

In unprecedented support, US defends India's space weapons test saying it understands New Delhi's concerns

American leaderships says it understands India's concerns about space threats

By Chidanand Rajghatta

Washington: Some two decades after Washington came down like a ton of bricks on India for its Shakti nuclear tests, the United States on Thursday expressed unprecedented understanding and support for New Delhi's security concern while defending its recent space weapons test.

A hearing of the powerful US Senate Armed Services Committee on the proposal to establish a United States Space Force was the forum for lawmakers and defence officials to voice understanding of India's compulsions in going in for an anti-satellite test while seeking to establish global space norms and protocol that would include New Delhi.

"What should the rules environment be, and what should we be doing to try to promote rules? India is an ally. We're not talking about an adversary doing something. We're talking about them testing some capacity, but then that creates challenges for all kinds of uses of space. How should we be solving problems like that?" Virginia Senator Tim Kaine asked at the hearing, opening the floor for the Pentagon to express its support for New Delhi.

"The first lesson from the Indian ASAT is just the simple question of why did they do that. And the answer should be, I think to all the committee looking at it, is that they did that because they are concerned about threats to their nation from space, "

Responded US Strategic Command Commander General John E Hyten adding, "And therefore, they feel they have to have a capability to defend themselves in space. " It was an unprecedented moment in US-India relations, where despite close ties, administrations spanning both Democrats and Republicans have been leery of any significant advance by New Delhi in the military technology realm. In the immediate aftermath of the 1998 nuclear tests, the US secretary of state Madeleine Albright had castigated India saying it had "dug a hole" for itself by going overtly nuclear, leading her Indian counterpart Jaswant Singh to retort that "Culturally, Indians do not dig holes to bury themselves. "

That snarky exchange was a distant memory at Thursday's amicable Senate discussion as American policymakers sought to understand New Delhi's compulsions. Gen Hyten, in fact, echoed some of the arguments from New Delhi that India went into for a space weapons test because, as it happened with the nuclear non-proliferation regime, it did not want to be left out of any future global protocol or architecture on the subject.

Senator Kaine also drew a distinction between a similar Chinese test in 2007 which generated 100,000 pieces of debris, compared to the 400 from India's test. NASA had initially termed India's test and the debris it created as a "terrible, terrible thing" before it was told by the White House to reel back criticism and continue cooperation with India.

<https://timesofindia.indiatimes.com/india/in-unprecedented-support-us-defends-indias-space-weapons-test-saying-it-understands-new-delhis-concerns/articleshow/68852883.cms>

Pentagon defends India's A-Sat test, says country is concerned over 'threats' in space

Washington: India is concerned about the "threats" it faces in space, the Pentagon has said, defending the country for acquiring anti-satellite (A-Sat) missile test capabilities.

On March 27, India achieved a historic feat by shooting down its own loworbit satellite with a ground-to-space missile, making the country a space power.

The test made India the fourth country in the world after the US, Russia and China to have the A-Sat capabilities.

"The first lesson from the Indian A-Sat is just the simple question of why did they do that. And the answer should be, I think to all the committee looking at it, is that they did that because they are concerned about threats to their nation from space, " US strategic command commander General John E Hyten told members of the powerful Senate Armed Services Committee on Thursday.

"And therefore, they feel they have to have a capability to defend themselves in space, " Hyten told Senate Armed Services Committee while responding to a question from Senators on the need for India to do anti-satellite missile test, and the debris it generated in the space.

After India's test, NASA termed as a "terrible thing" the country's shooting down of one of its satellites, saying it created about 400 pieces of orbital debris, endangering the the International Space Station (ISS).

NASA administrator Jim Bridenstine had said about 60 pieces were tracked and out of which 24 are going above the apogee of the ISS.

Hyten advocated for the development of some kind of international norms of behaviour in space.

"And where those norms of behaviour should begin, from my opinion, is with debris, because as the combatant commander responsible for space today, I don't want more debris, " said the top Pentagon commander.

Raising the issue, Senator Tim Kaine said India announced last month that it had successfully conducted a test of an antisatellite weapon.

"So, they had something in low earth orbit. They used an anti-satellite weapon to down, and it resulted in - the estimate's right now 400 pieces of debris, 24 which are large enough to potentially pose a threat to the International Space Station, " he said.

"There have been other instances like this. There was a Chinese - a similar effort in 2007 that led to the catalogued 100,000 pieces of debris, many of which are still observing in debris fields that pose danger to other assets in space, " he said.

