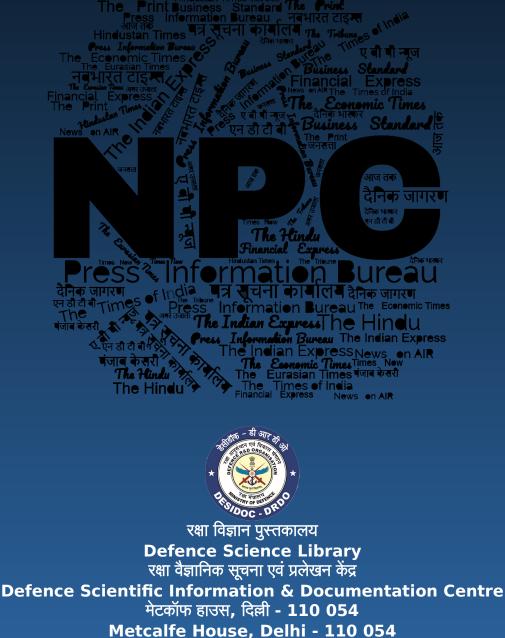
अप्रैल Apr 2024 खंड/Vol. : 49 अंक/Issue : 61 29/03/2024-01/04/2024

# समाचार पत्रों से चयित अंश Newspapers Clippings

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**DRDO** News

### DRDO Technology News



Sun, 31 Mar 2024

### कितना घातक और सटीक है आकाश मिसाइल सिस्टम? पलक झपकते ही दुश्मनों को करेगा तबाह

भारतीय सेना की पश्चिमी कमान ने रविवार को सतह से हवा में मार करने वाली आकाश मिसाइल प्रणाली का सफलतापूर्वक परीक्षण किया. भारत के रक्षा बलों की रूटीन ड्रिल के तहत नियमित अभ्यास के रूप में किया गया यह परीक्षण देश की रक्षा क्षमता के लिए एक मील का पत्थर है. आत्मनिर्भर भारत मिशन को बढ़ावा देने के लिए इस आकाश मिसाइल प्रणाली को रक्षा अनुसंधान और विकास संगठन (डीआरडीओ) द्वारा स्वदेशी रूप से डिजाइन और विकसित किया गया है. रक्षा अनुसंधान और विकास संगठन (डीआरडीओ) द्वारा निर्मित मध्यम दूरी की सतह से हवा में मार करने वाली आकाश एक मिसाइल (एसएएम) प्रणाली है. इसे इंटीग्रेटेड गाइडेड मिसाइल डेवलपमेंट प्रोग्राम (आईजीएमडीपी) के तहत विकसित किया गया है. जिसके तहत नाग, अग्नि और त्रिशूल मिसाइल और पृथ्वी बैलिस्टिक मिसाइल का विकास किया गया है.

DRDO congratulates the Air defence Warriors of Western Command the "Sky Gladiators" for exhibiting high degree of professionalism. Indigenous Akash weapon system proving the capability time and again, a boost to #AtmaNirbharBharat @DefenceMinIndia @SpokespersonMoD https://t.co/Fk1hYgYvr4 pic.twitter.com/gagwfpgEkP — DRDO (@DRDO\_India) March 31, 2024

इसके तहत भारतीय वायु सेना (आईएएफ) और भारतीय सेना (आईए) के लिए दो मिसाइल संस्करण बनाए गए हैं. भारतीय वायुसेना ने मई 2015 में आकाश मिसाइलों के पहले बैच को शामिल किया था. पहली आकाश मिसाइल मार्च 2012 में भारतीय वायुसेना को सौंपी गई थी, जबकि औपचारिक रूप से जुलाई 2015 में वायुसेना में इसे शामिल किया गया था. आकाश एसएएम प्रणाली हवा में कई लक्ष्यों को एक साथ निशाना बना सकती है.

https://hindi.news18.com/news/nation/deadly-accurate-how-indigenous-akash-weapon-systemdestroy-enemy-8198689.html

