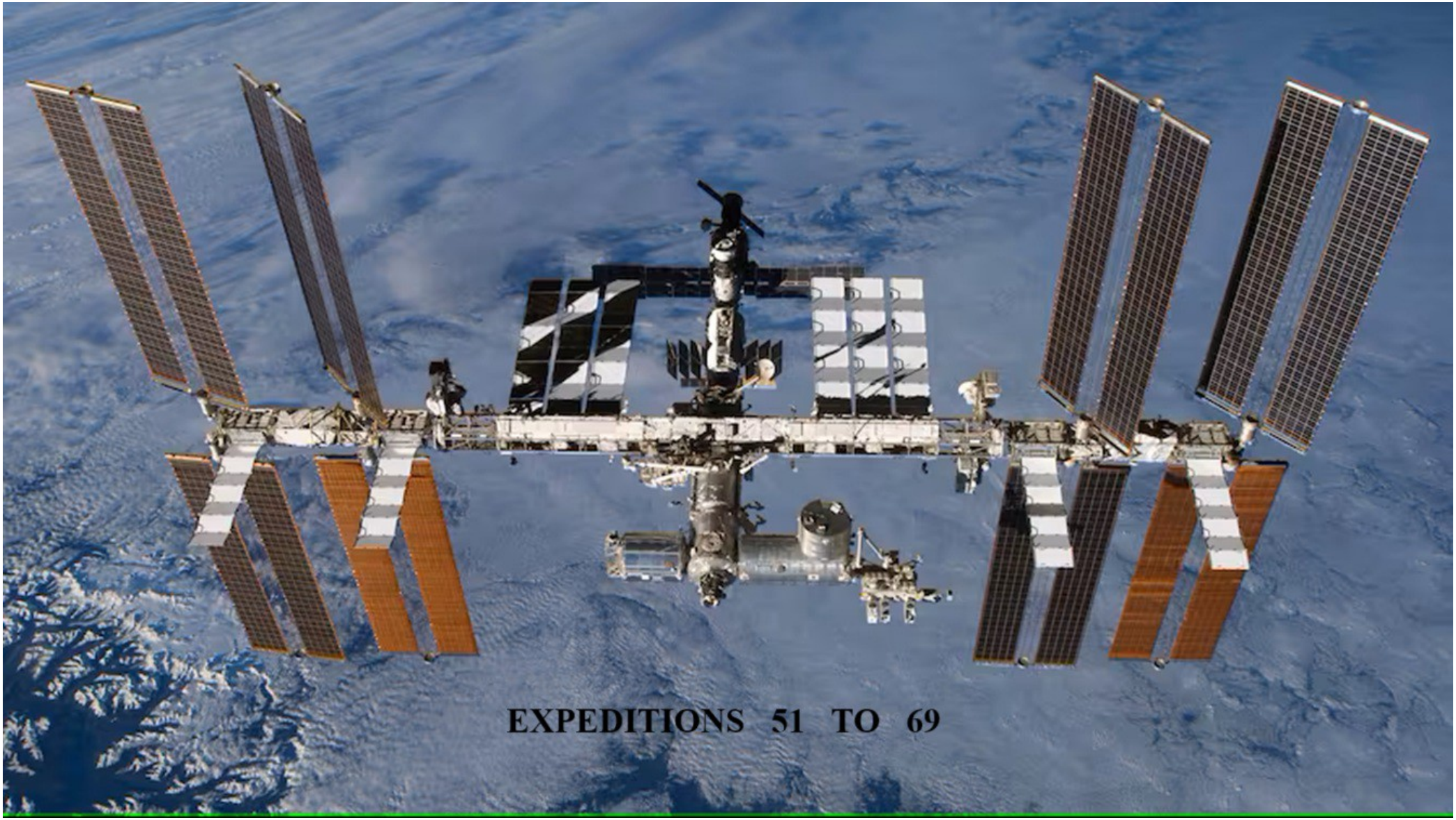
EXPEDITIONS 51 TO 69

Human Space Flight

INTERNATIONAL PATCH HANDBOOK

- PART II -

INTERNATIONAL SPACE STATION - MISSION

ISS EXPEDITION 51 to ISS EXPEDITION 69

2017 to 2023

International Patch Handbook - Part II -

Werner Ackermann

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etc.

Collectors of vintage space mission patches will often use the term "crew patch" to refer to a particular design of mission patch, usually a rare and highly sought after version. This site is intended as kind of a field guide to crew patches for the serious space patch collector.

What is a "crew patch"?

For collectors of vintage embroidered space mission patches there tends to be one patch in particular for each mission that is considered the definitive "Crew Patch". The main criteria for this patch are that it should have been used by the crew themselves at some stage around the time of the mission itself, and that it should be rare, and thus challenging to collect. For some missions the identity of the "crew patch" is obvious, but for others it's more difficult to say which patch can really meet the criteria mentioned above.

What are these "Crew Souvenir patches"?

On most missions a number of embroidered patches were carried by the crews as souvenirs, and others placed on the flight by US - NASA to be used in official presentations. In many cases these patches were examples of the "Crew Patch" as described above.
In other cases these may have been regular patch manufatories versions of the mission patch. These are categorized as "Crew Souvenir patches" any designs of which examples were carried on the flight or used by US – NASA at the time of the flight but which don't fall into the above categories - i.e. they are not the crew patch, or a commonly-available and widely - distributed design.
Another group of patches that could be classified in this way are those designs used by members of the crew not at the time of the mission itself but at some later stage. These terms are fairly arbitrary, so should not be taken as a definitive classification of a particular patch. Many patches that can't be classified as Crew Patches or Crew Souvenir Patches are both extremely rare and highly collectible and in many cases worth as much as, or more than, the so-called 'Crew Patches'.

The

International Space Station (ISS)

was first launched into orbit on November 20, 1998.

The first module, name Zarya, was launched aboard a Russian Proton rocket.

The second module, called Unity, was launched aboard the Space Shuttle during mission STS-88.

This was the beginning of the largest international cooperative space venture in history as it attached together in orbit the first two modules of the **International Space Station (ISS)**

I S S EXPEDITION 50 / 51

From left to right:
Peggy Whitson , Oleg Novitskiy , Thomas Pesquet

Launch Date : November 17, 2016 , 20:20 UTC

Vehicle : SOYUZ MS - 03

Landing Crew : Novitskiy (RUS)
Pesquet (France)

Landing Date : June 02, 2017 , 14:10 UTC

ISS Crew - 51: from April 10, 2017 to April 20, 2017

Cdr. Peggy Whitson (USA)

FE Novitskiy (RUS)

FE Pesquet (France)

ISS Crew - 51: from April 20, 2017 to June 02, 2017

Cdr. Peggy Whitson (USA)

FE Novitskiy (RUS)

FE Pesquet (France)

FE Yurchikhin (RUS) (Soyuz MS-04)

FE Fischer (USA) (Soyuz MS-04)

SOYUZ MS - 03

Right :

The Soyuz MS-03 crew patch uses the classical shield shape; the origin of this type of emblem. The flags of the countries represented on this international space mission, the name of the spacecraft and the Roscosmos logo crown the design. Three animals symbolize each of the crewmembers occupying three quandrants, while the fourth one houses the spaceship, depicted flying towards the ISS's docking target. The eagle is taken from the state seal of Iowa, birth state of US crewmember Whitson, the Zubr buffalo from Belorussia represents the Russian commander's origins and the lion to show the Normandy origins of French astronaut Pesquet. Behind the crew's family names, a mountain in the Caucasus mountains is shown: Kazbek, which is the callsign for the crew of Soyuz MS-03. Patch designed by Luc van den Abeelen.

+ +

Left :

ENERGIA
SOYUZ MS - 03
LOGO

I S S EXPEDITION 51

From as early as the 11th century, coats of arms have been used as emblems representing groups as small as families to as large as countries.

The Expedition 51 patch is designed as a modernized international coat of arms, blending the traditional shield shape with our modernized symbol of achievement, the International Space Station.

The background represents our home world and its inhabitants on the left, and outer space to the right.

The bi-color International Space Station is the bridge between the two, symbolizing the benefits on Earth of space research, and at the same time our mission to explore deeper into space, on a path to further discovery and knowledge

I S S EXPEDITION 51 , info

The actual - December 2015 - artwork for the planned
ISS Expedition 51

< Version discarded due to crew change >

I S S EXPEDITION 51 , info

The actual - December 2015 - patch for the planned
ISS Expedition 51

< Version discarded due to crew change >

I S S EXPEDITION 51

E S A - Proxima mission patch

The name was chosen from over 1300 entries to ESA's competition earlier this year.
The winner was provided by 13 year-old Samuel Planas from Toulouse, France.

"Proxima is the closest star to our Sun and is the most logical first destination for a voyage beyond our Solar System," explained Samuel Planas. "Proxima also refers to how human spaceflight is close to people on Earth."

The logo continues the exploration theme, with star trails evoking future space travel and exploration beyond low-Earth orbit. Two stylised planets can represent our Earth and Moon or the Moon and Mars.

The 'x' in Proxima is centred in the middle of the patch to signify the star Proxima Centauri. It also refers to the unknown as well as Thomas Pesquet being the 10th French space voyager.

The three vertical lines form the distinctive outline of the International Space Station as well as representing the colours of Earth, the Moon and Mars, while hinting at the French national flag. Minister Mandon handed Thomas Pesquet a French flag during the press conference to carry into space.

Thomas Pesquet commented:
"I am really pleased with this mission name and the logo. It ticks all the boxes I had in mind by continuing the naming tradition for French astronauts and recognising the legacy of human spaceflight so far while also being forwardlooking and futuristic."

I S S EXPEDITION 51

Mission Overview

04/10/17 - Expedition 51 Start

04/20/17 - Soyuz MS - 04 Launch / Dock

05/12/17 - U.S. - Spacewalk (4:09 h)

05/23/17 - U.S. - Spacewalk (2:44 h)

06/02/17 - Soyuz MS - 03 Undock / Land

06/02/17 - Expedition 51 End

Visiting Vehicles

04/18/17 - Cygnus OA – 7 Launch

04/22/17 - Cygnus OA – 7 Capture

SOYUZ MS - 03 , info

Here is the MS - 03 back-up crew patch :

I S S EXPEDITION 51 / 52

From left to right:
Fedor Yurchikhin , Jack Fischer

Launch Date : April 20, 2017 , 07:13 UTC

Vehicle : SOYUZ MS - 04

Landing Crew : Yurchikhin (RUS),
Fischer (USA)
Peggy Whitson (USA) [Soyuz MS - 03]

Landing Date : September 03, 2017 , 01:22 UTC

ISS Crew - 52: from June 02, 2017 to July 28, 2017

Cdr. Yurchikhin (RUS)

FE Fischer (USA)

FE Peggy Whitson (USA) (Soyuz MS-03)

ISS Crew - 52: from July 28, 2017 to September 02, 2017

Cdr. Yurchikhin (RUS)

FE Fischer (USA)

FE Peggy Whitson (USA)

FE Ryazansky (RUS) (Soyuz MS-05)

FE Bresnik (USA) (Soyuz MS-05)

FE Nespoli (Italy) (Soyuz MS-05)

Soyuz MS - 04 „launch crew“ patch :

Right :

The Soyuz MS-04 patch design is inspired on the iconic Apollo 12 patch.
The classic sailing ship symbolizes the dream of flying in space. The vessel trails a stream of stars, as used in the patch for Expedition 52, which cosmonaut Yurchikhin will command during the second part of his stay on the International Space Station, symbolized by the single star to the left of the ship. Behind the ship in Earth-like colors is a depiction of Konstantin Tsiolkovski's design for a space station, while the border is similar in design to spaceship commander's Yurchikhin earlier Soyuz patches. His name and that of astronaut Fischer, together with the name of the spaceship incorporating the Roscosmos logo and the space fliers national flags occupy the border of the logo. Designed by Luc van den Abeelen.

+ +

SOYUZ MS - 04

Left :

ENERGIA
SOYUZ MS - 04
LOGO

SOYUZ MS - 04 , cont.

Soyuz MS - 04 „landing crew“ patch :

Top right :

Yurchikhin requested this version with the added name Whitson to be produced to commemorate the exceptional fact that he would be landing with an extra colleague: Peggy Whitson.

Bottom right :

Hidden in the embroidery is the name 'Argo' in Greek letters;
the name Yurchikhin gave to his Soyuz ship.

SOYUZ MS - 04 , info

To represent their launch together, Fischer and Yurchikhin worked with artists to design two distinct mission patches, one „official“ and one „unofficial“, but both drawing inspiration from the emblems of historic past spaceflights.

SOYUZ MS - 04 , info

One more set of patches for Fedor Yurchikhin and Jack Fischer to honor Apollo-Soyuz legacy of coop.
Thanks to Blake with Blake Dumesnil Designs for rocking this!

„ official „

„ unofficial „

I S S EXPEDITION 52

Our planet is shown surrounded by an imaginary constellation shaped like a house, depicting the theme of the patch:

“The Earth is our home.”

It is our precious cradle, to be preserved for all future generations. The house of stars just touches the Moon, acknowledging the first steps we have already taken there, while Mars is not far away, just beyond the International Space Station, symbolized by the Roman numeral “LII,” signifying the expedition number.

The planets Saturn and Jupiter, seen orbiting farther away, symbolize humanity’s exploration of deeper space, which will begin soon.

A small Sputnik is seen circling the Earth on the same orbit with the ISS, bridging the beginning of our cosmic quest till now:

Expedition 52 will launch in 2017, sixty years after that first satellite.

Two groups of crew names signify the pair of Soyuz vehicles that will launch the astronauts of Expedition 52 to the Station.

I S S EXPEDITION 52 , info

The actual - December 2015 - patch for the planned
ISS Expedition 52

< Version discarded due to crew change >

I S S EXPEDITION 52 , info

The actual - November 2016 - patch for the planned
ISS Expedition 52

< Version discarded due to crew change >

I S S EXPEDITION 52 , info

The Expedition 52 crew members :

Front row (from left) are Commander Fyodor Yurchikhin
and NASA astronaut Randy Bresnik.
Back row (from left) are NASA astronauts Jack Fischer
and Peggy Whitson, European Space Agency astronaut
Paolo Nespoli and Roscosmos cosmonaut Sergey Ryazanskiy.

I S S EXPEDITION 52 , info

Expedition 52 crew poster

I S S EXPEDITION 52

Mission Overview

06/02/17 - Expedition 52 Start

07/28/17 - Soyuz MS - 05 Launch / Dock

08/17/17 - RUS - Spacewalk (7:33 h)

09/02/17 - Soyuz MS - 04 Undock / Land

09/02/17 - Expedition 52 End

Visiting Vehicles

06/04/17 - Cygnus OA – 7 Release

06/04/17 - Dragon SpX – 11 Launch

06/05/17 - Dragon SpX – 11 Capture

06/14/17 - Progress MS - 06 Launch

06/16/17 - Progress MS - 06 Dock

07/03/17 - Dragon SpX – 11 Release

07/20/17 - Progress MS - 05 Undock

08/14/17 - Dragon SpX – 12 Launch

08/16/17 - Dragon SpX – 12 Capture

SOYUZ MS - 04 , info

Here is the MS - 04 back-up crew patch :

I S S EXPEDITION 52 / 53

From left to right:
Paolo Nespoli , Sergey Ryazansky , Randolf Bresnik

Launch Date : July 28, 2017 , 15:41 UTC

Vehicle : SOYUZ MS - 05

Landing Date : December 14, 2017 , 08:38 UTC

ISS Crew - 53: from September 02, 2017 to September 13, 2017

Cdr. Bresnik (USA)

FE Ryazansky (RUS)

FE Nespoli (Italy)

ISS Crew - 53: from September 13, 2017 to December 14, 2017

Cdr. Bresnik (USA)

FE Ryazansky (RUS)

FE Nespoli (Italy)

FE Misurkin (RUS) (Soyuz MS-06)

FE Vande Hei (USA) (Soyuz MS-06)

FE Acaba (USA) (Soyuz MS-06)

SOYUZ MS - 05

Right :

Roscosmos has announced a competition to design the emblem. The design by Anastasia Sergeevna Timofeyeva (Yekaterinburg) will be used as the basis for the official Soyuz MS-05 patch.
The Soyuz MS-05 crew patch features a nose-on view of the spacecraft, as it prepares to dock with the International Space station, with the Roscosmos logo just above it. In a protruding circle, the Greek god of the northern wind Boreas is shown, as this name is the call sign for the spaceship's crew. In the foreground, the navigational device of the docking cross is shown, as seen by the crew during the link-up with the orbital facility. The constellation of Scorpion is shown in the background, as a reference to the spaceship commander's star sign. Three stars in the background symbolize the crew members, whose names are shown in the border, with the corresponding national flags next to them.   Designed by Anastasia Timofeyeva, finalized by Luc van den Abeelen.   Copyright Roscosmos/spacepatches.nl

\+ +

Left :

ENERGIA
SOYUZ MS - 05
LOGO

SOYUZ MS - 05 , info

Roscosmos release :

Competition results for the Soyuz MS-05 crew patch

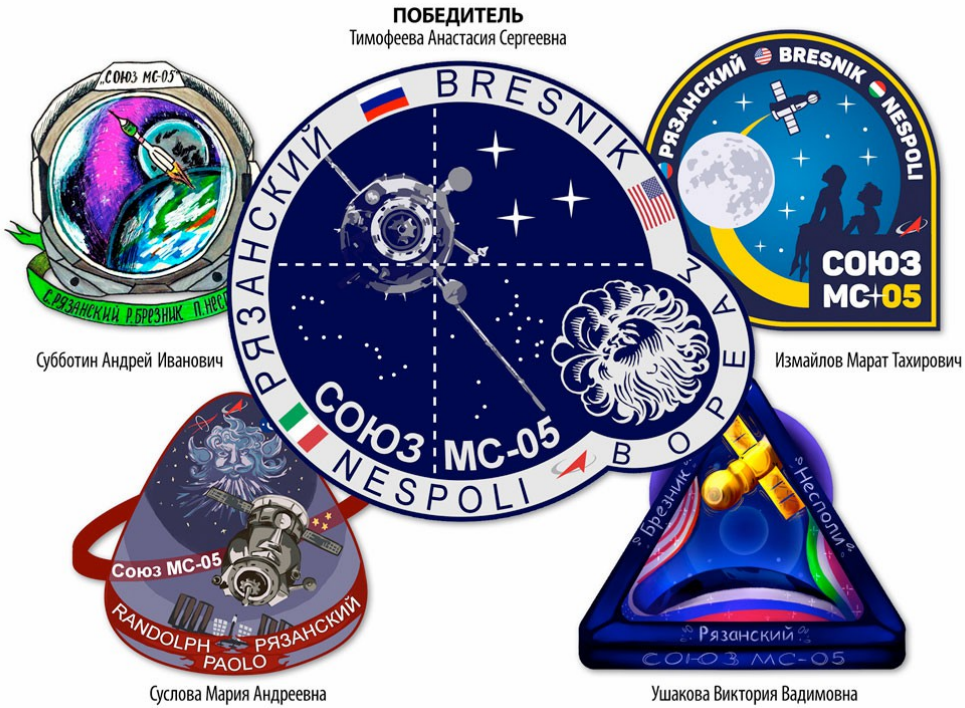
At the end of October 2016, the crew of Soyuz MS-05 announced a competition to create designs for its mission emblem.

By almost a month later, Roscosmos had received more than 700 submissions. The choices were so many that the crew's commander, Sergey Ryazansky (Roscosmos), and flight engineers Randy Bresnik (NASA) and Paolo Nespoli (ESA) decided to postpone the date of the end fo the contest so they could review each design and determine a winner.

On Wednesday (Dec. 21), the crew announced the winner!

The design by Тимофеева Анастасия Сергеевна (Yekaterinburg) will be used as the basis for the official Soyuz MS-05 patch.

In addition, the crew noted the works of
Суслова Мария Андреевна (Kaliningrad),
Измайлов Марата Тахировича (Moscow),
Ушаковой Виктории Вадимовны (St. Petersburg) and
Субботин Андрей Иванович (Sovetskaya Gavan).



I S S EXPEDITION 53

The International Space Station is our launch pad into the future of human space exploration.

Collectively, our world stands at the cusp of incredible developments as a spacefaring species.

Onboard the space station we continue to evolve the technologies vital to the sustainment and longevity of humans in the harsh realities of living without gravity or the protection of our atmosphere.

These self-sustaining or regenerative technologies continually developed aboard the space station not only improve life here on Earth, but they are essential to human beings existence beyond low-Earth orbit (LEO).

The space station is the linchpin for this next great phase of development and is instrumental in expanding the use of space, not only as a worldclass science laboratory, but also as a destination for next-generation space vehicles.

This journey beyond LEO is depicted in the Expedition 53 patch as we, the crew, will endeavor to accomplish the work that allows future missions to further explore our solar system.

This journey will only be accomplished as an international team, represented by our multinational crew as well as by the many countries depicted on the globe.

The myriad of stars represent the untold number of passionate and supremely dedicated people that endeavor across the planet daily to make the space station the amazing vehicle it is as well as prepare us for the next great steps forward in space exploration.

I S S EXPEDITION 53 , info

The actual - May 2016 - patch for the planned
ISS Expedition 53

< Version discarded due to crew change >

I S S EXPEDITION 53 , info

The actual - November 2016 - patch for the planned
ISS Expedition 53

< Version discarded due to crew change >

I S S EXPEDITION 53

E S A - Vita mission patch

Vita stands for Vitality, Innovation, Technology and Ability and was chosen by Italy's ASI space agency, which is providing the mission through a barter agreement with NASA.

In Italian, "vita" means "life," reflecting the experiments that Paolo Nespoli will run and the philosophical notion of living in outer space – one of the most inhospitable places for humans.

The overall circle and blue shading evoke our planet, with the Third Paradise symbol by Italian artist Michelangelo Pistoletto linking the mission's main messages.

Three elements stand out:
a strand of DNA as a symbol of life and science,
a book as a symbol of culture and education, and
Earth as a symbol of humanity.

The Third Paradise is a reformulation of the symbol for infinity.
The two opposing ovals contain elements of the scientific and cultural activities Paolo Nespoli will perform in space.

Their meeting in the center represents the evolution of Earth and benefits for humankind.
The central shape of the symbol, together with the presence of the globe, can also be seen as an eye, giving an astronaut's perspective over our planet.

Reflecting Paolo Nespoli's origins, the logo features the colors of the Italian flag.

The mission's logo was developed by ESA together with ASI and Paolo Nespoli.

I S S EXPEDITION 53 , info

The six-member Expedition 53 crew poses for an official crew portrait at the Johnson Space Center in Houston, Texas.
Seated in the front (from left) are Flight Engineer Alexander Misurkin of Roscosmos and Commander Randy Bresnik of NASA.
Standing in the back (from left) are NASA astronauts Joe Acaba and Mark Vande Hei, Sergey Ryazanskiy of Roscosmos and Paolo Nespoli of the European Space Agency.

