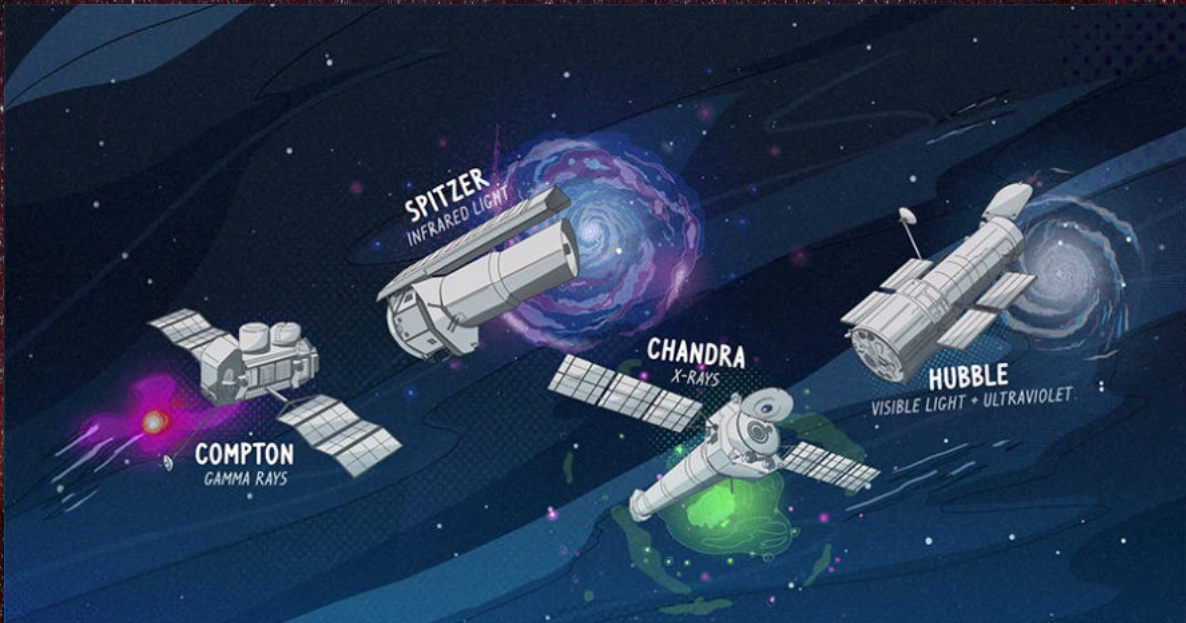


ORBIT

Astro Space Stamp Society



NASA's Great Observatories

Inside this issue

Back to Venus Part 2

Yulia Peresild - The First Actress in Space

Covers for Rocket Rollouts

2021's Top 10 Astronomy Stamps

Traffic at the International Space Station

Ukraine Special

Great Ukrainians in Space

ANN 225 - The Dream Destroyed

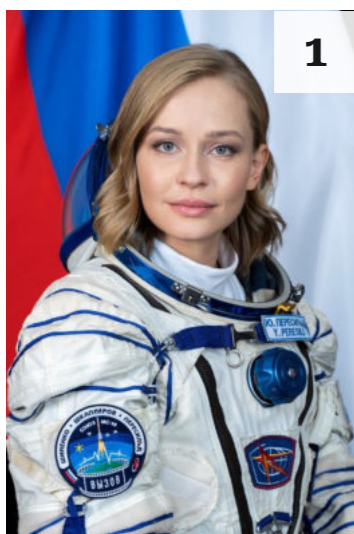
Ukraine Celebrates its Astronomical Observatories



Yulia Peresild – The First Actress in Space

by Umberto Cavallaro

This article is reprinted with permission by Umberto Cavallaro and first appeared in [AD*ASTRA](#)



1

Yulia Peresild is one of the most celebrated Russian TV and film actresses who flew to the ISS with film director Klim Shipenko (See footnote 1) on a Soyuz mission to shoot the first film in orbit (See footnote 2).

The opportunity "to fulfill the most romantic dreams and go to the stars – as the

same time as becoming a big international star" suddenly popped up in September 2020 when was broadcast that the largest Russian TV channel, the state-owned Pervy Kanal (Channel One) with the Russian Space Agency Roscosmos, and production company Yellow, Black and White (one of the largest independent production studios of movies and TV programs in Russia) agreed to cast a leading actor for a feature film to be shot in space, aboard the ISS, (See footnote 3) the first in history.

