

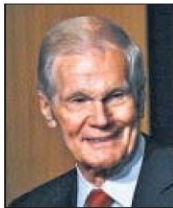


Hindustan Times

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{ SCIENTIFIC TIES } NEW COLLABORATION

Nasa chief discusses role of Indian astronaut at space station, calls country 'great future partner'



Nasa administrator Bill Nelson

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NEW DELHI: India and the US held talks on deepening space collaboration with a focus on the proposed role of an Indian astronaut who will be trained by National Aeronautics and Space Administration (Nasa) and will fly to the International Space Station (ISS) next year, Nasa administrator Bill Nelson said on Tuesday.

The Nasa chief also hailed India as a "great future partner

for astronauts in space", and said that the two countries will launch a low earth orbit observatory from India in early 2024.

A Nasa delegation led by Nelson held a meeting with minister of state for science & technology Jitendra Singh on Tuesday.

"I had a discussion with the minister on what the Indian astronaut would do on the space station. And the two of us talked about the fact that things that are important to India in scientific research, the Indian

astronaut ought to have that as a choice to do. If there is a particular part of research that he or she would be interested in, then I want to encourage that," Nelson later said at a media interaction.

"Nasa will help train the Indian astronaut to fly to ISS by end of 2024. Those details are being worked out, Indian Space Research Organisation (Isro) will announce that," Nelson said.

The Nasa chief asked Singh to [continued on → 11](#)

precisely determine what is happening to the Earth and its climate," Nelson said.

The spacecraft is worth \$1 billion.

NISAR is going to look at the Earth's surface using a technology that will measure any change on the surface, he added.

NISAR is a low earth orbit observatory being jointly developed by NASA and ISRO to map the entire globe in 12 days and provide data for understanding changes in Earth's ecosystems, ice mass, vegetation biomass, sea level rise, ground water and natural hazards including earthquakes, tsunamis, volcanoes and landslides.

It carries L and S dual band synthetic aperture radar (SAR) that will observe large swathes with high resolution data. The SAR payloads mounted on integrated radar instrument structure and the spacecraft bus are together called an observatory.

NISAR is targeted for launch onboard India's geosynchronous satellite launch vehicle, the statement by department of space said.

"Data from NISAR will be highly suitable for studying the land ecosystems, deformation of solid earth, mountain and polar cryosphere, sea ice and coastal oceans in regional to global scale," it added.

During the meeting, Nelson congratulated Singh for the historic Chandrayaan-3 landing on the moon's south pole.

During the visit of Prime Minister Narendra Modi to the US earlier this year, the two sides agreed to launch a two-week joint India-US spacecraft next year.

"ISRO and NASA have formed a Joint Working Group (JWG) on human spaceflight cooperation and are exploring cooperation in radiation impact studies, micro meteorite and orbital debris shield studies; space health and medicine aspects," the statement said, adding that 8th meeting of working group on civilian space cooperation was held in Washington in January 2023.

Nelson earlier called India "a leader in space".

"Touchdown in India! Ready to embark on a week of engaging meetings and events to grow @NASA's partnership with @isro. India is a leader in space and we're looking forward to a productive visit," he wrote on X after his arrival.

NASA CHIEF

expedites the programme related to sending India's first astronaut aboard a Nasa rocket to ISS, the Indian department of space said in a statement.

India's first crewed spaceflight, Gaganyaan, is also expected to take place next year, kicking off a new era of space exploration.

Isro's Gaganyaan project envisages demonstration of human spaceflight capability by launching a crew of three astronauts to an orbit of 400 km for a three-day mission and bringing them back safely to earth, by landing in seas close to India.

The astronauts are hand-picked fighter pilots from the Indian Air Force who have undergone training in Russia.

Nelson also said the Nasairo Synthetic Aperture Radar (NISAR) observatory would be launched in the first quarter of 2024. NISAR completed a key trial at Isro's compact antenna test facility in mid-November.

"In the first quarter of 2024, in a joint venture, India will launch a very expensive spacecraft, NISAR, and it is part of what we call our great observatories. And the combination of these four or five observatories that will be put up, and all our 25 spacecraft looking at the Earth...the combination of all that information...is helping us