I S S EXPEDITION 53 , info

Expedition 53 crew poster

I S S EXPEDITION 53

Mission Overview

09/02/17 - Expedition 53 Start

09/13/17 - Soyuz MS - 06 Launch / Dock

10/05/17 - U.S. - Spacewalk (6:55 h)

10/10/17 - U.S. - Spacewalk (6:15 h)

10/20/17 - U.S. - Spacewalk (6:45 h)

12/14/17 - Soyuz MS - 05 Undock / Land

12/14/17 - Expedition 53 End

Visiting Vehicles

09/17/17 - Dragon SpX – 12 Release

10/14/17 - Progress MS – 07 Launch

10/16/17 - Progress MS – 07 Dock

11/12/17 - Cygnus OA – 8 Launch

11/14/17 - Cygnus OA – 8 Capture

12/06/17 - Cygnus OA – 8 Release

SOYUZ MS - 05 , info

Here is the MS - 05 back-up crew patch :

I S S EXPEDITION 53 / 54

From left to right:
Joseph Acaba , Alexander Misurkin , Mark Vande Hei

Launch Date : September 12, 2017 , 21:17 UTC

Vehicle : SOYUZ MS - 06

Landing Date : February 28, 2018 , 02:31 UTC

ISS Crew - 54: from December 14, 2017 to December 19. 2017

Cdr. Misurkin (RUS)

FE Vande Hei (USA)

FE Acaba (USA)

ISS Crew - 54: from December 19. 2017 to February 27, 2018

Cdr. Misurkin (RUS)

FE Vande Hei (USA)

FE Acaba (USA)

FE Shkaplerov (RUS) (Soyuz MS-07)

FE Tingle (USA) (Soyuz MS-07)

FE Kanai (Japan) (Soyuz MS-07)

SOYUZ MS - 06

Right :

The composition of the emblem of the crew of the spacecraft Soyuz MS-06 is designed around a stylized image of an eagle, spreading its wings. The powerful bird in the image also recalls the city of Oyol, where spacecraft commander Alexander Misurkin grew up. The crew's callsign is "Altair": the brightest star in the constellation of the Eagle. The design of the graphic symbol of the crew is made in a simple three-color palette; the continents of our planet are depicted in a minimalist manner - dots in the style of computer graphics. In the center of the emblem a Soyuz spaceraft is depicted in flight. In the lower part of the emblem the logos of Roscosmos and NASA are shown. The top part of the border shows the name of the Soyuz MS-06 spacecraft while the bottom part is taken up by the crew members' names.The crew patch was developed by Alexei Tarapata, the winner of a contest announced by Alexander Misurkin in social media.
The final design was made by Dutch artist Luc van den Abeelen.

+ +

Left :

ENERGIA
SOYUZ MS - 06
LOGO

I S S EXPEDITION 54

Orbiting Earth continuously since 1998, the International Space Station (ISS) is one of our greatest engineering achievements.

It is depicted in gold, symbolic of constancy and excellence. Flying toward a sunrise represents the station's contributions to a bright future. That sunrise uses blue, white, and red, the combined national colors of Japan, Russia, and the United States, symbolizing the crew's cohesiveness.

Crewmember names are in blue, symbolizing devotion and loyalty.

The gold border represents the constant human presence in space onboard the orbiting laboratory. Symbolic of new Russian and U.S. spacecraft that will advance human exploration, the patch is shaped as a capsule.

The number 54 is drawn as a path eventually leading to Mars.

Finally, the stars symbolize the values of leadership, trust, teamwork, and excellence lived by mission control teams throughout the history of human space programs, as well as the global vigilance of those teams while operating the station.

I S S EXPEDITION 54 , info

The actual - August 2016 - patch for the planned ISS Expedition 54

collectSPACE information : It looks like there might be two versions of this patch out there: one with merrowed edge and one with cut edge.

- Asking the designer Tim Gagnon if he was aware of the specifications for the patch and he felt the cut one had way too much yellow showing, so the cut version may be unfinished or a second version
- The first one did not get its border (this is done by hand after the patches are cut).
- The seller has now sold a total of 30 of these obsolete Expedition 54 (original six crew name) patches so far, so it is now looking likely there is at least 30, maybe more of these "unfinished" obsolete ISS-54 patches out there?

< Version discarded due to crew change >

I S S EXPEDITION 54 , info

The six-member Expedition 54 crew poses for an official crew portrait at the Johnson Space Center in Houston, Texas.
From left are Flight Engineers Joe Acaba and Mark Vande Hei of NASA, Commander Alexander Misurkin of Roscosmos and Flight Engineers Anton Shkaplerov of Roscosmos, Scott Tingle of NASA and Norishige Kanai of the Japan Aerospace Exploration Agency.

I S S EXPEDITION 54 , info

Expedition 54 crew poster

I S S EXPEDITION 54

Mission Overview

12/14/17 - Expedition 54 Start

12/17/17 - Soyuz MS - 07 Launch / Dock

01/23/18 - U.S. - Spacewalk (7:23 h)

02/02/18 - RUS - Spacewalk (8:12 h)

02/16/18 - U.S. - Spacewalk (5:52 h)

02/28/18 - Soyuz MS - 06 Undock / Land

02/28/18 - Expedition 54 End

Visiting Vehicles

12/15/17 - Dragon SpX – 13 Launch

12/17/17 - Dragon SpX – 13 Capture

12/28/17 - Progress MS – 06 Undock

01/13/18 - Dragon SpX – 13 Release

02/13/18 - Progress MS – 08 Launch

02/15/18 - Progress MS – 08 Dock

SOYUZ MS - 06 , info

Here is the MS - 06 back-up crew patch :

I S S EXPEDITION 54 / 55

From left to right:
Norishige Kanai , Anton Shkaplerov , Scott Tingle

Launch Date : December 17, 2017 , 07:21 UTC

Vehicle : SOYUZ MS - 07

Landing Date : June 03, 2018 , 12:39 UTC

ISS Crew - 55: from February 27, 2018 to March 23, 2018

Cdr. Shkaplerov (RUS)

FE Tingle (USA)

FE Kanai (Japan)

ISS Crew - 55: from March 23, 2018 to June 03, 2018

Cdr. Shkaplerov (RUS)

FE Tingle (USA)

FE Kanai (Japan)

FE Artemiev (RUS) (Soyuz MS-08)

FE Feustel (USA) (Soyuz MS-08)

FE Arnold (USA) (Soyuz MS-08)

SOYUZ MS - 07

Right :

The crew patch is depicted in the shape of an an armillary sphere:
a centuries-old tool that is supposed to represent the heavens. The Soyuz MS-07 spacecraft is shown flying high over the Earth in the center of the instrument, symbolizing man's continued presence in orbit. In the background, the Moon is shown, representing future aspiration for human activities in space.
The constellation of Capricorn is represented in the top of the design, with the three larger stars representing the crew members. The groups of two and three smaller stars symbolize the children fathered by spacecraft commander Shkaplerov and American astronaut Tingle. The crew's names are positioned along the border of the patch together with their national flags. On the design's horizontal ring, the name of the spacecraft and the Roscosmos logo are shown. Designed by Luc van den Abeelen.

\+ +

Left :

ENERGIA
SOYUZ MS - 07
LOGO

SOYUZ MS - 07 , info

I S S EXPEDITION 55 , info

ISS Expedition 54 / 55 crew members
- from left to right -
Norishige Kanai , Anton Shkaplerov and Scott Tingle
pose in front of the Soyuz launcher spacecraft
that would launch them into space

Uniform / clothing patch rules :

Left shoulder:		National flag
Right shoulder:		Spacecraft mission patch
Right front side:	-	Space Agency patch
	-	First ISS Expedition mission patch
Left front side:	-	Personal patch / patches
	-	Second ISS Expedition mission patch

I S S EXPEDITION 55 , info

Here is the Japan Aerospace Exploration Agency's (JAXA)
patch for Norishige Kanai's Expedition 54/55
stay aboard the International Space Station

I S S EXPEDITION 55

The six crew members of Expedition 55 are patriots from three different countries – Japan, Russia, and the United States.

The crew from these three countries will work together to ensure the success

of Expedition 55. The three rings symbolize the three countries of the six crew members. The rings join in a common intersection, symbolizing collaboration and a common focus for the crew aboard the space station.

The colors of the rings represent the energy and power required to carry humans and equipment into space and to operate the ISS. The colors blue and green represent the magnificent beauty of Earth. The color black represents the darkness of space, and the immense challenge of exploring space.

The six stars represent the crew, Norishige Kanai, Scott Tingle, Anton Shkaplerov, A.J. (Drew) Feustel, Oleg Artemyev, and Ricky Arnold.

The three flags are the flags representing each crew member's country.

The swoosh extending upward towards space represents the dedication of cosmonauts, astronauts and a multinational support team working together to explore space and discover new science that will benefit all humans.

I S S EXPEDITION 55 , info

The six-member Expedition 55 crew poses for an official crew portrait at the Johnson Space Center in Houston, Texas.
In the front row (from left) are Scott Tingle of NASA, Commander Anton Shkaplerov of Roscosmos and Norishige Kanai of the Japan Aerospace Exploration Agency.
In the back row (from left) are NASA astronauts Ricky Arnold and Andrew Feustel and Roscosmos cosmonaut Oleg Artemyev.

I S S EXPEDITION 55 , info

Expedition 55 crew poster

I S S EXPEDITION 55

Mission Overview

02/28/18 - Expedition 55 Start

03/21/18 - Soyuz MS-08 Launch / Dock

03/29/18 - U.S. - Spacewalk (6:10 h)

05/16/18 - U.S. - Spacewalk (6:30 h)

06/03/18 - Soyuz MS-07 Undock / Land

06/03/18 - Expedition 55 End

Visiting Vehicles

03/28/18 - Progress MS – 07 Undock

04/02/18 - Dragon SpX – 14 Launch

04/04/18 - Dragon SpX – 14 Capture

05/05/18 - Dragon SpX – 14 Release

05/21/18 - Cygnus OA – 9 Launch

11/24/18 - Cygnus OA – 9 Capture

SOYUZ MS - 07 , info

Here is the MS - 07 back-up crew patch :

I S S EXPEDITION 55 / 56

From left to right:
Richard Arnold , Oleg Artemiev , Andrew Feustel

Launch Date : March 21, 2018 , 17:44 UTC

Vehicle : SOYUZ MS - 08

Landing Date : October 04, 2018 , 11:45 UTC

ISS Crew - 56: from June 03, 2018 to June 08, 2018

Cdr. Feustel (USA)

FE Artemiev (RUS)

FE Arnold (USA)

ISS Crew - 56: from June 08, 2018 to October 04, 2018

Cdr. Feustel (USA)

FE Artemiev (RUS)

FE Arnold (USA)

FE Prokopiev (RUS) (Soyuz MS-09)

FE Geerst (Germany) (Soyuz MS-09)

FE Serena Aunon-Chancellor (USA) (Soyuz MS-09)

SOYUZ MS - 08

Right :

The Soyuz MS - 08 crew patch design is shaped like the spacecraft's descent module as it looks during the landing phase of the ship's mission. Within, the crew is depicted in silhouettes as they approach their launch vehicle. A moon is shown behind the launch complex, representing the dream of manned missions into deeper space. Six stars in the background are for the six-member ISS crew.
The 'Science' statue located in Baikonur and the tulip from the old coat of arms of Leninsk town symbolize the significance of the Russian launch base.
The International Space Station is shown in bright yellow as the spacecraft's orbital destination. The crew names are shown in a semicircle at the top of the design, while the colors of the Russian and US flags are shown at the bottom, flanking the Roscosmos logo, underneath the spacecraft's name and crew expedition numbers. Designed by Luc van den Abeelen

\+ +

Left :

ENERGIA
SOYUZ MS - 08
LOGO

SOYUZ MS - 08 , info

NASA photos from the rollout of the Soyuz rocket to the launch pad show multiple spectators wearing bright orange vests with a different MS - 08 crew-related insignia

SOYUZ MS - 08 , info

Earlier (left) and the final versions (right) of the MS - 08 patch designed by Arnold's daughter.

This is not the official Soyuz MS - 08 crew patch but one produced by AB Emblem based on a design by Arnold's daughter(s)

It's hard to see, but on the first version patch (left), the Soyuz capsule is over Hawai'i, and in the window, there's a hand giving the "hang loose" sign (quite common in the 50th state).

I S S EXPEDITION 56

The Expedition 56 patch portrays a dove carrying an olive branch in its beak.

The patch includes of the Soyuz launch vehicle for the crew and the ISS orbital laboratory.

The Expedition 56 astronauts' names are displayed on the dove's wings and along the limb of the Earth at the base of the patch. The dove's tail is firmly planted on the Earth limb in order to represent the strong link between our planet and the humans who are sent into the cosmos to carry us beyond the bounds of our only home.

The patch theme is best expressed with the Sanskrit word "Shanti," meaning peace, tranquility in one of the oldest languages in history.

The patch illustrates our hope for peace and love in the world, and the innate human desire to spread our wings and explore into the future, building on the wisdom of the past, for the betterment of humankind.

The artist is Drew Feustel's son.

ISS Expedition 56 will be led by commander Drew Feustel of NASA. His crewmates, all flight engineers, include:
Roscosmos cosmonauts Oleg Artemyev and Sergei Prokopyev;
Ricky Arnold and Serena Aunon-Chanceller of NASA and
European Space Agency astronaut Alexander Gerst

I S S EXPEDITION 56 , info

This is the shirt embroidery image for Expedition 56

I S S EXPEDITION 56 , info

The actual - September 2017 - patch for the planned ISS Expedition 56

< Version discarded due to crew change >

I S S EXPEDITION 56

Mission Overview

06/03/18 - Expedition 56 Start

06/06/18 - Soyuz MS - 09 Launch / Dock

06/14/18 - U.S. - Spacewalk (6:45 h)

08/16/18 - RUS - Spacewalk (7:46 h)

10/04/18 - Soyuz MS - 08 Undock / Land

10/04/18 - Expedition 56 End

Visiting Vehicles

06/29/18 - Dragon SpX – 15 Launch

07/02/18 - Dragon SpX – 15 Capture

07/10/18 - Progress MS – 09 Launch / Dock

07/15/18 - Cygnus OA – 9 Release

08/04/18 - Dragon SpX – 15 Release

08/23/18 - Progress MS – 08 Undock

09/22/18 - Kounotori HTV – 7 Launch

09/27/18 - Kounotori HTV – 7 Capture

I S S EXPEDITION 56 , info

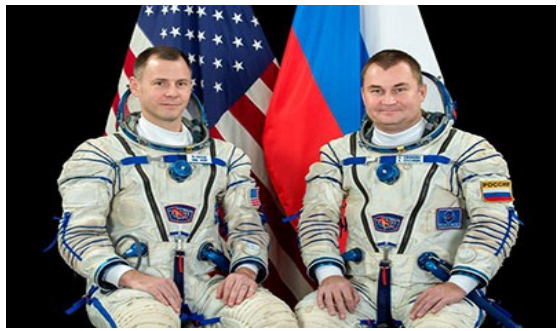
Expedition 56 crew poster

I S S EXPEDITION 56 / 57

From left to right:
Serena Aunon-Chancellor , Sergey Prokopiev , Alexander Geerst

Launch Date : June 06, 2018 , 17:12 UTC
Vehicle : SOYUZ MS - 09
Landing Date : December 20, 2018 , 05:02 UTC

I S S EXPEDITION 57 / 58



From left to right:
Tyler Hague , Alexey Ovchinin

Launch Date : October 11, 2018 , 08:40 UTC
Vehicle : SOYUZ MS - 10
Landing Date : October 11, 2018 , 09:00 UTC

ISS Crew - 57: from October 04, 2018 to December 03, 2018

Cdr. Geerst (Germany)

FE Prokopiev (RUS)

FE Serena Aunon-Chancellor (USA)

SOYUZ MS - 10 : [suborbital mission]
- After 2minutes, 25seconds failure of one booster
- Spacecraft separated from the launch vehicle Soyuz-FG
- Soyuz MS - 10 descending and land under its parachute
- Crew is safe and in good condition

ISS Crew - 57: from December 03, 2018 to December 20, 2018

Cdr. Geerst (Germany)

FE Prokopiev (RUS)

FE Serena Aunon-Chancellor (USA)

FE Kononenko (RUS) (Soyuz MS-11)

FE Saint-Jacques (Canada) (Soyuz MS-11)

FE Ann McClain (USA) (Soyuz MS-11)

SOYUZ MS - 09

Right :

The circular shape of the Soyuz MS-09 crew patch symbolizes the shape of the globe, inside of which the Belukha mountain is visible: the highest peak of the Altai, representing the crew's callsign. A trio of white swans flying over the Earth towards the ISS symbolise the three crew members. The six stars shown against the black background of space are for the members making up the successive ISS expedition crews. The golden silhouette of the orbital outpost is shown at the top of the emblem. Below are the numbers of the main expeditions of the same hue. The Roscosmos logo is placed in the middle of the inscription 'Soyuz MS - 09'. The crew members' names are put along the emblem's inner border with the crew commander's name underneath the flying spaceship Soyuz. The outer border is made up of the astronauts' national flags.
Designed by Luc van den Abeelen.   Copyright Roscosmos/spacepatches.nl
Soyuz commander Sergey Prokopyev briefly described its design during the crew's press conference at Johnson Space Center in Houston on Wednesday (Feb. 14):   „ Just imagine this picture, on this symbol we have of course Earth, space and three swans - white swans they fly to the space. I think it is a good symbol for three members of crew and it is main idea this is a patch. „

+ +

Left :

ENERGIA
SOYUZ MS - 09
LOGO

SOYUZ MS - 10

Right :

The triangular design of the Soyuz MS - 10 crew patch shows the spacecraft orbiting over the Earth's surface. Behind our blue planet, the elements of the Russian and American flags stress the international character of the space mission. The three stars, part of the US flag and the triangular design recall the original three crewmembers, before the removal of cosmonaut Tikhonov from this mission. In the backround of deep space, the silhouette of an owl is visible, symbolising the scientific wisdom that orbital research on board the ISS will gain. The orbital complex is shown in bright yellow on the left. The top right angle of the logo shows the direction of mankind's future dream: via the Moon to deep space. The Roscosmos logo is put at the top of the design, with the crew names underneath. The spacecraft designation is put in the centre of the patch. Designed by Luc van den Abeelen
Note: The owl in Russian is Сова (Sava). In French, "ça va" means everything is good. Alexei Ovchinin says that the name of the patch is "ALL IS GOOD!"

+ +

Left :

ENERGIA
SOYUZ MS - 10
LOGO

SOYUZ MS - 10 , info

This is a 3-piece Soyuz MS - 10 souvenir set
by RKK Energia

- banner, pin, and decal -

- pin -

SOYUZ MS - 10 , info

The actual - February 2018 . patch for the planned
Soyuz MS - 10 mission

< Version discarded due to crew change >

I S S EXPEDITION 57

Designed by Sean Collins ; Graphics Lead, NASA Johnson Space Center
„I designed this crew patch with Alexander Geerst art directing.

Humans are explorers. We live on a cosmic island. Setting sails towards new worlds has always been our nature, and it is key to our survival. As soon as our ancestors learned how to build ships, they not only used them to sail up and down the coasts, but ultimately they set out to travel beyond the horizon, to discover new continents.

The time of space exploration has just begun, a mere blink of an eye in the eon-long history of human exploration. And yet we already have successfully built great ships to sail the black heavenly seas, and we have dared adventurous journeys into the unknown.

The Expedition 57 patch is a tribute to human exploration.

It depicts an explorer's ship leaving for the unknown as our early ancestors did, and is shaped like an arrow, heading out to new cosmic horizons.

It highlights the purpose of the International Space Station as a world class science laboratory for the benefit of mankind and international cooperation, as well as humanity's flagship in space, preparing us for the amazing voyages ahead.

The Expedition 57 patch is dedicated to all those thousands of humans who make this journey possible through the contribution of their passion, hard work, and courage to one of the most fascinating projects in human history“ .

„ official patch „

I S S   EXPEDITION   57 , info

The actual - September 2017 - patch for the planned
ISS Expedition 57 [with Epps]

< Version discarded due to crew change >

+ +

The actual - January 2018 - patch for the planned
ISS Expedition 57 [with Aunon-Chancellor]

< Version discarded due to crew change >

I S S   EXPEDITION   57 , info

The actual - April 2018 - patch for the planned
ISS Expedition 57 [without Tikonov]

< Version discarded due to crew change >

+ +

The - December 2018 - patch for the
ISS Expedition 57 [6 names]

„ unofficial „

I S S EXPEDITION 57

E S A - Horizons mission patch

The mission is called 'horizons' and the logo was designed to be timeless, using the concept of the 'golden section', a mathematical ratio of 1:1.618, which has been used for centuries in art, architecture and music as well philosophically linked to the beauty of nature.

In the logo, the basic grid and colours are based on the ratio of this golden section, as well as the positioning of individual logo elements.

Thus, the horizon lies in the golden section of the circular surface height and the word mark with its baseline again on the minor part of the horizon.

The colours and the parabola of the trajectory were determined by a sequence of numbers with (rounded) distances in the ratio 1:1.618.

Other elements show a face gazing into space over the horizon with a blue band, which symbolises Earth's atmosphere but also Alexander Geerst's first mission, Blue Dot.

The face's eye could also be a bird flying across an ocean, and the stylised International Space Station to the right of the mission name represents a four-masted sailing ship from the early days of sea exploration.

The new mission goes beyond Blue Dot and extends into infinity symbolised by the white arc, with the Alexander Geerst's national flag colours subtly integrated at the left.

The patch was designed by Prof. Christian K. Pfestorf and Michael Hartmann of Steinbeis design consultants, Rhein Main International Institute for Advanced Design Strategies.

