

Debris created by India's Anti-Satellite test still in space: NASA

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By Amitabh Sinha

Pune: A majority of the debris created by India's anti-satellite test of March 27 seem to have disintegrated, though more than 40 pieces are still moving around in space, according to the latest assessment of space debris by NASA.

A report in the Orbital Debris Quarterly News, published by NASA's Orbital Debris Program Office, states that of the 101 pieces of debris that were big enough to be tracked, 49 continued to remain in orbit as on July 15. It was possible that more pieces, smaller ones, created from that test are floating around but these were not being tracked, it stated.

India had shot down its 740-kg Microsat-R satellite on March 27 this year in a demonstration of its capability to destroy the space-based infrastructure of an enemy country.

That anti-satellite test made India only the fourth country in the world to have demonstrated this capability. The Microsat-R satellite was launched on January 24 this year by the Defence Research and Development Organisation, the same agency that carried out the test.

The destroyed satellite had disintegrated into several small and big pieces, and added to a large amount of debris in space, which is considered a threat to functional satellites and other space assets. At that time, India had said that since the test was carried out in the lower atmosphere, it did not expect to add any significant amount of space debris. "Whatever debris is generated will decay and fall back on to the earth within weeks," a statement by Ministry of External Affairs had said.

A few days later, an official DRDO source had told The Indian Express that the expectation was that all the pieces created by the test would re-enter the Earth's atmosphere and burn up within a maximum of 45 days. The bigger pieces were expected to start decaying earlier.

However, NASA administrator Jim Bridenstine had claimed that some of the pieces created by India's test actually posed a risk to the International Space Station — the world's only permanent facility in space.

Explained

India's claims not entirely off the mark

This is the first credible estimation in public domain of the amount of debris created by India's anti-satellite test and what remains of it four months down the line. Indian agencies do not have any independent method to track debris. But the numbers now show that India's claim about the debris falling off quickly and disintegrating was not entirely off the mark. Large number of fragments created by a similar test by China in 2007 are still floating in space.

He had said that nearly 400 pieces of debris from that test had been identified, out of which 60 were being tracked. He had said 24 of them had ventured near the International Space Station.

The latest assessment also states that nearly 400 pieces were created from India's test.

"A total of 101 debris have entered the public satellite catalogue, of which 49 fragments remain on-orbit as of July 15, 2019. However, over 400 fragments were initially tracked and cataloging is complicated by the low altitude of the event and the concomitant rapid orbital decay," the report in the publication states.

The publication stated that India had 97 functional, and non-functional but intact satellites in space as on June 30, and 157 pieces of trackable space debris, including fragments of rockets that become junk after delivering their payloads in their specified orbits. This was a very small proportion of the total of 19,404 large objects in space sent by all countries, of which 14,432 were debris and junk parts of used rockets.

<https://indianexpress.com/article/technology/science/nasa-report-debris-created-by-indias-anti-satellite-test-still-in-space-5925275/>



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Rajnath Singh to perform ground-breaking ceremony of missile test range centre in AP

Machilipatnam: Union Defence Minister Rajnath Singh will perform the ground-breaking ceremony for the Missile Test Range Centre on August 26 at Gullamoda village in Andhra Pradesh's Krishna district, an official said on Monday.

Chief Minister Y S Jagan Mohan Reddy and several other state ministers will be present at the event, Krishna district Collector A. Md. Intiaz said.

The Defence Research and Development Organisation (DRDO) had proposed setting up of the Missile Test Range Centre. The project requires an investment of Rs 1,000 crore. The facility is projected to be a full-fledged testing range to support both short-range and long-range missile missions.

Earlier in the day, the district collector had conducted a review meeting with DRDO Officials. PTI <https://www.indiapost.com/rajnath-singh-to-perform-ground-breaking-ceremony-of-missile-test-range-centre-in-ap/>