According to the Roscosmos' statement, the aim of the movie was to "popularize Russia's space activities, as well as glorify the cosmonaut profession".

In an atmosphere of renewed competition, a sort of modern equivalent of the space race of the Cold-War Era between America and the Soviet Union – ignited by the launch of Space-X's Crew Dragon which has left a substantial hole in the Roskosmos cashflow – this unexpected Russian move was seen by the media as a "me-too project" clearly conceived to upstage Tom Cruise's plans, after NASA announced

four months before (on May 4, 2020) that the agency was teaming up with SpaceX to make the "first feature film in Earth Orbit" on the ISS.

The film was going to bring to the ISS the "Mission Impossible" Hollywood superstar actor Tom Cruise and director Doug Liman, "to inspire a new generation of engineers and scientists", as Brindenstine tweeted on May 5, 2020 (See footnote 4).

At the beginning the Russian producers of the project planned to hold casting sessions both among male and female actors. In early November TASS announced that it was decided that "a female character would certainly be more "suitable"(See footnote 5) and that a Russia-wide open contest would be shortly launched to select the female protagonist for the leading role in the new film as well as her stunt double. "In the shortest possible time – said Alexey Trotsyuk, General Producer of the Yellow, Black and White – we need to find more than just an actress: we need a real superhero.

We are looking for a woman who can play her role on Earth, and then endure the most difficult training, fly into space and there, in a state of weightlessness, also solve the most difficult shooting tasks".

Casting a female lead was an astute move if the goal was to restore finances of the once-mighty Roscosmos by making cash outside Russia where an attractive female lead is likely



2

to have more audience appeal than would some unknown Russian male, since there are no faces readily recognizable to Western or Asian audiences.

The two American and Russian squads had to contend with filming their separate stories in the same "space" at the same time.

At the beginning this Russian shooting in space was regarded by many spaceflight observers as a "mission impossible", also because of strong internal opposition in Russia. Until a month before the launch, the website of the Yuri Gagarin Cosmonaut Training Center listed cosmonauts Sergei Korsakov and Dmitry Petelin as "reserve" crew for Soyuz MS-19, suggesting that the cinematographic flight was not absolutely certain to take place as planned.

In the end, the Russians won the race for the first movie in space.

It was not the first time in history that the Russians were keen to beat NASA to the punch, sometimes taking incredible risks: first artificial satellite, first animal in space, first man in space, first woman in space, first EVA, first spacecraft with three men on board, (See footnote 6) first EVA by a woman (See footnote 7) just to mention a few legendary "firsts".

An open casting call was launched on the Channel One website on the 3rd of November 2020, with the tag line 'Becoming a star, by flying to the stars!', inviting both actresses and other women with a passion for space to apply.

Candidates were required to be aged 25 to 45, to have Russian citizenship and basic knowledge of English, to possess acting skills and a university degree, to be healthy and physically fit, and to meet specific anthropological requirements, to ensure they could fit comfortably in a Soyuz: stand between 150 and 180 cm, 50–75 kg in weight, with a chest girth of up to 112 cm.

Additionally, she had to be able to run 1 km in three-and-a-half minutes or less, swim 800 m freestyle in 20 minutes, and dive from a three-meter springboard "with an impressive technique".

Candidates had also to have a "clean criminal record", possess psychological requirements typically required for any potential cosmonaut candidate. Finally, they had to record a video test of themselves, reciting Tatiana's monologue from the novel-in-verse 'Eugene Onegin' by Alexander Pushkin, and upload it to the official casting website.

Candidates were encouraged to signify their participation on Social Media by using the hashtag #хочувкосмос (I want to go into space).



3

The window for women to submit their applications was closed on December 31st.

The original plan was that thirty, or so, finalists would be selected, and would then participate in a sort of Reality TV style contest, between January and March, showing them going through the cosmonaut selection tests at the Yuri Gagarin Cosmonaut Training Centre, with the number of contenders being progressively reduced, in line with the usual reality show model.

However, these plans were scrapped, and for many weeks, little information emerged, other than a statement that around three thousand applications had been received for the starring role (around six times the number of applications received for the last conventional call for professional cosmonauts in 2019!).

Among the candidates for the role were famous professional actresses, ballerinas, fitness trainers, but also women from different backgrounds including parachutists, civil aviation pilots and even a psychologist, a scientific researcher and an aerospace doctor.

