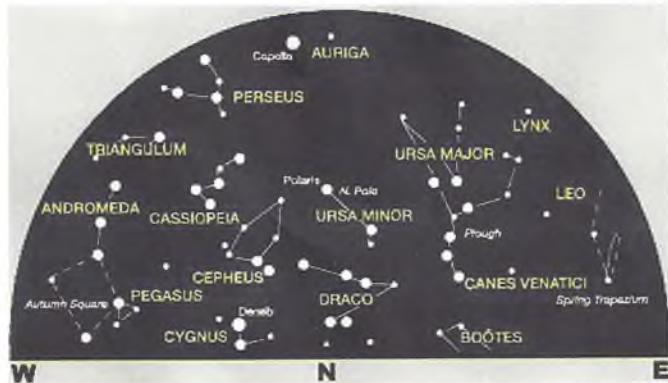


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ORBIT

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Soyuz 4-5: the first space mail service *by Umberto Cavallaro*

The first space mail delivery service was operated by Soviets in January 1969, during the spasmodic final phase of the USSR/USA "Moon Race".

Both Americans and Soviets had suspended their space activities for extended periods after, respectively, the tragedies of Apollo 1 and Soyuz 1. After 18 months of re-design and testing, the Americans restart the race.

Apollo 7 has successfully flight-tested the new spacecraft which will bring American astronauts to the Moon. For the first time three astronauts have orbited the Moon, aboard Apollo 8. Even Soviets had many misadventures and now they must recover lost time and stake all on landing on the Moon, which they hope to reach ahead of the Americans. They start again with docking tests in orbit.

On January 14th, 1969 Soyuz-4 lifts-off piloted by the rookie cosmonaut Vladimir Aleksandrovič Šatalov. Actually the launch was planned the day before but, for the first time in the history of the Soviet space programme, it was delayed due to adverse weather condition. The following day also Soyuz-5 was launched, carrying onboard three cosmonauts at their first mission: Boris Valentinovič Volynov, Aleksej Stanislavovič Eliseëv e Evgenij Vasilëvič Khrunov.

Goal of the mission was to finally carry out the original mission originally foreseen for the first Soyuz mission in 1967, and test the main phases and most critical techniques of the Soviet Moon landing programme: the transfer of crew members between two manned spacecraft, with the aim of preceding the pre-announced Apollo 9 mission. Even the Soviet programme includes in fact the transfer of one



cosmonaut from the command module to the lunar module.

Šatalov maneuvers his spacecraft in the rendezvous with Soyuz-5 and the two spacecraft link up and interconnect their electrical and mechanical plants. It's a new record: for the first time two manned spacecraft dock in space. TASS broadcasts: "Today was born the first Space Station ever".

However, there is no direct way by which cosmonauts may transfer from one spacecraft to the other. After docking, Eliseëv and Khrunov start their preparation for the EVA required to reach Soyuz-4. The preparation phase is broadcast live by Soviet TV. During the 35th orbit cosmonauts start to egress from their spacecraft. It's the second Soviet EVA ever. A problem occurred to Khrunov who catches on wires while exiting. This distracts Eliseëv and he forgets switching on the camera. Only few pictures of this historical event are video-recorded by the external camera and no TV image exists. Šatalov lowers pressure to allow cosmonaut companions to enter Soyuz-4.

This article is excerpted from pages 137-139 of the book by Umberto Cavallaro, "Propaganda and Pragmatismo in the race to the Moon", Ed. Impremix, Torino 2011, 186 pp (in Italian – English version in preparation) It first appeared in English in issue no 15 of AdAstra (December 2012) and is produced by the kind permission of its author, the Editor.

Stamps showing the crew transfer

All issued in 1969 except the Mongolian issue bottom row centre which 1971



They come and deliver some letters for the Commander and the *Izvestia* and *Pravda* newspaper issued the day of the Šatalov's launch.

The two spacecraft remain docked for 4 hours and 35 minutes. Then they undock and re-enter the atmosphere on their own, and land reaching a new record again: for the first time a crew return back to Earth aboard a spacecraft different from the one used to fly to space.

During the Soyuz-5 re-entry, with Volynov returning alone, a new tragedy is only just avoided. The retrofire module fails to separate completely, despite the fact that the explosive bolts fire. A similar problem had already occurred during some Vostok and Voskhod missions, as well as during the Mercury mission of John Glenn, but the Soyuz Service Module is far bigger and heavier.

Once the Soyuz starts reaching the atmosphere, Volynov loses control of the craft and the two modules assume the most aerodynamically stable position, with the heavy descent module, and its light metal wall, at the front and the heat shield in the rear. The rubber seal on the hatch begins to smoke and, wearing no space suit, Volynov is himself beginning to feel uncomfortably hot and realizes he only has seconds to live. His body is strained upwards against restraining straps instead against the seat, as planned. Luckily the struts between the descent and service modules burn completely: one more explosion and the spacecraft tumbles into the proper position for re-entry.

