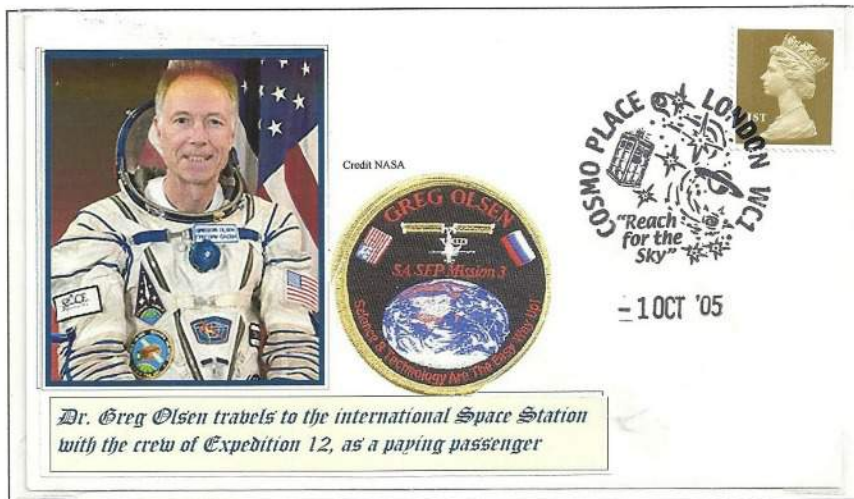


The International Space Station

Soyuz TMA 7 (launched 1.10.2005) EO-12 Greg Olsen—third space tourist



Arriving on the one hundredth manned Russian flight, fare-paying space participant American entrepreneur Greg Olsen had spent many months preparing to flying on the previous Soyuz ferry to the ISS but had been thwarted by a medical condition which six months later had cleared up to permit him to fly. Whilst on board with American commander Bill McArthur and Russian Valery Tokarev Olsen had limited access to the US facilities and spent much of his time observing and photographing, though he did take part in live video feeds of an educational nature. Olsen departed with EO-11 expedition member Sergei Krikalev and John Phillips who had arrived in mid April, leaving McArthur and Tokarev as the new resident crew.



The International Space Station

Soyuz TMA 8 (launched 30.3.2006) EO-13



Marcos Pontes, a Brazilian Air Force astronaut arrived with Russian commander Pavel Vinogradov and American Jeffrey Williams in the Spring, so becoming one of only a handful of South Americans to make it into space. During almost ten days in orbit Pontes conducted experiments in the Brazilian *Centenario* programme, which included bio-technology, engineering research and educational objectives



The International Space Station

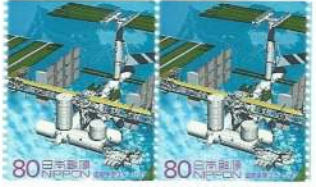
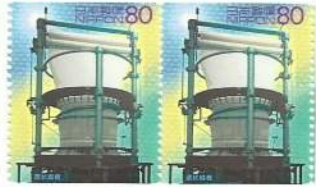
Science and Technology and Animation Series, No.7

科学技術 & アニメーション



第7集 探

- ① タイムボカン：少年少女がタイムマシン「タイムボカン」に乗って過去未来を行き来するコメディアニメーション。昭和50(1976)年に放送が開始され、その後多くのシリーズが制作された。
- ② 環状線機：運動の理想を追い求めた豊田佐吉(豊成3(1887)年～昭和5(1930)年)が発明した。円運動で布を織る独自の織機。省エネルギー・静粛運転でこれまでない幅の広い布を織ることができ、実用には至らなかったが世界的な評価を得た。
- ③ 新幹線：鉄道旅客輸送高速化の世界的なきかけ。昭和38(1963)年に試作車が世界最高速度256km/hを達成した。
- ④ マイクロマシン：数mm以下の部品で構成された微小な機械。医療、情報通信等、あらゆる産業分野に活用される。切手のデザインは、デモンストレーション用の約5mmの大きさの車で電池で動く。
- ⑤ 国際宇宙ステーション：地上から約400km上空に建設されていて計画を本実験機

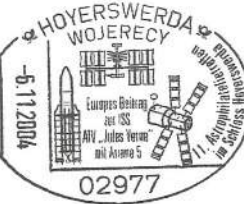


発行所：郵便局 平成17年3月23日

シンコプロ

The International Space Station

International Celebration of Progress



02977
Jeff Dugdale
Astro Space Stamp Society
c/o Elgin High School
High School Dr.
Elgin, Moray IV30 6UD
United Kingdom



The International Space Station

Normal Service Resumed STS-121 (launched 4.7.2006)

Following a few "return to flight" missions, the shuttle was passed ready to return to ISS building duties...

