

SPACE SYSTEMS SYMPOSIUM (D1)  
Innovative and Visionary Space Systems Concepts (1)

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RUSSIAN SPACE EXPERIMENT "ZNAMYA-3"

**Abstract**

Russian Space Experiment "Znamya-3": deployment of the prototype of the large-scale space film frameless reflector-Solar sail shaped by the centrifugal forces and using transport resupply vehicle "Progress-M"; modifications of the Solar sail structures, general configuration and potential application of the Solar sail structures; operation description of preparation stages and flight tests; verification of a possibility to turn the Solar sail to larger angles; potential use of this construction as a light and radio reflector. It is scheduled to carry out the Space Experiment, focused on deployment of the large-scale space film frameless construction, shaped by centrifugal forces. Space vehicle control is realized by the gyroscopic installation.