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IAF SPACE EXPLORATION SYMPOSIUM (A3)

Moon Exploration – Part 1 (2A)

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RUSSIAN LUNAR EXPLORATION PROGRAM IMPLEMENTATION STATUS

Abstract

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Today the key milestones for implementation of concept of the National Lunar Exploration Program have been defined. The first milestone of the concept is the creation of automatic space tools for the Moon studies. Currently the objective of automatic missions is to perform the detailed studies of the lunar properties and resources. In the framework of the implementation of this milestone Lavochkin Association develops space complexes intended for providing high-precision and safe landing on the predetermined area of the Moon, remote monitoring, sampling and analysis of soil samples, delivery of lunar soil to the Earth.

In order to ensure the solution of the objectives specified above the following spacecraft are under development:

- Luna-Glob Luna-25, designed for verification of the soft landing on the Moon South Pole;
- Luna-Resource-1 (Orbiter) Luna-26, designed for Moon remote sensing, including stereo cameras studies;
- Luna-Resource-1 (Lander) Luna-27, designed for the contact Moon studies, providing high-precision and safe landing on the specified surface area at the Moon South Pole;
 - Luna-Grunt Luna-28, designed for delivery of lunar soil samples to the Earth.

The stepwise implementation of these mission will enable to solve some of technological problems that ensure the creation of Lunar space infrastructure, including delivery of payloads to various space objects.