नवभारत टाइम्स

Sat, 30 Mar 2024

### भारत का आकाश, टारगेट सेट... फिर तो दुश्मन का बचना मुश्किल, खासियत जान लें

भारतीय सेना ने एक वीडियो जारी किया है। इस वीडियो को देखने के बाद हर देशवासी का सीना चौड़ा हो जाएगा। लेकिन यह वीडियो चीन और पाकिस्तान की नींद उड़ा देगा। दरअसल सेना ने आज भारत की आत्मनिर्भरता की दस्तक खुले आसमान में दी है। आज भारत की 'आकाश मिसाइल' की गर्जना से पूरा आसमान गूंजा है। सेना ने आकाश मिसाइल सिस्टम का वीडियो शेयर कर दुनिया को बता दिया है कि भारत आज रक्षा क्षेत्र में किसी भी ताकतवर देश से कम नहीं है।

वीडियो में आकाश मिसाइल की टारगेट को भेदने की कला को दिखाया गया है। वीडियो में देखा जा सकता है कि आकाश मिसाइल आसानी से हवा में उड़ रहे विमान को पलक झपकते नष्ट कर देता है। विमान के तबाह होने के बाद उसमें से धुआं निकलते भी दिखाई देता है। वीडियो साफ संदेश दे रहा है कि सेना की नजर दुश्मन की हर नापाक हरकत पर रहती है। सेना की नजरों से दुश्मन का बचना नामुमकिन है।

#### कितनी खतरनाक है आकाश मिसाइल?

आकाश एक शॉर्ट रेंज वाली सर्फेस टू एयर यानी सतह से हवा में मार करने वाली मिसाइल है। इसकी रेंज 25 किलोमीटर की है, यानी इतनी दूरी पर मौजूद किसी भी टारगेट को आसानी से तबाह किया जा सकता है। एक समय था जब विदेशों से खरीदे जाने वाले रक्षा उत्पादों में इस तरह का मिसाइल सिस्टम प्रमुख हुआ करती था। लेकिन आज भारत खुद ऐसी मिसाइल का निर्माण अपनी धरती पर कर रहा है। यह देश के लिए गौरव की बात है।

आकाश मिसाइल सिस्टम की टारगेट को खत्म करने की क्षमता 88 फीसदी है, जिसे 98.5 फीसदी तक किया जा सकता है। मिसाइल सिस्टम में लॉन्चर, मिसाइल, कंट्रोल सेंटर, एक इंटीग्रल मिशन गाइडेंस सिस्टम, एक मल्टीफंक्शनल फायर कंट्रोल रडार, एक आर्मिंग एंड एक्सप्लोजन सिस्टम और डिजिटल ऑटोपायलट जैसे उपकरण लगे हुए हैं।

आकाश-एनजी सिस्टम अत्याधुनिक मिसाइल प्रणाली है जो उच्च गति, फुर्तीले हवाई खतरों को रोकने में सक्षम है।

आकाश मिसाइल रक्षा अनुसंधान और विकास संगठन की ओर से डेवलप सिस्टम है और बीते एक दशक से अधिक समय से सर्विस में है। आकाश टीम की ओर से मिसाइल के कई एडवांस्ड वर्जन तैयार किए जा रहे हैं।

मध्य पूर्व में ऐसे कई देश हैं जिन्होंने आकाश हथियार प्रणाली की दिलचस्पी दिखाई है। उन्होंने इसकी क्षमताओं और परीक्षणों में भी रुचि ली है।

एक तरह जहां आकाश वेपन सिस्टम को DRO की ओर से स्वदेशी रूप से डिजाइन और डेवलप किया गया है, दूसरी ओर अन्य उद्योगों के साथ पब्लिक डिफेंस सेक्टर की ओर से इसे प्रोड्यूस किया गया है।

https://navbharattimes.indiatimes.com/india/all-you-need-to-know-about-akash-missile-systemindian-army/articleshow/108898820.cms

## THE TIMES OF INDIA

Thu, 28 Mar 2024

#### **Tejas MK-1A Completes Maiden Flight, First Delivery soon**

The first production series fighter of LCA Tejas Mark-1A, an advanced variant of the LCA Mk-1 that has already been inducted by the Indian Air Force (IAF), Thursday completed its maiden flight in Bengaluru. Defence PSU HAL, which is manufacturing the Tejas Mk-1A or LCA Mk1A or developed by Bengaluru-based DRDO lab Aeronautical Development Agency (ADA), had been conducting various taxi trials over the past several days.