I S S EXPEDITION 57

Mission Overview

10/04/18 - Expedition 57 Start

10/11/18 - Soyuz MS - 10 *Abnormal LV Launch*

12/03/18 - Soyuz MS-11 Launch / Dock

12/11/18 - RUS - Spacewalk (7:45 h)

12/20/18 - Soyuz MS - 09 Undock / Land

12/20/18 - Expedition 57 End

Visiting Vehicles

11/07/18 - Kounotori HTV – 7 Release

11/16/18 - Progress MS – 10 Launch

11/17/18 - Cygnus NG - 10 Launch

11/18/18 - Progress MS – 10 Dock

11/19/18 - Cygnus NG - 10 Capture

12/05/18 - Dragon SpX – 16 Launch

12/08/18 - Dragon SpX – 16 Capture

12/08/18 - Cygnus NG - 10 Release

I S S EXPEDITION 57 , info

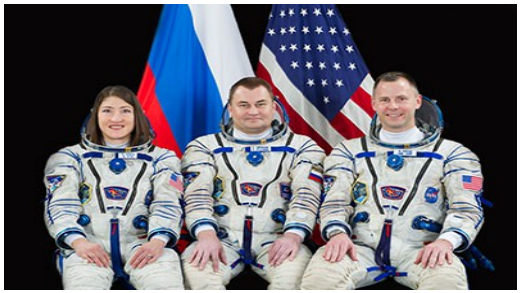
Expedition 57 crew poster

I S S EXPEDITION 58 / 59

From left to right:
Ann McClain , Oleg Kononenko , David Saint-Jacques

Launch Date : December 03, 2018 , 11:31 UTC
Vehicle : SOYUZ MS - 11
Landing Date : June 25, 2019 , 02:48 UTC

I S S EXPEDITION 59 / 60



From left to right:
Christina Hammock-Koch , Alexey Ovchinin , Nick Hague

Launch Date : March 14, 2019 , 19:14 UTC
Vehicle : SOYUZ MS - 12
Landing Crew : Ovchinin (RUS) , Hague (USA)
Hazzaa Al Mansoori (UAE)
[Soyuz MS-15 / VC-19]
Landing Date : October 03, 2019 , 11:00 UTC

ISS Crew - 58: from December 20, 2018 to March 15, 2019

Cdr. Kononenko (RUS)

FE Saint-Jacques (Canada)

FE Ann McClain (USA)

[The moment of docking of Soyuz MS-12 at the ISS was considered the official beginning of Expedition 59 , instead of a traditional start of a new long-duration shift with the departure of a previous crew.
This break with tradition was apparently prompted by the Soyuz MS - 10 launch accident which delayed staffing the station with its complete six-member crew and delaying the official start of Expedition 59]

ISS Crew - 59: from March 15, 2019 to June 24, 2019

Cdr. Kononenko (RUS)

FE Saint-Jacques (Canada)

FE Ann McClain (USA)

FE Ovchinin (RUS)

FE Hague (USA)

FE Christina Hammock-Koch (USA)

SOYUZ MS - 11

Right :

The Soyuz MS - 11 crew emblem depicts the spacecraft, which for over 50 years has been the main means of delivering cosmonauts and astronauts to low-Earth orbit and continues to be an integral part of space research. On the right is the ISS, which serves as an outpost for scientific research in space, where, among other things, technologies for future interplanetary manned flights are being worked out, and symbolizing the international partnership necessary to achieve this lofty goal. The red arrow, an element of the Roscosmos logo, is directed towards the Moon and Mars, symbolizing the priority tasks of mankind in space. The Milky Way symbolises our galaxy, the location of the Earth and our Solar system. The image of the Earth on the emblem is identical to how it is seen by cosmonauts and astronauts through the porthole. The shape of the digits in ‘11’ resembles the curved exterior of a football stadium, recognising the World Football Championship in Russia. On the right the design shows the constellation of Scorpio with its brightest star Antares - the call sign of the crew, commanded by Oleg Kononenko, whose name is in the upper part of the emblem. The emblem also shows the names of two other crewmembers: David St. Jacques (CSA astronaut) and Ann McClain (NASA astronaut). The horizon, dividing the emblem in half, symbolizes the dawn of a new era in space exploration and the hope that space continues to inspire and unite people from all over the world.   Designed by Blake Dumesnil. Copyright Roscosmos

\+ +

Left :

ENERGIA
SOYUZ MS - 11
LOGO

SOYUZ MS - 12

Right :

The patch is based on the graphic design for the Soyuz MS - 10 crew, composed of Alexei Ovchinin and Nicholas Hague. The composition of the new emblem is mirrored relative to the original one, with the name of Christina Cook added to the design. A double border indicates the second attempt of Ovchinin and Hague to achieve orbit.The triangular shape of the emblem personifies the unity of the three members of the spaceship crew which is shown flying above the Earth. The top corner of the emblem indicates the direction upwards, recalling that the crew is flying from Earth to the ISS. Behind our blue planet, Russian and American flags are flying, indicating the international character of the flight. The number of stars in the flag of the United States symbolize the number of crew members. A silhouetted owl in flight, symbol of wisdom, spreading its wings against the blackness of space, symbolizes the contribution to science, the achievements of which are multiplied by research on the ISS. The bright golden silhouette of the space station is visible on the right side of the design - the main objective of the crew’s flight. To the left is the Moon - a daunting task and the goal of future research. The Roscosmos logo is at the top of the emblem, above the astronauts' names. The name of the spacecraft is located in the centre of the design.

\+ +

Left :

ENERGIA
SOYUZ MS - 12
LOGO

I S S EXPEDITION 58

Thousands of people worldwide dedicate their lives to the human exploration of space. As one team, we strive to learn, discover and pioneer for the benefit of all mankind.

The Expedition 58 patch is a crew tribute to those thousands who stand ready every day committed to supporting this mission.

Central to the patch is the compass rose - a symbol of exploration past, present and future.

The passing of the International Space Station from darkness into light suggests that we are only just peaking over the horizon, looking forward to advancing human understanding of our place in the universe.

The crew of Expedition 58 are fortunate explorers never alone in their journey.

Among the night lights on the Earth are glints of brightness – the global team and major control facilities that keep the space station on orbit and its inhabitants on track.

And as the explorers from centuries past used stars to guide their way, so too does the crew of Expedition 58.

The stars on the Expedition 58 patch are their families, one star for each member.

They shine on as a beacon of strength and a guiding light home.

I S S EXPEDITION 58 , info

The actual - September 2017 - patch for the planned
ISS Expedition 58 [Aunon-Chancellor]

< Version discarded due to crew change >

I S S EXPEDITION 58 , info

The actual - January 2018 - patch for the planned
ISS Expedition 58 [McClain]

< Version discarded due to crew change >

+ +

The actual - May 2018 - patch for the planned
ISS Expedition 58 [without Tikhonov]

< Version discarded due to crew change >

I S S EXPEDITION 59

The Expedition 59 patch celebrates the ISS's role as a microgravity science laboratory. The crew, made up of scientists, doctors, engineers and pilots, will conduct hundreds of experiments for the benefit of mankind and our fragile environment on planet Earth.

The patch shape depicts the cupola windows. Through these windows, astronauts have made many significant observations of Earth's ecosystems and they have discovered and documented real-time events like volcanic eruptions and earthquakes.

The position of the Earth at the top of the patch depicts where the Earth would be seen by an astronaut from the cupola. It represents the explorers' unique perspective on his or her home.

The image at the center of the patch is the station itself, the largest single structure humans have ever put into space, an engineering marvel.

The station is overlaid on an atom, the basic building block of all matter. The atom has three electron orbits with the flags of Russia, the United States of America and Canada, representing the home countries of the Expedition 59 crew.

Like electrons in an atom, international cooperation is the basic stabilizing force that enables large scale space exploration.

To achieve great deeds, humans from all across the globe must work together in peace with a shared vision.

The Expedition 59 patch celebrates the massive scientific accomplishments of the space station while highlighting the importance of global teamwork in understanding our planet and continuing with bold exploration in the future.

I S S EXPEDITION 59 , info

This is the simplified embroidery version of the
International Space Station's Expedition 59 crew patch

I S S EXPEDITION 59 , info

The actual - May 2018 - patch for the planned
ISS Expedition 59 [5 names]

< Version discarded due to crew change >

I S S EXPEDITION 59 , info

The official Expedition 59 crew portrait with
(from left)
astronauts David Saint-Jacques of the Canadian Space Agency and Anne McClain of NASA; cosmonauts Oleg Kononenko and Aleksey Ovchinin of Roscosmos; and NASA astronauts Nick Hague and Christina Koch

I S S EXPEDITION 59 , info

Expedition 59 crew poster

Crew Dragon SpaceX – DM – 1

Instead of carrying astronauts to the ISS, this flight had an „Anthropomorphic Test Device (ATD)“ wearing SpaceX's custrom flight suit

NASA - DEMO - 1 mission patch

SPACE X - DEMO -1 mission patch

Interestingly, the NASA version has differences in the streaks as well

Launch Date :	March 02, 2019 , 07:49 UTC
Vehicle :	CREW DRAGON , No.: C204
Docking date :	March 03, 2019 , 10:51 UTC
Undocking date :	March 08, 2019 , 07:32 UTC
Landing Date :	March 08, 2019 , 13:45 UTC

I S S EXPEDITION 59 , info

On 18 March, 1965, Leonov became the first person to leave a spacecraft in a spacesuit to conduct a spacewalk, exiting the capsule during the Voskhod 2 mission for a 12-minute spacewalk.

Kononenko and Ovchinin also added signs to the backs of their Orlon spacesuits to honor the first spacewalker :

Kononenko's suit with the red stripes bears a sign that says **:**

"1st spacewalker"

and the sign on Ovchinin's suit with the blue stripes says :

"Happy birthday, Alexei Arkhipovich,"

Leonov's family name

I S S EXPEDITION 59 , info

Spacewalkers
Kononenko [suit with the red stripes]
and
Ovchinin [suit with the blue stripes]
work outside the Pirs docking compartment during the
RUS-VKD-No.: 54 spacewalk
- May 29, 2019 - at the ISS

Shortly after beginning their spacewalk, Expedition 59 Commander Kononenko and Flight Engineer Ovichinin of the Russian space agency Roscosmos recorded birthday greetings for the first person to spacewalk,
Russian cosmonaut Alexei Leonov :

Leonov's 85th birthday, Thursday May 30, 2019

I S S EXPEDITION 58

Mission Overview

12/20/18 - Expedition 58 Start

03/14/19 - Soyuz MS - 12 Launch / Dock

03/14/19 - Expedition 58 End

Visiting Vehicles

01/14/19 - Dragon SpX – 16 Release

01/25/19 - Progress MS – 09 Undock

03/02/19 - Crew Dragon SpaceX – DM – 1
(unmanned) Launch / Dock

03/08/19 - Crew Dragon SpaceX – DM – 1
(unmanned) Undock / Land

I S S EXPEDITION 58 , info

Expedition 58 crew poster

I S S EXPEDITION 59

Mission Overview

03/14/19 - Expedition 59 Start

03/22/19 - U.S. - Spacewalk (6:38 h)

03/29/19 - U.S. - Spacewalk (6:42 h)

04/08/19 - U.S. - Spacewalk (6:26 h)

05/29/19 - RUS - Spacewalk (6:01 h)

06/25/19 - Soyuz MS - 11 Undock / Land

06/25/19 - Expedition 59 End

Visiting Vehicles

04/04/19 - Progress MS – 11 Launch / Dock

04/17/19 - Cygnus NG - 11 Launch

04/19/19 - Cygnus NG - 11 Capture

05/04/19 - Dragon SpX – 17 Launch

05/06/19 - Dragon SpX – 17 Capture

06/03/19 - Dragon SpX – 17 Release

06/04/19 - Progress MS – 10 Undock

SOYUZ MS - 12 , info

Here is the MS - 12 back-up crew patch :

I S S EXPEDITION 59 / 60

From left to right:
Christina Hammock-Koch , Alexey Ovchinin , Nick Hague

Launch Date : March 14, 2019 , 19:14 UTC
Vehicle : SOYUZ MS - 12
Landing Crew : Ovchinin (RUS)
Hague (USA)
Hazzaa Al Mansoori (UAE)
[Soyuz MS-15 / VC-19]
Landing Date : October 03, 2019 , 11:00 UTC

I S S FLIGHT NUMBER 60 S

Launch Date : August 22, 2019 , 03:38 UTC
Vehicle : SOYUZ MS - 14
Landing Date : September 07, 2019 , 21:34 UTC

Instead of a crew, the Soyuz MS-14 spaceship is hauling the Russian „Skybot F-850 robot“, a two-legged, two-armed humanoid stand-in for a cosmonaut commander.

FEDOR : **F**inal **E**xperimental **D**emonstration **O**bject **R**esearch

ISS Crew - 60: from June 24, 2019 to July 20, 2019

Cdr. Ovchinin (RUS)
FE Hague (USA)
FE Christina Hammock-Koch (USA)

ISS Crew - 60: from July 20, 2019 to September 25, 2019

Cdr. Ovchinin (RUS)
FE Hague (USA)
FE Christina Hammock-Koch (USA)
FE Skvortsov (RUS) (Soyuz MS-13)
FE Parmitano (Italy) (Soyuz MS-13)
FE Morgan (USA) (Soyuz MS-13)

Note: *[From August 27, 2019 to September 06, 2019 the robot “Skybot F-850 Robot” (Soyuz MS-14) was part of the ISS crew 60 !!!]*

ISS Crew - 60: from September 25, 2019 to October 03, 2019

Cdr. Ovchinin (RUS)
FE Hague (USA)
FE Christina Hammock-Koch (USA)
FE Skvortsov (RUS)
FE Parmitano (Italy)
FE Morgan (USA)
FE Skripochka (RUS) (Soyuz MS-15)
FE Jessica Meir (USA) (Soyuz MS-15)
SFP Hazzaa Al Mansoori (UAE)
(Soyuz MS-15 / VC-19)

[SFP = SpaceFlight Participant]

SOYUZ MS - 12 „launch crew“ patch

Right :

The patch is based on the graphic design for the Soyuz MS - 10 crew, composed of Alexei Ovchinin and Nicholas Hague. The composition of the new emblem is mirrored relative to the original one, with the name of Christina Cook added to the design. A double border indicates the second attempt of Ovchinin and Hague to achieve orbit.The triangular shape of the emblem personifies the unity of the three members of the spaceship crew which is shown flying above the Earth. The top corner of the emblem indicates the direction upwards, recalling that the crew is flying from Earth to the ISS. Behind our blue planet, Russian and American flags are flying, indicating the international character of the flight. The number of stars in the flag of the United States symbolize the number of crew members. A silhouetted owl in flight, symbol of wisdom, spreading its wings against the blackness of space, symbolizes the contribution to science, the achievements of which are multiplied by research on the ISS. The bright golden silhouette of the space station is visible on the right side of the design - the main objective of the crew’s flight. To the left is the Moon - a daunting task and the goal of future research. The Roscosmos logo is at the top of the emblem, above the astronauts' names. The name of the spacecraft is located in the centre of the design.

+ +

SOYUZ MS - 12

Left :

ENERGIA
SOYUZ MS - 12
LOGO

SOYUZ MS - 12 , cont.

SOYUZ MS - 12 „landing crew“ patch

The UAE cosmonaut Almansoori's name in Arabic replacing Koch's,
the ISS silhouette with one of a Soyuz capsule under parachute
and added UAE flag

SOYUZ MS - 12 , cont.

SOYUZ MS - 12 „landing crew“ patch

The UAE cosmonaut Almansoori's name replacing Koch's,
the ISS silhouette with one of a Soyuz capsule under parachute
and added UAE flag

I S S EXPEDITION 60

The Moon landing is one of the most extraordinary feats of humankind, an embodiment of ingenuity and desire for exploration.

The patch of Expedition 60 commemorates the 50th anniversary of that landing, a constellation of three stars with the Moon superimposed forms the letter “L,” the Latin symbol for 50.

The Moon is depicted as a waxing crescent, as it was on July 20, 1969.

The familiar silhouette of the International Space Station is visible, flying across the night sky.

Stars, numerous and bright as seen from the space station, form the shape of an eagle in the same pose as on the iconic patch of the Apollo 11 mission.

The sunrise represents the fact that we are still in the early stages of humanity’s exploration of space.

The hexagonal shape of the patch represents the space station's cupola, with the six points of the hexagon symbolizing the six crewmembers of Expedition 60.

The names and nationalities are not present, as on the original Apollo 11 mission patch, to highlight that space missions - then, now, and in the future - are for Earth and all humankind

I S S FLIGHT NUMBER 60 S

F E D O R :

Final **E**xperimental **D**emonstration **O**bject **R**esearch

Russian „Skybot F-850 robot“,

two-legged, two-armed humanoid stand-in for a cosmonaut commander.

I S S FLIGHT NUMBER 60 S

Testflight of Soyuz 2.1a launcher

This is the RKK Energia patch for the Soyuz MS - 14 mission.
It uses the company logo as a background. The spacecraft is shown in the foreground with its destination, the International Space Station, depicted as a silhouette. The spacecraft's designation is at the bottom of the design, incorporating the Roscosmos logo, while the first flight of the crew spaceship on the Soyuz 2.1a launcher is indicated at the top of the patch.

I S S EXPEDITION 60

Mission Overview

06/25/19 - Expedition 60 Start

07/20/19 - Soyuz MS - 13 Launch / Dock

08/21/19 - U.S. - Spacewalk (6:32 h)

08/26/19 - Soyuz MS - 13 Redock

09/25/19 - Soyuz MS - 15 Launch / Dock

10/03/19 - Soyuz MS - 12 Undock / Land

10/03/19 - Expedition 60 End

Visiting Vehicles

07/25/19 - Dragon SpX – 18 Launch

07/27/19 - Dragon SpX – 18 Capture

07/29/19 - Progress MS – 11 Undock

07/31/19 - Progress MS – 12 Launch / Dock

08/06/19 - Cygnus NG - 11 Release

08/22/19 - Soyuz MS - 14 (unmanned) Launch

08/27/19 - Soyuz MS - 14 (unmanned) Dock

08/27/19 - Dragon SpX – 18 Release

09/07/19 - Soyuz MS - 14 (unmanned) Undock / Land

09/24/19 - Kounotori HTV – 8 Launch

09/27/19 - Kounotori HTV – 8 Capture

I S S EXPEDITION 60 , info

Expedition 60 crew poster

I S S EXPEDITION 60 / 61

From left to right:
Andrew Morgan , Alexandr Skvortsov , Luka Parmitano

Launch Date : July 20, 2019 , 16:28 UTC

Vehicle : SOYUZ MS - 13

Landing Crew : Skvortsov (RUS)
Parmitano (Italy)
Christina Hammock Koch (USA)
[SOYUZ MS - 12]

Landing Date : February 06, 2020 , 09:13 UTC

ISS Crew - 61: from October 03, 2019 to February 06, 2020

Cdr. Parmitano (Italy)

FE Skvortsov (RUS)

FE Morgan (USA)

FE Christina Hammock-Koch (USA) (Soyuz MS-12)

FE Skripochka (RUS) (Soyuz MS-15)

FE Jessica Meir (USA) (Soyuz MS-15)

SOYUZ MS - 13

SOYUZ MS - 13 „launch crew“ patch

Right :

The circular Soyuz MS - 13 crew patch focuses on the Soyuz launcher, depicted sitting on the Baikonur launch pad, while the service tower is opening as the spaceship is preparing to be launched into orbit. With the craft enclosed in the rocket nosecone, the launcher scene is surrounded by silhouetted stages of the Soyuz's lifecycle during its mission to the International Space Station. To the left is the ship approaching the orbital facility, which itself is depicted at the top of the design, while the missions end is illustrated by the parachute-assisted landing of the descent module. Three gold star to the left of the ISS represent the spaceship crew, consisting of Russian commander Skvortsov, NASA astronaut Morgan and ESA astronaut Parmitano. Their names are positioned on the left while the Roscosmos logo is shown on the right of the design, underneath the spacecraft's designation.
Designed by Luc van den Abeelen.   Copyright Roscosmos.

+ +

Left :

ENERGIA
SOYUZ MS - 13
LOGO

SOYUZ MS - 13 , info

This is a 3-piece Soyuz MS - 13 souvenir set
by RKK Energia

- banner, pin, and decal -

- pin -

SOYUZ MS - 13 , cont.

SOYUZ MS - 13 „landing crew“ patch

A 'landing' version of the MS - 13 patch,
with NASA astronaut Koch’s name replacing Morgan’s, and the silhouette of a Soyuz capsule embroidered in gold thread. This patch was prepared to be worn on all the crew's Sokol suits during landing but was not used in the end.

I S S EXPEDITION 61

The Expedition 61 patch represents an exciting and dynamic time aboard the International Space Station as it constantly advances towards a limitless future in space.

The overall patch view is from an approaching vehicle in pursuit of the space station.

The sun is the most prominent, central element in the patch as the source of energy and life for the Earth, the station and our entire solar system.

As the present focus of human spaceflight, the space station is centered in the emblem while barely eclipsing the sun with its tiny shadow, reminding of us that human exploration is a small part of our quest to understand the universe.

Fifteen of the sun's rays represent the 15 original partner members of the space station program, while the 16th ray represents an open invitation for continued collaboration with new partners.

The four yellow rays form the cardinal directions of a compass, symbolizing the innate human drive to explore.

The advancing terminator represents the dawn of a new day on Earth.

The name ring appears to float through space and has no single orientation, emphasizing the variety of viewpoints assembled in an international crew unified under one mission.

Nine rays extend beyond the name ring to represent the nine human missions that have braved exploration beyond low-Earth orbit, thus encouraging us to drive boundlessly out into our solar system.

I S S EXPEDITION 61 , info

Here is the simplified insignia as worn by

Expedition 61 crew members on his shirts

I S S EXPEDITION 61 , info

E S A - Beyond mission

From Luca Parmitano on board the International Space Station :

1000 thanks to the 'Amici del Reparto Sperimentale Volo'
for this unique patch, dedicated to the Beyond mission

I S S EXPEDITION 61

E S A - Beyond mission patch

In selecting Beyond, Luca Parmitano was inspired by his fellow ESA astronauts. From the nearness to Earth of Thomas Pesquet's Proxima mission to the broadening scope of Alexander Gerst's current Horizons mission,
Luca Parmitano saw a path that will push humankind even farther,
for the benefit of all.

"What we do in orbit is not just for the astronauts or for the International Space Station programme, it is for everybody," Luca Parmitano explains.
"It is for Earth, it is for humankind, and it is the only path for us to learn what we need in terms of science and technology in order to go beyond."

The mission logo illustrates this trajectory.

An astronaut looks out into space through a helmet visor. Earth and the ISS are reflected in this visor.

In the distance, the Moon is poised for humankind's return, with the Orion spacecraft and exploratory rovers.

Beyond is Mars, the Red Planet, currently being studied by satellites such as ExoMars, Mars Express and, one day, by humans.

The research Luca Parmitano will be running on the Space Station
will contribute to keeping humans safe on longer exploration missions.
Also on the agenda for Luca Parmitano are demonstrations that will develop the technological and operational knowledge that will allow humans, together with robots, to explore the Moon and Mars from orbit and on their surfaces.

Boeing Orbital Flight Test 1

Instead of carrying astronauts to the ISS, this flight had an „Anthropomorphic Test Device (ATD)“ "Rosie the Rocketeer" wearing Boeing's custrom flight suit

NASA - OFT - 1 mission patch

BOEING - OFT - 1 mission patch

Launch Date :	December 20, 2019 , 11:37 UTC
Vehicle :	BOEING CST – 100 Starliner
Perigee Altitude :	187 km (116 mi)
Apogee Altitude :	222 km (138 mi)
Landing Date :	December 22, 2019 , 12:59 UTC

I S S EXPEDITION 61

Mission Overview

10/03/19 - Expedition 61 Start
10/06/19 - U.S. - Spacewalk (7:01 h)
10/11/19 - U.S. - Spacewalk (6:45 h)
10/18/19 - U.S. - Spacewalk (7:17 h)
(first all-female Spacewalk)
11/15/19 - U.S. - Spacewalk (6:39 h)
11/22/19 - U.S. - Spacewalk (6:33 h)
12/02/19 - U.S. - Spacewalk (6:02 h)
01/15/20 - U.S. - Spacewalk (7:29 h)
(second all-female Spacewalk)
01/20/20 - U.S. - Spacewalk (6:58 h)
(third all-female Spacewalk)
01/25/20 - U.S. - Spacewalk (6:12 h)
02/06/20 - Soyuz MS - 13 Undock / Land
02/06/20 - Expedition 61 End

Visiting Vehicles

11/01/19 - Kounotori HTV – 8 Release
11/02/19 - Cygnus NG - 12 Launch
11/04/19 - Cygnus NG - 12 Capture
11/29/19 - Progress MS – 12 Undock
12/05/19 - Dragon SpX – 19 Launch
12/06/19 - Progress MS – 13 Launch
12/08/19 - Dragon SpX – 19 Capture
12/09/19 - Progress MS – 13 Dock
12/20/19 - Starliner Boeing CST-100
(unmanned) Launch
< the planned ISS orbit was not reached >
12/22/19 - Starliner Boeing CST-100 Land
01/07/20 - Dragon SpX – 19 Release
01/31/20 - Cygnus NG - 12 Release

I S S EXPEDITION 61 , info

Expedition 61 crew poster

I S S EXPEDITION 61 / 62

From left to right:
Hazzaa Al Mansoori (VC - 19) , and
Oleg Skripochka , Jessica Meir

Launch Date : September 25, 2019 , 13:57 UTC

Vehicle : SOYUZ MS - 15

Landing Crew : Skripochka (RUS)
Meir (USA)
Morgan (USA) [Soyuz MS - 13]

Landing Date : April 17, 2020 , 05:16 UTC

ISS Crew - 62: from February 06, 2020 to April 09, 2020

Cdr. Skripochka (RUS)
FE Jessica Meir (USA)
FE Morgan (USA) (Soyuz MS - 13)

ISS Crew - 62: from April 09, 2020 to April 17, 2020

Cdr. Skripochka (RUS)
FE Jessica Meir (USA)
FE Morgan (USA)
FE Iwanischin (RUS) (Soyuz MS-16)
FE Cassady (USA) (Soyuz MS-16)
FE Wagner (RUS) (Soyuz MS-16)

Note: SFP Hazzaa Al Mansoori (UAE) (VC - 19) was part of the ISS Expedition 60 Crew from September 25, to October 03, and returned with Soyuz MS - 12 on October 03, 2019

[SFP = Spaceflight participant]
[VC = Visiting Crew]

SOYUZ MS - 15 „launch crew“ patch

Right :

The Soyuz MS - 15 crew patch uses a hexagonal design with a view of space in the background, dominated by an image of our moon. In this way, the crew commemorates the 50th anniversary of man's first landing on our celestial neighbour. The blue and yellow border colours are borrowed from the Apollo 11 patch. Soyuz is depicted in blue hues, representing a reflection of Earth's atmosphere on the spacecraft's exterior. An arctic tern is at the top of the design, symbolising the prolonged mission on board ISS. This bird is known for the long migrations it undertakes annually. The space station is depicted as a silhouette, reflecting the golden rays of the Sun. The spacecraft's identification is shown against the lower part of the moon, with the Roscosmos logo in its centre. Six sections make up the design's border, alternately displaying the crew members' names and their national flags. Designed by Luc van den Abeelen. Copyright Roscosmos , produced by Spacepatches.nl.