The force exceeds 9G. The parachute deploys irregularly and the fuel for the control thrusters, that are supposed to stabilize it, was exhausted. Meanwhile Volynov falls into a faint because of toxic smoke. The craft lands in the snowy Ural Mountains, thousands of miles far from the planned landing site. Even though the spacecraft lands in a snow bank, it still hits hard. The landing shock is such that Volynov is thrown across the cabin and breaks some of his front teeth, but survives. It is minus 38 degrees Celsius outside (-39 degrees Fahrenheit). Volynov realizes that the rescue team will take hours to locate him. Many hours later, helicopters spot the downed spacecraft and land nearby. The rescuers find the capsule's hatch open -- no one inside, and no trace of the cosmonaut.

Following his footprints and the bloody spots where he has spit in the snow, they find him a few kilometres away, in the hut of peasants who are keeping him warm. No news of this is ever printed in the Soviet press at that time. The secret is kept until 1997.

A parade, to celebrate the latest Soviet space achievement is organized at Kremlin, along with other cosmonauts and Premier Brežnev. A deserter from the Soviet Army aiming for Brezhnev, fires his gun wildly, missing Brezhnev but hitting the car in which many cosmonauts riding, including Beregovoj, Leonov, Nikolaëv and Tereškova. All are uninjured, but the ceremony is suddenly cancelled.



The first Soviet documents of space mail

In preparation for this joint mission, the Soviet Ministry for Communication prepared 10.000 stationaries with a 4 kopeks imprinted stamp. The cachet, designed by the artist Jurij Levinovskij, features a rocket and an envelope with the inscription "Earth-Cosmos-Cosmos-Earth".

The Ministry also prepared a special date postmark to be used at the Cosmodrome at launch and during the mission from January 14th to 18th. As reported by Julius Cacka, covers exist postmarked on January 13th, the day in which the launch of Soyuz 4 was originally planned.

An envelope addressed to Commander Šatalov by General Kamanin, director of the Cosmonaut Training Centre of Star City, was postmarked on January 14th, 1969 and officially embarked on Soyuz-5 which was launched the following day. Khrunov was in charge of delivering it to Šatalov together with newspaper of the day before and a letter from the wife of Šatalov, enclosed in an official envelope, marked as "Mail of Pilots-Cosmonauts of the URSS".

The envelope does not bear stamp or postmark. Šatalov signs both the covers, and adds the handwritten notation "Onboard Soyuz-4 15-1-1969". Then he records the cover with the onboard TV-camera.

The flown Soyuz-4/Soyuz-5 envelope

[From the collection of Renzo Monateri]

The four kopeks stationary sent to Šatalov by Kamanin, Director of Star City's Cosmonaut Training Centre (*shown top of next column*). One 10 kopeks stamp featuring Beregovoy was added in order to cope with the "Space mail" tariff, but left uncanceled.

Addressee: Outer Space – to the Commander of the craft "Soyuz 4" Šatalov Vladimir Alexandrovič

Sender: Earth, Launching Site – Kamanin.

[From the collection of Renzo Monateri]