Launched on Independence Day – a first - shuttle *Discovery* brought a third member of the EO-13 crew in German astronaut Thomas Reiter (the first non Russian/American resident) as well as much new equipment and the usual replenishment of resources, water and food in the multi-purpose logistics module Leonardo, which would return to earth full of discarded or redundant materials and equipment.



STS-115 (launched 9.9.2006)

Atlantis was delayed by 10 days because of tropical storm Ernesto, which required the start of a tortuous roll back to the VAB of the whole shuttle stack, but this was halted before it got very far and the shuttle readied for launch with steadily improving weather conditions. However, as a result the launch of Soyuz TMA-9 was also rescheduled.



The International Space Station

Soyuz TMA 9 (launched 19.7.2006) EO-14 First Female Space Tourist

This ferry—the 250th manned flight in history—carried the first female space participant in Iranian-American millionaire Anousheh Ansari, whose family had founded the \$10M X-prize for private manned spaceflight won in 2005 by SpaceShipOne. The intended participant was to have been Japanese entrepreneur Daisuke Enomato but he had failed a medical check up a month before the planned launch and was replaced by his wealthy back-up.



Почтовая марка
N=14400,
Урусову О.А.

The International Space Station

STS-116 (launched 9.12.2006)

Also referred to as **ISS-12A.1** in the ISS programme. this mission had as its main goals delivery and attachment of the International Space Station's P5 truss segment, a major rewiring of the station's power system, and exchange of ISS Expedition 14 personnel.

It was particularly notable to Sweden since it was the first time a Scandinavian astronaut (Christer Fuglesang) had visited space.

Fuglesang, shown in one of a series of maxim cards produced by the Swedish Post Office in 2009 marking his achievements, is unique in not only being the first Scandinavian to fly on a shuttle but also the first European Space Agency astronaut to qualify to command a Russian Soyuz ferry.

He was further celebrated with the issue in 2010 of an American Zazzle (private post) stamp.



The International Space Station

Soyuz TMA 10 (launched 7.4.2007) EO-15 Charles Simonyi Makes First of Two Flights !

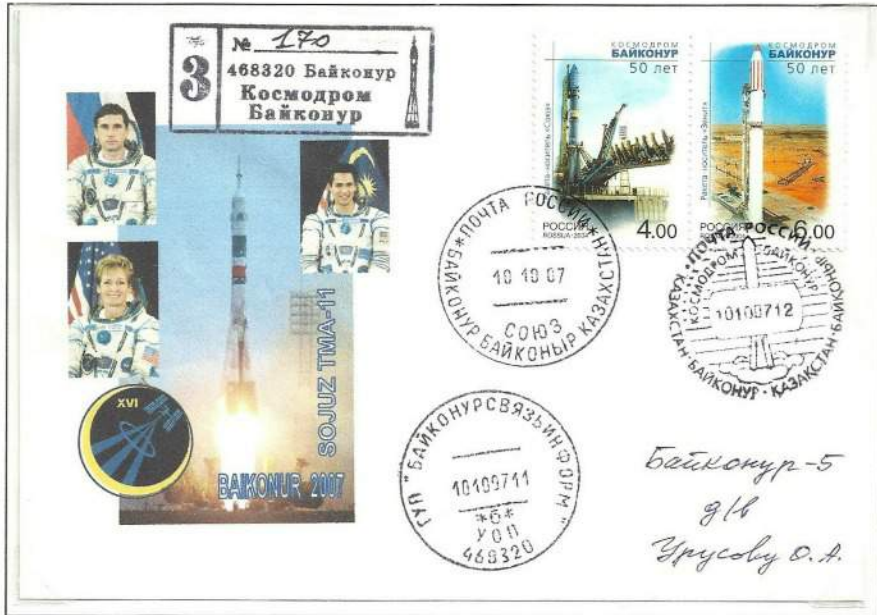
As the Expedition 14 approached its end on April 2nd Spanish-American astronaut Miguel Lopez-Alegria set a new endurance record for an American astronaut on a single flight, beating the 196 days records set by Dan Bursch in 2001 and Carl Walz the following year.