\+ +

SOYUZ MS - 15

Left :

ENERGIA
SOYUZ MS - 15
LOGO

SOYUZ MS - 15 , info

This is a 3-piece Soyuz MS - 15 souvenir set
by RKK Energia

- banner, pin, and decal -

SOYUZ MS - 15 , cont.

SOYUZ MS - 15 „landing crew“ patch

This Soyuz MS - 15 patches arrived to the ISS in December with Progress cargo ship.
The patches were prepared by Zvezda plant to change on Sokols space suits.

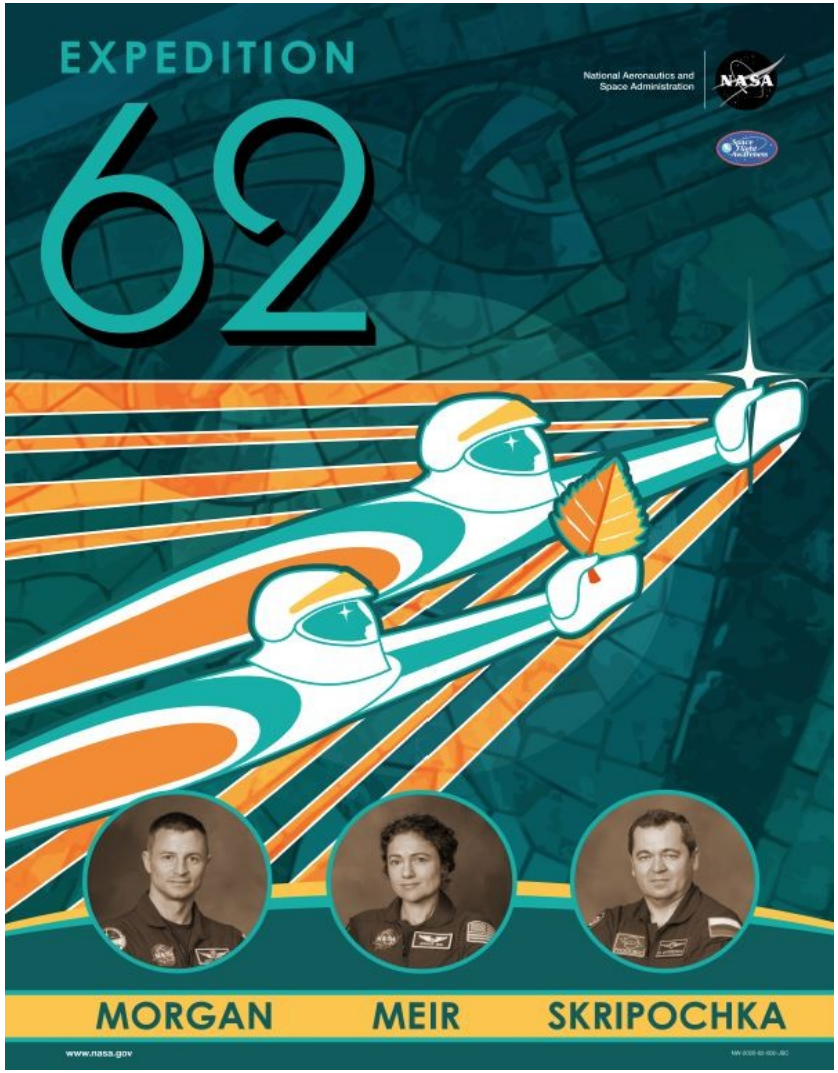
I S S EXPEDITION VC - 19 , info

Here is AlMansoori's UAE Mission 1 insignia

Here is the patch for the UAE's Mohammed Bin Rashid Space Centre

Hazza AlMansoori, the first astronaut from the United Arab Emirates (UAE), flies to the International Space Station as a space flight participant (Visiting Crew - 19) on board the Russia's Soyuz MS - 15 spacecraft

I S S EXPEDITION 62 , info



Expedition 62 crew poster

I S S EXPEDITION 62

The Expedition 62 patch embodies two main themes:
first, the importance of the global partnership on which the ISS was founded, and second, the paradigm shifting perspective provided by seeing our planet Earth from above with human eyes.

Based on a vintage mosaic found near the headquarters of the Gagarin Cosmonaut Training Center, the two space explorers flying in formation represent friendship between space agencies and the people that work in them.

The shining star in the hand is a symbol of unity under a common quest for discovery, as this partnership continues to burn bright into the future.

Generated by the flying astronauts, the shock wave signifies the powerful impact of human space exploration and the scientific research conducted on the space station, strengthened when we work as a team, side by side with all of our international partners.

The backdrop of the large sun behind our planet Earth reminds us that we are but a very small component of our solar system and our universe.

The sun is also responsible for fueling life on Earth, sustaining the biosphere (symbolized by the leaf) surrounded by the precious, fragile atmosphere (represented by the clouds).

This imagery reminds us of our duty to protect our home planet, to preserve our environment and to carry principles of responsible environmental stewardship with us as we explore the universe.

This birch leaf combines the principal elements, embodying nature, science and the global alliance, as these trees are indigenous to regions that crewmembers from all sides call home.

I S S EXPEDITION 62

Mission Overview

02/06/20 - Expedition 62 Start

04/09/20 - Soyuz MS - 16 Launch / Dock

04/17/20 - Soyuz MS - 15 Undock / Land

04/17/20 - Expedition 62 End

Visiting Vehicles

02/15/20 - Cygnus NG - 13 Launch

02/18/20 - Cygnus NG - 13 Capture

03/07/20 - Dragon SpX – 20 Launch

03/09/20 - Dragon SpX – 20 Capture

SOYUZ MS - 15 , info

Here is the MS - 15 back-up crew patch :

I S S EXPEDITION 62 / 63

From left to right:
Christopher Cassidy , Anatoly Ivanishin , Ivan Vagner

Launch Date : April 09, 2020 , 08:13 UTC
Vehicle : SOYUZ MS - 16
Landing Date : October 22, 2020 , 02:54 UTC

From left to right:
NASA astronauts Doug Hurley and Robert Behnken

Launch Date : May 30, 2020 , 19:23 UTC
Vehicle : SpaceX DRAGON - DM - 2
Landing Date : August 02 , 2020 , 18:48 UTC

ISS Crew - 63 : from April 17, 2020 to May 31, 2020

Cdr. Cassady (USA)
FE Iwanischin (RUS)
FE Wagner (RUS)

ISS Crew - 63: from May 31, 2020 to August 01, 2020

Cdr. Cassady (USA)
FE Iwanischin (RUS)
FE Wagner (RUS)
FE Hurley (USA)
FE Benken (USA)

ISS Crew - 63 : from August 01, 2020 to October 14, 2020

Cdr. Cassady (USA)
FE Iwanischin (RUS)
FE Wagner (RUS)

ISS Crew - 63 : from October 14, 2020 to October 21, 2020

Cdr. Cassady (USA)
FE Iwanischin (RUS)
FE Wagner (RUS)
FE Ryshikow (RUS) (Soyuz MS-17)
FE Kud-Swertschkow (RUS) (Soyuz MS-17)
FE Kathleen Rubens (USA) (Soyuz MS-17)

SOYUZ MS - 16

Right :

The Soyuz MS-16 crew patch depicts two of the most challenging elements of the spaceship's mission. The craft is shown just after orbital insertion, preparing to navigate towards its destination; the International Space Station, indicated by a white silhouette. In the background a multi-colored streak depicts the re-entry of the ship's descent module during its fiery return into Earth's atmosphere.
Three stars against the black background of deep space represent the three crew members' journey while the two-toned blue hues in the bottom of the design represent our home planet and all the Earth-based support professionals enabling this mission. They are acknowledged by the position of the crew members' names in this part of the design. The spaceship's designation is written across the top of the patch, crowned by the Roscosmos logo.

+ +

Left :

ENERGIA
SOYUZ MS - 16
LOGO

SpaceX DRAGON - DM - 2

NASA - Crew DM - 2 mission patch

+ +

SPACE X - Crew DEMO - 2 mission patch

Top right :

Doug Hurley shared the description of the patch :

Through the crew patch for the SpaceX DM-2 mission, we pay tribute to the dedicated teams of NASA and SpaceX that have worked hard toward returning human spaceflight launches to the United States. The return of human space flight launches to the United States after the end of the Space Shuttle Program and the incredible efforts of the men and women of NASA and SpaceX are the overriding themes of the crew patch for DM-2. The patch is distinctly shaped in the form of the Crew Dragon and appropriate for the first crewed flight of this vehicle. The symbols of the Dragon capsule and Falcon 9 rocket are prominently displayed at the top of the patch. They pay tribute to the SpaceX Dragon and Falcon 9 teams that have dedicated years to design, develop, build and soon operate the human-rated system. The familiar silhouette of the ISS is visible, flying across the North American night sky, and serves as the destination of this and future missions of Crew Dragon. Both the NASA "vector" and Commercial Crew Program symbol are shown prominently to honor the efforts of the Agency and its Program to return launch capacity to the United States. The silver star on the east coast of Florida highlights the location of Launch Pad 39A and the Kennedy Space Center from where humans have flown to space since the early 1960s and all Crew Dragon missions will originate. The stars on either side of the crew's names represent their respective family members. Each has a wife and son who are incredibly supportive and important to the success of the mission. Finally, the flag of the United States is on the patch to represent all past and future American human space flight endeavors and to honor the men and women who developed and flew them.

Patch design: Andrew Nyberg

+ +

Bottom right :

The design priminently features the SpaceX-designed space suit.

Note: *Space patch collectors can look forward to a fun new era of 'two-patches-for-one-mission'.*

SpaceX DRAGON - DM - 2 , info

Logo from the American aerospace company SpaceX for the Falcon 9

The Falcon 9 is a partially reusable medium-weight launch vehicle, developed, manufactured and launched by the American aerospace company SpaceX

„ Falcon 9 Dragon , *Amanda Jefferson* „

SpaceX DRAGON - DM - 2 , info

Falcon 9 First Flight official embroidered patch

I S S EXPEDITION 63

The Expedition 63 patch represents an intersection of the past and the beginning of a new dawn in human space flight as we continue to inhabit the ISS, aim towards returning to the Moon and plan for the journey to Mars.

Thirteen illuminated stars along the top of the patch commemorate the Apollo 13 mission celebrating its 50th anniversary during Expedition 63.

The swoosh in the shape of the number “63” orbiting around the Earth and Moon honors the Apollo Program and the future missions to go beyond low Earth orbit.

The atom, shown overlaid on a vibrant sunrise, is the Expedition 63 crew’s call sign symbolizing the energy to revolve, or orbit around a nucleus or in their case, the Earth.

The international crew will continue to carry out the important mission of collaboration in preserving the space station as a microgravity and space environment research laboratory.

SOYUZ MS - 16 , info

The actual - December 2019 - patch for the planned
Soyuz MS - 16 mission

< Version discarded due to crew change >

I S S EXPEDITION 63 , info

The actual - January 2020 - patch for the planned
ISS Expedition 63

ISS Expedition 63 mission insignia, incorporating a multitude of elements, such as a stylized 63 in the orbit traces, a boot print on the lunar surface, and the initials of the three crewmen, Andrei Babkin, Nikolai Tikhonov and Chris Cassidy:

АБ НТ СС

< Version discarded due to crew change >

I S S EXPEDITION 63 , info

The official Expedition 63 crew portrait with
(clockwise from bottom left)
Doug Hurley of NASA , Anatoly Ivanishin of Roscosmos ,
Chris Cassidy of NASA , Ivan Vagner of Roscosmos
and Bob Behnken of NASA

I S S EXPEDITION 63 , info

Expedition 63 crew poster

(without Demo - 2 crew)

I S S EXPEDITION 63

Mission Overview

04/17/20 - Expedition 63 Start
05/30/20 - Crew Dragon SpaceX – Demo – 2 Launch
05/31/20 - Crew Dragon SpaceX – Demo – 2 Dock
06/26/20 - U.S. - Spacewalk (6:07 h)
07/01/20 - U.S. - Spacewalk (6:01 h)
07/16/20 - U.S. - Spacewalk (6:00 h)
07/21/20 - U.S. - Spacewalk (5:29 h)
08/01/20 - Crew Dragon SpaceX – Demo – 2 Undock
08/02/20 - Crew Dragon SpaceX – Demo – 2 Splashdown
10/21/20 - Soyuz MS - 16 Undock
10/22/20 - Soyuz MS - 16 Land
10/21//20 - Expedition 63 End

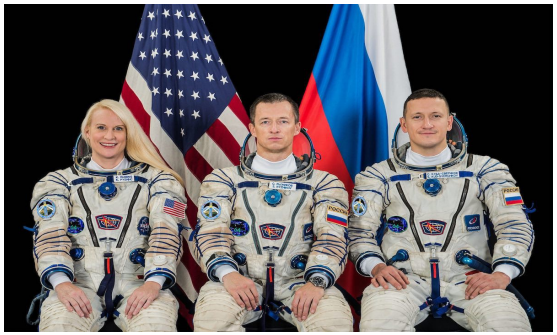
Visiting Vehicles

04/07/20 - Dragon SpX - 20 Release
04/25/20 - Progress MS - 14 Launch / Dock
05/11/20 - Cygnus NG – 13 Release
05/21/20 - Kounotori HTV – 9 Launch
05/25/20 - Kounotori HTV – 9 Capture
07/08/20 - Progress MS - 13 Undock
07/23/20 - Progress MS - 15 Launch / Dock
08/19/20 - Kounotori HTV – 9 Release
10/03/20 - Cygnus NG – 14 Launch
10/05/20 - Cygnus NG – 14 Capture

SOYUZ MS - 16 , info

Here is the MS - 16 back-up crew patch :

I S S EXPEDITION 63 / 64



From left to right:
Kate Rubins , Sergey Ryzhikov , Sergey Kud-Sverchkov

Launch Date : October 14, 2020 , 05:45 UTC
Vehicle : SOYUZ MS - 17
Landing Date : April 17, 2021 , 04:55 UTC

From left to right:
Shannon Walker , Victor Glover , Michael Hopkins , Soichi Noguchi (Japan)

Launch Date : November 16, 2020 , 00:27 UTC
Vehicle : SpaceX DRAGON - CREW – 1
Landing Date : May 02, 2021 , 06:57 UTC

ISS Crew - 64: from October 21, 2020 to November 17 2020

Cdr. Ryshikow (RUS)
FE Kud-Swertschkow (RUS)
FE Kathleen Rubens (USA)

ISS Crew - 64: from November 17, 2020 to April 09, 2021

Cdr. Ryshikow (RUS)
FE Kud-Swertschkow (RUS)
FE Kathleen Rubens (USA)
FE Hopkins (USA)
FE Glover (USA)
FE Shannon Walker (USA)
FE Noguchi (Japan)

ISS Crew - 64: from April 09, 2021 to April 17, 2021

Cdr. Ryshikow (RUS)
FE Kud-Swertschkow (RUS)
FE Kathleen Rubens (USA)
FE Hopkins (USA)
FE Glover (USA)
FE Shannon Walker (USA)
FE Noguchi (Japan)
FE Novitskiy (RUS) (Soyuz MS-18)
FE Dubrov (RUS) (Soyuz MS-18)
FE Vande Hei (USA) (Soyuz MS-18)

SOYUZ MS - 17

Right :
The Soyuz MS - 17 crew patch is circular in shape, symbolising our planet and its perfection, and uses the outline of the Russian letter F, for ‘Favor’, the crew’s callsign. At the base of the emblem is the inscription ‘Baikonur’, symbolizing the connection of the crew with this city. In 2020, Baikonur is 65 years old, and flight engineer Sergei Kud-Sverchkov was born there. Baikonur Cosmodrome is a spaceport from where launch vehicles and Soyuz spacecraft depart for the International Space Station. The ISS is located at the top of the emblem, and its solar panels are shaped like the Roman numeral XX, symbolising the twenty-year flight of the station in manned mode. The inside of the emblem depicts a piece of the earth's surface, which reproduce an aerial photo taken by Ryzhikov of his homeland in Russia and symbolizes respect for our planet and gratitude for our homeland - nourishing, inspiring, supporting and strengthening.
In the center of the composition, above the launch vehicle, is a light source illuminating the planet and crew members with their rays, whose names are located on the border of the emblem.
Designed by Sergei Rizhikov with Luc van den Abeelen

+ +

Left :

ENERGIA
SOYUZ MS - 17
LOGO

Top right :

Building on the legacy of Mercury, Gemini, Apollo, Skylab, Shuttle, MIR, ISS, and the DM-2 mission, the men and women of NASA and SpaceX
have returned human space flight launches to the U.S.
Crew-1 marks the beginning of sustained government-commercial partnership missions to the ISS, and its Crew Dragon spacecraft is the focus of the patch.

The spacecraft, composed of the capsule and trunk, is flying from the bottom left toward the upper right, repres. ascent and insertion to orbital flight.
The Crew Dragon is superimp. on a background of stars and completes the outline of a dragon's head. The letter C borders the patch, which together with the number 1 in the foreground represent the mission, Crew-1. Shadows of the legacy human spaceflight launch programs are on the border to honor and recognize their contributions to the Crew Dragon capsule. The outline of the ISS is also on the border to acknowledge Crew Dragon's destination and its contribution to maintaining a human presence in low earth orbit for the U. S. and our international partners.
There are no individual names or flags on the border because the patch honors not just the crew members on board, but all of the countless SpaceX and NASA personnel that worked together to make a sleek and elegant Crew Dragon spacecraft.
This patch honors their vision, service, and support.
Designed and made by Gregory "ZeroG" Manchess

+ +

Bottom right :

SPACE X
DRAGON CREW 1
PATCH

SPACE X DRAGON CREW – 1

NASA - Crew 1 mission patch

+ +

SPACE X - Crew 1 mission patch

SPACE X DRAGON CREW – 1 , info

SPACE X - Crew 1 mission patch

The artwork is different than the original patch
(Noguchi name)

SPACE X DRAGON CREW – 1 , info

SPACE X - Crew 1 mission patch

The company "you-need-patches"
has produced such a patch

I S S EXPEDITION 64

The Expedition 64 patch shows the ISS illuminated by the city lights of Earth.

The illumination of the ISS modules represents the enduring partnership and continous human presence on ISS for 20 years.

The modules from all partner countries represent the international cooperation, which sustains this presence in space.

The aurora and light behind the horizon are beautiful features of our home planet, and the moon and stars in the background show our future exploration beyond Earth.

The International Space Station Expedition 64 crew patch was designed based on a photo taken by NASA astronaut Kate Rubins when she was last aboard the orbiting outpost in October 2016.

Kate Rubins:
"The city lights of Europe illuminate the space station as we fly past,"
The 2016 photo on which the Expedition 64 patch was based.
(NASA/Kate Rubins)

Kate Rubins :
"Green aurora with purple highlights compliment the
city lights in the Great Lakes region."
The photo may have partially inspired the colors
of the Expedition 64 crew patch.
(NASA/Kate Rubins)

I S S EXPEDITION 64 , cont.

Rubins said in a pre-flight interview with collectSPACE :

"The 64 patch is actually a photograph that I took when I was on board the ISS the last time. It is the underside of the International Space Station as we are flying over city lights in Europe."
Rubins captured the photo on Sept. 28, 2016, as the space station was flying 214 miles (396 km) over the English Channel, off the coast of Penzance in the United Kingdom. At the time, Rubins was a member of the Expedition 49 crew.
"The city lights of Europe illuminate the space station as we fly past,"
wrote Rubins. In the photo, the metal skin of the station's modules reflects the orange glow from the city lights below, revealing the orbital complex against the dark night sky. The constellation Orion is seen just above Earth's horizon, which is outlined by the thin green line of the atmosphere. A similar scene is depicted on the Expedition 64 patch, although the color palette has been shifted from orange to blue. The insignia also adds purple and green aurora to the horizon, which may have been inspired by another of Rubins' photos with similarly-colored northern lights (or aurora borealis), which she took on Aug. 3, 2016.
The patch art omits the star pattern that forms Orion, as seen in Rubins' photo, but it has seven bright stars for the seven Expedition 64 crew members (four more astronauts will join Rubins, Ryzhikov and Kud-Sverchkov when SpaceX's Crew-1 mision launches).
The emblem also includes the moon, symbolizing NASA's next destination for human exploration. Rubins chose the photo she did for the patch because, to her, it represented how the space station and planet it orbits are connected.
"You can see all the lights of the cities being reflected on the underside of the space station. I just thought it was this great analogy of the connectedness between Earth and space and then you can see, of course, the station pass overhead [from] one of those cities at night."