In early March, First Channel and Roscosmos jointly announced that the project was proceeding, and the candidates for the leading



6



4



5



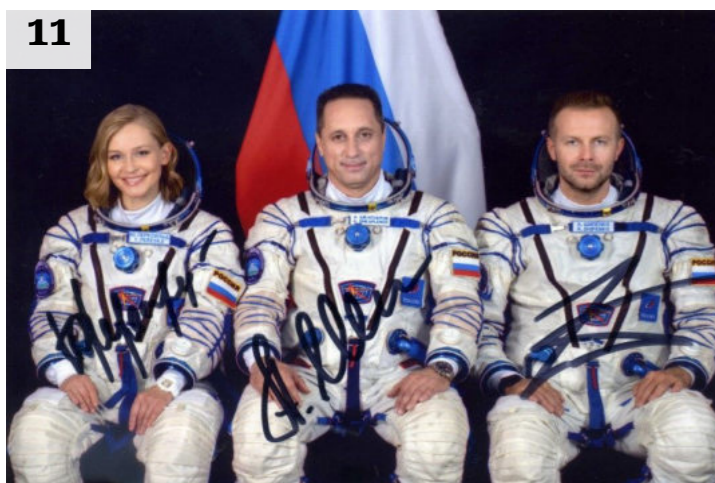
actress role were reduced to twenty through medical, physical and psychological assessments at the Gagarin Cosmonaut Training Centre.

The names of the shortlist of twenty selected candidates were only notified around 7th March. It was also announced that the film director would be Klim Shipenko and he would also travel to the International Space Station, to oversee the filming process.

On April 23rd Dmitri Rogozin – the head of the Russian space agency Roscosmos – revealed that Klim Shipenko had completed his medical checks and had been confirmed fit to fly to the ISS. Also it was announced that four women had been chosen, aged between 27 and 36: three were experienced professional actresses (Alena Mordovina (b 1987), Yulia Peresild (b 1984), Sofya Arzhakovskaya (aka Sofya Skya) (b 1987) whilst the fourth was Galina Kairova (b 1994), an amateur actress, holding a private pilot's license.

Shipenko would select the actress who would accompany him onboard Soyuz MS-19 as would be the case with any other movie: "It is always the Director who decides who he will work with. – Dmitri Rogozin stated – It is important for us now to show him, which of these girls is ready to handle the challenge of the spaceflight".

The first of the twenty actresses to pass all the medical and psychological tests, and be confirmed as qualified for cosmonaut training



was Alena Mordovina. For several weeks, she was the only candidate eligible to make the flight, until the other three were added at the last moment.

The The four were finally reduced to two when, on the 13th of May, the identities of the Prime and Back-up crews were announced:

- Prime Crew: Anton Skhaplerov, Klim Shipenko, Yulia Peresild.
- Back-up Crew: Oleg Artemyev, Aleksey Dudin, Alyona Mordovina.

Aleksey Dudin – the Shipenko's back-up whose name, confirmed by the Medical Commission, had never been publicly mentioned before – is an experienced and skilled camera operator, who has been involved in the production on several movies and TV series.



On 24th May, the four Spaceflight Participants reported to the GCTC to start their training period of only four months under the program of the ISS Expedition 66, for launching on Soyuz MS-19, The intensive preparation process included, besides classroom study and tuition, working on Soyuz and ISS (Russian Segment) simulators, simulating Zero-G and short-term weightlessness conditions by flying on an IL-76 aircraft, water recovery and survival training – in preparations for potential Soyuz emergency landing on water or in different climatic and geographical zones – visiting the "Zvezda" company for measuring and assessment for the production of "Sokol"



spacesuits and Soyuz seats, visiting the Baikonur cosmodrome to witness the preparations, and launch of the unmanned Progress MS-17.

The Russian movie proposal didn't meet universal approval and caused controversy in the Russian political, scientific and aerospace community, as mentioned before.

Some Russian scientists suggested that diverting Russian State assets and valuable ISS resources for a purpose not connected to scientific research could actually be illegal, and called for transparency with regard to the underlying financial arrangements.

There were some tough political oppositions to the project that appeared to be putting entertainment before science, with inappropriate use of Federal funds. During a long interview with RIA Novosti, released on December 12, 2020, Deputy Prime Minister, Yuri Borisov spoke out, making it clear that he would not support the notion that Roscosmos might be bank-rolling a commercial project.