Soyuz TMA 10 brought new resident crew members in Oleg Kotov and Fyodor Yurchikin who would join Sunita Williams for a spell—and a new space participant, Charles Simonyi, a founder member of the Microsoft Corporation, who was making what would prove to be the first of two journeys to the ISS !!



The International Space Station

Soyuz TMA 11 (launched 10.10.2007) EO-16

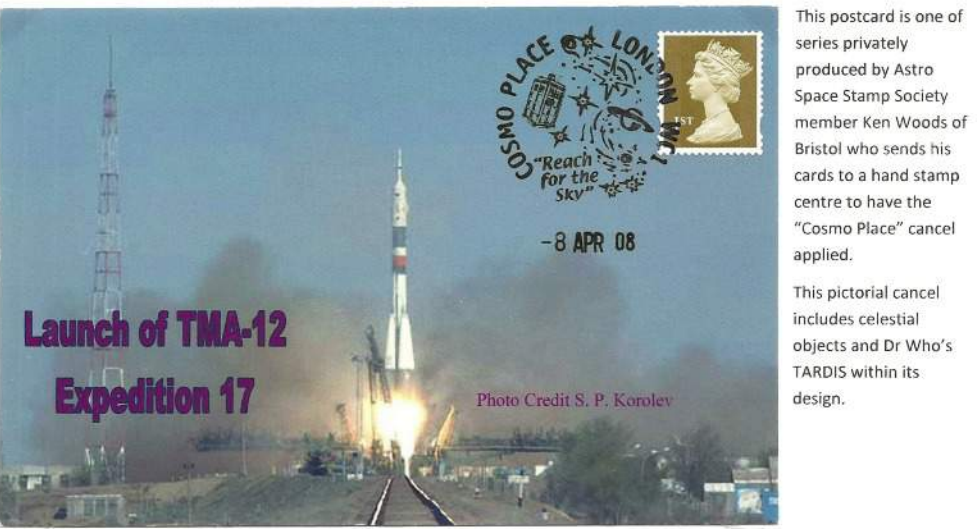


Commanded by the first ever female shuttle commander, Peggy Whitson, and carrying Malaysian participant Sheikh Muszapher Shukor as well as veteran cosmonaut Yuri Malenchenko, (with 126 days on Mir in his log) this Soyuz ferry docked with the ISS on October 12th and Clayton Anderson thus became a member of the new EO-16 team.

The International Space Station

Soyuz TMA 12 (launched 8.4.2008) EO-17

This flight carried South Korean female astronaut Yi So-yeon who flew as a guest of the Russian government through the Korean Astronaut Programme after the Korean government paid the Russian government 25 million US dollars in agreement to support the first Korean astronaut in space. Her role aboard the Soyuz is referred to as a Spaceflight Participant in English-language Russian Federal Space Agency and NASA documents and press briefings. Yi So-yeon was originally back-up to prime selectee Ko San who was originally scheduled to fly. On 10 March 2008, it was announced that Ko breached regulations surrounding removal of books from the training centre in Russia, and therefore he would not be allowed to fly.



This postcard is one of series privately produced by Astro Space Stamp Society member Ken Woods of Bristol who sends his cards to a hand stamp centre to have the "Cosmo Place" cancel applied.

This pictorial cancel includes celestial objects and Dr Who's TARDIS within its design.



The International Space Station

Soyuz TMA 13 (launched 12.10.2008) EO-18

Soyuz TMA-13 was the 100th Soyuz spacecraft to be crewed, Soyuz 1 having flown in April 1967.