Thursday's maiden flight lasted 18 minutes and was piloted by Group Capt (retd) KK Venugopal, HAL chief test pilot (fixed wing).

"The first aircraft LA5033 of the Tejas Mk1A aircraft series took to the skies from HAL facility in Bengaluru today (Thursday). It was a successful sortie with a flying time of 18 minutes," HAL said

Thursday. The Mk-1A will come with digital radar warning receivers, a superior AESA (active electronically scanned array) radar, advanced beyond-visual-range (BVR) air-to-air missiles and external self-protection jammer pods, among other improvements.

#### Tejas

HAL, which has delivered 32 single-seat LCA fighters and two of the eight twin-seat trainers of the 40 Tejas Mk1 order worth Rs 8,802 crore, will now have to begin delivery of 83 Tejas Mk-1A in the March 2024-Feb 2028 timeframe. This is as stipulated by the Rs 46,898 crore contract for 83 improved Tejas Mark-1A jets of 2021. On Nov 23, 2023, PM Narendra Modi flew in a trainer that was delivered in Oct 2023, Putting his personal stamp of approval on the indigenous Tejas fighter, which will become the mainstay of the IAF in the years ahead instead of foreign jets.

The IAF already has two Tejas squadrons, the 'Flying Daggers' and 'Flying Bullets', one of which is now deployed in the southwestern sector facing Pakistan. "Successfully completed a sortie on Tejas. The experience was incredibly enriching, significantly bolstering my confidence in our country's indigenous capabilities, and leaving me with a renewed sense of pride and optimism about our national potential," Modi had said, after becoming the first PM to fly in a fighter jet.

In line with making Tejas the mainstay of IAF, the defence acquisition council (DAC) has granted the acceptance of necessity (AON) for 97 more Tejas Mk-1A aircraft and an order to procure these is expected after the final clearance from the cabinet committee on security (CCS) is received.

Tejas is critical for IAF to stem the depletion in the number of its fighter squadrons, which is down to just 31 when at least 42 are required to tackle China and Pakistan.

From very little confidence from both the IAF and the Centre in the Tejas in its initial years of flying, the fighter has grown to become a platform that is being showcased as a flagbearer by India in multiple defence and aero shows across the world. It is noteworthy that the IAF reported its first loss of a Tejas Mk 1 fighter aircraft to an air crash on March 12.

https://timesofindia.indiatimes.com/india/tejas-mk-1a-completes-maiden-flight-first-deliverysoon/articleshow/108846208.cms

### **Defence News**

Defence Strategic: National/International



Press Information Bureau Government of India

**Ministry of Defence** 

Sun, 31 Mar 2024

#### Closing Ceremony - EX TIGER TRIUMPH 2024

The Closing Ceremony of the Bilateral Tri-Service Humanitarian Assistance and Disaster Relief (HADR) Amphibious Exercise between India and US, Tiger Triumph 2024 was held onboard USS

Somerset on 30 Mar 2024. The exercise signifies the robust strategic partnership between the two countries and was aimed towards sharing best practices and Standard Operating Procedures in undertaking multinational HADR operations.

The Harbour Phase was conducted at Visakhapatnam from 18 - 25 Mar 24, which includeded presail discussions, Subject Matter Expert Exchange, Sports engagements, ship boarding drills and cross deck visits. Personnel from both Navies celebrated the festival of Holi together on 25 Mar 24, as part of the cultural exchange programme showcasing the vibrant and vivid culture of India. The Sea phase was conducted from 26 to 30 Mar 24 and it included units of both countries undertaking maritime exercises at sea followed by landing of troops at Kakinada for setting up of a joint Command and Control Centre and a Joint Relief and Medical Camp for HADR operations. Cross Deck helicopter operations involving UH3H, CH53 and MH60R helicopters were also undertaken between ships of the Indian Navy and the US Navy off Kakinada and Visakhapatnam.

The participating units from the Indian Navy included a Landing Platform Dock, Landing Ship Tanks (Large) including their integral Landing Crafts and helicopters, Guided Missile Frigate and Long Range Maritime Reconnaissance Aircraft. The Indian Army was represented by one Infantry Battalion Group including mechanised forces and the Indian Air Force had deployed one medium lift aircraft, transport helicopter and the Rapid Action Medical Team (RAMT).

