



ISpA

INDIAN SPACE ASSOCIATION

Bhumandal Se Brahmaand Tak

WISHES YOU AND
YOUR FAMILY A

Happy New Year

ISpA BULLETIN DECEMBER 2022 EDITION

ISpA Bulletin catalogues all endeavours undertaken by ISpA in the direction of propelling India's Space Sector forward.

**BEST WISHES FROM
Team ISpA** 



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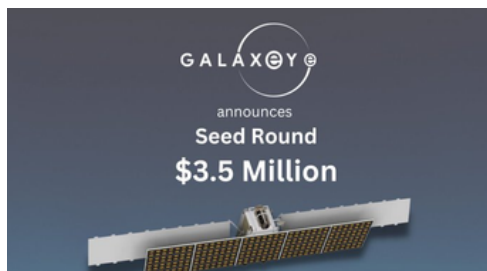
ispa.india



ISpA- Indian Space Association



Startup Champions 2.0 exhibits all about the Agnikul Cosmos and India Space Association (ISpA)



GalaxyEye Space secured a Seed Round of \$3.5 Million, led by Speciale Invest.



Bellatrix Aerospace plans multiple launches in 2023 to test satellite engines



SpaceX deploys 40 OneWeb satellites in orbit



A TATA Enterprise

Tata's Nelco seeks to offer satellite broadband services



OneWeb acquires 10,000 Hughes LEO Terminals



The Swadeshi Rocketeers sums up Vikram-S launch & buoyant emotions of success and impact. This piece by space editor Pallava Bagla and News9Plus portrays evolution of space sector through pioneering efforts of our inspiring space scientists.



Pixxel Space, Skyroot Aerospace, Agnikul Cosmos, and Dhruva Space felicitated at India SatCom 2022.

ISpA Space Startups Outreach - Bangalore Edition

ISpA organized a Space Startups Outreach program in Bangalore to understand the vision, potential, business needs and challenges, and how ISpA can help mitigate the issues faced by startups

The meeting involved representatives from Astrogate Labs, Vellon Space, Aniara Communications and Genex Space.



ISRO Space Technology Workshop

ISRO organized a closed-door interactive format workshop for early-stage space startups and aspiring space entrepreneurs. Scientists of ISRO gave a brief on various topics like Navigation & Communication, Geospatial Technologies, Aerospace Materials, Avionics/ Electronics, etc, and provided ideas for the development of new products and services in these fields. ISRO and Social Alpha signed an MoU to launch the Spacotech Innovation Network (SPIN), a platform for innovation, curation, and venture development of space startups. Director of ISpA Wg Cdr Satyam Kushwaha (Retd) participated as a guest speaker and gave a brief on the role of ISpA and how it will be helping new space startups.

2nd India Spectrum Management Conference

The 2nd India Spectrum Management Conference (ISMC-22) was held in the Capital, December 6-7, 2022. Chief Guest Shri. Devusinh Chauhan, Hon'ble Minister of State for Communications, gracing ISMC-22 and presented his views on India's Key spectrum challenges, opportunities, and targets for India along with a Spectrum Strategy to support 5G rollout. The conference held talks on the socio-economic benefits of the 6 GHz band and the way forward and view on the Role of Indian startups in 5G and beyond along with Key spectrum challenges, opportunities, and targets.





ISpA Members Meet

The Indian Space Association held a virtual Member Meet on Friday, 9th December 2022. The meeting started with the opening remarks by ISpA Chairman- Shri Jayant Patil. Following that DG- Lt Gen AK Bhatt of ISpA led a presentation to update the members on the activities taken by ISpA during the last six months. The members were also briefed on the formation of the National Advisory Council (NAC) and Mission DefSpace wherein Director ISpA is part of the MoD Advisory Committee. The presentation also highlighted the recent achievements & notable contributions of our members spanning various space verticals.



Indo-US PSA to GOI Pre-meeting Discussion

A pre-meeting was organized under the guidance of ISRO & the Principal Scientific Advisor to the Government of India on December 28th, 2022 to promote and cater the issues of the Indian Space Industry aimed at strengthening Indo-US Bilateral Space Collaboration. Various academic institutions, startups, MSMEs & industry giants contributed on issues like ITAR, SCOMET, Visa regulations & data usage.