Son of a NASA astronaut, Richard Garriott flew on TMA-13 as a "Spaceflight Participant", a guest of the Russian government through a space tourist programme run by Space Adventures. *Garriott, an entrepreneur and software designer, though not named is pictured in the 2010 Guinea stamp promoting Space Tourism and craft of the future.*

The pictorial launch cover cancel tying two Russian stamps celebrating 50 years of Baikonur launches, illustrates the ISS and refers to international cooperation in space.



The International Space Station

Soyuz TMA 14 (launched 26.3.2009) EO-19

This craft transported two members of the Expedition 19 crew as well as spaceflight participant Charles Simonyi on his second self-funded flight to the space station. TMA-14 was the 101st manned flight of a Soyuz spacecraft, including launch failures; however, it was the 100th to launch and land manned, as Soyuz 34 was launched unmanned to replace Soyuz 32, which landed empty.

On the launch cover below two familiar style cancels tie the left hand segment of the 2005 Kazakh mini-sheet (SG MS 482) commemorating 50 years of launches from their Baikonur (Tyuratam) launch centre. The Registered Mail hand stamp top left uses English style characters as opposed to the usual "3" Zakaznoe wording. Illustrated in the cover design are mission patches for EO-19, the TMA-14 flight and for Simonyi himself who is unique in flying twice as a space participant, the pc or officially preferred term for "space tourist"



Left the complete mini-sheet, part of which is used on the cover above. The stamps from left show a Soyuz rocket, the Soviet Buran shuttle (which flew only once—in 1988—and that unmanned, before being scrapped) and a manned Soyuz crew capsule returning to Earth for a hard landing.

The International Space Station

Soyuz TMA 16 (launched 30.9.2009) EO-21

This craft transported two members of the Expedition 21 crew and a Canadian entrepreneur. The launch of Soyuz TMA-16 marked the first time since 1969 that three Soyuz craft were in orbit simultaneously.

Guy Laliberté, founder and CEO of Cirque du Soleil, was a spaceflight participant aboard TMA-16 during its flight to the ISS, paying approximately US\$35 million for his seat through the American firm Space Adventures. He returned on board the Soyuz TMA-14 spacecraft left as an emergency vehicle during that previous flight. The Soyuz TMA-16 flight spacecraft flew back to Earth with only two crewmembers.

The familiar pictorial launch cancel ties a 2007 20 r commemorative celebrating the Father of Soviet Spaceflight, Sergei Korolev, the legendary and until well after his death anonymous "Chief Designer". Spaceflight participant Guy Laliberté is pictured on the left of the trio of cosmonauts.