I S S EXPEDITION 64 , info

Here is the Japan Aerospace Exploration Agency's (JAXA) patch for Soichi Noguchi's Expedition 64/65 stay on the ISS

I S S EXPEDITION 64 , info

Here's a side-by-side of the A-B Emblem (up) and TsPK (down) patches:

I S S EXPEDITION 64

Mission Overview

10/21/20 - Expedition 64 Start
11/16/20 - SpaceX Dragon - Crew - 1 Launch
11/17/20 - SpaceX Dragon - Crew - 1 Dock
11/18/20 - RUS - Spacewalk (6:48 h)
01/27/21 - USA - Spacewalk (6:56 h)
02/01/21 - USA - Spacewalk (5:20 h)
02/28/21 - USA - Spacewalk (7:04 h)
03/05/21 - USA - Spacewalk (6:56 h)
03/13/21 - USA - Spacewalk (6:47 h)
03/19/21 - Soyuz MS – 17 Relocation [MRM1 to MRM2]
04/05/21 - SpaceX Dragon Relocation [IDA2 to IDA3]
04/09/21 - Soyuz MS - 18 Launch / Dock
04/17/21 - Soyuz MS - 17 Undock / Land
04/17/21 - Expedition 64 End

Visiting Vehicles

12/06/20 - Dragon SpX - 21 Launch
12/07/20 - Dragon SpX - 21 Dock
01/06/21 - Cygnus NG - 14 Release
01/12/21 - Dragon SpX - 21 Undock
02/09/21 - Progress MS - 15 Undock
02/15/21 - Progress MS - 16 Launch
02/17/21 - Progress MS - 16 Dock
02/20/21 - Cygnus NG - 15 Launch
02/22/21 - Cygnus NG - 15 Capture

SOYUZ MS - 17 , info

Here is the MS - 17 back-up crew patch :

I S S EXPEDITION 64 / 65

From left to right:
Mark Vande Hei ,Oleg Novitskiy , Pyotr Dubrov

Launch Date : April 09, 2021 , 07:42 UTC

Vehicle : SOYUZ MS - 18 [Yu. A. Gagarin]

Landing Crew : Novitskiy (RUS)
Yulia Peresild (Soyuz MS-19)
Shipenko (Soyuz MS-19)

Landing Date : October 17, 2021 , 04:35 UTC

ISS Crew - 65: from April 17, 2021 to April 24, 2021
Cdr Shannon Walker (USA) (SpaceX-Crew - 1)
FE Hopkins (USA) (SpaceX-Crew - 1)
FE Glover (USA) (SpaceX-Crew - 1)
FE Noguchi (Japan) (SpaceX-Crew - 1)
FE Novitskiy (RUS)
FE Dubrov (RUS)
FE Vande Hei (USA)

ISS Crew - 65: from April 24, 2021 to May 02, 2021
Cdr Shannon Walker (USA)
FE Hopkins (USA)
FE Glover (USA)
FE Noguchi (Japan)
FE Novitskiy (RUS)
FE Dubrov (RUS)
FE Vande Hei (USA)
FE Kimbrough (USA)
FE Megan McArthur (USA)
FE Hoshide (Japan)
FE Pesquet (France)

ISS Crew - 65: from May 02, 2021 to October 04, 2021
Cdr. Hoshide (Japan)
FE Novitskiy (RUS)
FE Dubrov (RUS)
FE Vande Hei (USA)
FE Kimbrough (USA)
FE Megan McArthur (USA)
FE Pesquet (France)

I S S EXPEDITION 65 / 66

From left to right:

Megan McArthur , Thomas Pesquet ,

Akihiko Hoshide , Shane Kimbrough

Launch Date : April 23, 2021 , 09:49 UTC

Vehicle : SpaceX DRAGON - CREW – 2

Landing Date : November 09, 2021 , 03:33 UTC

Continuation:

ISS Crew - 65: from October 04, 2021 to October 05, 2021
Cdr. Pesquet (France)
FE Novitskiy (RUS)
FE Dubrov (RUS)
FE Vande Hei (USA)
FE Kimbrough (USA)
FE Megan McArthur (USA)
FE Hoshide (Japan)

ISS Crew - 65: from October 05, 2021 to October 17, 2021
Cdr. Pesquet (France)
FE Novitskiy (RUS)
FE Dubrov (RUS)
FE Vande Hei (USA)
FE Kimbrough (USA)
FE Megan McArthur (USA)
FE Hoshide (Japan)

FE Shkaplerov (RUS) (Soyuz MS-19)
FE / SFP Shipenko (RUS) (Soyuz MS-19)
FE / SFP Yulia Peresild (RUS) (Soyuz MS-19)

[SFP = Spaceflight participant]

<u>**SOYUZ MS - 18 „launch crew“ patch**</u>

Right :

The Soyuz MS-18 crew patch prominently displays the spacecraft on a shield-shaped background. The spacecraft designation, the crew members names and the Roscosmos logo fill the top of the patch design. Blue and purple rays make up most of the background, symbolising the depths of the cosmos and the far reaches cosmonautics sets its sights on, both in science and in future destinations. Three yellow stars represent the three members of the crew. Soyuz’s orbital target, the ISS is depicted as a silver silhouette. The lower end of the design is occupied by the Kazabek mountain, representing the call-sign of this mission. The patch border displays the flag of Belarus at the top for commander Novitski’s nation of birth, the flag of the Russian Khabarovsk territory on the left representing cosmonaut Dubrov’s origins and on the right are the USA’s national colours for astronaut Vande Hei. The Russian flag is positioned on the spacecraft itself. A banner across the bottom of the design shows the years 1961 and 2021 and the number 60 in between, commemorating Yuri Gagarin’s trailblazing first human spaceflight, six decades ago this year. The patch was designed by spacecraft commander Oleg Novitsky with Luc van den Abeelen. copyright Roscosmos

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<u>SOYUZ MS - 18</u>

Left :

ENERGIA
SOYUZ MS - 18
LOGO

SOYUZ MS - 18 , info

Here is the MS - 18 back-up crew patch :

+ +

<u>Right :</u>
"collectSPACE Messages:
Oleg Novitskiy, Yulia Peresild and Klim Shipenko all wore
Soyuz MS - 18 patches to return to Earth.
It was its landing version with Peresild and Shipenko instead of Dubrov
and Vande Hei.
Plus white and blue border on the left of the patch-colours of „Pskov“
(home town of Yulia). Colours of Russia on the right side.

<u>SOYUZ MS - 18</u>

<u>Soyuz MS - 18 „landing crew“ patch</u>

SOYUZ MS - 18 , info

Mark Vande Hei

Oleg Novitskiy

SOYUZ MS - 18 , info

"collectSPACE Messages:
„ There are two versions of the MS - 18 patch aboard the ISS.
Novitskiy has the version with Korsakov. Vande Hei, the version with him.
Dubrov has the version with Korsakov as well as Novitskiy. Why? „
„ In a pre-flight interview, Vande Hei said that he, Novitskiy and Dubrov considered Korsakov the fourth member of their crew and wore the patch with Korsakov's name to reflect that.
In fact, during training, Vande Hei said he wore the patch with Korsakov's name and Korsakov vice versa. „
From Sergei Korsakov :
„ In fact, we had a well-coordinated crew of four for the ship, which has only three seats. We jokingly referred to this situation as the "Musical Chair" game. Now that the music has stopped, I want to wish the Soyuz MS - 18 crew
to successfully complete their preparations,.and safely return to Earth!

Top right :

The Crew-2 patch is a beautiful design that represents the second crew rotation flight with astronauts aboard the SpaceX Crew Dragon spacecraft, hence the number “2” featured towards the bottom of the patch. Commander of the mission, astronaut astro_kimbrough, said, “The determined expression of the Dragon reflects the strength of the team and their contribution to the exploration of space.” He also shared the meaning of the five stars featured in the center of the patch. He said they represent the five space agencies cooperating in the International Space Station (ISS) program: NASA, the Canadian Space Agency, the European Space Agency (ESA), the Japan Aerospace Exploration Agency (JAXA), and Roscosmos. The Crew Dragon spacecraft on the right represents the vehicle that will house the crew until they reach the space station. : Commander Shane Kimbrough and Pilot Megan McArthur of NASA, Mission Specialist Thomas Pesquet (ESA), and Mission Specialist Akihiko Hoshide (JAXA). Designed and made by Gregory "ZeroG" Manchess

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Bottom right :

SPACE X
DRAGON CREW 2
PATCH

SPACE X DRAGON CREW – 2

NASA - Crew 2 mission patch

\+ +

SPACE X - Crew 2 mission patch

I S S EXPEDITION 65

The International Space Station Expedition 65 patch depicts the space station as it appears during the time the crew will be onboard.

The space station flying over the Earth represents the overall reason for having a space station; to benefit the world through scientific research and international cooperation in space.

When this expedition begins, the space station will have provided continued human presence in space for more than twenty years.

Blue, the background color of the patch, symbolizes reliability.

The stars represent the crew onboard the space station, as well as mission control centers located on three continents.

Those stars, in that field of blue, also symbolize the thousands of space workers throughout the space station partnership who continue to contribute to the success of our International Space Station.

I S S EXPEDITION 65

E S A - Alpha mission patch

Designed by ESA's graphic artists, the Alpha patch features a rocket launch – the most dramatic moment in any space mission.
Around the patch are 17 colored slots representing the United Nations Sustainable Development Goals.
At the top, the International Space Station is stylized in the colors of the French flag.
Ten stars sparkle in the background, evoking the Centaurus constellation, and the number of French citizens who have flown to space.
The name of Thomas Pesquet's second mission to the ISS was selected from over 27,000 entries to an ESA competition. The first to submit this name was Christelle de Larrard from Mios, Gironde, France :
"There were many reasons to choose Alpha as a mission name,"
says Thomas Pesquet:
"It connects to my first mission, Proxima, as the stars belong to the same system close to Earth, and therefore convey the same idea of proximity (such as space research for people on Earth) and an idea of continuation in my work. Alpha, a Greek letter, is also widely used in mathematics, science and technology. And, as the first letter of the alphabet, it is often synonymous with the excellence we try to achieve in space exploration."
Alpha was also the original denomination of the ISS, and is still used today as its radio call sign. The word is pronounced the same in almost every language, resulting in a simple yet meaningful mission name for the first astronaut to fly on a new generation of US crewed spacecraft. Alpha launches as part of NASA's Crew-2.

I S S EXPEDITION VC - Vyzov

From left to right:
SFP Yulia Peresild , Anton Shkaplerov , *SFP* Klim Shipenko
(! ! all Russian cosmonauts or ? ! !)

Launch Date :	October 05, 2021 , 08:55 UTC	
Vehicle :	SOYUZ MS - 19	
Landing Crew :	Shkaplerov (RUS)	
	Dubrov (RUS)	[SOYUZ MS - 18]
	Vande Hei (USA)	[SOYUZ MS - 18]
Landing Date :	März 30, 2022 , 11:28 UTC	

[VC = Visiting Crew]
[Vyzov = Challenge ("Вызов“)]
[SFP = Spaceflight participant]

Actress Yulia Peresild and producer Klim Shipenko, who are making their first flights into space, spend 12 days on the space station, filming segments for a movie titled "Challenge" („Vyzov“ = "Вызов").

The motion picture is a joint project of the State Corporation Roscosmos, Channel One and the studio Yellow, Black and White.

They returned to Earth with Oleg Novitsky October 17, 2021 on the Soyuz MS – 18 spacecraft

< Promotional item >

Keychain „THE CHALLENGE“ with Roscosmos logo

[For more information see "ISS Expedition 66"]

I S S EXPEDITION 65

Mission Overview

04/17/21 - Expedition 65 Start

04/23/21 - SpaceX Dragon - Crew - 2 Launch

04/24/21 - SpaceX Dragon - Crew - 2 Dock

05/02/21 - SpaceX Dragon - Crew - 1 Undock / Splashdown

06/02/21 - RUS - Spacewalk (7:19 h)

06/16/21 - USA - Spacewalk (7:15 h)

06/20/21 - USA - Spacewalk (6:28 h)

06/25/21 - USA - Spacewalk (6:45 h)

07/21/21 - SpaceX Dragon - Crew - 2 Relocation
[IDA2 to IDA3]

09/03/21 - RUS - Spacewalk (7:54 h)

09/09/21 - RUS - Spacewalk (7:25 h)

09/12/21 - USA - Spacewalk (6:54 h)
(first all international spacewalk)

09/28/21 - Soyuz MS – 18 Relocation
[Rassvet to Nauka]

10/05/21 - Soyuz MS – 19 Launch / Dock

10/17/21 - Soyuz-MS – 18 Undock / Land

10/17/21 - Expedition 65 End

I S S EXPEDITION 65

Visiting Vehicles

04/27/21 - Progress MS-14 -Undock
[in space for at least 368 days]

06/03/21 - Dragon SpX - 22 Launch

06/05/21 - Dragon SpX - 22 Dock

06/29/21 - Cygnus NG – 15 Release

06/29/21 - Progress MS-17 Launch

07/02/21 - Progress MS-17 Dock

07/08/21 - Dragon SpX - 22 Undock

07/21/21 - MLM-U – NAUKA – Module Launch

07/26/21 - Progress MS-16 and PIRS-module Undock

07/29/21 - MLM-U – NAUKA – Module Dock

08/10/21 - Cygnus NG – 16 Launch

08/12/21 - Cygnus NG – 16 Dock

08/29/21 - Dragon SpX - 23 Launch

08/30/21 - Dragon SpX - 23 Dock

09/30/21 - Dragon SpX - 23 Undock

I S S EXPEDITION 65 / 66
I S S EXPEDITION VC-Yzov

From left to right:
SFP Yulia Peresild , Anton Shkaplerov , *SFP* Klim Shipenko
(! ! all Russian cosmonauts or ? ! !)

Launch Date :	October 05, 2021 , 08:55 UTC	
Vehicle :	SOYUZ MS - 19	
Landing Crew :	Shkaplerov (RUS)	
	Dubrov (RUS)	[SOYUZ MS - 18]
	Vande Hei (USA)	[SOYUZ MS - 18]
Landing Date :	März 30, 2022 , 11:28 UTC	

[VC = Visiting Crew]
[Vyzov = Challenge ("Вызов“)]
[SFP = Spaceflight participant]

ISS Crew - 66: from October 17, 2021 to November 06, 2021

Cdr.	Pesquet (France)	(SpaceX-Crew-2)
FE	Shkaplerov (RUS)	(Soyuz MS-19)
FE	Dubrov (RUS)	(Soyuz MS-18)
FE	Vande Hei (USA)	(Soyuz MS-18)
FE	Kimbrough (USA)	(SpaceX-Crew-2)
FE	Megan McArthur (USA)	(SpaceX-Crew-2)
FE	Hoshide (Japan)	(SpaceX-Crew-2)

ISS Crew - 66: from November 06, 2021 to November 07, 2021

Cdr.	Shkaplerov (RUS)
FE	Dubrov (RUS)
FE	Vande Hei (USA)
FE	Kimbrough (USA)
FE	Megan McArthur (USA)
FE	Hoshide (Japan)
FE	Pesquet (France)

ISS Crew - 66: from November 07, 2021 to November 11, 2021

Cdr.	Shkaplerov (RUS)
FE	Dubrov (RUS)
FE	Vande Hei (USA)

ISS Crew - 66: from November 11, 2021 to December 08, 2021

Cdr.	Shkaplerov (RUS)
FE	Dubrov (RUS)
FE	Vande Hei (USA)
FE	Charia (USA)
FE	Mashburn (USA)
FE	Maurer (Germany)
FE	Kayla Barron (USA)

I S S EXPEDITION 66 / 67

From left to right:
Raja Chari , Thomas Mashburn , Matthias Maurer , Kayla Barron

Launch Date : November 11, 2021 , 02:03 UTC
Vehicle : SpaceX DRAGON - CREW – 3
Landing Date : May 06, 2022 , 04:43 UTC

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Continuation-II:

ISS Crew - 66: from March 18, 2022 to March 30, 2022

Cdr.	Shkaplerov (RUS)	
FE	Dubrov (RUS)	
FE	Vande Hei (USA)	
FE	Charia (USA)	
FE	Mashburn (USA)	
FE	Maurer (Germany)	
FE	Kayla Barron (USA)	
FE	Artemeyev (RUS)	(Soyuz MS-21)
FE	Korsak (RUS)	(Soyuz MS-21)
FE	Matveev (RUS)	(Soyuz MS-21)

Continuation-I:

ISS Crew - 66: from December 08, 2021 to December 20, 2021

Cdr.	Shkaplerov (RUS)	
FE	Dubrov (RUS)	
FE	Vande Hei (USA)	
FE	Charia (USA)	
FE	Mashburn (USA)	
FE	Maurer (Germany)	
FE	Kayla Barron (USA)	
SC-Cdr.	Misurkin (RUS)	(Soyuz MS-20)
SFP	Maezawa (Japan)	(Soyuz MS-20)
SFP	Hirano (Japan)	(Soyuz MS-20)

[SC - Cdr. = Spacecraft Commander]
[SFP = spaceflight participant]

ISS Crew - 66: from December 20, 2021 to March 18, 2022

Cdr.	Shkaplerov (RUS)
FE	Dubrov (RUS)
FE	Vande Hei (USA)
FE	Charia (USA)
FE	Mashburn (USA)
FE	Maurer (Germany)
FE	Kayla Barron (USA)

SOYUZ MS - 19 „launch crew“ patch

Right :

The composition of the emblem is built around the image of the ascending Soyuz launch vehicle with the Soyuz MS spacecraft. The mission name, Soyuz MS-19, is located on both sides of the rocket. The large yellow star symbolizes the ISS [International Space Station] and the three white stars represent the crew of three cosmonauts: Anton Shkaplerov, Klim Shipenko and Yulia Peresild — all of them will become the stars of the first feature film shot in space. The excitement of the flight of non-professional space flight participants is reflected in the contour of the cardiogram that symbolizes the beating of their hearts. In the lower field, there is the planet wrapped with film to symbolize the shooting of a film. Its name, "The Challenge," is inscribed in the frame of the stylized film. On the top of the emblem border, there are the names of the expedition members, and on the bottom — the flag of the Russia. The right field contains the logo of Roscosmos. The emblem is developed by Roscosmos together with Channel One, the Yellow, Black and White Studio.

+ +

SOYUZ MS - 19

Left :

ENERGIA
SOYUZ MS - 19
LOGO

SOYUZ MS - 19 , info

Here is the MS - 19 back-up crew patch :

SOYUZ MS - 19 , cont.

SOYUZ MS - 19 „landing crew“ patch

Patches were sent to ISS, but the crew ended up not wearing this version on their Sokol suits. (Copyright Roscosmos)

(АСТРЕЙ = ASTRAEUS :
This is the callsign of the MS - 19 mission)

[According to Roscosmos / Glavkosmos :
only 50 copies of the patch have been made ! ! !]

Top right :

The Crew Dragon Crew-3 patch highlights the beauty of space and the vehicle that is delivering our team to the ISS. The sunlit capsule heralds the dawn of a new era of human space flight, as commercial vehicles expand into low earth orbit. The capsule flies upward, thrusting beyond the edge of the circle, representing an international effort that pushes to reach new heights of space exploration. The flames below the capsule honor the of thousands of workers who contributed to the US commercial vehicle effort — the fire in their hearts propels the program's success. Since Crew-3 is the third operational flight to the Space Station, the number three figures prominently in both the shape of the exhaust below the capsule and the highlighted stars. A dragon is embedded in the exhaust opposite the three for the capsule's namesake. Finally, four red planets represent the four crew members of the mission, as well as humanity's dream to explore Mars and even more distant planetary bodies.
Designed and made by Gregory "ZeroG" Manchess

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Bottom right :

SPACE X
DRAGON CREW 3
PATCH

SpaceX DRAGON - CREW - 3

NASA - Crew 3 mission patch

+ +

SPACE X - Crew 3 mission patch

SpaceX DRAGON - CREW - 3 , info

The
„ U.S. Space Force Space Launch Delta 45 1st Range Operations Squadron “
(USSF SLD45 1ROPS)
have released a very cool cross-over patch for the CREW-3 launch

CREW-3 Spooky Season Morgan Denman

SpaceX DRAGON - CREW - 3 , info

Here are two apparel embroidery versions of
NASA's SpaceX CREW-3 emblem

The Expedition 66 patch celebrates the continued utilization of the International Space Station as a path for human and scientific space exploration. Its shape reflects the Route 66 highway sign, which once guided an earlier expansion into distant, remote lands. The arc of the Earth's atmosphere is reminiscent of the well-known stop-motion photos taken by astronauts and cosmonauts of the Earth in eclipse. Two future destinations are depicted, the Moon resting inside one of the numerals, and Mars to the right. A multicolored bridge containing the colors of each of this mission's international partner's flags (Russia, Germany, France, Japan, and the United States) draws the viewer from the perimeter of the patch into the numeral 66 just as the space station bridges the gap from low-Earth orbit to these distant exploration destinations.

The Expedition 66 patch was designed by NASA graphic designer Blake Dumesnil. Blake decribes the background of the design,

"Growing up around classic cars, collectibles, and Americana, I couldn't pass up the opportunity to use the Route 66 sign as a starting point for this design, but going beyond the obvious numerical tie, I loved the idea of a journey being just as important as the destination - the Space Station is an incredible stop along the road back to the Moon and on to Mars!"

"He said, 'Hey, six-six, I like the idea of Route 66," Marshburn said, recalling his conversation with Blake Dumesnil, the Houston-based graphic artist who worked with him to create the Expedition 66 patch, in an interview with collectSPACE. The patch is shaped like a U.S. Highway shield, the same type of sign found along "historic" Route 66, which runs from Chicago, Illinois to Santa Monica, California. On the emblem, Dumesnil depicted a road that extends from the station to beyond Earth's horizon and into deep space.

"I loved the idea of a journey being just as important as the destination. The ISS is an incredible stop along the road back to the moon and onto Mars!" he wrote.

At first, Marshburn was concerned about referencing Route 66 as it could be seen as "a little bit too American." The patch, after all, was meant to represent the entire crew and during its six-month stretch, Expedition 66 would include six Americans (Kimbrough, McArthur, Vande Hei, Chari, Barron, Marshburn), two Europeans (Pesquet, Maurer), a Japanese (Hoshide) and five Russians (Dubrov, Shkaplerov, Artemyev, Matveev, Korsakov).

I S S EXPEDITION 66

Continuation:

"We have an international crew and Russia had to sign off on [the design], but interestingly, when I passed that idea around to them they said, "Nah, this is an American cultural icon, but we get it, we think it's great [as a symbol of] not just exploration, but commercialization of an otherwise relatively inaccessible area," Marshburn said.

"So in all ways we thought that was really cool," he said.

"And I was pleased my crewmates liked it."

I S S EXPEDITION 66

E S A - Cosmic Kiss mission patch

The name of European Space Agency (ESA) mission to the International Space Station, Cosmic Kiss, is a declaration of love for space. It communicates the special connection the Station provides between Earth's inhabitants and the cosmos. It also conveys the value of partnership in exploring farther to the Moon and Mars, alongside the need to respect, protect and preserve the nature of our home planet as we seek a sustainable future on Earth.
The patch takes inspiration from the Nebra sky disc ("Himmelsscheibe von Nebra") – the oldest known realistic illustration of the night sky – as well as the Pioneer plaques and Voyager Golden Records that were sent into the unknown carrying messages from Earth. These artifacts show a fascination with space that spans the ages. Since the beginning of time, humans have looked skyward for knowledge about the origins of life, the Universe and our place in the cosmos. The Cosmic Kiss mission builds on the curiosity of all those who came before us, as exploration advances our understanding of Earth, our Solar System and life itself. Like the Nebra sky disc, the patch features several cosmic elements including Earth, the Moon and the Pleiades star cluster. It also depicts Mars, one of ESA's three key destinations for exploration over the next 10 years, as a small red dot beckoning in the distance. Earth is shown borderless and backlit, with only a delicate line of atmosphere visible. This phenomenon is often described by space travelers, who marvel at the wonder of all human life and events taking place in one thin and precious layer. The most prominent feature is a simplified, almost heart-like ISS. This is connected through a human heartbeat that stretches from Earth to the Moon. This heartbeat symbolizes the human presence and passion that propels exploration forward and connects us to the Universe, as well as the vital life science experiments the Station enables. As a unique oasis in space, the ISS is a hub of science, research and operations like no other. The continuous human presence that it supports beyond our Earth leads to greater knowledge, technological advances and a better understanding of fundamental and applied sciences. The Station is a lifeline for Earth's future and paves the way for our next steps into space as we go forward to the Moon and Mars. It is the Cosmic Kiss that unites us and brings light to the unknown. The Cosmic Kiss mission patch features black, red, gold and white.

Continuation:
Each color has been selected for its significance:

Black : represents the Universe and its mysteries that we seek to understand.

Red : stands for love and passion. It represents our human presence today and the martian soils that await us as we explore farther into the Solar System.

Gold : is the color of the stars that share their warmth and light to enable life.

White : is the heartbeat that flashes in the atmosphere. It stands for technology and scientific progress, bringing light into the dark.