BIF India SatCom 2022

India SatCom 2022, the 8th edition of Broadband India Forum's (BIF) annual flagship event was held in New Delhi on December 14-15, 2022. The event saw participation from other industry stalwarts, along with senior government dignitaries from ISRO, DoS, DoT, TRAI, NSIL as well as other leading government stakeholders. A BIF White Paper on 'Emerging trends in Satcom & Broadcasting' was released by the honourable dignitaries. This White Paper examines the emerging and new trends in the satellite technologies in the future and the important applications & use cases which will make it enter the mainstream and core of 5G and the 6G networks in delivering high-speed broadband and converged access (broadband & broadcasting) to users



ITU-APT: Telecom Stories

[Read complete excerpt at itu-apt.org](http://itu-apt.org)

Incumbent Telecom Carriers asked the government to identify and release a 6 GHz spectrum band for fifth-generation or 5G Services expansion. In a letter to the telecom secretary stating that the 6 GHz band will be the only key mid-band spectrum for 5G expansion to cater to the increasing demand from consumers and enterprises. In India, 6 GHz is partly used for satellite operations by the Indian Space Research Organisation (ISRO) that a co-existence between 5G and other use cases is possible in the band basis of multiple studies, and added that the FS links which are limited to lower 6 GHz band (5925–6425 MHz) in India and deployed at known locations, national-level coordination is possible between IMT and FS.

Moon Monday #108: A lunarbound KPLO, many mission updates, future foundations, and more

[Read More at blog.jatan.space](http://blog.jatan.space)

- On December 17, the Korea Pathfinder Lunar Orbiter (KPLO) successfully entered lunar orbit, making it South Korea's first such spacecraft.
- The biological experiment onboard BioSentinel was turned on by the mission team on December 5 while the CubeSat was more than 1 million kilometers away from Earth.
- A few weeks ago, the LunaH-Map CubeSat successfully demonstrated autonomous optical navigation, an important ability for small satellites.
- Contact was lost with the CuSP CubeSat just an hour after deployment on Artemis I launch day, November 16, due to an unexplained spike in battery temperature.
- The Artemis I Orion capsule is now being returned to NASA's Kennedy Space Center to know exactly how well its heat shield worked during its fiery reentry into Earth's atmosphere.
- ispace Japan's first lunar lander, launched on December 11, successfully completed the first orbital maneuver using its propulsion system on December 15
- The launch of Russia's Luna 25 robotic Moon lander was delayed from earlier this year to 2023 because its Doppler distance and velocity sensors underperformed during testing.



Private Sector to Play a Major Role' : In-SPACE Chief on Small Satellite Launches in 2023, Space Start-Ups

5 Dec 2022
[News18](#)



Amazon Invests in Indian Space Tech Startups, Partners with ISRO

5 Dec 2022
[Analytics India Magazine](#)



Ready to take Indo-UAE space relations to new height: Union space minister Jitendra Singh at Abu Dhabi Space Debate

5 Dec 2022
[The Times of India](#)



Focus on commercial use of NavIC, ISRO's future satellites to get additional frequency

12 Dec 2022
[The Indian Express](#)



MoU signed between space and agriculture departments to develop Krishi Decision Support System

13 Dec 2022
[Mint](#)



Budget 2023: Space tech industry seeks more allocation for IN-Space, Defence Space Agency

13 Dec 2022
[Money Control](#)

Satcom, telecom industries together need to drive access to voice & data services: IN-SPACE

13 Dec 2022

[ET Satcom](#)



Isro working on feasibility studies for missions to Venus, aeronomy: Jitendra Singh

14 Dec 2022

[Mint](#)



Indian startups Skyroot, Dhruva eye space-tech's final frontier—tourism

15 Dec 2022

[Times Now](#)



Hughes eyes Rs 750-crore satcom market opportunity in India

16 Dec 2022

[The Financial Express](#)



Tamil Nadu to set up six defence, space industrial parks

17 Dec 2022

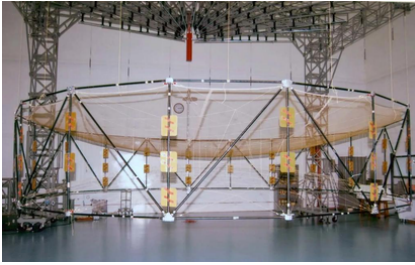
[The New Indian Express](#)



Defence, space agencies release 99% of EEZ prohibited areas for oil exploration and production

19 Dec 2022

[The Economic Times](#)



GSAT communication satellite costing Rs 508 crore unused for half its lifetime: CAG report

23 Dec 2022

[Down To Earth](#)

Kerala Space Park project to be registered as society under the name 'K-Space'

29 Dec 2022

[The Hindu](#)



Chandrayaan-3 will launch in August 2023, says ISRO chairman: Report

29 Dec 2022

[Times Now](#)

Govt introduces National Geospatial Policy to promote private startups, advanced tech

29 Dec 2022

[Tech Circle](#)

USA



SpaceX gets US approval to deploy up to 7,500 satellites

2 Dec 2022

[Money Control](#)



Elon Musk's SpaceX unveils Starlink-like satellite service for governments called 'Starshield'

7 Dec 2022

[Business Insider India](#)

MAXAR

Advent to buy satellite operator Maxar Technologies for about \$4 billion

17 Dec 2022

[ET Satcom](#)