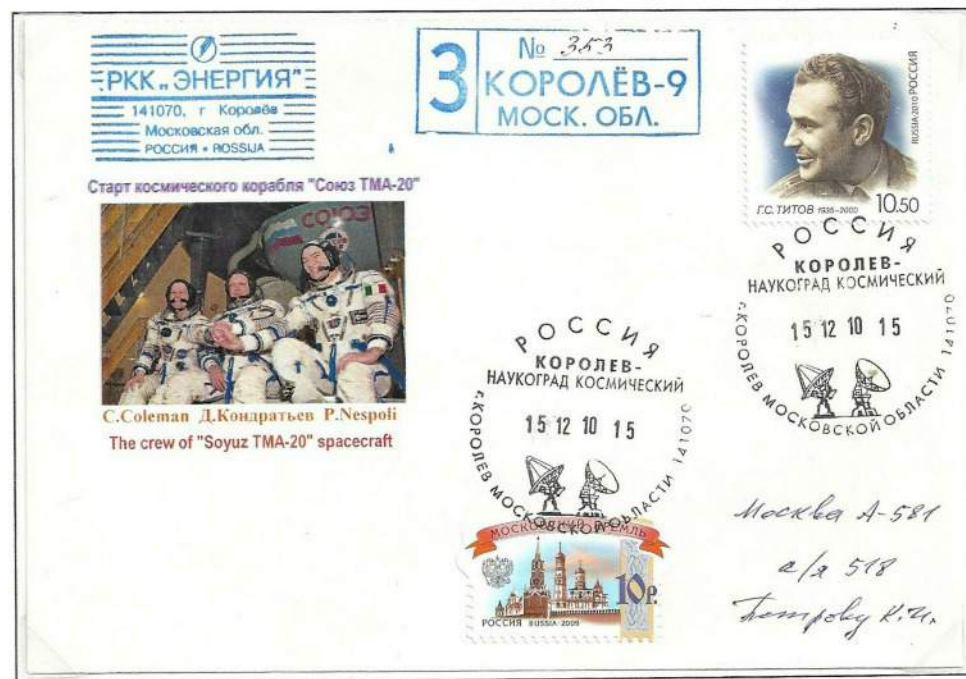


The International Space Station

Soyuz TMA 20 (launched 15.12.2010) EO-27

The three-person crew of Soyuz TMA-20 – Dmitri Kondratyev, Catherine Coleman and Paolo Nespoli – represented the ISS partner organizations of Roscosmos, NASA and ESA. Soyuz TMA-20's crew represented half of the members of Expedition 27; the other three members of the expedition arrived at the station on board Soyuz TMA-21 on April 6, 2011.

This launch cover bears new style cancels. In blue top left a hand stamp for RKK Energia the firm which produces the Russian hardware for spaceflight and a Zakaznoe cancel for the Moscow suburb now renamed in honour of Sergei Korolev, where the cosmonaut training centre is located. A Moscow Korolev cancel also ties Russian stamps to the cover, one showing the Kremlin buildings and the other the second Soviet cosmonaut to be launched (in August 1961) and the first to orbit the Earth—as Yuri Gagarin was launched from a point East of his landing site and so did not complete an orbit—German Titov.



The International Space Station

Departures and Landings

As for the previous pages on Cosmonaut training and the Soyuz ferry, we have to rely on earlier issues to show the complete progress of a Soyuz landing following a trip to a space station. These Intercosmos programme issues from the late 1979's and early 1980's describe this process well.



Above left to right as we see on the joint Mongolian issue the departing Soyuz craft separates into three components as it returns to Earth with only the middle crew section surviving the enormously high re-entry temperatures suggested on the joint-North Viet Nam issue, before making a hard landing (usually in Kazakhstan) as shown on the joint Czechoslovakian flight issue. This landing on earth has been described by cosmonauts as like being in a car crash shunt.



Here, left to right the returned cosmonauts take their first unsteady steps on Earth, shown on the joint Bulgarian issue before signing the crew capsule (joint-Cuban) and after a flight to Moscow (joint-Rumanian) take part in a news conference joined by their back-ups who are slated to fly themselves soon after (joint-Hungarian flight issue).

In contrast the re-usable American shuttles landed either at Kennedy Space Centre, Florida or Edwards Air Force Base, California and were then "turned round" for their next flight, often within two or three months.

Niger 1981 Left showing the fiery re-entry of the Earth's atmosphere and Uganda 1982 the landing.



The International Space Station

The ISS was finally completed in 2011 and now receives visits only through Soyuz ferries, but is supplied by a variety of Russian, Japanese and European cargo ships. It is expected to stay in service until 2020 and no plans or finance are in place to replace it.

Two Britons are slated to fly to it in the coming years: space participant Sarah Brightman, singer and entertainer, due to launch on board Soyuz TMA-18M in the Autumn of 2015 and ESA astronaut Major Tim Peake who should fly on board Soyuz TMA-19M, but not before late 2015.

STS-135 (launched 8.7.11)

(ISS assembly flight ULF7) was the final mission of the American Space Shuttle programme. It used the orbiter *Atlantis* and carried a four-person crew, the smallest of any shuttle mission since STS-6 in April 1983. The mission's primary cargo was to deliver the Multi-Purpose Logistics Module (MPLM) *Raffaello* and a Lightweight Multi-Purpose Carrier (LMC) to the ISS.



Soyuz TMA-12M (to be launched March 2014)

This flight will transport two Russians Alexander Skvortsov, Oleg Kotov and NASA's Steven Swanson the three members of the Expedition 39 crew to the International Space Station and will be the 121st flight of a Soyuz spacecraft, the first flight launching in 1967. The Soyuz will most likely remain on board the space station for the Expedition 40 increment to serve as an emergency escape vehicle.

Right, many issues marking the 50th anniversary of the launch of Sputnik in 1957 featured images of the ISS.

