

What is Mission Shakti? 10 Important points you need to know about Anti-Satellite (ASAT) and Low Earth Orbit (LEO)

letsstudytogether.co/mission-shakti-10-important-points-need-know-anti-satellite-asat-low-earth-orbit-leo

March 28, 2019



Mission Shakti | Anti-Satellite (ASAT) | Low Earth Orbit (LEO)

#MissionShakti. Mission Shakti PDF. 10 Important points about Anti-Satellite (ASAT) and Low Earth Orbit (LEO). As we all know that yesterday India has become the 4th country in the world after United States (US), China and Russia to demonstrate anti-satellite missile capability by shooting down a live satellite. Yesterday In a special address to the nation, PM Narendra Modi described it as a rare achievement that puts the country in an exclusive club of space super powers..

In his (PM Modi) speech PM also lauded the Indian Space Research Organisation (ISRO) for developing various space-related technologies that benefit society. He added that given India had already established itself as a space power, a demonstration of its military prowess in space was necessary for regional peace.

What is Mission Shakti — ASAT?

Mission Shakti

WHAT

Obsolete satellite destroyed by DRDO-developed ballistic missile interceptor missile



Satellite was at height of 300 km, was tracked with sensors that confirmed the kill

Demonstrates India's ability to detect, target and destroy space objects

DRDO had capability to develop system in 2012; made presentations, but was not given go-ahead

WHERE

Ground-based interceptor missile units based in Balasore testing range

WHEN

Preparations started in 2016, tests carried out in 2017 and in February this year



Mission Shakti | Anti-Satellite (ASAT) | Low Earth Orbit (LEO)

India anti-satellite weapon: Mission Shakti has ensured India a unique spot among countries with anti-satellite missiles. Anti-satellite weapons (ASATs) are created to destroy or incapacitate satellites. There are many countries which have this capability, but only four countries — including India — have demonstrated their ASAT capabilities. The US first tested ASAT technology in 1958, the USSR followed in 1964 and China in 2007. In 2015, Russia tested its PL-19 Nudol missile and followed it up with other tests.

India conducted Mission Shakti, an anti-satellite missile test, from the Dr. A P J Abdul Kalam Island launch complex. This was a technological mission carried out by DRDO. The satellite used in the mission was one of India's existing satellites operating in lower orbit. The test was fully successful and achieved all parameters and it required an extremely high degree of precision and technical capability. The significance of the test is that India has tested and successfully demonstrated its capability to interdict and intercept a satellite in outer space based on complete indigenous technology. With this test, the country joins an exclusive group of space faring nations consisting of USA, Russia, and China.

You may also like : [Filmfare Award 2019 Winners – List of Filmfare Award Winners PDF](#)

Anti-Satellite (ASAT)

Anti-satellite weapons (ASAT) are space weapons designed to incapacitate or destroy satellites for strategic military purposes. Several nations possess operational ASAT systems. Although no ASAT system has yet been utilised in warfare, a few nations have shot down their own (defunct) satellites to demonstrate their ASAT capabilities in a show of force.

India's ASAT programme, publicly acknowledged in 2012 when an Agni V missile's parabolic trajectory took it up to 600 km in space, is subsumed under its Ballistic Missile Defence (BMD) programme, responsible for intercepting and destroying ballistic objects before they threaten Indian territories or assets. The BMD has two broadly defined target tiers, called endo-atmospheric and exo-atmospheric. Mission Shakti falls in the exo-atmospheric category. While more details are awaited from the DRDO, it is possible that the organisation used a modified version of the Agni V missile for the task. In 2012, shortly after testing the Agni V, DRDO's then chief V.K. Saraswat had said that the missile could be modified for use as an ASAT weapon.

10 Important points you need to know about Mission Shakti ,Anti-Satellite (ASAT) and Low Earth Orbit (LEO)



- India has successfully tested its Anti-Satellite (ASAT) Missile by destroying an LEO satellite under a highly complex anti satellite missile test titled Mission Shakti. With this, our country has become the 4th nation in the world to demonstrate anti-satellite missile capability by shooting down a satellite. Other 3 super powers are United States, China and Russia.
- The test was safely conducted in Earth's lower atmosphere so that no space debris is created.
- The anti-satellite (ASAT) missile which was made by the Defence Research & Development Organisation (DRDO) destroyed the LEO satellite in a span of three minutes.
- Note : Anti Satellite weapons also called the ASAT are developed to destroy satellites.
- Mission Shakti will make the country stand strong and secure.It will further protect the nation from disharmony and bring peace.

- The team Mission Shakti completed this feat in just three minutes, making India's way in the space power league.
- In a special address to the nation, Prime Minister Narendra Modi described it as a rare achievement that puts the country in an exclusive club of space super powers.
- Let's see some important details about Mission Shakti.
- Mission Shakti was a "highly complex" anti-satellite missile test conducted today (27th March 2019), at a high speed by India's scientists.
- Under the mission, India successfully launched a missile at a satellite in low-earth orbit.
- Mission Shakti is not directed against any country, the government has said. The capability achieved through the test provides credible deterrence against threats to India's growing space-based assets from long range missiles, the government added. It further clarified that the test did not violate any international law.

Source : The ET, News 18, NDTV and other Media Sources

You may also like : [40+ Important Static GK PDF for SSC, Railway & Banking Exams 2019 - Download Free](#)

RRB NTPC General Knowledge (GK-GS) Question E-Book in Hindi language - Get Now



A Complete Book on Data Interpretation and Analysis For LIC AAO & SBI PO 2019 | Download PDF