The US Task Force comprised of a US Navy Landing Platform Dock including its integral Landing Craft Air Cushions and helicopters, a Destroyer, maritime reconnaissance and medium lift aircraft, and also, US Marines.

Special Ops Forces from all the three Services also participated in the exercise and jointly undertook combined operations with the US counterparts at Visakhapatnam and Kakinada during the harbour and sea phase.

https://pib.gov.in/PressReleasePage.aspx?PRID=2016748



**Ministry of Defence** 

Fri, 29 Mar 2024

#### India – Mozambique – Tanzania Trilateral (IMT TRILAT 24) Exercise Concludes at Nacala, Mozambique

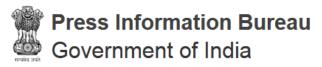
The second edition of India-Mozambique-Tanzania Trilateral Exercise concluded at Nacala, Mozambique on 28 Mar 24. The week-long exercise underscores the importance of enhanced maritime cooperation and interoperability between the Navies of India, Mozambique, and Tanzania. INS Tir and Sujata participated in IMT TRILAT 24 from 21 - 28 Mar 24 through a series of joint exercises, training sessions and collaborative activities, providing invaluable opportunities for all three Navies to exchange knowledge, enhance capabilities and bolster maritime security in the region.

The IMT TRILAT 24 Exercise unfolded in two phases. The initial harbour phase from 21 to 24 Mar 24 saw intensive training sessions concurrently held onboard INS Tir at Zanzibar and INS Sujata at Maputo. Activities included vital training on Visit, Board, Search and Seizure(VBSS), Damage Control and Firefighting Drills, communication procedures and medical lectures with CPR demonstration and casualty evacuation (CASEVAC).

The sea phase commenced on 24 Mar 24, wherein INS Tir and INS Sujata embarked sea riders from the Tanzanian and Mozambique Navies respectively. Joint operations with Mozambique Naval ship Namatili and Tanzanian naval ship Fatundu showcased significant synergy and sustained efforts with the regional Navies in line with the vision of SAGAR (Security & Growth for All in the Region). The evolutions at sea involved simulated VBSS exercises and night manoeuvres. The sea riders were imparted training on bridge watch keeping, damage control and firefighting. The ships also undertook joint surveillance of EEZ off Tanzania and Mozambique in the area of operation. The closing ceremony, held onboard INS Tir and INS Sujata at Nacala, Mozambique featured representatives from all three navies. The closing remarks highlighted successful collaboration, understanding of maritime capabilities and shared objectives achieved during the exercise. It emphasised continued collaboration towards maritime security and regional stability underlining India's commitment as the preferred security partner.

In addition to IMT TRILAT, various official and training exchanges, cross deck visits, sport fixtures and Yoga were held as part of the long range training deployment of the ships. The ships were open to visitors at Zanzibar, Maputo and Nacala, wherein more than 1500 people including school children, Indian diaspora and local populace visited the ship. Outreach activities were also conducted at Mizzizini orphanage center at Zanzibar and Obra Dom Orio Reception Centre at Maputo fostering bonds of friendship.

https://pib.gov.in/PressReleasePage.aspx?PRID=2016626



**Ministry of Defence** 

Fri, 29 Mar 2024

#### Defence Secretary Visits Indian Coast Guard Facilities in the North West Region

#### Shri Giridhar Aramane inaugurates infrastructure for Hovercraft Maintenance Unit at Okha

Defence Secretary Shri Giridhar Aramane visited the Indian Coast Guard facilities in the North West Region on 28-29 March 2024. During the visit, he inaugurated the infrastructure for the Hovercraft Maintenance Unit (HMU) at Okha on 28 Mar 24. Coast Guard OTM and Married Accommodation at Inaz Village Veraval was inaugurated by Mrs. Gayatri Aramane on 29 March 2024. The Defence Secretary was also briefed about the upcoming 200 mtr ICG Jetty Construction work at Okha. He appreciated the role played by ICG, in safeguarding national maritime interests in its area of responsibility.