"It is probably necessary to publicise the achievements of Russian cosmonautics... If they find sponsors who will pay for the actors' stay in orbit and this does not interfere with the main scientific programme of the ISS, then by all means, let them film... but, I can tell you for sure that as long as I am in this position, I will not ignore any proposal for funding a feature film at public expense."

Some spaceflight observers also wondered how professional cosmonauts – some of whom had spent more than a decade training before their first mission – would feel being deprived of their flights and now see that any actress could learn in months all that was necessary to fly in space and work on the ISS.

Others simply wondered why Roscosmos was so committed to this production and wanted to highlight the role of women in space when, in reality, they don't select them as cosmonauts,



and in the 20+ year of ISS life, the agency had a total of one woman aboard the ISS.

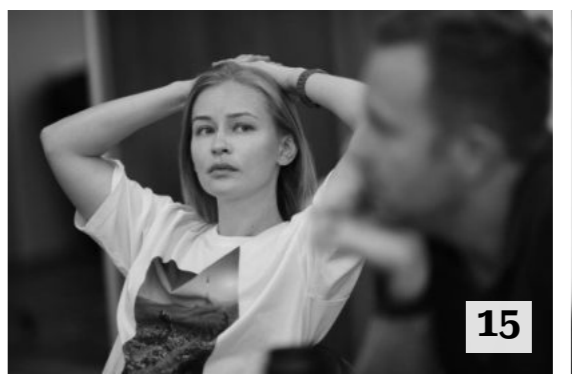
Roscosmos claimed that not enough qualified women had applied for the program until now, so maybe a project like this could help change that, both directly, through candidates to be in the film, and indirectly, by inspiring young Russian girls and attracting them to spaceflight.

Sergei Krikalev, head of the Gagarin Cosmonaut Training Centre in Star City, and a six-time space flyer who accrued more than 800 days in space, (See footnote 8) was removed from his senior management position in June 2021 after questioning during a Roscosmos Management Board meeting whether sending entertainers into space was the best use of funds when the budget had just been cut by 20%.

He was however reinstated a few days later, after many public protests both from prominent former and current cosmonauts and from the Russian media.

It was rumoured that, to overcome such resistance, the project was taken for endorsement to Vladimir Putin who gave it the green light.

"The movie will shine a light on Russia's success in space", stated Dmitry Peskov, the press secretary for President Vladimir Putin.



At the end of August the medical commission of the Gagarin Cosmonaut Training Center concluded that Yulia Peresild, Klim Shipenko and Anton Shkaplerov were fit to fly into space.

In September, three weeks before the launch, the two crews participated in the critical final examinations, involving each crew performing a simulated Soyuz launch, docking, and landing, while dealing with various unexpected situations created by their instructors and examiners. They then performed a similar exercise in the ISS Russian Segment, carrying out routine duties and actions, interspersed with further problems and challenges to resolve.

The combination of emergencies and challenges was determined by the crew choosing one of several sealed envelopes with different alternatives. Both crews achieved the required 'pass' in both exams, with the back-up crew outperforming and achieving slightly better scores 9.56 out of 10t (vs 9.50 achieved by the main crew).

After a period of rest and relaxation, the Interdepartmental Commission announced on 16 September which crew would fly, and authorised the start of the pre-launch phase, and departure to Baikonur.

While the four Spaceflight Participants were not allowed to give formal interviews, each of them has used Social Media to convey information about their experiences and thoughts.

From the several photographs, texts and videos shared by Yulia with her audience it was clear that she has found it very challenging adapting to the rigorous demands of training with the vast amount of technical information she was required to absorb rapidly, particularly learning about the design and handling of the spacecraft: "thousands of unknown words,... and one night to digest it all..., re-reading the manuals... analysing mistakes in order not to repeat them".

On several occasions she also mentioned she was 'scared' about what she was going to do. "The word hard, does not come close to describing how it is" she wrote on 27th August. "For the first two weeks I was learning it until four in the morning every night.

