

~~Top Secret~~

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DIRECTORATE OF
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WEEKLY SURVEYOR

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Soviet Lunar Spacesuit Described: A Soviet physician has described a spacesuit to be used for walking distances of 2-3 km on the lunar surface. The source was involved in testing an experimental model of this suit at Tomilino during the spring of 1969. Considerable further development of the spacesuit took place at the Institute of Medical Biological Problems after this test at Tomilino. The upper part of the suit was described as firm, with the arm and leg areas comprised of a soft hermeticizing fabric in six layers. A control console flapped out which permitted the cosmonaut to control the suit pressure and temperature. The means of supplying oxygen to the spacesuit during the test was through a line; eventually tanks would be affixed to the back but they had not yet been developed. Heat was removed from the body by means of water which circulated through tubing. [REDACTED]

Comment: The model of the Soviet lunar spacesuit described appears to have been in an early stage of development in the spring of 1969 (the first US lunar landing was in July 1969). This information is significant in that it indicates that at least this version of the Soviet lunar spacesuit was partially a hard suit. This contrasts with the US Apollo suit which is soft. There is insufficient information upon which to base a judgment concerning the Soviet state-of-the-art in joint development and general mobility. This suit, however, does not appear to include a constant volume bellows joint arrangement, a primary asset of a complete hard suit. The gloves, one of the most critical items in spacesuit design, appear in this test to be of crude design and inadequate for work on the moon. [REDACTED]