

This Day in History... June 16, 1963

First Woman in Space

On June 16, 1963, Valentina Tereshkova became the first woman in space. The 26-year-old former textile worker circled Earth 48 times during a demanding solo flight that lasted nearly three days.

Valentina Vladimirovna Tereshkova was born on March 6, 1937, in Bolshoye Maslennikovo, a village in Russia's Yaroslavl region. Her father was a tractor driver who served in the Soviet Army. He was killed during the Soviet-Finnish War when Valentina was two years old. Her mother worked in a textile factory and raised Valentina and her two siblings.

Tereshkova left school as a teenager and began working in a tire factory. She later joined her mother at a textile mill while continuing her education through correspondence courses. Away from work, she became interested in parachuting. She made her first jump through a local aviation club in May 1959 and eventually completed more than 100 jumps.

Her parachuting experience proved especially valuable. The Vostok spacecraft did not land with its cosmonaut inside. During the final descent, the cosmonaut had to eject from the capsule and parachute separately to the ground.

The Soviet Union began considering a female spaceflight after Yuri Gagarin became the first person in space on April 12, 1961. Soviet officials reviewed hundreds of possible candidates. Applicants had to be young, physically fit, relatively small, and experienced parachutists. Five women, including Tereshkova, entered cosmonaut training in 1962.

Their training included weightless flights, isolation tests, centrifuge runs, spacecraft engineering, rocket theory, parachuting, and flight instruction. They also endured heat-chamber tests and other examinations designed to measure their reactions to the physical and mental pressures of spaceflight. After passing her final examinations, Tereshkova was commissioned as a junior lieutenant in the Soviet Air Force.

Tereshkova was chosen to fly Vostok 6. Her backup was Irina Solovyova, another skilled parachutist. The mission was planned to overlap with Vostok 5, which had launched cosmonaut Valery Bykovsky on June 14.

Vostok 6 lifted off from the Baikonur Cosmodrome on June 16, 1963. Tereshkova used the radio call sign "Chaika," meaning "Seagull." At one point, Vostok 6 and Vostok 5 passed within about three miles of each other. Tereshkova and Bykovsky communicated by radio, although their spacecraft did not dock.

The Vostok capsule was largely controlled from the ground, but Tereshkova practiced manually orienting it. She maintained a flight log, monitored the spacecraft's systems, and conducted medical observations. She also photographed Earth's horizon. Scientists later used her photographs to study aerosol layers in the upper atmosphere.

The flight was physically difficult. Tereshkova experienced nausea, fatigue, and discomfort inside the cramped capsule. Nevertheless, she completed 48 orbits in 70 hours and 50 minutes. Her single mission lasted longer than the combined spaceflight time of all six American astronauts who had flown before her.

On June 19, Tereshkova ejected from the descending capsule and parachuted safely to Earth in the Altai region. She received the title Hero of the Soviet Union and became an international representative of the Soviet space program. However, she never flew in space again. The Soviet Union would not send another woman into orbit until Svetlana Savitskaya flew aboard Soyuz T-7 in 1982.

Tereshkova later graduated from the Zhukovsky Air Force Engineering Academy and earned a doctorate in engineering. She also held several political and public positions. Decades after Vostok 6, she said she would still volunteer for a mission to Mars, even if she could not return. Her flight remains distinctive: she was the first woman in space and is still the only woman to have completed a solo space mission.



1963 imperforate Russia stamps honoring Tereshkova



Twenty years later, Sally Ride became the first American woman in space on June 18, 1983.

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