There are so many acronyms, and if you don't learn them all you won't understand anything

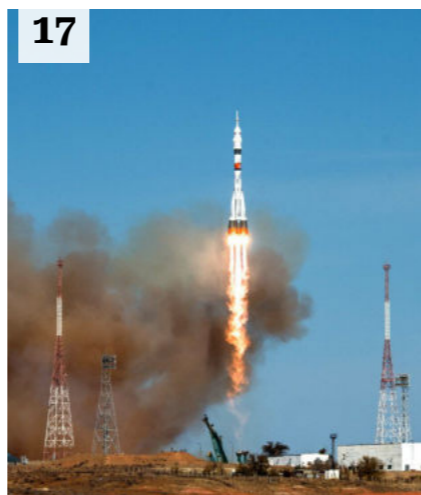
else further on", she told a pre-launch press conference. "It was psychologically, physically and morally hard. But I think that once we reach the goal, it will not seem as difficult as it truly was and we will remember it all with a smile".

Yulia Sergeevna Peresild (Юлия Сергеевна Пересильд) was born in 1984 in Pskov, a small city in the north-west, located about 20km (12 miles) east from the today's Estonian border, near Latvia. Her father was an icon painter and her mother a kindergarten worker. Unlike many other Soviet children who grew up following in the footsteps of Gagarin and Tereskova, she never dreamed of going into space.

Since she was a child, her dream was that of becoming an actress, and she pursued it early. Starting from third grade, she studied acting and singing, and also starred in school theatre plays.

When she was 11, she participated in "The Morning Star", a TV contest for young talents. In 2002 she enrolled in the Faculty of Russian Philology of the Pskov State Pedagogical Institute.

A year later, she left for Moscow and entered the Russian Academy of Theatre Arts, where she graduated in 2006. The young woman was accepted and she soon began appearing in TV series, as supporting cast. She also quickly discovered her preferred movie director – Aleksey Uchitel (who filmed the controversial



'Matilda', dealing with Nicholas II's mistress), with whom, as she revealed only in 2017, she had her two daughters – Anna, born in 2009 and Maria, born in 2012.

Her quick ascent to fame began with 'Prisoner' (2008), followed by the drama 'The Edge' (2010), which won her several awards. In recent years her popularity grew, starring in over 30 films and taking on more than 70 roles in popular TV series. She has also been one of the leading actresses at Moscow's State Theatre of Nations and is considered to belong to the actor pool of the state-owned 'Channel One'.

Yulia is a founding member of the charity foundation Galchonok (Russian: Галчонок) which works to provide treatment for children with organic central nervous system disorders.

Very little was originally known about the plot of this "space drama" – a pet project of Dmitry Rogozin – initially kept under wraps. In many ways the plot seemed secondary to the spectacle. Details about it were sketchy, and only emerged progressively.

"This is not science fiction, but a highly realistic version of what could happen in the not-too-distant future. It's a movie about how a person in no way connected with space exploration, due to various reasons, ends up a month later in orbit. That's all I can tell you," cryptically said Konstantin Ernst, general director of Channel One, when announcing the film.

In July 2021 Shipenko revealed, during a fundraising campaign, that the script was still being fine-tuned, but the story involved a cosmonaut who suffers a cardiac arrest during a spacewalk and, although he survives, he is too ill and requires surgery to ensure he can handle the Soyuz return to Earth.



A female cardiac surgeon, named Zhenya, has to be sent to the ISS to perform the operation in zero gravity, with only a few weeks to prepare for the trip.

Rogozin said he edited the script himself to correctly represent the realities of space travel. "We describe some real emergencies that may happen out there". In an interview he added; "In this project, it is important for us not only to demonstrate the heroism and high professionalism of cosmonauts and industry specialists who ensure the safety of manned flights in outer space, but also to develop the methodology of accelerated preparation for spaceflight or a mission to the ISS by a specialist (engineer, doctor, astrophysicist), in case of emergency.

This is a kind of space experiment". Rogozin and his colleagues in Glavkosmos, the commercial arm of Roscosmos, want to sell more seats to wealthy tourists, on future Soyuz missions, and they know that streamlining the time for training and preparation is key to competing with American players in the market.

The three launched into space on Oct. 5, at 4:55 a.m. EDT, on a Soyuz 2.1a rocket that was specially decorated for the movie.

This was the first all-Russian crew to go into space for over twenty years (See footnote 9).

Since Russia had only six seats to the ISS available for routine crew exchange missions (on Soyuz MS-18 and MS-19), and needed to find a way to accommodate this unplanned 'project' within those available resources, Yulia and the film director had to fly on the Soyuz MS-19 mission, replacing two of the three professional cosmonauts previously assigned to that mission.



