An approach to improving the reliability of performing dynamic operations on the example of cargo vehicle TCV "Progress"

© A.V. Donskov[1], N.V. Mishurova[1,2]

[1]S.P. Korolev Rocket and Space Public Corporation Energia, Korolev town, Moscow region, 141070, Russia
[2]Bauman Moscow State Technical University, Moscow, 105005, Russia

The article considers the problem of increasing the reliability of performing dynamic spacecraft operations at the all stages of flight. The necessity of improving the control and analysis methods of the current spacecraft status is revealed and justified. The new approach to using methodological tools for monitoring the current spacecraft status (forecasting and counteracting) in case of an emergency during time bounded flight with the lack of information is proposed on the example of TCV "Progress" rendezvous diagram and docking schedule.

Keywords: flight control, spacecraft, TCV "Progress", fuzzy sets, linguistic variables, operational control.

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Donskov A.V. (b. 1986) graduated from Bauman Moscow State Technical University in 2009. Engineer, S.P. Korolev Rocket and Space Public Corporation Energia.
e-mail: aleksej_ne@mail.ru

Mishurova N.V. (b.1986) graduated from Bauman Moscow State Technical University in 2009. Engineer, S.P. Korolev Rocket and Space Public Corporation Energia.
e-mail: trigonella@mail.ru