The hovercrafts are based at Okha and Jakhau for maintaining surveillance in 50 Islands in the Area of Responsibility (AoR), Gulf of Kutch, in the shallow water and marshy terrain along the coast of Gujarat. The field facility for HMU will enable timely technical support, upkeep & maintenance of these hovercrafts which in turn will ensure optimum operational availability and keep them in ever ready state to meet any operational requirement.HMU facilities comprise of ACV parking for technical assistance, Office Building, Workshop and Maintenance Area.

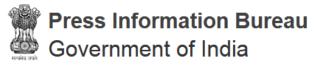
The Coast Guard Residential Area (CGRA) at Inaz Village Veraval includes 60 Nos of Married Accommodations, an all-weather Helipad, living Accommodations for Subordinate Officers & Naviks, a Parade Ground, and a Mess. The presence of a helipad adds a strategic advantage to

various operations in Veraval that includes addressing maritime emergencies, search & rescue missions, and surveillance activities.

ICG Regional Headquarters (North West) was established on 16 Dec 2009 at Gandhinagar. It executes ICG's mandated charter in maritime zones in Gujarat, Daman & Diu.

The ICG is focused on the development of berthing and other infrastructure which underscores, the commitment to equipping with facilities for operating advanced surface and air platforms. In addition to the recently inaugurated Jetty at Vadinar, ICG is also constructing 100 mtr jetty extension at Porbandar and 125 mtr jetty at Mundra in addition to the 200 mtr jetty at Okha. These events were witnessed by Director General Rakesh Pal, the Director General, Indian Coast Guard, and Inspector General AK Harbola, the Commander, Coast Guard Region (NW) along with various dignitaries of Central and State Govt.

https://pib.gov.in/PressReleasePage.aspx?PRID=2016643



**Ministry of Defence** 

Fri, 29 Mar 2024

#### METOC Seminar 'Meghayan 2024' - an Insight into the Frontline of Climate Change

The World Meteorological Day is commemorated every year on 23rd March. It marks the origin of World Meteorological Organization (WMO) on 23 Mar 1950 and signifies the invaluable contribution and essential role of the meteorologists in this field. As part of the World Meteorological Day celebrations, a METOC (Meteorological and Oceanographic) seminar 'Meghayan-24'\_ was conducted by School of Naval Oceanology & Meteorology (SNOM) and Indian Naval Meteorological Analysis Centre (INMAC) at Southern Naval Command on 28 Mar 24. The seminar was based on the theme \_\*'At the Frontline of Climate Action'\*\_ as promulgated by WMO for the year 2024. The inaugural address was delivered by Admiral R Hari Kumar. Chief of the Naval Staff through virtual mode. He highlighted the need for accurate and immediate focus on the pressing challenge of climate change and to work together in the collective pursuit of common goal of 'Achieving a Climate Smart Society' under the global framework for climate services of WMO. He reiterated Indian Navy's commitment to adopting long term sustainable policies to address the environmental concerns and integrating climate change considerations in the security strategy. While laying importance on reliable METOC support for safe & optimal Naval operations, he complimented the dedicated efforts and contributions of the Naval met specialists in this field providing crucial support across all domains.

The seminar witnessed presentations by guest speakers Dr. TVS Uday Bhaskar, Scientist G, Indian Naval Centre for Ocean Information System (INCOIS), Hyderabad and Dr. Ragavendra Ashit, Scientist 'G', National Centre for Medium Range Forecasting (NCMRWF), New Delhi. They enlightened the audience on the latest techniques adopted by the scientific agencies and the climate data crunching undertaken to help the policy makers in decision making at national level. In addition, panel discussions were held on various topics of 'Effect of Weather and Climate Change on Naval Operations' by the specialist officers bringing out latest techniques adopted by the Indian Navy & Indian scientific organisations in providing METOC inputs/forecasts for operational

evolutions. On this occasion an indigenous mobile application INDRA (Indian Naval Dynamic Resource for Weather Analysis) to disseminate weather related information and forecasts empowering optimal & quick decision making was also launched. The application has been developed by BISAG (Bhaskaracharya National Institute for Space Applications and Geo-informatics) in coordination with Directorate of Naval Oceanology and Meteorology, Indian Navy. The event was attended by Rear Admiral Upal Kundu, Chief of Staff, Southern Naval Command, Cmde Abhinav Barve, Commodore (NOM), Naval Headquarters and Mr. Miren Karamta, Director, BISAG. The seminar served as a platform towards sharing of knowledge & insights on weather and climate services as well as way ahead to face the challenges of climate change.