I S S EXPEDITION VC - 20

From left to right:
SFP Yozo Hirano , SC-Cdr. Alexander Misurkin , SFP Yusaku Maezawa

Launch Date : December 08, 2021 , 07:38:16 UTC

Vehicle : SOYUZ MS - 20

Landing Date : December 20, 2021 , 03:13:18 UTC

[VC = Visiting Crew]
[SC - Cdr. = Spacecraft Commander]
[SFP = spaceflight participant]

I S S EXPEDITION VC - 20

What appears to be Yusaku Maezawa's personal patch
for his Soyuz MS - 20 ISS mission

I S S EXPEDITION VC - 20 , cont.

SOYUZ MS - 20

Right :

The graphic symbol of the crew was developed by Alexey Tarapata from St. Petersburg and Maezawa's team. The final adjustment of the design was made by an artist from the Netherlands, Luc van den Abeelen. The composition of the Soyuz MS - 20 emblem is built around a stylized image of an eagle spreading its wings and is associated with the crew's call sign - Altair. The star Altair (Alpha of the Eagle constellation) is the brightest in this constellation.The powerful bird in the drawing also reminds about the city of Orel, where the crew commander Alexander Misurkin grew up. The combination of red and white colors symbolizes the flag of Japan. The graphic symbol at the bottom of the emblem consists from the letters "M" and "Z", and is the personal logo of Yusaku Maezawa. In the upper part of the emblem, a flying Soyuz spacecraft is visible. At the top of the emblem border are the Soyuz MS - 20 spacecraft name and Roscosmos logo showed, and at the bottom the crew names are presented.

+ +

Left :

ENERGIA
SOYUZ MS - 20
LOGO

I S S EXPEDITION 66

Mission Overview

10/17/21 - Expedition 66 Start

11/07/21 - SpaceX Dragon - Crew - 2 Undock

11/08/21 - SpaceX Dragon - Crew - 2 Splashdown

11/11/21 - SpaceX Dragon - Crew - 3 Launch / Dock

12/02/21 - USA – Spacewalk (6:32 h)

12/08/21 - Soyuz MS - 20 Launch / Dock

12/20/21 - Soyuz MS - 20 Undock / Land

01/19/22 - RUS – Spacewalk (7:11 h)

03/15/22 - USA – Spacewalk (6:54 h)

03/18/22 - Soyuz MS - 21 Launch / Dock

03/23/22 - USA – Spacewalk (6:54 h)

03/30/22 - Soyuz-MS - 19 Undock / Land

03/30/22 - Expedition 66 End

I S S EXPEDITION 66 , info
I S S EXPEDITION VC-20 , info

The three-person Soyuz MS-20 crew (front row) participates in a group portrait with the seven-member Expedition 66 crew :
In the front row, from left, are Japanese spaceflight participant Yusaku Maezawa, Roscosmos cosmonaut Alexander Misurkin, and Japanese spaceflight participant Yozo Hirano.
In the middle row, from left, are Roscosmos cosmonauts Pyotr Dubrov and Anton Shkaplerov with NASA astronaut Mark Vande Hei.
In the back row, from left, is ESA (European Space Agency) astronaut Matthias Maurer with NASA astronauts Thomas Marshburn, Raja Chari and Kayla Barron.

I S S EXPEDITION 66

Visiting Vehicles

10/20/21 - Progress MS - 17 Undock
[Progress relocation]

10/22/21 - Progress MS - 17 Dock
[Poisk to Nauka]

10/27/21 - Progress MS - 18 Launch

10/29/21 - Progress MS - 18 Dock

11/20/21 - Cygnus NG – 16 Release

11/24/21 - Progress M-UM Launch
[with PRICHAL node module]

11/25/21 - Progress MS - 17 Undock

11/26/21 - Progress M-UM Dock
[with PRICHAL node module]

12/21/21 - Dragon SpX - 24 Launch
12/22/21 - Dragon SpX - 24 Dock

12/23/21 - Progress M-UM instrument
compartrement Unock

01/23/22 - Dragon SpX - 24 Undock

01/24/22 - Dragon SpX - 24 Spalshdown

02/15/22 - Progress MS - 19 Launch

02/17/22 - Progress MS - 19 Dock

02/19/22 - Cygnus NG – 17 Launch

02/21/22 - Cygnus NG – 16 Dock

I S S EXPEDITION 66 , info

Expedition 66 crew poster

I S S EXPEDITION 66 / 67

From left to right:
Sergey Korsakov , Oleg Artemyev , Denis Matveev

Launch Date : March 18, 2022 , 15:55 UTC
Vehicle : SOYUZ MS - 21
Landing Date : September 29, 2022 , 10:57 UTC

ISS Expedition 67 / 68

From left to right:
Robert Hines , Samantha Cristoforetti , Jessica Watkins , Kjell Lindgren

Launch Date : April 27, 2022 , 07:53 UTC
Vehicle : SpaceX DRAGON - Crew 4
Landing Date : October 14, 2022 , 20:55 UTC

ISS Crew - 67: from March 30, 2022 to April 09, 2022

Cdr. Mashburn (USA) (SpaceX-Crew-3)
FE Charia (USA) (SpaceX-Crew-3)
FE Maurer (Germany) (SpaceX-Crew-3)
FE Kayla Barron (USA) (SpaceX-Crew-3)
FE Artemyev (RUS)
FE Korsakov (RUS)
FE Matveev (RUS)

ISS Crew - 67: from April 09, 2022 to April 25, 2022

Cdr. Mashburn (USA)
FE Charia (USA)
FE Maurer (Germany)
FE Kayla Barron (USA)
FE Artemyev (RUS)
FE Korsakov (RUS)
FE Matveev (RUS)

- Ax-1 crew not officially part of ISS crew 67 -

SC-Cdr. López-Alegría (USA/Spain) (SpaceX-Crew-Ax-1)
PA Larry Connor (USA) (SpaceX-Crew-Ax-1)
PA Mark Pathy (Canada) (SpaceX-Crew-Ax-1)
PA Eytan Stibbe (Israel) (SpaceX-Crew-Ax-1)

[SC - Cdr. = Spacecraft Commander]
*[PA = **p**rivate **a**stronaut]*

ISS Crew - 67: from April 25, 2022 to April 28, 2022

Cdr. Mashburn (USA)
FE Charia (USA)
FE Maurer (Germany)
FE Kayla Barron (USA)
FE Artemyev (RUS)
FE Korsakov (RUS)
FE Matveev (RUS)

Continuation-I:

ISS Crew - 67: from April 28, 2022 to May 05, 2022

Cdr. Mashburn (USA)
FE Charia (USA)
FE Maurer (Germany)
FE Kayla Barron (USA)
FE Artemyev (RUS)
FE Korsakov (RUS)
FE Matveev (RUS)
FE Lindgren (USA)
FE Hines (USA)
FE Cristoforetti (Italy) (Leader USOS)
FE Watkins (USA)

[USOS = US Orbital Segment]

ISS Crew - 67: from May 05, 2022 to September 21, 2022

Cdr. Artemyev (RUS)
FE Korsakov (RUS)
FE Matveev (RUS)
FE Lindgren (USA)
FE Hines (USA)
FE Cristoforetti (Italy)
FE Watkins (USA)

Continuation-II:

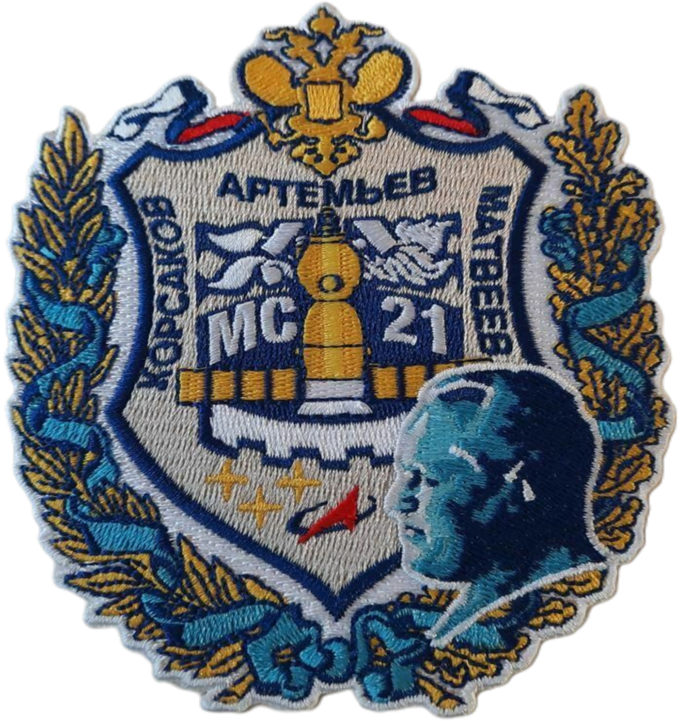
ISS Crew - 67: from September 21, 2022 to September 28, 2022

Cdr. Artemyev (RUS)
FE Korsakov (RUS)
FE Matveev (RUS)
FE Lindgren (USA)
FE Hines (USA)
FE Cristoforetti (Italy)
FE Watkins (USA)
FE Prokopyev (RUS) (Soyuz MS - 22)
FE Petelin (RUS) (Soyuz MS - 22)
FE Rubioi (USA) (Soyuz MS - 22)

ISS Crew - 67: from September 28, 2022 to September 29, 2022

Cdr. Cristoforetti (Italy)
FE Lindgren (USA)
FE Hines (USA)
FE Watkins (USA)
FE Artemyev (RUS)
FE Korsakov (RUS)
FE Matveev (RUS)
FE Prokopyev (RUS)
FE Petelin (RUS)
FE Rubioi (USA)

SOYUZ MS - 21



Right :

The Spacecraft will be called "Korolyov" and mission will be called "Launch by Baumansky Start." The emblem is based upon the arms of Bauman Moscow State Technical University. The general design is based on the logo of the Bauman University where all crew members studied.
The portrait represents Sergei Korolev, after whom the spacecraft is named.

Note:
The March 18, 2022 launch date will also mark the 57th anniversary of Alexei Leonov's first spacewalk.

+ +

Left :

ENERGIA
SOYUZ MS - 21
LOGO ' S

Top right :

Official description reads:
Rays of light streak across the inky blackness of space, preceding the dawn of a new chapter in human spaceflight. The free-flying Dragon capsule forms the thorax of the central element of the patch, the Dragonfly – a beautiful and agile flyer. For many, the dragonfly represents transformation and good fortune.
On its way to the International Space Station, the capsule appears suspended in low Earth orbit with the Earth below and Moon above. Four bright stars represent the four crewmembers' families and their steadfast patience, love and support. The remaining multitude of stars represent the countless members of the NASA, SpaceX and international partner teams, whose ingenuity, vigilance and tireless work has made this mission possible.
Best of all — it was designed by the brilliant Alexandra Lindgren!
(Kjell Lindgren's daughter)

+ +

Bottom right :

SPACE X
DRAGON CREW 4
PATCH

SpaceX DRAGON - CREW - 4

NASA - Crew 4 mission patch

+ +

SPACE X - Crew 4 mission patch

SpaceX DRAGON - CREW - 4 , info

USSF SLD45 1ROPS - Crew 4 patch

The
„ U.S. Space Force Space Launch Delta 45 1st Range Operations Squadron „
(USSF SLD45 1ROPS)

have released a patch for the CREW-4 launch

SpaceX DRAGON - CREW - 4 , info

NASA - Crew 4 mission patch

National Aeronautics and Space Administration
Dragon Crew 4 patch made by Aviator Gear

It looks like this is another official design as it's being worn
by Samantha Cristoforetti's and Kjell Lindgren at Star City

I S S EXPEDITION 67

The Expedition 67 patch celebrates our on-going international mission to conduct science and research to improve life on Earth and extend our presence in the solar system.

The ISS is poised in the foreground to recognize the contributions of the thousands of engineers, scientists, researchers, trainers, fabricators, leaders, and dreamers who have made this miracle of engineering and sustained operations possible.

Our beautiful home, the planet Earth, serves as a central element of the patch, just as it is central to the ISS's mission.

While we endeavor to unlock the mysteries of the universe, we are also committed to better understanding the Earth and how we can protect it for future generations.

Three stars shine bright on a field of black, representing the United States, Russia, and Italy, the three countries with crewmembers on this particular expedition.

The numerous stars further scattered across the night sky represent the additional countries that comprise the ISS partnership.

The life-giving rays of the sun represent our crew's families, whose love and support make this endeavor possible.

Designed by Greg Manchess

I S S EXPEDITION 67

E S A - Minerva mission patch

Inspired by the Roman goddess of wisdom, the handicrafts and the arts, the name Minerva is a homage to the competence and sophisticated craftmanship of the men and women all over the world who make human spaceflight possible.

The goddess Minerva also embodies the toughness and discipline that is equired of us, and the wisdom we wish to demonstrate, as we consolidate and expand human presence in space.

Minerva is often depicted with her sacred owl, a key feature of Samantha Cristoforetti's mission patch.

The eye of the owl is a yellow Moon, casting a white glow onto a round Earth.

Its beak hints at the shape of the International Space Station, with its characteristic solar panels.

The two lines also symbolise Samantha's two missions to space.

Waves of ever darker blue make up the body of the owl and encourage us to rise to the challenge and move farther into deep space.

The owl looks to the right, to the future of space exploration and adventure off Earth for our planet.

Top right :

Starting with her first spaceflight, Samantha Cristoforetti introduced embroidered zipper pulls (or tags) with designs related to her patches and missions.

Now that she is a member of SpaceX DRAGON - Crew – 4, Samantha Cristoforetti and her three crewmates have been seen with new Crew-4 themed tags :

Team Crew-4
Dragon Crew-4
Remove Before Launch
Expedition 67

+ +

Bottom right :

The photo shows Samantha Cristoforetti's collection of zipper pulls, including a new one for her **Minerva mission**.

- Her "Don't Panic" pull from **Expedition 42**.
- Another appears to be for **Expedition 67** (based on the colors).
- The fourth one is unknow ; *can be :* *[NASA Extreme Environment Mission Operations, or NEEMO 23 ; 2019] ?*

I S S EXPEDITION 67 , info

E S A - Minerva mission patch , info

+ +

Axiom Mission 1 (Ax – 1)

[First private astronaut mission to the ISS]

From left to right:
PA Mark Pathy , PA Larry Connor ,
SC-Cdr. Michael Lopez-Alegria , PA Eytan Stibbe

Launch Date : April 08, 2022 , 15:17 UTC

Vehicle : SpaceX DRAGON - CREW – Ax-1

Landing Date : April 25, 2022 , 17:07 UTC

[SC - Cdr. = Spacecraft Commander]
*[PA = **p**rivate **a**stronaut]*

Axiom Mission 1 (Ax – 1)

SPACE X - Crew Ax – 1 mission patch

Axiom Mission 1 (Ax – 1)

Axiom Space - Crew Ax-1 mission patch

At the heart of the patch is the venerable ISS itself, the core of this pioneering private research mission, reflecting Ax-1's role as a precursor for future activity in low-Earth orbit and a key step toward the ISS's commercial successor – Axiom Station.

The flags of four countries adorn the ISS in the form of its solar arrays, representing this multinational crew and reinforcing the importance of international collaboration in exploration.

A cascading plane of blue represents Earth's atmosphere, and the journey humanity has traveled to arrive in this new era, among the first steps in expanding the human presence in low-Earth Orbit.

Four bright stars – one for each crew member and an atom at the center of the constellation – represent the expedition's scientific and aspirational goals.

The last name of each crew member adorn the top of the design.

The bottom highlights the Earth overflown while the mission's historic significance is spelled out in "First Private Crew to the ISS" and MMXXII marks the year.

A golden border inspired by the logo of 'Rakia,' the mission's name in Stibbe's home country, marks the significance of this mission to the people of Israel.

Axiom Mission 1 (Ax – 1) , info

Ax-1 mission specialist Eytan Stibbe has his own mission patch for the Israeli "Rakia" ("firmament" in English) science investigations he will carry out on behalf of the Ramon Foundation while on board the International Space Station.

Eitan Stibbe's personal patch created on basis of Mission Rakia insignia. There are some differences from mission patch. You can see Rakia words in English, Hebrew, and Arabic at the center of logo, astronaut's name on the top and "Second Israeli in the Space" words in Hebrew below.

Axiom Mission 1 (Ax – 1) , info

From left to right:
Michael Lopez-Alegria, a retired NASA astronaut , Larry Connor, an American real estate entrepreneur , Eytan Stibbe, a businessman and Mark Pathy, a Canadian investor

Crew from Axiom Mission 1 at ISS

Boeing Orbital Flight Test 2

Starliner again carried the „Anthropomorphic Test Device (ATD)“ "Rosie the Rocketeer" for its second flight, wearing Boeing's custrom flight suit

NASA - OFT - 2 mission patch

BOEING - OFT - 2 mission patch

Launch Date :	May 19, 2022 , 22:55 UTC
Vehicle :	BOEING CST – 100 Starliner
Docking date :	May 21, 2022 , 00:28 UTC
Undocking date :	May 25, 2022 , 18:36 UTC
Landing Date :	May 25, 2022 , 22:49 UTC

I S S EXPEDITION 67

Mission Overview

03/30/22 - Expedition 67 Start

04/08/22 - SpaceX Dragon - Crew - Ax-1 Launch

04/09/22 - SpaceX Dragon - Crew - Ax-1 Dock

04/18/22 - RUS – Spacewalk (6:37 h)

04/25/22 - SpaceX - Crew - Ax-1 Undock / Splashdown

04/27/22 - SpaceX Dragon - Crew - 4 Launch / Dock

04/28/22 - RUS – Spacewalk (7:42 h)

05/05/22 - SpaceX - Crew - 3 Undock

05/06/22 - SpaceX - Crew - 3 Splashdown

07/21/22 - RUS – Spacewalk (7:05 h)

08/17/22 - RUS – Spacewalk (4:01 h)

09/02/22 - RUS – Spacewalk (7:47 h)

09/21/22 - Soyuz MS - 22 Launch / Dock

09/29/22 - Soyuz MS - 21 Undock / Land

09/29/22 - Expedition 67 End

I S S EXPEDITION 67 , info

Soyuz MS - 21 mission patch

ISS Expedition 67 insignia
with names of the „prime“ Expedition 67 crew

+ +

There appears to be a rubber version as well

I S S EXPEDITION 67

Visiting Vehicles

05/19/22 - Boeing – Starliner – OFT-2
(unmanned) Launch

05/21/22 - Boeing – Starliner – OFT-2
(unmanned) Dock

05/25/22 - Boeing – Starliner – OFT-2
(unmanned) Undock / Land

06/01/22 - Progress MS - 18 Undock

06/03/22 - Progress MS - 20 Launch / Dock

07/15/22 - Dragon SpX - 25 Launch

07/16/22 - Dragon SpX - 25 Dock

06/28/22 - Cygnus NG - 17 Release

08/19/22 - Dragon SpX - 25 Undock

08/20/22 - Dragon SpX - 25 Spalshdown

I S S EXPEDITION 67 , info

Photo of the patch ordered by Oleg Artemiev

A Russian-produced version with the crew names
was worn by the Soyuz MS - 21 crew during launch

I S S EXPEDITION 67 / 68

From left to right:
Francisco Rubio , Sergej Prokopyev , Dmitri Petelin

Launch Date : September 21, 2022 , 13:54 UTC
Vehicle : SOYUZ MS - 22 [Tsiolkovsky]
Landing Crew: Without crew *[external leak on MS-22]*
Landing Date : March 28, 2023 , 11:46 UTC

From left to right:
Anna Kikina , Josh Cassada , Nicole Mann , Koichi Wakata

Launch Date : October 05, 2022 , 16:01 UTC
Vehicle : SpaceX DRAGON - CREW - **5**
Landing Date : March 12, 2023 , 02:02 UTC

ISS Crew - 68: from September 29, 2022 to Octobery 06, 2022

Cdr.	Cristoforetti (Italy)	(SpaceX-Crew-4)
FE	Hines (USA)	(SpaceX-Crew-4)
FE	Lindgren (USA)	(SpaceX-Crew-4)
FE	Watkins (USA)	(SpaceX-Crew-4)
FE	Prokopyev (RUS)	
FE	Petelin (RUS)	
FE	Rubioi (USA)	

ISS Crew - 68: from October 06, 2022 to October 12, 2022

Cdr.	Cristoforetti (Italy)
FE	Hines (USA)
FE	Lindgren (USA)
FE	Watkins (USA)
FE	Prokopyev (RUS)
FE	Petelin (RUS)
FE	Rubioi (USA)
FE	Mann (USA)
FE	Cassada (USA)
FE	Wakata (Japan)
FE	Kikina (RUS)

ISS Crew - 68: from October 12, 2022 to October 14, 2022

Cdr	Prokopyev (RUS)
FE	Petelin (RUS)
FE	Rubio (USA)
FE	Cristoforetti (Italy)
FE	Hines (USA)
FE	Lindgren (USA)
FE	Watkins (USA)
FE	Mann (USA)
FE	Cassada (USA)
FE	Wakata (Japan)
FE	Kikina (RUS)

I S S EXPEDITION 68 / 69

Soyuz MS spacecraft

Launch Date : February 24, 2023 , 00:24 UTC

Launch Crew : Without crew

Vehicle : SOYUZ MS - 23

Landing Crew : Cdr. Prokopyev (RUS)
FE Petelin (RUS)
FE Rubio (USA)

Landing Date : September 27, 2023 , 11:17 UTC

Continuation:

ISS Crew - 68: from October 14, 2022 to March 03, 2023
Cdr Prokopyev (RUS)
FE Petelin (RUS)
FE Rubio (USA)
FE Mann (USA)
FE Cassada (USA)
FE Wakata (Japan)
FE Kikina (RUS)

ISS Crew - 68: from March 03, 2023 to March 11, 2023
Cdr Prokopyev (RUS)
FE Petelin (RUS)
FE Rubio (USA)
FE Mann (USA)
FE Cassada (USA)
FE Wakata (Japan)
FE Kikina (RUS)
FE Bowen (USA) (SpaceX-Crew-6)
FE Hoburg (USA) (SpaceX-Crew-6)
FE Sultan Al Neyadi
(United Arab Emirates) (SpaceX-Crew-6)
FE Fedyaev (RUS) (SpaceX-Crew-6)

ISS Crew - 68: from March 11, 2023 to March 28, 2023
Cdr Prokopyev (RUS)
FE Petelin (RUS)
FE Rubio (USA)
FE Bowen (USA)
FE Hoburg (USA)
FE Sultan Al Neyadi
(United Arab Emirates)
FE Fedyaev (RUS)

SOYUZ MS - 22

The emblem of the crew is made in the form of a circle.
In its upper part, the call sign of the crew - "Altai" and the state flags of the countries participating in the flight are applied. In the same field below, the names of the participants of the 68th expedition to the ISS are entered.
The top half of the emblem features a stylized image of the station.
In the lower half is an image of the Soyuz MS manned spacecraft.
Even lower is the name and serial number of the Soyuz MS-22 spacecraft, the direction of flight of which is directed towards the ISS.
Below it is an image of the Earth.
The ISS is surrounded by three stars, corresponding to the number of crew members on the ship.
The red star is the new Roscosmos logo.
The swan symbolizes the crew commander, Colonel of the Aerospace Forces of the Russian Federation Sergei Prokopiev, who flew the Tu-160 aircraft during his military service.
Among Russian pilots, the aircraft was called the "White Swan".
To the right of the three stars is a stylized image of a turtle, symbolizing the name of the 2017 astronaut set, Turtles, of which Francisco Rubio is a member.
Next to the swan there is a figure in the form of a sail, formed by three arcs of circles, the radii of which are proportional to the radii of the three celestial bodies: the Earth, Mars and the Moon.
This is the emblem of recruitment to the Roscosmos cosmonaut corps, during which Dmitry Petelin was selected for the cosmonaut corps.

