

# RUSSIAN HUMAN MISSIONS TO SPACE STATIONS FROM 1974 TO 2021

## FROM SALYUT 3 TO THE INTERNATIONAL SPACE STATION

After the badly defeat in the race to the Moon, the Soviet Union relaunched the challenge to the Americans in the conquest of space by putting the first space station into orbit on April 19, 1971, continuing over time a building new ones and expanding them with the addition of new housing and scientific segments, up to the joint participation in the construction by the current ISS configuration.

This collection aims to trace the history of the Soviet missions first, then Russian, or joint with other countries, through commemorative envelopes of the launches, the docking among the various capsules and space stations, the postmarks and on-board cachets, the returns to the ground, the mission control centers that followed one.

The first docking of an American space shuttle at the orbiting station MIR was historic, the first step in a long adventure that led to the collaboration between the two countries for the construction of the ISS. With this space base, participation and competition has expanded to space agencies, with the involvement of other countries, and private companies, with the main future objectives of being able to reach the moon again and Mars.

in the collection missions are represented in the period from 1974 to 2015 within the following space programs:

- **SOYUZ** In Russian means mission. Soyuz belonged to the development of the third Soviet space program consisting of 40 missions ranging from 1967 to 1981.
- **SALYUT** Seven orbital stations of which the first five, called first generation, were mostly used for military purposes from 1971 to 1972, the last two second generation from 1977 to 1986. With the Salyut 7 the Soviet Union opened definitively to international space cooperation with the flight of the first French astronaut Jean-Loup Crétien.
- **PROGRESS, PROGRESS M.** Refueling ships without crews used to transport food, water, fuel from Earth to space stations.
- **SOYUZ T.** The letter T as Troika. Third generation of the Soyuz spacecraft which carried out several missions between 1979 and 1986. These were new and improved space capsules with built-in automatic docking system. The first shuttle, T1, flew unmanned.
- **COSMOS.** Shuttles sometimes used to check the possibility of making human flights and for the transport of materials for space stations
- **MIR.** Launched on February 20, 1986 it had 28 different crews. For several years it was the permanent outpost of human presence in space and was completed in 1996 with the attachment of the "priroda" module. Since 1995, thanks to a new coupling mechanism, they could also dock American space shuttles
- **SOYUZ TM.** M for "Modify". It is the evolution of the Soyuz T which carried out missions from 1986 to the end of 2000, the period in which the period of Russian orbiting stations ended and then the construction of the ISS International Space Station began
- **ISS. International Space Station.** The first module was the Russian Zarya, it was launched on 20 November 1998. Over time it has been expanded with modules and equipment supplied by the 5 different space agencies (NASA, RKA, ESA, JAXA, CSA) who manage it in a joint project with a estimated cost over 100 billion Euros for 30 years.
- **SOYUZ TMA.** Further evolution of the capsule intended for travel to and from the International Space Station.
- **ATV.** European supplier using navigation technology deriving from Soyuz. Built for 5 models it has the possibility of docking exclusively in the Russian sector of the ISS International Space Station
- **HTV - Cygnus.** Unmanned suppliers destined, in the light of progress, to send basic necessities but also hardware and scientific experiments to the space station. HTV built by the JAXA space agency, the Cygnus built in Italy, in Turin, and then launched into space by the American base of Wallops Island.

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