https://pib.gov.in/PressReleasePage.aspx?PRID=2016642



**Ministry of Defence** 

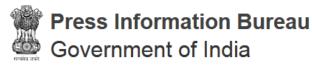
Fri, 29 Mar 2024

#### CNS Admiral R Hari Kumar Addresses Future Leadership of Indian Armed Forces Attending the 79 Staff Course at DSSC, Wellington

Chief of the Naval Staff Admiral R Hari Kumar visited DSSC, Wellington on 28 March 2024 and addressed the Future Leadership of the Indian Armed Forces attending the 79 Staff Course. Chief of the Naval Staff shed light on the Maritime legacy of India and the importance of the country's geography in establishing maritime character in the Indian Ocean Region. He highlighted the Indian Navy's transformation into a Combat Ready, Credible, Cohesive, and Future-Proof force employing the tenets of Aatmanirbharta.

Admiral R Hari Kumar elaborated on some of the recently conducted operations by the Indian Navy, including anti-piracy missions. He dwelled upon the crucial role performed by the Navy in protecting India's trade and other maritime interests. He also underscored the importance of jointness and integration within the Armed Forces to achieve national military objectives.

https://pib.gov.in/PressReleasePage.aspx?PRID=2016610



**Ministry of Defence** 

Thu, 28 Mar 2024

#### Department of Defence Production Issues Notification for Reorganisation of DGQA

To facilitate transparent allocation of Proof Ranges & Testing Facilities, Directorate of Defence Testing and Evaluation Promotion to come into force

In a major reform towards 'Ease of Doing Business' and to achieve Aatmnirbharta in Defence, the Department of Defence Production under the Ministry of Defence has issued notification for reorganisation of Directorate General of Quality Assurance (DGQA) which is aimed at speeding up Quality Assurance processes and trials and reducing layers of decision-making. This reorganisation also factors change in the Quality Assurance methodology and revised role of DGQA post corporatization of OFB.

With the corporatisation of Ordnance Factories into new DPSUs, increased participation of private defence industry and impetus by the Government towards indigenisation, a need was felt to reorganise DGQA for an effective and efficient support to emerging defence manufacturing industry. DGQA has already been steering various organizational and functional reforms after active discussions with all stakeholders in the defence manufacturing ecosystem.

The new structure under implementation will enable single point technical support for complete equipment/ weapon platform at all levels and also ensure uniformity in product-based QA. The new structure also provides for a separate Directorate of Defence Testing and Evaluation Promotion to facilitate transparent allocation of Proof Ranges and testing facilities.

This arrangement coupled with automation and digitization of standardized QA processes is likely to significantly improve the engagement of Defence Industry with DGQA. The re-organised structure and ongoing functional reforms will give an impetus to indigenization drive under 'Aatmanirbhar Bharat' with availability of Indian standards/ equivalent to guide manufacturers within the country and this will also boost export of high Quality qualified defence products.

https://pib.gov.in/PressReleasePage.aspx?PRID=2016542



Sun, 31 Mar 2024

#### Mumbai all Set to become Country's First Tri-service Common Defence Station

The Armed Forces intend to establish Mumbai as the nation's first "tri-service common defence station" for the Army, Navy, and Indian Air Force (IAF). This move is intended to foster unity among the three services in advance of the establishment of integrated theatre commands, The Indian Express reported.

The senior military hierarchy is currently discussing this matter, and an announcement is anticipated shortly, as stated by officials.

India does not currently have any common defence stations. The Andaman and Nicobar Command was established as a full-fledged, tri-service command in 2001. Last year, additional initiatives were implemented to promote cooperation between the services, like inter-service postings.

All Army, Navy, and IAF facilities—including logistics, infrastructure, repair and maintenance, as well as stores and supplies—would be consolidated into a single defense station, allowing for their optimal operation under a single lead service. The Navy, with its largest presence in Mumbai, will be the lead service in this case. Currently, the three services' wings are dispersed and run independently throughout Mumbai and its suburbs. The plan calls for combining administration, infrastructure, and logistics into a single chain.

