

R E P O R T

by Lieutenant-Colonel Alexei Arkhipovich Leonov,
USSR pilot-cosmonaut, on the "Voskhod-2" spacecraft,
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On March 18, 1965 in accordance with the "Voskhod-2" spacecraft flight program an extra-vehicular space excursion experiment was carried out.

Leaving the spacecraft is achieved by means of a special airlock system. The spacecraft commander controlled the system from the cabin.

A special space suit with a self-contained life support system provided a safe performing of the experiment in deep vacuum and while free-floating in space.

All the spacecraft systems associated with leaving control and self-contained systems of the space suits functioned without a hitch in the extra-vehicular experiment. According to more precisely defined data. I stayed in space for 23 minutes 41 seconds, 12 minutes 9 seconds free-floating in space.

While leaving the spacecraft and returning back I was in constant communication with both the spacecraft commander and ground stations.

Moving off the spacecraft was up to 5.35 meters, i. e. at the full length of the tether line. Free-floating in space was performed during several maneuvers of moving off and approaching the spacecraft.

While free-floating in space I made observations and carried out experiments in accordance with the flight program.

From outer space the Earth surface, a horizon and the spacecraft details were excellently seen. The shadowed parts of the spacecraft were quite well lighted by Sun rays reflected from the Earth.

While performing the experiment of leaving the spacecraft, working in outer space and returning back as well as in the following flight I felt fine. I was completely sure of space suit high quality, and had no doubt about instruments and life support systems reliability.

Some conclusions:

— leaving the spacecraft into outer space is quite possible and is no longer mysterious to a man;

— a man in a special space suit with a self-contained life support system may not only exist in space but also perform certain aimed and coordinated operations;

— it is possible to carry out some physical work, to make scientific observations in outer space.

After the flight I feel well. My state of health is the same as before the flight.



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