21



This in turn, meant that two of the crew on the preceding mission Soyuz MS-18 needed to extend their stay on the ISS until the Spring of 2022 in order to allow the unusual movie troupe to return to Earth with Oleg Novitisky, aboard the MS-18 spacecraft.

With two non-professional Spaceflight Participants onboard – being literally passengers, during the active phases of the flight, despite their accelerated flight training – new techniques with modified Soyuz control interfaces had to be developed in order to enable the craft to be flown by the commander alone. The Soyuz docked with the ISS a little later than planned because the Soyuz's Kurs automated rendezvous system failed, and the commander had to switch to manual control for the final approach to docking.

Shkaplerov would normally have had the help of a flight engineer but his two colleagues were unable to help him, "The finale was a little dramatic, in order for your movie to be even more dramatic" bombastic Roscosmos chief Dmitry Rogozin radioed to Shkaplerov after the successful docking.

Peresild and Shipenko used their cameras to film the approach of their Soyuz to the space station, while Novitsky and Pyotr Dubrov filmed the approach of the Soyuz capsule from aboard the space station. The small troupe arrived 'on set' at the space station after around three hours of "leak checks" between the Soyuz and ISS, when the hatches between the two vehicles could be opened and the three



22



joined the seven members already onboard as crew of Expedition 65. Also the entry scenes and the welcoming ceremony were filmed, to be incorporated in the movie.

"I keep thinking that I'm dreaming," Yulia said when she set foot aboard the ISS. "It's almost impossible to believe that it's all a reality." During his 12-day stay Shipenko acquired almost 40 minutes of screen time onboard the ISS, filling several of the behind-the-scenes roles, including director, makeup artist, camera operator, sound editor, the International Space Station being an audio nightmare.

Most of filming took place in Russia's Nauka multi-purpose laboratory module, with some scenes filmed in the Earth-viewing cupola, which is attached to the Tranquility Node of the U.S. segment. The two flight participants were escorted while outside the Russian segment of the station.

Yulia Peresild played, obviously, the role of Zhenya, the cardiac surgeon sent into orbit to save a cosmonaut. The experienced Russian cosmonaut, Oleg Novitsky – already onboard the ISS since the last April – played the character with the heart problem in the movie.

Also cosmonauts Pyotr Dubrov and astronaut Mark Vande Hei – already on the space station – and Commander Anton Shkaplerov had parts in the movie. Anton confessed that it was not easy for cosmonauts to get into

their characters for the movie, with film director Klim Shipenko altering the script now and then, which made the job still more difficult: "It is somewhat difficult for us, unprofessional actors.

But we are doing our best. I hope, we will do it" said anton Shkaplerov during an online news conference at TASS organized jointly by Russia's state space corporation Roscosmos, TV Channel One, and the Cosmonaut Training Center.

On the 17th of October 2021 Novitsky returned to the Commander's seat of the Soyuz spacecraft and brought actress and director back to Earth, landing in a remote area outside the western Kazakhstan. They were then transferred to Zvezdny Gorodok to undergo rehabilitation after the spaceflight.

Channel One and Russian state media provided patriotic coverage of the entire mission, including the re-entry of the capsule descending under its parachute above the vast Kazakh steppe, followed by ground personnel assisting the smiling crew as they emerged from the capsule.

These were the first shots taken for the movie. Once on the ground, filming continued until May 2022, with release of the film planned no earlier than late 2022.

On October 5, 2021, on the day of the launch of the Soyuz MS-19, on the request of the Austrian astrophilately society Gmünder Weltraumfreunde, Austria issued a set of three stamps featuring Yulia Peresild, Alina Mordovina and the Film "Challenge".

A special pictorial postmark, designed by Adriana Bruna, under the supervision of our friend, ASITAF Member Walter Hopferwieser, was used in Vienna on October 9, 2021 during an official Ceremony held at the Federation of Austrian Philatelic Societies VÖPh in Wien.

Images

- 1 - Yulia Peresild.
- 2 - Announcement of the motion "Вызов" (Vyzov), "Challenge" in English.
- 3 - Prime Crew and Back-up Crew.
- 4 - Yulia Peresild in intensive preparation and training for the flight.
- 5 - Yulia Peresild in intensive preparation and training for the flight.

