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THE RESULTS OF GROUND DEVELOPMENT TESTS OF THE RD861K HIGH-ALTITUDE  
LIQUID-PROPELLANT RESTARTABLE ROCKET ENGINE

**Abstract**

The RD861K hypergolic high-altitude liquid-propellant restartable rocket engine passed its last qualification test in June 2020, which has completed the cycle of ground development tests. The results of the ground development tests have confirmed the compliance of the RD861K basic specifications with the requirements specified in the respective specification. The reliability of the engine has been proven through the successful performance of a launch vehicle stage equipped with this engine. The paper discusses the results of the ground development tests of the RD861K engine. It is expected that the engine will be used as the main engine in the second stage of the new Cyclone-4m launch vehicle.