There was a collision in '09 between a working US satellite and a sort of defunct Soviet era satellite that -kind of a fender bender that produced debris. Then this debris causes challenges, he added.

"If we think that space is going to be more of a traffic jam, more satellites for all kinds of purposes up there, what should we be thinking about as a Senate in this committee or in Foreign Relations about sort of the rules?" he asked.

"What should the rules environment be, and what should we be doing to try to promote rules? India is an ally. We're not talking about an adversary doing something. We're talking about them testing some capacity, but then that creates challenges for all kinds of uses of space. How should we be solving problems like that?" Kaine asked.

<https://timesofindia.indiatimes.com/india/pentagon-defends-indias-a-sat-test-says-country-is-concerned-over-threats-in-space/articleshow/68842379.cms>

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India's A-SAT mission planned in a way that debris will decay soon: DRDO Chief

Speaking at the Vivekananda International Foundation, a think-tank, Reddy said the location for the test was "well away" from the International Space Station (ISS)

Seeking to assuage concerns over the orbital debris created by India's A-SAT test, DRDO Chairman G Satheesh Reddy again assured that the mission was planned in a way that the resulting fragments will decay in a few weeks and there was no threat to the ISS.

Speaking at the Vivekananda International Foundation, a think-tank, Reddy said the location for the test was "well away" from the International Space Station (ISS).

"The debris will decay in a few weeks. That's how the whole mission was planned," he said.

Noting that the A-SAT test was an exemplary effort reflecting India's indigenous defence technology, the Defence and Research Development Organisation chief said more than 50 industries participated in the mission contributing 200 components to make the mission a success.

India shot down one of its satellites in space on March 27 with a ground-launched anti-satellite (A-SAT) missile to demonstrate this complex capability, joining the elite club of countries — the US, Russia and China — which have such capabilities.

The A-SAT test was successfully conducted with a new interceptor missile against a live orbiting satellite in the Low Earth Orbit (LEO) in a hit-to-kill mode.

This had raised concerns about the threat the debris will pose to global space assets, including the ISS.

During his address on Thursday, Reddy emphasised that India has to become self-sufficient in areas like making bulletproof jackets to manufacturing composite materials.

He said the DRDO is also focussing on small arms like carbines.

"Not much has happened in the area of small arms. We have taken this up very seriously. Based on the RFP (Request for Proposal) floated by the armed forces, we have started developing some of them. Some have gone through trials," Reddy said.

Elaborating on the Pinaka multi-barrel rocket launcher, he said it has been converted into a 'guided Pinaka' with an extended range. It is, he said, in the process of induction into the Army.

<https://www.moneycontrol.com/news/india/indias-a-sat-mission-planned-in-a-way-that-debris-will-decay-soon-drdo-chief-3812971.html>

Scientist Dr A K Singh conferred with Lifetime Achievement Award

The conclave was organised by the university to mark World Creativity and Innovation Day

By Dar Ovais

Chandigarh: Dr A K Singh was conferred with Lifetime Achievement Award during 4th APJ Abdul Kalam Innovation Conclave at Chandigarh University, Mohali Thursday.

Dr A K Singh, director at Life Sciences, DRDO, was honoured with Lifetime Achievement Award for his rich contribution in the field of life sciences, aerospace and aeronautics. The DST scientist has more than 18 patents and has contributed in more than 57 research publications at an international and national level.

The conclave was organised by the university to mark World Creativity and Innovation Day.

Dr Singh joined DRDO in 1988 and worked on various R&D projects. he has made significant contributions in Infection Imaging and Internal Decorporation of Fission Produced Radionuclides. He has developed a “Diagnobact” kit, for detection of infectious lesion. He has also introduced and nurtured pharmacosyntigraphy, i.e. application of nuclear medicine imaging in drug research.

“Innovation begins with an idea, which should be further encouraged to take shape of a futuristic technology to become beneficial for society” said Dr A K Singh, while addressing the students.

For innovating ‘Smart Trolley Bag’ that interacts with the traveler through voice and face, Pankaj Sharma, a third-year Electronics and Communication Engineering student, bagged first position and Best Innovation of the Year Award 2019.

<https://indianexpress.com/article/cities/chandigarh/scientist-dr-a-k-singh-conferred-with-lifetime-achievement-award-5671733/>