IS-19 \* ISS-15 Resident Crew \* 21.04. - 21.10.2007 \* Soyuz TMA-10

# Soyuz TMA-10 \* 07.04. - 21.10.2007

Oleg Kotov, Fyodor Yurchikhin, and Charles Simonyi (United States) docked to the ISS on 09.04.2007. Together with Mikhail Tyurin and Michael Lopez-Alegria, Simonyi returned to Earth on board Soyuz TMA-9 on 21.04.2007. Oleg Kotov, Fyodor Yurchikhin, and, at times, Sunita Williams and Clayton Anderson formed the ISS-15 Resident Crew. On 30.05.2007, Yurchikhin and Kotov attached a shield against space debris to Zvezda. They exchanged experiments on the module's outer shell. Together with Sheikh Muszaphar Shukor, Kotov and Yurchikhin landed 330 km west of Arkalyk on 21.10.2007. Due to a wrongly wired control panel, the board computer had initiated a ballistic descent at a height of 50 km.

Beginning with ISS-15, a new and somewhat larger on-board stamp of the Russian ISS segment with date came into use. Like its predecessor, it was mostly used for cancellations in blue. Kotov delivered 5 covers to Earth that carried the cancellation dates of the docking of Soyuz TMA-10, STS-117, STS-118, and the undocking of Soyuz TMA-10, the octagonal station seal, an oval ISS-15 on-board cancellation as well as 20 signatures of all participating space travelers.

17.09.2007 would have marked the 150th birthday of Konstantin Tsiolkovsky. Some hand-written Tsiolkovsky pages – some of which were accompanied by sketches and/or the signature of the outstanding Russian space pioneer – were on board the ISS. They are marked with the circular on-board postmark dated 17.09.2007 in blue and the octagonal station seal.

# Progress M-60 \* 12.05. - 25.09.2007

On 15.05.2007, the docking of Progress M-60 took place, which delivered 2,561 kg of supplies: 476 kg of propellant, 420 l of drinking water, 45 kg of oxygen, 241 kg of food (canned food, fresh fruit and vegetables), medicines, clothing, and scientific equipment. It also delivered mail, books, DVD films (Russian comedies and the Soviet science fiction classic "Solaris"), and magazines.

# STS-117 \* 08. - 22.06.2007

Frederick Sturckow, Lee Archambault, Patrick Forrester, Steven Swanson, John Olivas, James Reilly, and Clayton Conrad Anderson docked the Space Shuttle Atlantis to the ISS on 10.06.2007. They delivered and installed the S3 truss segment and the S4 solar array carrier. Anderson replaced Sunita Williams as a member of the ISS-15 crew. STS-117 left the ISS on 19.06.2007 and, due to violent storms in Florida, had to land at Edwards Air Force Base, California.

With STS-117, Kotov sent 1 letter to Austria and 1 letter to Germany, the latter of which got lost.

# Progress M-61 \* 02.08.2007 - 22.01.2008

On 05.08.2007, Progress M-61 docked, carrying 2,569 kg of supplies, food, propellant, and

a new board computer. 459 kg of the payload were intended for the American part of the space station.

Progress M-61 also delivered 5 Chinese FDCs with the two Yang Liwei postmarks on board the ISS which CISME had already transported with Shenzhou-5.

# STS-118 \* 08. - 21.08.2007

Scott Kelly, Charles Hobaugh, Tracy Caldwell, Rick Mastracchio, Dave Williams (Canada), Barbara Morgan, and Benjamin Drew docked the Space Shuttle Endeavour to the ISS on 10.08.2007. They delivered and installed the 1,800-kg S5 truss segment. On 13.08.2007, Mastracchio and Williams exchanged the space station's defective CMG 3 gyroscope in an EVA. In her capacity as a teacher, Morgan gave three lessons in weightlessness. Endeavour took off from the ISS on 19.08.2007.