- 6 - Yulia Peresild in intensive preparation and training for the flight.
- 7 - Yulia Peresild in intensive preparation and training for the flight.
- 8 - Yulia Peresild in intensive preparation and training for the flight.
- 9 - Yulia Peresild in intensive preparation and training for the flight.
- 10 - Mission Patch
- 11 - Prime Crew: Anton Shkaplerov, Klim Shipenko, Yulia Peresild.
- 12 - Back-up Crew: Oleg Artemyev, Aleksey Dudin, Alyona Mordovina.
- 13 - Prime Crew and Back-up Crew.
- 14 - Learning about the design and handling of the spacecraft.
- 15 - Learning about the design and handling of the spacecraft.
- 16 - Learning about the design and handling of the spacecraft.
- 17 - Lift-off of the Soyuz 2.1a rocket.
- 18 - First Day Cover for the flight.
- 19 - On board the Space Station.
- 20 - On board the Space Station.
- 21 - First Day Cover for the flight.
- 22 - First Day Cover for the flight.
- 23 - Austrian stamp of Alina Mordovina.
- 24 - Austrian stamp for the Film "Challenge".
- 25 - Austrian stamp of Yulia Peresild.
- 26 - A special pictorial postmark for the flight.

Footnote 1 - Klim Shipenko is the director of the Russian drama 'The Text' (2019) and 'Kholop' (2019), the highest-grossing Russian movie of all time.

Footnote 2 - Actually a few films have already been shot in orbit, before "Challenge". In 1984 Soviet-era cosmonauts filmed for the Russian narrative film "Return from Orbit" aboard Soyuz T-9 and inside the Salyut 7 space station. The movie tells the story of an accident occurred on an orbital space station, as a result of which the ship's commander is seriously injured and must be urgently delivered to Earth. In early 2002 the "IMAX Space Station 3D" documentary was produced by Lockheed Martin and IMAX corporations. The 45-minute 3-D movie – filmed by 25 astronauts and cosmonauts and narrated by Tom Cruise – "takes viewers to the futuristic laboratory where future technologies are perfected and existing problems solved by a combination of dedication, bravery, and innovation". In 2012 "Apogee of Fear" was produced, the first narrative science fiction film made

A Film Studio In Space

By Nik Steggall

completely in space. The eight-minute short was filmed by entrepreneur and space tourist Richard Garriott – who, son of a NASA astronaut, in October 2008 had been on the ISS as a spaceflight participant, for 10 days. He was able to use the script and the production elements from the work of fantasy novelist Tracy Hickman. Garriott used crew members on board the ISS as actors for the movie.

Footnote 3 - “Channel One will select candidates who will go into space to shoot a film” www.1tv.ru/news/2020-09-23/393819-pervyy_kanal_provedet_otbor_kandidatov_ko_torve_otpravlyatsya_v_kosmos_dlya_s_emok_v_filme (Press Release in Russian)

Footnote 4 - As the U.S. team was originally scheduled to arrive at the ISS in October 2021 aboard Elon Musk’s Crew Dragon, the Russian crew had planned to shoot ‘The Challenge’ at the same time as Hollywood would attempt to make its first blockbuster in space. Klim Shipenko, the director of ‘The Challenge’, stated in a press release on *1tv.ru* that he was ready to help Cruise during the filming process. “I think – he said – the American group will consist not of 25 people, but two. And they will need our support, both physically to help with the filming, as well as morally and emotionally. I have no doubt that Tom Cruise will need it, and we are ready to provide it”.

Footnote 5 - TASS Russian News Agency, Russian actress to head to ISS in 2021 to star in first feature film in space, in *tass.com* (2 Nov

2020). The press release ambiguously reported: “Film director Doug Liman and actor Tom Cruise also plan to go into space in October 2021 on board Crew Dragon for the filming.”

Footnote 6 - Umberto Cavallaro, “*Voskhod 1: the most absurd adventure in space ever*”, in *The Race to the Moon*, Springer 2018, p. 163-168.

Footnote 7 - Umberto Cavallaro, “*Svetlana Savitskaya: Twice in Space—The Second Soviet First*”, in *Women Spacefarers, Sixty Different Paths to Space*, Springer 2017 p. 9-16.

