps**

J A X A - - **Japan Aerospace Exploration Agency**

C S A - - **Canadian Space Agency / Agence spatiale canadienne, ASC**

C N S A - - **China National Space Administration**

Alexei Leonov

Voskhod 2

March 1965, the first space walk

Rusty Schweickart

Apollo 9

Schweickart performs an EVA (March 1969) standing on the lunar module porch, photographed by fellow astronaut James McDivitt inside the LM