For instance, the Navy maintains a sizable armament depot at INS Karanja and is in charge of providing logistics training to Naval personnel at INS Hamla. The Army's ordnance depot, a separate training area, an air defence regiment, and IAF units will be combined for joint use by the three services.

According to an official, this will imply that the logistics, services, and works of the individual services will be integrated, resulting in a single system of delivery of supplies such as fuel and rations, as well as the ability to repair common items in one location.

The official also stated that according to the plans, all entities will share the resources of the individual services, which include training facilities, storage facilities, repair and maintenance facilities, and infrastructure like schools, hospitals, and sports complexes.

For example, the other two services also use the services of INHS Asvini, a Naval hospital in Mumbai. According to a second official, since the goal is to have a single channel for funding and delivery and eliminate redundancy, this will result in better resource optimization and management and prevent duplication of effort.

Other officials stated that since Mumbai is the first planned common defence station, the locations of the second and third common defence stations are probably going to be Sulur, which is close to Coimbatore, and Guwahati. The IAF is probably going to be the lead service for Sulur, but the Army is probably going to be the lead service for the Guwahati station.

https://www.deccanherald.com/india/maharashtra/mumbai-all-set-to-become-countrys-first-triservice-common-defence-station-2959158

## THE ECONOMIC TIMES

Fri, 29 Mar 2024

#### Want to Export Jet Engines in Future, Says Defence Minister Rajnath Singh

India is firmly on the path to self-reliance in defence and is even looking to export fighter jet engines in the future, defence minister Rajnath Singh said at the Times Now Summit themed India Unstoppable.

The minister said he has directed officials to look at all possible collaboration opportunities to make India self-reliant. He referred to the engine manufacturing agreement between GE Aerospace and Hindustan Aeronautics for the GE 414 engine that will power future variants of the light combat aircraft (LCA).

He added that he has directed the Defence Research and Development Organisation to explore more such possibilities with Safran from France as well as the UK. "I have asked them to see what all can be made in India and which nations are ready to transfer technology. We have had enough of imports. We want India to be an exporter when it comes to engines," he said.

He said the government has taken steps to ensure that even after they leave service, Aginveers have a secure future and assured that if any changes are needed, room is open for reforms. "If a need is felt, we can bring changes and reforms in the scheme," he said.

https://economictimes.indiatimes.com/news/defence/want-to-export-jet-engines-in-future-saysdefence-minister-rajnath-singh/articleshow/108859976.cms

## THE ECONOMIC TIMES

#### **India's Borders Totally Secure: Rajnath Singh**

Defence Minister Rajnath Singh on Thursday said India and its borders are "totally secure" and the people of the country should have full faith in the armed forces. During a fireside chat on the concluding day of the Times Now Summit here, while responding to a question on the criticism of the Agniveer scheme, the minister said such questions have "no standing" and underlined that everyone will accept that the armed forces should have a young profile.

During the event, the Union minister also shared anecdotes from his nearly 50-year-long political journey. Asked how he reacted to questions raised by many, including members of the opposition, on the India-China border issue, Singh said they never made him uncomfortable.

"In keeping with the country's interests, I tell them (opposition) whatever I can. But in defence, there are many things which have strategic importance and we cannot tell them publicly. We try to steer clear of telling those things, whether it is (about) northern, western or eastern sector," he said.

"I want to assure the people of the country... they should have full faith in our Army and security personnel," the Union minister said.

Indian and Chinese troops are locked in an over three-and-half-year-long confrontation at certain friction points in eastern Ladakh even as the two sides completed disengagement from several areas following extensive diplomatic and military talks.

"Having been the defence minister for five years and home minister before that, I want to assure the people of the country based on what I have seen, understood and assessed that our borders and our country are totally secure," he added.

The eastern Ladakh border standoff erupted on May 5, 2020, following a violent clash in the Pangong lake area.

The ties between India and China nosedived significantly following the fierce clash in the Galwan Valley in June 2020 that marked the most serious military conflict between the two sides in decades. As a result of a series of military and diplomatic talks, the two sides completed the disengagement process in 2021 on the north and south banks of the Pangong lake and in the Gogra area. Singh defended the Aginveer scheme, saying recruiting youths would result in an increased risk-taking spirit and more tech-savvy armed forces.

