Paper ID: 10463 oral

SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2)

Future Space Transportation Systems (4)

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SYSTEM ANALYSIS AND APPLY STUDY FOR LONG-TERM LAUNCHER AND SPACE VEHICLE ROCKET ENGINES.

Abstract

The paper describes latest results of the most recent activities in Russia in the technical assessment of mid-term and long-term launcher's and space vehicle's engines architecture. Principal issues of optimum choice of engines for future launchers and space vehicle are considered. Assessment criteria (multiplicity, requirements and specifications for propellant reliability, safety etc) are being analyzed. The paper will also give an overview and first results of system analysis and apply study for expendable and reusable launcher systems, inter-orbital tugs, manned and cargo vehicle engines.