SOYUZ MS - 22 , cont.

ENERGIA SOYUZ MS – 22 „Tsiolkovsky“ LOGO

ENERGIA SOYUZ MS – 22 LOGO

SOYUZ MS - 22 , cont.

SOYUZ MS - 22 „landing without-crew“ patch

SOYUZ MS - 23

ENERGIA SOYUZ MS – 23 LOGO

\+ +

Bottom right :

SOYUZ MS - 23 „landing crew preparation “ patch

[For more information see "ISS Expedition 69"]

SOYUZ MS - 23

SOYUZ MS - 23 „without-crew“ patch

\+ +

Top right :

A fire-breathing, five-shaped dragon propels the Crew Dragon spacecraft of NASA's SpaceX Crew-5 mission beyond the confines of a pentagon's outline and into low-Earth orbit. As the spacecraft ascends above the Earth's atmosphere and its crew of courageous explorers embarks on their expedition aboard the International Space Station, the dragon's fire transitions to the colors of NASA's Commercial Crew Program representing the unrelenting efforts of the many teams who have met this challenge with unparalleled determination.
The sun shines its light on this international team as they bravely pursue.

Note:

The Crew-5 astronauts wore the version of their patch without names when entering the International Space Station

\+ +

Bottom right :

SPACE X
DRAGON CREW 5
PATCH

SpaceX DRAGON - CREW - 5

NASA - Crew 5 mission patch

\+ +

SPACE X - Crew 5 mission patch

SpaceX DRAGON - CREW - 5 , info

SpaceX Crew-5 Mission Specialist Anna Kikina of Roscosmos drinks from a water bottle aboard the Dragon Endurance crew ship during a flight to the International Space Station

SpaceX DRAGON - CREW - 5 , info

" Anna Kikina Crew-5 " personal patch

collectSPACE , Liembo , Retrorocket Emblems :

I designed this patch in collaboration with Anna Kikina.
She wanted a patch that expressed her love of the outdoors including hiking and rafting.
She wanted the design to give a sense of exploration of both the Earth and space.
It features her gazing atop a peak with her characteristic ponytail.

SpaceX DRAGON - CREW - 5 , info

For cosmonauts and astronauts who happen to be in space during the holidays celebrating New Year is always unique and memorable.
For SpaceX Crew-5 Russian cosmonaut Anna Kikina it will be the first time to celebrate this holiday in orbit, outside the Earth.

SpaceX DRAGON - CREW - 5 , info

"A great way to say Happy New Year to our kids is by showing a message from Father Frost in the spaceplane, depicted on this patch"

SpaceX DRAGON - CREW - 5 , info

NASA - Crew 5 mission patch

[No crew names on these patch]

The patch was designed before the Russian cosmonaut was assigned to the mission and the trail behind the spacecraft is red, white and blue, the colors of the flag of the United States.
The Russian flag is also red, white and blue but the colors are arranged the way they typically are to represent the U.S. flag.

I S S EXPEDITION 68 , info

[This is the names version of the Expedition 68 patch]

Not flown patch and nobody from the ISS-68 crew had it on their training suits.
This patch is not official and was never shown to Russian crew members.

Why Russian names are written in English?
- The official language on the ISS is English !!! -

I S S EXPEDITION 68

International Space Station Expedition 68 marks the 24th year of operation since the start of its assembly on orbit.

Today, the U.S., Russia, Japan, Canada, and the European Space Agency are partnering in the operation of the largest ever orbital outpost managed by humankind.

Seven sparkling stars in the vastness of space represent crewmembers and experts on the ground operating the space station.

Bright sunbeams illuminate the station, a platform for scientific research, Earth and astronomical observation, education, as well as development of new technologies necessary for the exploration beyond low-Earth orbit, on the Moon and Mars

I S S EXPEDITION 68

Mission Overview

09/29/22 - Expedition 68 Start

10/05/22 - SpaceX Dragon - Crew - 5 Launch

10/06/22 - SpaceX Dragon - Crew - 5 Dock

10/14/22 - SpaceX Dragon - Crew - 4 Undock/Splashdown

11/15/22 - USA – Spacewalk (7:11 h)

11/17/22 - RUS – Spacewalk (6:28 h)

12/03/22 - USA – Spacewalk (7:05 h)

12/22/22 - USA – Spacewalk (7:08 h)

02/02/23 - USA – Spacewalk (6:41 h)

02/24/23 - Soyuz MS - 23 Launch (without crew)

02/26/23 - Soyuz MS - 23 Dock (without crew)

03/02/23 - SpaceX Dragon - Crew - 6 Launch

03/03/23 - SpaceX Dragon - Crew - 6 Dock

03/11/23 - SpaceX Dragon - Crew - 5 Undock

03/12/23 - SpaceX Dragon - Crew - 5 Splashdown

03/28/23 - Soyuz MS - 22 Undock / Land / (without crew)

03/28/23 - Expedition 68 End

I S S EXPEDITION 68 , info

Expedition 68 crew poster

I S S EXPEDITION 68

Visiting Vehicles

10/23/22 - Progress MS - 19 Undock

10/26/22 - Progress MS - 21 Launch

10/28/22 - Progress MS - 21 Dock

11/06/22 - Cygnus NG - 18 Launch

11/09/22 - Cygnus NG - 18 Dock

11/26/22 - Dragon SpX - 26 Launch

11/27/22 - Dragon SpX - 26 Dock

01/09/23 - Dragon SpX - 26 Undock

01/11/23 - Dragon SpX - 26 Splashdown

02/07/23 - Progress MS - 20 Undock

02/19/23 - Progress MS - 21 Undock

03/15/23 - Dragon SpX - 27 Launch

03/16/23 - Dragon SpX - 27 Dock

SOYUZ MS - 22 , info

It is the only Soyuz patch with a red star instead
of Roscosmos logo

I S S EXPEDITION 69

From left to right:
Francisco Rubio , Sergej Prokopyev , Dmitri Petelin

[SOYUZ MS - 22 Crew transferred from ISS Expedition 68]

Launch Date : September 21, 2022 , 13:54 UTC
Launch Vehicle : SOYUZ MS - 22 [Tsiolkovsky]
Landing Vehicle : SOYUZ MS - 23
Landing Date : September 27, 2023 , 11:17 UTC

From left to right:
Sultan Al Neyadi , Warren Hoburg , Stephen Bowen , Andrey Fedyaev

Launch Date : March 02, 2023 , 05:34 UTC
Vehicle : SpaceX DRAGON - CREW – 6
Landing Date : September 04, 2023 , 04:17 UTC

ISS Crew - 69: from March 28, 2023 to May 22, 2023
Cdr Prokopyev (RUS)
FE Petelin (RUS)
FE Rubio (USA)
FE Bowen (USA)
FE Hoburg (USA)
FE Sultan Al Neyadi (United Arab Emirates)
FE Fedyaev (RUS)

ISS Crew - 69: from May 22, 2023 to May 30, 2023
Cdr Prokopyev (RUS)
FE Petelin (RUS)
FE Rubio (USA)
FE Bowen (USA)
FE Hoburg (USA)
FE Sultan Al Neyadi (United Arab Emirates)
FE Fedyaev (RUS)

- Ax-2 crew not officially part of ISS crew 69 -
SC-Cdr. Peggy Whitson (USA) (SpaceX-Crew-Ax-2)
PA Shoffner (USA) (SpaceX-Crew-Ax-2)
PA Ali Alqarni
(Kingdom of Saudi Arabia) (SpaceX-Crew-Ax-2)
PA Rayyanah Barnawi
(Kingdom of Saudi Arabia) (SpaceX-Crew-Ax-2)
[SC - Cdr. = Spacecraft Commander]
*[PA = **p**rivate **a**stronaut]*

ISS Crew - 69: from May 30, 2023 to August 27, 2023
Cdr Prokopyev (RUS)
FE Petelin (RUS)
FE Rubio (USA)
FE Bowen (USA)
FE Hoburg (USA)
FE Sultan Al Neyadi (United Arab Emirates)
FE Fedyaev (RUS)

I S S EXPEDITION 69 / 70

From left to right:
Konstantin Borisov , Andreas Mogensen , Jasmin Moghbeli ,
Satoshi Furukawa

The four crew members who comprise the SpaceX Crew-7 mission pose for a photo in their spacesuits at the company's headquarters in Hawthorne, California. From left are, Mission Specialist Konstantin Borisov, Pilot Andreas Mogensen, Commander Jasmin Moghbeli, and Mission Specialist Satoshi Furukawa.

Launch Date : August 26, 2023 , 07:27 UTC
Vehicle : SpaceX DRAGON - CREW – 7
Landing Date : March 12, 2024 , 09:47 UTC

Continuation:

ISS Crew - 69: <u>from August 27, 2023 to September 04, 2023</u>
Cdr Prokopyev (RUS)
FE Petelin (RUS)
FE Rubio (USA)
FE Bowen (USA)
FE Hoburg (USA)
FE Sultan Al Neyadi (United Arab Emirates)
FE Fedyaev (RUS)
FE Moghbeli (USA)
FE Mogensen (Denmark)
FE Furukawa (Japan)
FE Borisov (RUS)

ISS Crew - 69: <u>from September 04, 2023 to September 15, 2023</u>
Cdr Prokopyev (RUS)
FE Petelin (RUS)
FE Rubio (USA)
FE Moghbeli (USA)
FE Mogensen (Denmark)
FE Furukawa (Japan)
FE Borisov (RUS)

ISS Crew - 69: <u>from September 15, 2023 to September 27, 2023</u>
Cdr Prokopyev (RUS) *
FE Petelin (RUS)
FE Rubio (USA)
FE Moghbeli (USA)
FE Mogensen (Denmark) *
FE Furukawa (Japan)
FE Borisov (RUS)
FE Kononenko (RUS) (Soyuz MS - 24)
FE Chub (RUS) (Soyuz MS – 24)
FE Loral O'Hara (USA) (Soyuz MS – 24)

*[* = Change of ISS command on September26, 2023]*

SOYUZ MS - 23

SOYUZ MS - 23 „without-crew“ patch

The emblem adopts the traditional form of a circle.

Its design centers around the illustration of the Soyuz MS-23 uncrewed spacecraft flying toward the International Space Station, which is visible on the right.

The Soyuz MS-22 spacecraft is also shown but undocked from the ISS, with Soyuz MS-23 arriving to replace it.

Also included are stylized images of Earth, the moon, stars and the Sun, with the latter's rays symbolizing hope.

At the bottom of the emblem, on its border, are the name and serial number of the spacecraft Soyuz MS-23.

At the top is the logo of Roscosmos.

SOYUZ MS - 23 , cont.

SOYUZ MS - 23 „landing crew preparation“ patch

Soyuz MS - 23 landing preparation patch
Produced by Valentin Prokopyev, brother of Sergey Prokopyev,
and sent to the ISS with cargo Progress

SOYUZ MS - 23 , cont.

SOYUZ MS - 23 „landing crew“ patch

Three patches will be prepared by Zvezda plant to put them on the crew spacesuits and will be sent to the ISS with Progress cargo in August.
It is supposed Prokopiev and his crew members will change MS - 22 patches now on Sokols against MS - 23 landing patches

SOYUZ MS - 23 , info

This is non official MS - 23 patch produced by RKK Energia
100 patches produced but not distributed

ENERGIA SOYUZ MS – 23 LOGO

SOYUZ MS - 23 , info

The actual - November 2022 - patch for the planned
Soyuz MS - 23 mission

< Version discarded due to crew change >

Top right :

Sailing across the Crew-6 patch, the ship represents both our destination, the ISS, and the vessels that countless explorers have steered into the unknown.
The ISS anchors us, on the dawn of missions to the Moon and Mars. The ship's sail, a symbol of the 2012 Cosmonaut class, has relative radii matching those of Earth, the Moon and Mars. The Draco constellation represents the Commercial Crew Program, and shares a name with the thrusters that maneuver our Dragon spacecraft. The ship's Dragon figurehead looks to the future, as we also look back at Earth, grateful for the tireless hours of all who support our mission.

Crew names:

Stephen Bowen , Warren Hoburg , Sultan [النيادي] *(Al Neyadi)* ,
Andrey Fedyaev

+ +

Bottom right :

SPACE X
DRAGON CREW 6
PATCH

Note :
The correct name is :

Astronaut ***SULTAN Al Neyadi*** **,** سلطان النيادي

SpaceX DRAGON - CREW - 6

NASA - Crew 6 mission patch

+ +

SPACE X - Crew 6 mission patch

SpaceX / DRAGON , info

SPACE X LOGO PATCHES

SpaceX DRAGON - CREW - 6 , info

SPACE X - Crew 6 mission patch

Note:

Patch with the correct name

Al Neyadi , سلطان النيادي

I S S EXPEDITION 69

The Expedition 69 patch reflects the mission of the ISS to enable long-term exploration of space, for the benefit of Earth.

The unique mosaic design is inspired by the vintage, Art Deco stained glass window in Star City, Russia that provides a stylistic portrayal of the beauty of space exploration.

The number "69" forms a circle to symbolize the international partnerships and collaboration that make the ISS program possible.

The Earth is the central element inside the "6", as our home planet and the primary beneficiary of research onboard space station.

The star shining from Earth, spanning multiple continents, represents the ground teams around the world who support every aspect of this expedition and ensure our safe return home.

The ISS itself signifies the contributions of thousands of people over the past several decades, whose vision and sustained efforts have made this miracle of a laboratory an unparalleled success.

Looking towards the future, the next big steps in human space exploration are reflected in the Moon and Mars.

The sun around Mars is symbolic of the human imagination, curiosity, and ingenuity that draws us to explore.

The two white stars in the sky are taken directly from the Star City mural.

The larger star represents the family and friends whose love and support makes this endeavor possible.

The smaller star represents the explorers who came before us and helped pave the way to the stars.

I S S EXPEDITION 69 , info

The actual - December 2022 - patch for the planned
ISS Expedition 69

No crew names on these patch

< Version discarded due to mission change >

I S S EXPEDITION 69 , info

The actual - January 2023 - patch for the planned
ISS Expedition 69

With crew names on these patch

< Version discarded due to mission change >

Axiom Mission 2 (Ax – 2)

From left to right:
Peggy Whitson , John Shoffner , Ali Al-Qarni , Rayana Bernawi

Launch Date : May 21, 2023 , 21:37 UTC

Vehicle : SpaceX DRAGON - CREW – Ax - 2

Landing Date : May 31, 2023 , 03:04 UTC

Axiom Mission 2 (Ax – 2)

SPACE X - Crew Ax – 2 mission patch

Axiom Mission 2 (Ax – 2)

Axiom Space - Crew Ax-2 mission patch

The Ax-2 mission patch highlights the beauty of space, hope for the future, and the important role of the ISS to unite the best aspects of humanity. The Ax-2 patch is a classic triangular shape, which represents stability and power.

A sea of bright stars and constellations shine through the black canvas honoring the mission's focus on inspiration, education and teaching, symbolized by the five **S.T.E.A.M** symbols. **Science** represented by a DNA strand, **Technology** represented by a set of connected circles, **Engineering** represented by a cog, **Arts** represented by a brush, and **Math** represented by the Pi symbol.

At the center of the patch is the ISS with a lavender ascent and path from Earth to space. The color lavender has a special cultural meaning in the Kingdom of Saudi Arabia (KSA), representing the color of the nation's deserts and plateaus in the spring when they are covered in flower blooms. Lavender is also the color used in KSA's ceremonial events and a symbol of hospitality. In the patch, the color reflects the nation's desire to be a part of the space sector and position itself as a contributor to the global space community.

Linear lines inside the lavender path represent the motion used to reach the ISS. The technical style visually expresses the cutting-edge technology of the mission. There are five lines, which represent the five pillars of **S.T.E.A.M**. with each line representing education:

science, technology, engineering, the arts, and mathematics.

At the bottom of the patch is, the Earth and the horizon, which symbolize hope and inspiration. The bright white and energetic orange colors denote the optimism of Axiom Space's effort to expand access to low Earth orbit.

Surrounding the inner components of the patch, are the flags of the two countries flying as part of the Ax-2 mission, Commander Peggy Whitson and, Pilot John Schoffner of the United States of America, and the two Mission Specialists, Ali AlQarni and Rayyanah Barnawi from the Kingdom of Saudi Arabia, who are members of the inaugural Saudi national astronaut program.

Together, the four crew members make up the second private astronaut mission to the ISS, a mission that is expanding access to low-Earth orbit for individuals and nations around the world.

Saudi Space Commission Unveils Logo of Kingdom's Scientific Mission to International Space Station

The Saudi Space Commission official logo :

The logo embodies the noble goals of the Kingdom's scientific mission, which is centered around empowering people, protecting the planet and opening new horizons through the researches the astronauts will conduct in the fields of health and environmental sustainability. The logo will be placed on the official uniform of the crew, as it is customary for all space flights to have an official logo for each mission before the crew leaves the planet Earth into space.

The logo, which took a circular shape, features the Kingdom's flag, representing the identity of the Saudi astronauts, and reflecting the Kingdom's heritage, history, cultural specificity, and traditions. This is reflected on the logo through the green flag that symbolizes the banner of Islam; the white color which is the symbol of purity and on which the two Shahadahs (Islamic testimony) were written; and the drawn sword that is one of the manifestations of the authentic and ancient Saudi heritage that confirms firmness in applying justice. The logo also highlights the Kingdom's location on the world map, and the Saudi flag appears surrounded by the names of the two Saudi astronauts

– Rayana Bernawi and Ali Al-Qarni –

to show the home of the astronauts within the mission. This comes in addition to two radioactive beams that launch from the Kingdom into space, representing the two Saudi astronauts, in order to present a motivational message for Saudi youth to be an interest in space science, raise awareness of science, technology, engineering and mathematics jobs, qualify competencies, and promote higher education in the field of space. The mission's logo also stresses the Kingdom's aspirations and commitment to support space exploration efforts and reinforce the Saudi citizens' role in space programs and its fields of science and technology, with the aim of achieving the goals of the Kingdom's Vision 2030 that seeks to highlight the Kingdom's role in the space sector and its technologies.

Axiom Mission 2 (Ax – 2) , info

Axiom Mission 2 (Ax – 2) , info

United Arab Emirates (UAE) flag

The patch for the Mohammed Bin Rashid Space Center

Axiom Mission 2 (Ax – 2) , info

The logo of the first Arab long-duration astronaut mission.
(UAE Mission 2 / Sultan Al Neyadi's personal patch)

It depicts an astronaut wearing the suit and looking at a drawing of the Late Sheikh Zayed bin Sultan Al Nahyan, the UAE's founding father.
The logo also shows part of the Earth and the ISS, alongside the „Mohammed Bin Rashid Space Center logo", names of the mission „UAE Mission 2" , „Great Zayed" *(?)*, Founder of UAE and „Astronaut Sultan Al Neyadi" **(سلطان النيادي)**

I S S EXPEDITION 69

Mission Overview

03/28/23 - Expedition 69 Start

04/06/23 - Soyuz MS - 23 relocation (Poisk to Prichal)

04/19/23 - RUS – Spacewalk (7:55 h)

04/28/23 - USA – Spacewalk (7:01 h)

05/03/23 - RUS – Spacewalk (7:11 h)

05/06/23 - Dragon-Crew-6 relocation (PMA-3 to PMA-2)

05/12/23 - RUS – Spacewalk (5:15 h)

05/21/23 - SpaceX Dragon - Crew – Ax-2 Launch

05/22/23 - SpaceX Dragon - Crew – Ax-2 Dock

05/30/23 - SpaceX Dragon - Crew – Ax-2 Undock

05/31/23 - SpaceX Dragon - Crew – Ax-2 Splashdown

06/09/23 - USA – Spacewalk (6:03 h)

06/15/23 - USA – Spacewalk (5:35 h)

06/22/23 - RUS – Spacewalk (6:24 h)

08/09/23 - RUS – Spacewalk (6:35 h)

