

SPACE EXPLORATION SYMPOSIUM (A3)
Space Based Astronomy (4)

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ON-ORBIT SERVICED ASTROPHYSICAL SPACECRAFT WITH A LARGE-SIZED SPACE RADIO
TELESCOPE: DEVELOPMENT CONCEPT.

Abstract

The concept of creation and operation of a perspective scientific spacecraft for deep space objects research with a help of large-sized space radio telescope is considered in the article. Feature of the concept is multi-used specialized space vehicle of reserve systems. Design analysis of this servicing space vehicle and estimations of technical performances its systems are presented. It is shown, that realization of the proposed concept allows to increase terms of a scientific spacecraft life-time in 2-3 times.