

Cosmos 1 Solar Sail Spacecraft: Update

June 22 2005

Cosmos 1 the first solar sail was launched as scheduled at 19:46 UTC today from the nuclear submarine Borisoglebsk. The three stage separations occurred normally, and 15 minutes after launch a doppler signal was received at the temporary ground station at Petropavlovsk in Kamchatka. The signal lasted for around three minutes, and was then cut off for unknown reasons.

4:20 pm PDT (23:20 UTC):

At 3:00 this afternoon (22:00 UTC) The Planetary Society released the following statement regarding the condition of Cosmos 1: "The Cosmos 1 spacecraft was launched today but we cannot, at this time, confirm that a successful orbit injection. Some launch vehicle and spacecraft telemetry data gave ambiguous information during the launch. Since the orbit insertion burn, no information has been received from the spacecraft. There are continuing efforts to receive a signal from the spacecraft."

9:40 pm PDT (4:40 UTC, June 22):

In an official statement released at this time The Planetary Society said: We continue to search for the Cosmos 1 spacecraft. We have reviewed our telemetry recordings and have found what we believe are spacecraft signals in the data recorded at the tracking stations in Petropavlovsk, Kamchatka and Majuro, Marshall Islands. The review of data received at the tracking station in Panska Ves, Czech Republic also appears to indicate a spacecraft signal. If confirmed, these data will indicate that

Cosmos 1 made it to orbit. We will continue to monitor planned telemetry sessions and will be working with U.S. STRATCOM (Strategic Command) to locate Cosmos 1.

11:45 pm PDT (6:45 UTC, June 22):

Project Director Louis Friedman cautioned that some data point to a launch vehicle misfiring, one that would prevent the spacecraft from achieving orbit. He said, "That the weak signals were recorded at the expected times of spacecraft passes over the ground stations is encouraging, but in no way are they conclusive enough for us to be sure that they came from Cosmos 1 working in orbit." The Russian space agency indicated that the Volna rocket may have had a problem during its first or second stage firing. "This," Friedman noted, "would almost certainly have prevented the spacecraft from reaching the correct orbit."

Source: The Planetary Society

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