08/26/23 - SpaceX Dragon - Crew - 7 Launch

08/27/23 - SpaceX Dragon - Crew - 7 Dock

09/15/23 - Soyuz MS - 24 Launch / Dock

09/27/23 - Soyuz MS - 23 Undock / Land

09/27/23 - Expedition 69 End

I S S EXPEDITION 69

Visiting Vehicles

04/15/23 - Dragon SpX - 27 Undock / Splashdown

04/21/23 - Cygnus NG - 18 Undock

05/24/23 - Progress MS - 23 Launch / Dock

06/05/23 - Dragon SpX - 28 Launch

06/06/23 - Dragon SpX - 28 Dock

06/29/23 - Dragon SpX - 28 Undock

06/27/23 - Dragon SpX - 28 Splashdown

08/02/23 - Cygnus NG - 19 Launch

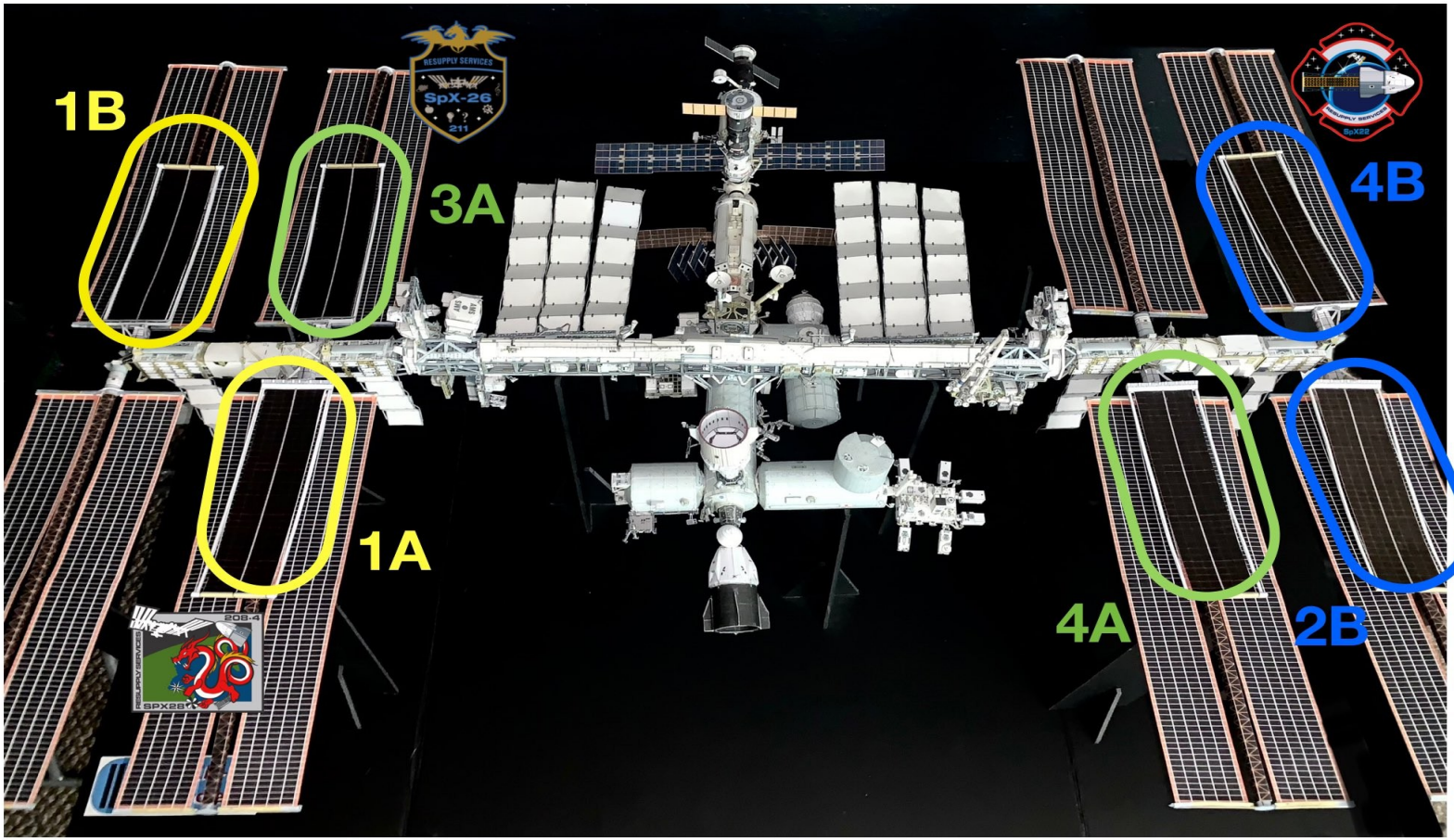
08/04/23 - Cygnus NG - 19 Dock

08/20/23 - Progress MS - 22 Undock

08/23/23 - Progress MS - 24 Launch

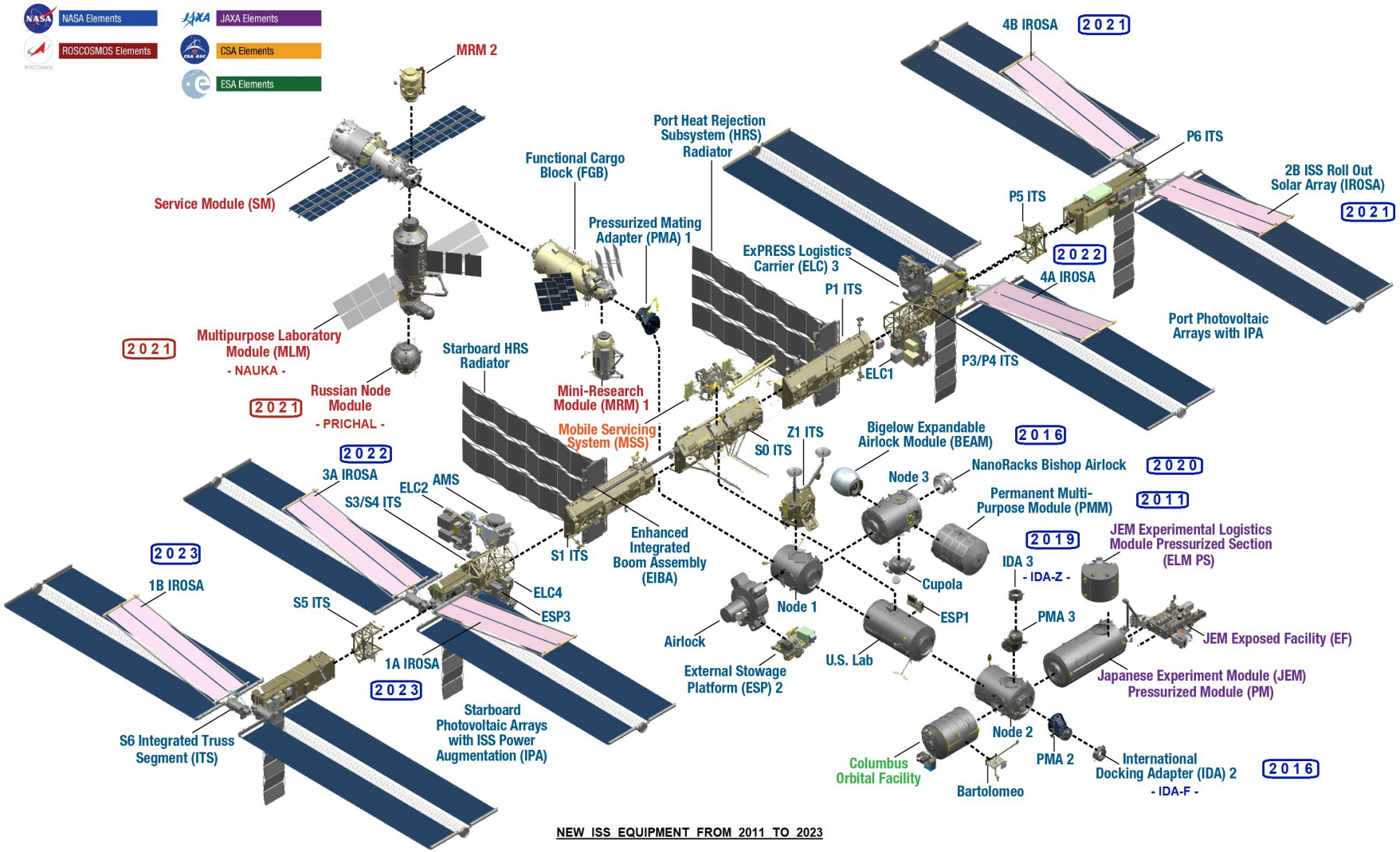
08/25/23 - Progress MS - 24 Dock

ISS Roll Out Solar Arrays (iROSA)



A first pair of new iROSA's, namely, 2B and 4B, were delivered to the station in the unpressurized trunk of the SpaceX Cargo **Dragon CRS-22** spacecraft.
A second pair of new iROSA's, namely, 3A and 4A, were delivered to the station in the unpressurized trunk of the SpaceX Cargo**Dragon CRS-26** spacecraft.
A third pair of new iROSA's, namely, 1A and 1B, were delivered to the station in the unpressurized trunk of the SpaceX Cargo **Dragon CRS-28** spacecraft.

NEW ISS EQUIPMENTS FROM 2011 TO 2023



NEW ISS EQUIPMENT FROM 2011 TO 2023

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A P P E N D I C E S

NASA Commemorative patch celebrating
20 years on the International Space Station

A new ESA 'astronaut' patch appeared in October 2020,
depicting the 25 flags of ESA current member states.

Tim Gagnon :

In November 2013, my friend Blake Dumesnil unveiled a beautiful patch to mark a unusual crew complement. He wrote:

"This is the 'official unofficial' patch for ISS Expedition 37.5!"
It featured the Olympic Torch headed to the winter games in Sochi, Russia.

A similar occurrence happened in the fall of 2019.

From Sept. 25 to Oct. 3, 2019, once again there were nine crew members on board the International Space Station. On March 14, 2019, the Soyuz MS - 12 spacecraft carried Aleksey Ovchinin, Nick Hague and Christina Koch. They were joined by Aleksandr Skvortsov, Luca Parmitano and Andrew Morgan, who arrived on Soyuz MS - 13 on July 20, 2019. They were then joined by Oleg Skripochka, Jessica Meir and Hazza Al Mansouri who launched on Sept. 25, 2019 on board Soyuz MS-15. I thought this event should also be commemorated with a patch. While Blake's patch was "officially unofficial" because he collaborated with the crew, this one is definitely "unofficially unofficial."
I did not work with the crew members to create this, but did gift each of them with a patch in appreciation of their service.

PACE PATCH ISS Expedition 52

VKD – 43 Russian spacewalk < 2017 >

Russian EVA / VKD – 43 *or* *50* patch

[*according to a different counting method this VKD – 43 is VKD-No.: 50*]

For the first time in history a (space) patch
was designed on Earth and in space!!!

Spacepatches.nl designer Luc van den Abeelen worked with cosmonaut Fyodor Yurchikhin, who was already on board the ISS at that time, on this design for the **50rd EVA/VKD** by Russian cosmonauts from ISS.

Fellow EVA/VKD 43 (50) space-walker Sergey Ryazanskiy, who launched with Soyuz MS - 05 to ISS brought the patches with him.

The EVA was on August 17, 2017 and lasted 7 hours and 34 minutes.

An interesting coincidence Cosmonaut Sergey Ryazanskiy participated in both EVA/VKD-36 (43) and 43 (50).

Dragon CRS Sp X – 8 < 2016 >
Bigelow Aerospace

Bigelow Expandable Activity Module „ BEAM “

The BEAM patch symbolizes the joint efforts of Bigelow Aerospace with NASA and SpaceX. The Bigelow Expandable Activity Module, known as BEAM, will remain attached to the ISS to provide additional performance data on expandable habitat technologies and enable new technology demonstrations.

Dragon CRS SpX – 22 < 2021 >

Johnson Space Center designed an emblem for the spacewalk to install the first pair of International Space Station (ISS) Roll-Out Solar Arrays (iROSA) on the port 6 (P6), 2B and 4B power channels

ISS Module N A U K A

Top right :

The multi-functional laboratory module is located against the background of the globe in the very center of the emblem. He is depicted in a fully operational configuration: with an ERA (European Robotic Arm) deployed, an open porthole, and an airlock in place. The Russian tricolor encircling the module reminds of its origin. Along the circumference of the emblem are the name of the module - Наука, the year of its launch, the launch site - the Baikonur cosmodrome and the launch vehicle that takes it into near-earth orbit
– "Proton-M". The ellipses of three crossed orbits (stylistic interpretation of the orbitals of the electrons of an atom) are additionally reminiscent of the "scientific" purpose of the module. At their tops are the logos of the State Corporation "Roscosmos", as well as the head enterprises-manufacturers of the module - the State Space Research and Production Center named after
M.V. Khrunichev and the Rocket and Space Corporation Energia named after S.P. Queen, part of Roscosmos. The stars in the lower part symbolize the full composition of the Russian segment of the ISS : large stars - the Zarya functional cargo block, the Zvezda service module and the Nauka itself, which will be included in its composition on July 29, 2021 as well as small - research modules «Рассвет» (МИМ-1) and «Поиск» (МИМ-2). < 2021 >

+ +

Bottom right :
Another
Multipurpose Laboratory Module
(MLM) patch < 2021 >

+ +

The
Prichal nodal module
will replace the nadir docking adapter on the Nauka multipurpose laboratory module on the Russian segment of the ISS.

Prichal will be provide five open docking ports.

The **UM (Uzlovoy Module)** or **NM (Node Module)**
is a node to be added to the Russian part of the ISS complex.

It is also named **Prichal**

UM is delivered by a modified Progress space tug,
called **Progress-MS-UM** or **Progress-M-UM**

< 2021 >

ISS Module P R I C H A L

Progress M-UM Sojus-2.1b

Knoten Modul

« Pritschal »

The International Space Station is getting a helping hand – or rather, a European Robotic Arm (ERA).

100% made-in-Europe, this intelligent robotic arm will be used to help get smaller payloads inside the Station, as well as aid astronauts on spacewalks.

ERA will position astronauts on the exterior of the Station saving both time and effort during spacewalks.

The arm consists of two end-effectors, two wrists, two limbs and one elbow joint together with electronics and cameras.

Both ends act as either a 'hand' for the robot, or the base from which it can operate.

ERA will be positioned on the Russian segment of the ISS

< 2021 >

E S A E R A Patch

This is the E R A patch,
the logo for Europe’s latest contribution to the ISS

Su – 25 / Sojus MS - 18 Signature Patch

ISS - 65 Kosmonaut O. V. Novitskiy < 2021 >

Pilot-cosmonaut Oleg Novitskiy Personal Signature patch limited produced to commemorate Oleg's third spaceflight on ISS in which Oleg flew "Yu.A.Gagarin" Soyuz MS - 18 ship to the ISS.

Patch is featuring three stars, RF Air Forces flag,orbit flags of Russian Federation and Belarus (Oleg is native of Belarus republic). Former Lieutenant Colonel in the Russian Air Force O.Novitskiy logged over 700 hours of flight time and was awarded for bravery during his 10 years service as an attack aviator in the North Caucasus.

Patch depicts Sukhoi Su – 25 "Shturmovik" aircraft flown by Oleg during his pilot years.

To commemorate Oleg's third flight Personal Signature patch was delivered by Anton Shkaplerov and presented to Oleg on his 50-years Birthday anniversary, celebrated October 12, 2021 during last days of Expedition-65.

During final days of third flight Oleg Novitskiy was also an actor and took part in the movie "Challange" filmed in the orbit.

In three long duration missions of Expeditions 33/34, 50/51, 64/65 Oleg Novitskiy spent over 531 days in space.

Note (labeling, counterclockwise) :

Cosmos

Russian Air Force

Belarus

Dragon CRS SpX – 26 < 2022 >

Second pair of new solar arrays were delivered to the station in the unpressurized trunk of the Cargo Dragon spacecraft

Dragon CRS SpX – 28 < 2023>

Third pair of new solar arrays were delivered to the station in the unpressurized trunk of the Cargo Dragon spacecraft

The
„ U.S. Space Force Space Launch Delta 45
1st Range Operations Squadron
(USSF SLD45 1ROPS) „

have released a patch for the SpaceX Dragon Crew Demo-2 flight
< 2020 >

The
„ U.S. Space Force Space Launch Delta 45
1st Range Operations Squadron
(USSF SLD45 1ROPS) „

have released a patch for the Boeing's Starliner Crew Flight Test (CFT)
on a United Launch Alliance Atlas V rocket.
< 2023 >

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A T T A C H M E N T

"Station Steelworkers" commemorative patch 2011

Inspired by an idea and sketch from Eddy Ruytings of Belgium, this patch celebrates the work that went into assembling the International Space Station from 1998 to 2011.
A simple yet fun patch in the same vein of the Hubble Huggers patch, Station Steelworkers depicts both US and Russian EVA suits, the astronauts holding tools.
The Flags of the ISS partners are depicted "orbiting" the design.
This design was created by Tim Gagnon of Titusville, FL and Jorge Cartes of Madrid, Spain.

"Station Steelworkers" commemorative patch 2021

The idea of this patch originated with Tim's friend Eddy Ruytings of Belgium. Inspired by the lighthearted "Hubble Huggers" patch, "Station Steelworkers" celebrates all those who were involved in making the ISS spacewalks a success. The design was created by Tim Gagnon and Jorge Cartes. Not much to say really about symbolism. The patch depicts a Russian cosmonaut in an Orlan suit and a U.S. astronaut in an EMU performing an EVA with oversized tools. The idea was to illustrate the assembly and maintenance of the ISS. The ISS is shown on orbit around Earth with the Moon and Mars depicted to illustrate that the research conducted will enable those exploration missions. The five stars represent the five space agencies involved: NASA, ESA, CSA, JAXA and ROSCOSMOS.
The Flags represent the 15 partner nations.

COUNTRY FLAGS ON EVA - SUITS

The United Arab Emirates (UAE) is the 12th country to have its flag adorn the shoulder of an astronaut's spacesuit on a spacewalk.

The 11 prior flags also include two for Russia, one for the former Soviet Union and one for the present day Russian Federation. The other flags worn on spacewalks have represented France, Germany, Canada, Japan, Sweden, China, Italy and the United Kingdom.

Although 12 country flags have been previously worn on EVA, they do not represent all of the nations to have citizen spacewalkers.

The world's first spacewalk was achieved by a Soviet cosmonaut, Alexei Leonov in March 1965, but it was not until the first American spacewalk by Ed White three months later that a country flag was worn on an EVA spacesuit.

Claude Nicollier of the European Space Agency (ESA) became the first Swiss astronaut to work in the vacuum of space in 1999. Although he wore a Swiss flag on his launch and entry spacesuit for the same mission, he wore an American flag when outside the space shuttle Discovery.

(Nicollier was the first ESA astronaut to perform an EVA from the U.S. space shuttle; all previous international spacewalkers did so from Russia's Mir space station.)

Soviet Union

United States of America

France

Russian Federation

Germany

Canada

Japan

Sweden

China

Italy

United Kingdom

United Arab Emirates

CARGO SPACECRAFTS

The Progress -, Cygnus -,
and also
the Automated Transfer Vehicle (ATV) -
and
the H-II Transfer Vehicle (HTV) -

spacecrafts burn up during reentry

The ship's non-combustible structural elements will drop in
a non-navigable area of the Pacific Ocean (South pacific),
1,800 kilometers (1,100 miles) from the city of Wellington (New Zealand)
and
7,700 kilometers (4,700 miles) from the city of Santiago (Chile)

CARGO SPACECRAFTS

A spaceship burns up on re-entry

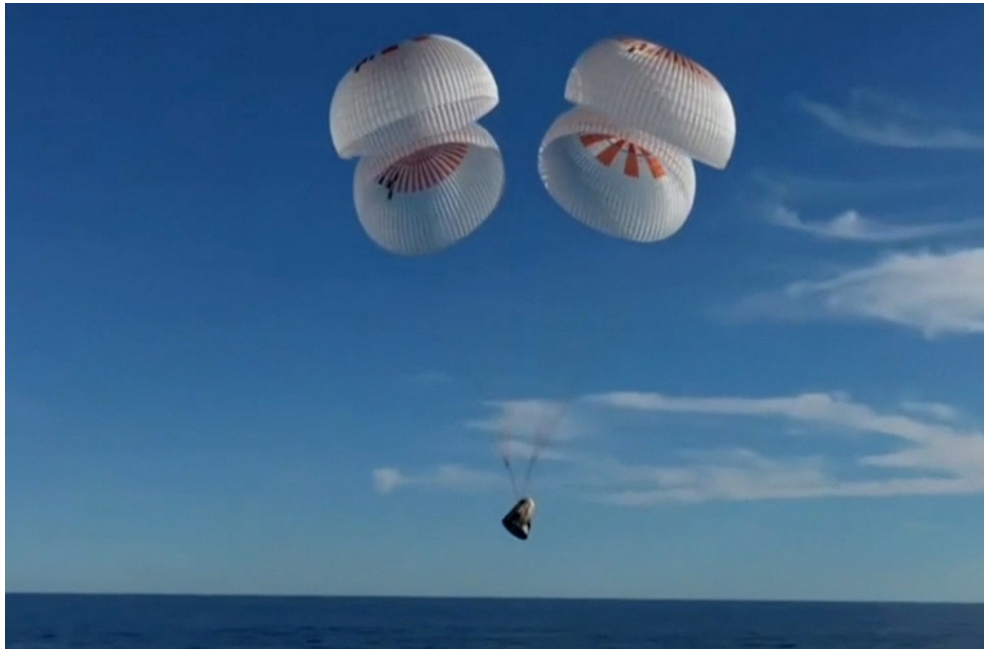
Photo taken by a crew member of the ISS

SOYUZ LANDING

Thursday, February 6, 2020
Two locals on horseback arrive at the Soyuz MS - 13 spacecraft shortly after it landed in a remote area near the town of Dzhezkazgan, Kazakhstan
(NASA / Bill Ingalls)

The normal landing area of the Soyuz capsule is
about 150 km (93 miles) southeast of Dzheskasgan,
and
about 440 km (275 miles) northeast of the Baikonur Cosmodrome,
at 47°N, 69°E Kazakh Stepp, Kazakhstan

DRAGON LANDING



The SpaceX Dragon capsules (Ctrew and Cargo) splash down
under parachutes in the
Atlantic Ocean east of Florida or in the Golf of Mexico west of Florida
or
in a recovery zone in the Pacific Ocean west of Baja California

S O U R C E S

NASA

ENERGIA / ROSCOSMOS

ESA

SPACEPATCHES . NL

A - B EMBLEME

COLLECTSPACE

SPACEFACTS

WIKIPEDIA

"http://www.crewpatches.com/crewpatches_intro.shtml"

or

"http://www.crewpatches.com/crewpatches_menu.shtml"

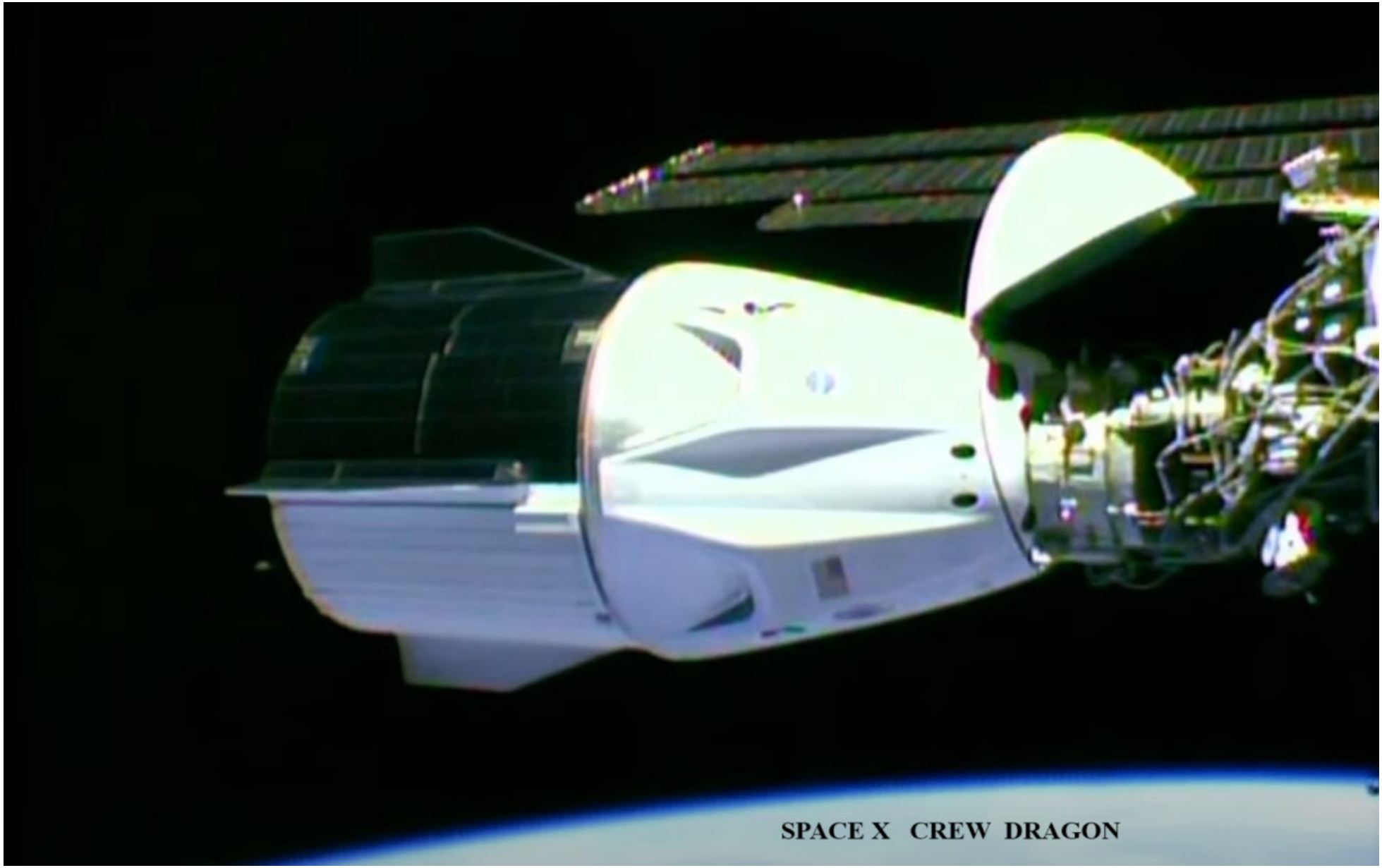
or

„http://www.sxpatches.com“

all data via „INTERNET“

Here is NASA's logo for the ISS's first 25 years

December 6, 2023 marks the 25th anniversary
of the birth of the International Space Station (ISS)
with the docking of the Russian Functional Cargo Block (FGB)
with the U.S. Unity node by the Space Shuttle STS-88 crew
on space shuttle Endeavour


SPACE X CREW DRAGON