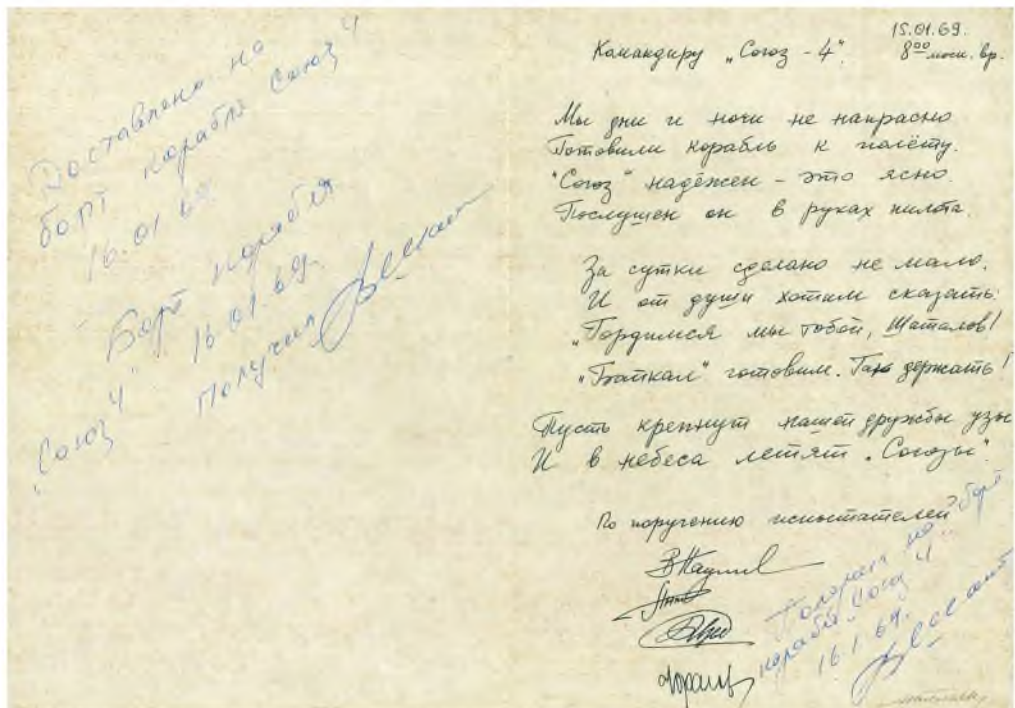
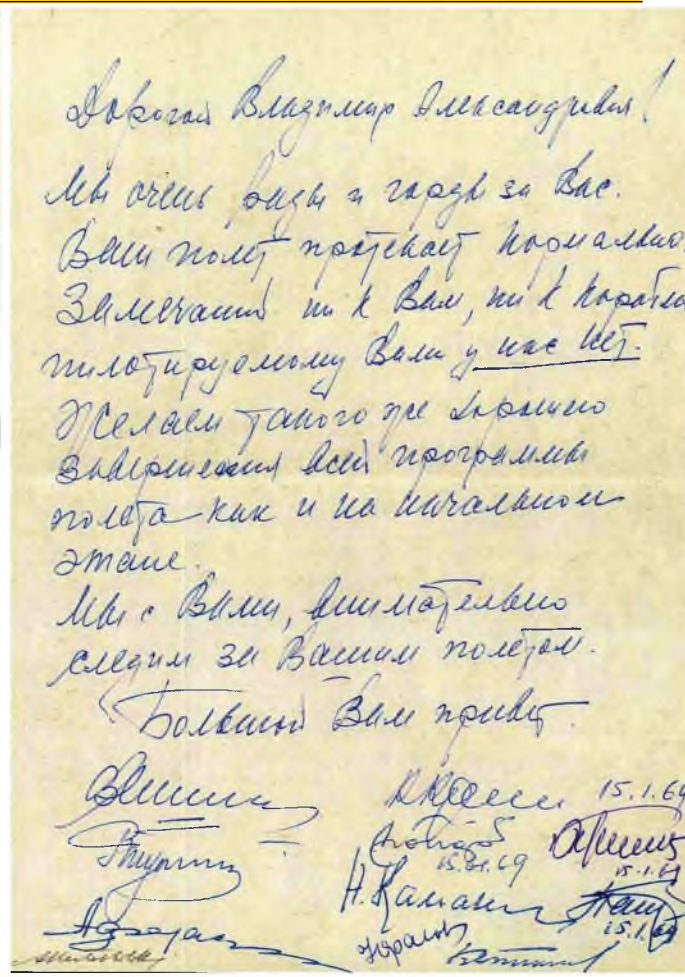
The notation (partially unreadable, because of the cachet) reads: "Onboard craft Soyuz 4". Signed by Šatalov. The envelope contained four pages addressed to Šatalov: - the first by the General Nikolaj Petrovič Kamanin, (one of the



first five USSR heroes and responsible for the training and tutoring the cosmonauts, the “cosmonauts’ mother hen”),
 - a second sheet by the members of the State Commission,
 - a third page by the testing team of the base,
 a fourth by the Cosmodrome’s military unit that had supervised the launch.

Message by the State Commission [From the collection of Renzo Monateri] (shown opposite)

Dear Vladimir Alexandrovich!
 We are very glad and proud of You. We trust Your flight goes on ok. No comment to you or to the craft you are piloting. We wish that the same success of the initial phase will continue during the whole flight.
 With our best regards
 Kirimov (Commission’s President)
 Afanasyev (Minister of Metal and Mechanics Industry)
 Mišin (the Chief Designer, successor of Korolëv) Kamanin (others)



On the right (alternate rhyme):
 to the Commander of “Soyuz -4”,
 15/1/69 8:00, Moscow time.
 Night and day we prepared
 the craft for the flight,
 “Soyuz” is therefore safe – this is
 for sure.
 It is obedient in the hands of the
 pilot.
 What had been done in these
 days is not a little.
 And with all our heart we want to
 say:
 “We are proud of You, Šatalov!”
 Let’s prepare the Baikal...!
 Let’s our friendly tie make
 stronger
 And let many Soyuz fly in the sky!
 On behalf of the Testing Team
 V. Naumov, Yurasov (and others)
 Handwritten, in blue (oblique):
 Received onboard spacecraft
 “Soyuz 4”

On the left (oblique): Delivered onboard spacecraft Soyuz -4 16/1/69 V. Šatalov