

METHOD OF FLIGHT OPERATION OF SOFTWARE AND HARDWARE FOR CONTROLLING PARAMETERS OF THE ROTATIONAL MOTION OF SMALL SPACECRAFT OF THE AIST SERIES

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The paper presents a methodology for flight operation of firmware intended for monitoring the parameters of the rotational motion of a small spacecraft. The developed technique is aimed at improving the quality of the primary information on the state of the parameters of the rotational motion of the small spacecraft and the quality of the implemented algorithms for controlling the electromagnets. This facilitates both the creation of favorable conditions for the implementation of technological processes on board of the small spacecraft, and a significant improvement in the quality of telemetric information transmitted from the small spacecraft to Earth. The technique can be applied to the operation of small spacecraft of other series that do not contain large elastic elements of the structure.

Keywords: small spacecraft, software and hardware, operating procedure, continuous control procedure, magnetic actuators, rotational motion parameters.

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