

SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2)  
Going To and Beyond the Earth-Moon System: Human Missions to Mars, Libration Points and NEO's  
(8-A5.4)

Author: Mr. Oleg Aleksandrov  
AVIASTAR Inc www.aviastar.us, United States, oleg@aviastar.us

MANNED ROVERS FOR MARS EXPLORATION, MOON AND OTHER PLANETS

**Abstract**

MANNED ROVERS FOR MARS EXPLORATION, MOON AND OTHER PLANETS. Abstract  
Manned rover for Mars exploration, moon and other planets. This report will be offered a welldeveloped concept of manned modules made in the form of planetary rovers. This concept will allow to perform a wide range of scientific and geological problems during one mission over a large area. Rovers will be equipped with cluster dredge devices allow you to collect soil samples from a depth of over 150 meters. Radius of the rovers will be more than 1,000 kilometers. The risks of not returning to the place of landing for these modules do not exist because the rovers expected to supply rocket returnable fuel for which may be produced during the movement of planetary rovers. Rovers will be equipped with docking ports through which a plurality of planetary rovers can form the station and even villages. Bussines card of the project is additional inflatable modules extends the internal volume of the stations for the crews. Such rovers will be equipped with landing systems with the soft landing right on the wheels. The project is now in the stage of development of technical documentation for the construction and testing of the key systems.