It was a big year for the space industry. 2023 will be even bigger

22 Dec 2022

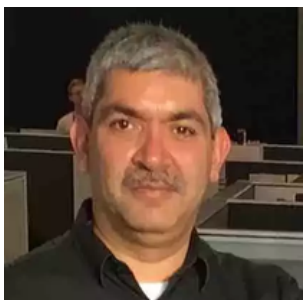
[TechCrunch](#)



Elon Musk says around 100 Starlinks now active in Iran

27 Dec 2022

[ET Satcom](#)



US Vice-President Kamala Harris names Indian-American Rajeev Badyal to National Space Council Advisory Group

30 Dec 2022

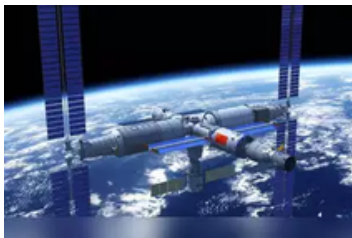
[ET Satcom](#)

CHINA



China lifts off 3 astronauts to its space station as it marks presence in space

1 Dec 2022
[The Economic Times](#)



China builds country's first space station from 2020 to 2022. Here's how

5 Dec 2022
[The Economic Times](#)



China sends another Gaofen remote sensing satellite into orbit; CAST secures victory streak in all 41 launch missions in 2022

29 Dec 2022
[Global Times](#)

RUSSIA



Russian Soyuz spacecraft leaking unknown liquid in space
15 Dec 2022

[India Today](#)



Russia may expedite launch of next space capsule after leak

20 Dec 2022
[The Indian Express](#)



Russia's space agency to issue bonds for satellite programme

21 Dec 2022
[Reuters](#)

Other Nations

South Korea Sees Space Exploration as Shaping Global Economy

6 Dec 2022
[Bloomberg](#)



Japan's ispace launches historic first commercial Moon lander

11 Dec 2022
[Al Jazeera](#)



South Korean pharma invests \$50 million in Axiom Space

22 Dec 2022
[SpaceNews](#)



Oman makes first mark in the sky: First Omani satellite, Aman, set for orbit

22 Dec 2022
[The Financial Express](#)



Italy's Vega grounded as investigators probe failed launch

22 Dec 2022
[ET Satcom](#)



France to sell 2 observation satellites to Poland -minister

28 Dec 2022
[The Print](#)

Job Openings from our Members



<https://agnikul.in/#/career>



<https://astrome.co/career/>



<https://www.dhruvaspace.com/careers>



<https://galaxeye.zohorecruit.in/careers>



<https://www.pixxel.space/careers>



<https://www.linkedin.com/company/skyserve-ai/jobs/>



<https://skyroot.in/career>



<https://tsctech.in/#/careers>

Department of Science & Technology releases National Geospatial Policy 2022

<https://www.meity.gov.in/content/digital-personal-data-protection-bill-2022>

MeitY releases Digital Personal Data Protection Bill 2022

<https://www.meity.gov.in/content/digital-personal-data-protection-bill-2022>

TRAI releases Consultation Paper on Data Communication Services Between Aircraft and Ground Stations Provided by Organizations Other Than Airports Authority of India

<https://www.trai.gov.in/consultation-paper-data-communication-services-between-aircraft-and-ground-stations-provided>

TRAI releases recommendations on Licensing Framework for Establishing and Operating Satellite Earth Station Gateway (SESG)

<https://www.trai.gov.in/notifications/press-release/trai-releases-recommendations-licensing-framework-establishing-and>

TRAI releases recommendations on "Regulatory Framework for Promoting Data Economy Through Establishment of Data Centres, Content Delivery Networks, and Interconnect Exchanges in India"

<https://www.trai.gov.in/notifications/press-release/trai-releases-recommendations-regulatory-framework-promoting-data>

Upcoming Events

11-13 January 2023

International Workshop on Space Situational Awareness & Space Traffic Management

18 January 2023

2nd ISpA-VIF Interactive Think-Tank on Space

21 January 2023

IIIT Delhi Industry Day

25 January 2023

2nd IN-SPACe Industry Meet

13-17 February 2023

Aero India 2023

10-12 October 2023

Indian Space Conclave 2023

CALL FOR NEW MEMBERSHIP

ISpA is an apex, non-profit industry body exclusively working towards the successful exploration, collaboration, and development of the private and public Space Industry in India.

[JOIN US](#)

- Participate in policy advocacy
- Networking and publicity opportunities
- Plethora of opportunities to advance your Business in Space Sector
- Multisectoral Partnerships
- Engagement with industry and defence experts via diverse platforms
- Access to industry-related information via reports and newsletters
- Be a part of ISpA Committees to bring expertise & interests and to guarantee the holistic development of the space sector.