Footnote 8 - In 1991-92 Sergei Krikalev made history, during his second space mission, as “the Last Soviet Citizen” abandoned on board the Mir during the dissolution of the Soviet Union, as the country that had sent him into space no longer existed. He had to stay in space for 311 consecutive days, twice as long as originally planned, and returned as a Russian citizen. He flew then in 1994 on STS-60, the first joint U.S./Russian Space Shuttle Mission. In December 1998 he participated in the STS-88 mission and became, with Robert Cabana, one of the first people to enter the International Space Station during the first ISS assembly mission, when they turned on the lights in the US module Unity.

Footnote 9 - The last all-Russian crew flew into space in 2000 on-board Soyuz TM-30, which was the last crewed flight to the Russian Mir space station.

The American Axiom Space company have begun the construction of the first two modules of their space station, the Axiom Hub. The Axiom space station, will see the first module launched and attached to the International Space Station in late 2023, with the second module set for launch in 2025.

When completed the Axiom station, would then be detached in 2028, to form a truly independent private space station. Further modules would then be launched and added to expand the station further.

After the first module has been launched, an inflatable module will be launched and attached to the Axiom module. This inflatable module, will be of a spherical shape and it is solely designed for creating entertainment content.

The film studio is being placed into space by the UK based Space Entertainment Enterprise (SEE) and the

module will be called, SEE-1. The SEE-1, will have a diameter of 20 ft, (6 m) and provide 1216 square foot, (113 square metres), of pressurized volume.

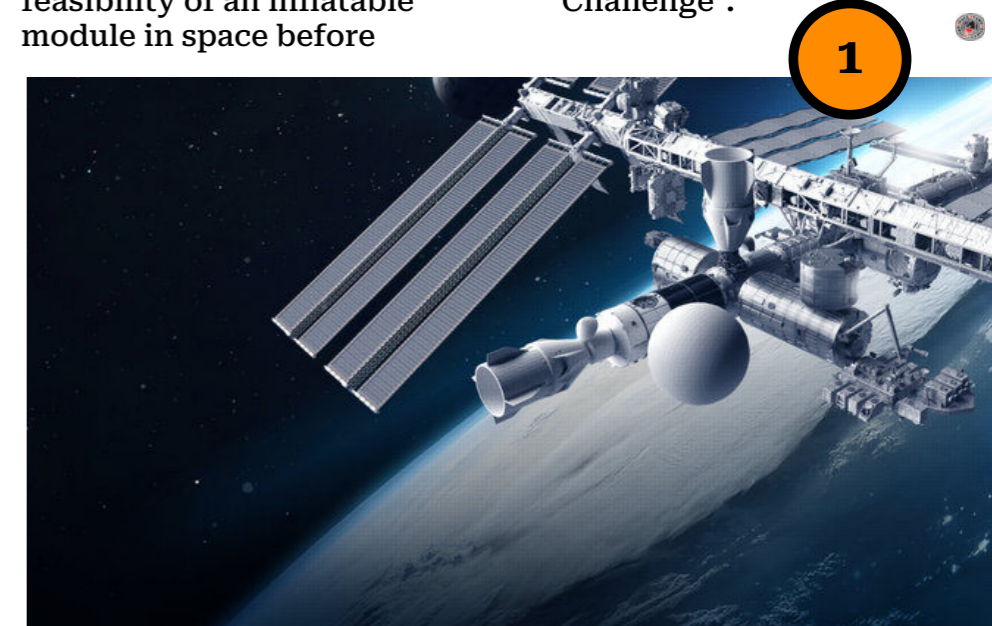
A smaller inflatable module had been previously launched to the ISS. The Bigelow Expandable Activity Module, BEAM, was launched on April 8, 2016 and it is still attached to the ISS.

It was originally planned as a temporary module to test the feasibility of an inflatable module in space before

Bigelow launched their full scale module to start forming their inflatable space station, It is now being used for storage by the astronauts.

The SEE-1 module will also be hired out to others, who would like to use the film making and production facility. In 2021, a Russian film crew was launched to the ISS on the Soyuz MS-19 spacecraft.

They filmed scenes on the ISS for the film *Vyzov*, “Challenge”.



Left: Sent in by Nik Steggall are Soyuz MS-19 postcards featuring Anton Skhaplerov, Klim Shipenko and Yulia Peresild who went to the International Space Station to film “Challenge”. Below: Soyuz MS-19 arriving at the ISS.



1. SEE-1 inflatable module attached to the Axiom module at the International Space Station.
2. The BEAM module attached at the ISS by the Bigelow company.
3. BEAM module commemorative cover.