

## Russian Space Station MIR - Historical Backgrounder -

On February 20, 1986, the Russian government made history as it launched into orbit the initial phase of the world's largest space station – MIR. The space station was the first of its kind, allowing astronauts and cosmonauts the ability to live in space for extended amounts of time. It took dozens of missions with crews from various nations conducting research and experiments to establish the MIR Space Station. Fifteen years later, the program met its demise when the huge structure was de-orbited and burned up in Earth's atmosphere.

Though referred to as the MIR Space Station, the structure was made up of more than seven various modules of which MIR was the core. As the main component of the space station, the 43-foot long, 20.4-ton MIR core module housed the operations and living quarters. In addition, MIR provided docking areas for other modules to join the station. MIR had a combined mass of more than 100 tons.

Within the MIR module were the controls for the mechanical operations that provided the crew with the ability to operate in space and facilitate research and scientific experiment activities. The core module also housed medical monitoring equipment and a stationary bicycle and treadmill for exercise.

In the living area, each crewmember had his/her own cabin, complete with a chair, sleeping bag and porthole. The common galley area contained a table, cooking equipment and trash storage. Also located on the MIR module were a commode, sink and shower. All habitable areas of MIR had distinct features making life on a space station seem as similar to life on Earth as possible – a feat especially difficult given the absence of gravity. The living quarters had painted walls, carpeted floors and white ceilings with fluorescent lighting.

Though MIR was developed and operated by Russia, crews from around the world lived on MIR. In 1995, Dr. Norman E. Thagard was the first U.S. astronaut to travel with his Russian counterparts and live on the MIR Space Station. NASA sent numerous astronauts to live on MIR, the last of which was Andrew Thomas who returned to Earth in June 1998. The Russian government was preparing to abandon the ailing spacecraft, but in January 2000, MIR was granted a reprieve by an investment group. MIRCorp was set up to adapt the space station for operations ranging from industrial production and scientific experiments to space tourism and advertising, but the idea never took off.

When first developed, three MIR modules were designed and built with the exact same specifications. The most well-known was the MIR that orbited Earth. Another MIR module is warehoused in Russia. The third MIR module, formerly on display in a Moscow museum, remains on permanent display at the Tommy Bartlett Exploratory, in Wisconsin Dells, Wis.