IS-19k

### Flown letters and covers of the ISS-15 Resident Crew:

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IS-19a	Letter with contents, flown with Soyuz TMA-9 to Earth	7	1,800 €
IS-19b	Letter with contents, flown with Progress M-60 to ISS		1,200 €
IS-19c	Letter with contents, flown with Space Shuttle Atlantis/ STS-117 to ISS		2,500 €
IS-19d	Letter with contents, flown with Space Shuttle Atlantis/ STS-117 to Earth	2	7,500 €
IS-19e	Letter with contents, flown with Progress M-61 to ISS		1,500 €
IS-19f	Letter with contents, flown with Space Shuttle Endeavour/STS-118 to ISS		2,800 €
IS-19h	ISS-15 / Soyuz TMA-10 on-board cover		400€

IS-19i	STS-117 on-board cover, 10 signatures	min. of 15	1,500 €
IS-19j	STS-118 on-board cover, 10 signatures		1,500 €
IS-19k	Long-duration on-board cover ISS-15/16, STS-117/118,		
	20 signatures		2,000 €
IS-19I	STS-118 on-board cover, 5 signatures of resident crew		500€

# IS-20 \* ISS-16 Resident Crew \* 21.10.2007 - 19.04.2008 \* Soyuz TMA-11

### Soyuz TMA-11 \* 10.10.2007 - 19.04.2008

Yuri Malenchenko, Peggy Whitson (United States), and Sheikh Muszaphar Shukor (Malaysia) docked to the ISS on 12.10.2007. In the context of extensive armament deals, Russia provided the Malaysian space agency ANGKASA with the manned flight at a favorable price. Shukor completed the training as a Space Tourist. Nevertheless, once on board, he took part in various experiments. Islamic scholars provided him with rules for the mission during the month of fasting Ramadan. Whitson was the first woman to take command of the ISS. Muszaphar Shukor returned to Earth on 21.10.2007, together with Oleg Kotov and Fyodor Yurchikhin. Malenchenko, Whitson, and, at times, C.C. Anderson, Daniel Tani, Léopold Eyharts, and Garrett Reisman formed the ISS-16 Resident Crew. Together with Soyeon Yi, Malenchenko and Whitson landed on 19.04.2008. When the Orbital Module was disconnected, one of five pyre bolts failed. As a result, the capsule plunged head first into the atmosphere. Antennas of the communication system were damaged. A ballistic descent was automatically initiated that subjected the crew to 8.6 times the acceleration due to gravity.

STS-120 \* 23.10. - 07.11.2007



IS-20b

Pamela Melroy, George Zamka, Scott Parazynski, Stephanie Wilson, Douglas Wheelock, Paolo Nespoli (Italy), and Daniel Tani docked with the Space Shuttle Discovery to the ISS on 25.10.2007. They delivered the 14.5-t Harmony connecting node. Tani replaced C.C. Anderson as a member of the ISS-16 crew. STS-120 undocked from the ISS on 05.11.2007.

# Progress M-62 \* 23.12.2007 - 15.02.2008

On 26.12.2007, Progress M-62 linked up with the ISS, supplying replacement parts, experiments, equipment for Zarya, 281 kg of food as well as Christmas greetings and New Year greetings from the space farers' families and friends.

With Progress M-62, 4 letters were delivered to the ISS.

# Progress M-63 \* 05.02. - 07.04.2008

On 07.02.2008, Progress M-63 docked to the ISS, carrying a 2,578-kg payload: 860 kg of propellant, 420 kg of water, 49 kg of breathable air, 240 kg of food, scientific instruments and equipment.

Progress M-63 delivered letters postmarked "Star City Named after Yuri Gagarin" by mistake on board the ISS. As a matter of fact, it is the Cosmonaut Training Center that got its name from Gagarin. This postmark was in use between 04.10.2007 and 04.01.2008.

### STS-122 \* 07. - 20.02.2008

Stephen Frick, Alan Poindexter, Stanley Love, Leland Melvin, Rex Walheim, Hans Schlegel (Germany), and Léopold Eyharts (France) docked the Space Shuttle Atlantis to the ISS on 09.02.2008. They delivered and integrated the European Columbus science laboratory. Columbus is a 6.9-m cylinder with an outer diameter of 4.5 m and a launch weight of 10.3 t. Eyharts replaced Daniel Tani as a member of the ISS-16 crew. STS-122 disconnected from the ISS on 18.02.2008.

