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Author: Dr. Enyu Gao China Academy of Space Technology (CAST), China, enyugao@gmail.com

APPLICATION AND PROSPECT OF ON-ORBIT SERVICE FOR GEO SATELLITES

Abstract

Most GEO satellites are highly valuable and long term manufactured spacecraft which are very important to both civil and military users. According to statistic data, GEO satellite operation companies are able to increase 100 million U.S. dollars on average if the GEO satellite life extents a year. As the fact above, on-orbit services such as propellant refilling, satellites repairing or even satellites recombining are strongly required and has a extremely bright future. On-orbit service will become a brand new application of GEO satellites and will create huge financial benefits. This paper mainly focuses on the application and prospect of on-orbit service for GEO satellites and introduces each direction of on-orbit service and its feasibility and prospect in future GEO satellite markets.