

Space Debris

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Over the last year, China carried out deorbit measures respectively on several end-of-lifespan geo-synchronous orbit satellites.

In 2011, China, in some successfully launched certain spacecrafts, adopted the space debris protection measures and optimized the design, as an effort to improve its survivability in orbit. As for the future construction of spacecrafts in different orbits, China has made progresses in its research on the space debris impact risk assessment and protection design. Furthermore, China has succeeded in the cross calibration of hypervelocity impact tests.

From September 2011 to January 2012, China participated in the following three tests on risk-object re-entry observation and prediction. These are: the US Upper Atmosphere Research Satellite (UARS) in September 2011, the German ROSAT Satellite in October 2011, and the Russia's Phobos-Grunt Mars orbiter and her

companion, China's Yinghuo-1 satellite in January 2012.

In the meantime, China National Space Administration has laid out many research projects in the areas of space debris covering measurements, environment and database, protection and mitigation, such as the technical research on the catalogue search for space debris in HEO and MEO; the research on the mitigation design and evaluation system of space debris; and the research and development on the deorbit of post-mission upper-stage rockets.

In the future, China will step up its efforts to improve its space debris measurement, mitigation and the spacecraft protection; enhance its experimental facilities and research capability; lay out more research projects in this regard; and ensure strong support to and active participation in the international space debris research activities and to make unremitting efforts to ensure the sustainable development of human activities in space.