Columbus delivered 279 blank cards of ERNO Philately, Bremen, on board the ISS. After landing, they were cancelled with a non-postal circular stamp. Five (Nos. 8, 12, 255, 256, and 278) came to the ISS a second time, with Soyuz TMA-15.

### STS-123 \* 11. - 27.03.2008

Dominic Gorie, Gregory Johnson, Robert Behnken, Michael Foreman, Takao Doi (Japan), Richard Linnehan, and Garrett Reisman docked the Space Shuttle Endeavour to the ISS on 13.03.2008. They delivered ELM-PS, the Logistics Module for experiments in the Japanese Kibō (= hope) Experiment Module. It consists of 6 units and is the largest module of the ISS. The Canadian Dextre robot hand serves as an extension of the robotic arm. Reisman replaced Léopold Eyharts as a member of the ISS-16 crew. STS-123 left the ISS on 25.03.2008.

### ATV-1 Jules Verne \* 09.03. - 29.09.2008

The ESA ATV-1 resupply spacecraft Jules Verne was launched on 09.03.2008 atop an Ariane 5 ES ATV from the European spaceport in Kourou in French Guiana, South America. After conducting approach tests, it automatically docked to the ISS on 03.04.2008. The Automated Transfer Vehicle can deliver up to 7.6 t to the space station. The freight is stowed in racks in the cargo bay. In addition, there are tanks for propellant, technical gases, oxygen,

and drinking water. ATV fulfils the same task as Progress. However, it is capable of lifting three times as much payload. After successful flights of Dragon and Cygnus, the project was discontinued. Using the same technology, ESA is building two service modules for the new U.S. spacecraft Orion as compensation for the use of the ISS.

With ATV-1 Jules Verne, 1,200 covers and 550 cards were flown to the ISS. They landed aboard the Multi-Purpose Logistics Module Leonardo with Endeavour / STS-126 at Edwards Air Force Base on 30.11.2008. Sergei Volkov and Oleg Kononenko signed 25 covers and cancelled them with the octagonal station seal. The Cargo Transfer Bag #1449 was unloaded as "Colis non prioritaire" on 04.02.2009. On this day, the envelopes were franked and machine-stamped at the KSC post office. Without stamps, postmarks, and additional stamps, they complied with ESA and NASA regulations for ISS payloads. Cristina Gastaldi, TAS-I confirmed that 1,200 letters had been loaded into ATV for transport; Ann L. Manz, EADS Astrium North America, confirmed that they had been unloaded from the Space Shuttle on 04.02,2009.

### Flown letters and covers of the ISS-16 Resident Crew:

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IS-20a	Letter with contents, flown with Soyuz TMA-10 to Earth	5	2,200 €
IS-20b	Letter with contents, flown with Space Shuttle Discovery/STS-120 to Earth	4	4,000 €
IS-20c	Letter with contents, flown with Progress M-62 or M-63 to ISS		1,800 €
IS-20d	Letter with contents, flown with Space Shuttle Atlantis/STS-122 to ISS	7	2,400 €
IS-20e	Letter with contents, flown with Space Shuttle Endeavour/STS-123 to Earth	4	4,000 €
IS-20f	Letter with contents, flown with Soyuz TMA-12 to ISS		1,000 €
IS-20h	ISS-16 / Soyuz TMA-11 on-board cover		400 €
IS-20i	STS-120 on-board cover with 9 signatures incl. STS- 120 crew	min. of 6	1,000 €
IS-20j	STS-122 ERNO Columbus card	279	250 €
IS-20k	ATV-1 on-board cover with on-board postmark and note of Malenchenko	7	600 €
IS-20I	Blank on-board cover, flown with ATV-1 Jules Verne	1,750	100 €
IS-20m	On-board cover flown with ATV-1 Jules Verne, flown with Soyuz TMA-16/TMA-14 to ISS again	26 (included in I)	600€