Power supply problems of the ISS Russian segment and their solutions

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The study tested current energy supply problems of the Service module of the International Space Station (ISS) Russian segment, revealed after 15 years of its operation. We examine such issues as the inefficient use of the solar batteries of the Russian segment, restrictions in power supply, received from the American segment, and the batteries overheating due to the excessive load on them. In this research we propose possible ways of solving these problems. Particular attention is paid to the changes made in the ISS structure to improve the battery air blow-off.

Keywords: *energy supply, ISS, problems, load, air blow-off, solution.*

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