

15, . . . , 49005, ; e-mail: ericksaavedralim@gmail.com

1. Curzi G., Modenini D., Tortora P. Large Constellations of Small Satellites: A Survey of Near Future Challenges and Missions. *Aerospace* 2020, Vol. 7, No. 133. <https://doi.org/10.3390/aerospace7090133>
2. IADC Statement on Large Constellations of Satellites in Low Earth Orbit. Issued by IADC Steering Group and Working Group 4. IADC-15-03 July 2021. URL: [https://www.iadc-home.org/documents\\_public/view/id/174#u](https://www.iadc-home.org/documents_public/view/id/174#u) ( 14.10.2021).
3. 117381, B 64 G 1/62, B 64 G 1/10.
4. The Echo-I inflation system. Langley research center ; chief D. L. Clemmons Jr. Hampton, Virginia, 1964. 56 p. TN D-2194. URL: <https://babel.hathitrust.org/cgi/pt?id=uiug.30112106866681&view=1up&seq=3> ( 14.10.2021).
5. Misty: . 2004. . 14, 6. . 50–53.
6. 5345238, H 1 Q 15/16. Satellite signature suppression shield. M. T. Eldridge, K. H. VcKechnie, R. M. Helfey. 494278; . 14.03.90; . 06.09.94.
7. Babuscia A., Knapp M., Hicks F. M. and other. InCUBEation : A series of mission for interplanetary exploration using small satellite platforms. Presentation A.1.3 on Interplanetary small satellite conference, 20-21 June 2013 California Institute of Technology, Pasadena, California. URL: <http://www.intersmallsatconference.org> ( 14.10.2021).
8. Lichodziejewski D., Veal G., Helms R., Freeland R., Kruer M. Inflatable Rigidizable Solar Array for Small Satellites. In Proceedings of 44th AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics, and Materials Conference. AIAA-2003.98. URL: <https://doi.org/10.2514/6.2003-1898>
9. Inflatable antenna technology with preliminary shuttle experiment results and potential applications. R. E. Freeland, S. Bard, G. R. Veal G. D. Bilyeu and other. URL: <https://trs.jpl.nasa.gov/bitstream/handle/2014/26491/96-1367.pdf?sequence=1> ( 14.10.2021).
10. Graybeal N. W., Craig J. I., Whorton M. S. Deployment Modeling of an Inflatable Solar Sail Spacecraft. Presented at the AMA Guidance, Navigation and Controls Conference, Keystone Colorado, August 21-24, 2006. Paper AIAA 2006-6336. URL: [https://smartech.gatech.edu/bitstream/handle/1853/34446/e-16-y34\\_10127.pdf](https://smartech.gatech.edu/bitstream/handle/1853/34446/e-16-y34_10127.pdf) ( 14.10.2021).

11. Schenk M., Viquerat A. D., Seffen K. A., Guest S. D. Review of Inflatable Booms for Deployable Space Structures: Packing and Rigidization. *Journal of Spacecraft and Rockets*. Vol. 51, No. 3. URL: <https://arc.aiaa.org/doi/10.2514/1.A32598> (14.10.2021).
12. Curtis H. *Orbital Mechanics for Engineering Students* (4th Edition). Butterworth-Heinemann, 2019. 692 p. ISBN 978-0-08-102133-0.
13. Fortescue P., Stark J., Swinerd G. *Spacecraft systems engineering*. John Wiley & Sons Ltd. Chichester, 2011. 724 p. <https://doi.org/10.1002/9781119971009>
14. Alpatov A., Kravets Vic., Kravets Vol., Lapkhanov E. Representation of the kinematics of the natural trihedral of a spiral-helix trajectory by quaternion matrices. *Transactions on Machine Learning and Artificial Intelligence*. 2021. Vol. 9, No. 4. P. 18–29. <https://doi.org/10.14738/tmlai.94.10523>
15. . . . ., 2006. 512 . ISBN 5-9221-0680-5.
16. . . . ., 1968. 800 .
17. . . . ., 2016. . 22, 6. . 20–24. <https://doi.org/10.15407/knit2016.06.020>
18. . . . ., 2019. . 25, 2. . 3–11. <https://doi.org/10.15407/knit2019.02.003>
19. . . . ., 2007. 270 .
20. Golubek A., Dron' M., Dubovik L., Dreus A., Kulyk O., Khorolskiy P. Development of the combined method to de-orbit space objects using an electric rocket propulsion system. *Eastern-European Journal of Enterprise Technologies*. 2020. Vol 4, No 5(106). . 78–87. <https://doi.org/10.15587/1729-4061.2020.210378>
21. Lapkhanov E., Khoroshylov S. Development of the aeromagnetic space debris deorbiting system. *Eastern-European Journal of Enterprise Technologies*. 2019. Vol. 5, No. 5(101). P. 30–37. <https://doi.org/10.15587/1729-4061.2019.179382>
22. . . . ., 2015. 2. . 49–58.
23. Martinez I. *Spacecraft thermal modelling and testing*. 43 p. URL: <http://webserver.dmt.upm.es/~isidoro/tc3/Spacecraft%20Thermal%20Modelling%20and%20Testing.pdf> (14.10.2021).
24. Horn A. C. A Low Cost Inflatable CubeSat Drag Brake Utilizing Sublimation. 2017. <https://doi.org/10.25777/1xaw-be17>

15.11.2021,  
01.12.2021