"Everyone will accept the fact that there should be youthfulness in the armed forces. Normally, 30-50 years has been the age range of our jawans. But when jawans aged 18-20 will join as Agniveers, then the risk-taking spirit will be a bit higher," he said.

Senior jawans are discharging their responsibilities well, there is no two ways about it, he said.

Today is the age of technology and the Indian youth should also be tech-savvy. Such youths are being recruited under this scheme as Agniveers, he added.

The future of these youths will not be impacted by the scheme. Steps have been taken to secure their future, including making provisions for reservation for Agniveers in paramilitary forces, Singh said.

"And if we see any drawbacks, then we are ready to rectify them," he said.

In June 2022, the Centre rolled out the Agnipath recruitment scheme for short-term induction of personnel into the armed forces with an aim to bring down the age profile of the three services.

The scheme provides for recruiting youngsters in the age bracket of 17 years and a half to 21 years for a four-year period with a provision to retain 25 per cent of them for 15 more years.

https://economictimes.indiatimes.com/news/defence/indias-borders-totally-secure-rajnath-singh/ articleshow/108846847.cms

## THE TIMES OF INDIA

Mon, 01 Apr 2024

#### IAF's 10-Day Gagan Shakti War Exercise Starts Today

Indian Air Force (IAF) will begin its 10-day Gagan Shakti war drill from Monday to test its capabilities. The Indian Army will provide logistics support for the mega exercise that will be held at different parts of the country, including at Pokhran Field Firing Range in Jaisalmer.

According to an official statement, "The Indian Army has facilitated a comprehensive pan-India movement of approximately 10,000 IAF personnel and ammunition in order to validate the Operational Rail Mobilisation Plan (ORMP) aspects of the IAF. This involved the formulation and facilitation of rail move plan from various clusters pan India for onward and return journeys as per the operational plan."

According to the statement, the Indian Army is providing 12 passenger trains, time tabled, with all amenities, including meals and bedding, from Bangalore, Chennai, Chandigarh, Delhi and Kanpur to destinations across the length and breadth of the country, starting from March 25. The passenger trains have been named Sanyukta Express to denote the inter-services camaraderie. Their return journeys have been planned for the month of April.

Official sources said that liaison and movement support is being ensured through the Movement Control Organisations (MCOs) of the Army. The MCOs en route have been tasked with monitoring train movement in coordination with a control cell established at the Army headquarters, as is to be carried out during operations. Two ammunition trains are also being readied to supply ammunition from depots to the exercise areas. Various other movements of smaller troops have been facilitated through the placement and attachment of railway coaches with express trains.

Gagan Shakti is the biggest IAF war exercise after Vayu Shakti. This exercise will be organised at Bhuj in Gujarat, Ladakh, Arunachal Pradesh, and in other areas.

https://timesofindia.indiatimes.com/city/jaipur/iafs-10-day-gagan-shakti-war-exercise-startstoday/amp\_articleshow/108927007.cms

## THE TIMES OF INDIA

Sat, 30 Mar 2024

#### Navy to Bring 9 Somali Pirates who Hijacked Iranian Vessel with Pakistani Crew to India

The Indian Navy will bring 9 Somali Pirates involved in the hijacking of an Iranian fishing vessel with 23 Pakistani crew to India. The Indian Navy recently intercepted and rescued an Iranian

fishing vessel, Al-Kambar 786, along with its 23-member Pakistani crew in the Arabian Sea. The operation took place on Friday, prompted by intelligence regarding the hijacking.

The Navy deployed patrol vessel INS Sumedha to intercept Al-Kambar in the early hours of Friday. Later, guided-missile frigate INS Trishul joined the maritime security operation to reinforce the mission.

A naval officer reported, "The crew of 23 Pakistani nationals has been safely rescued. Indian naval specialist teams are presently undertaking thorough sanitization and seaworthiness checks of Al-Kambar in order to escort her to a safe area for resuming normal fishing activities."

This interception comes amid heightened vigilance by the Indian Navy under "Operation Sankalp." The operation, initiated on March 23, marks 100 days of intensified operations in the Gulf of Aden, adjoining areas, Arabian Sea, and off the east coast of Somalia. These measures are in response to ongoing threats posed by Houthi rebels and Somali pirates, which have disrupted sea trade in the region.

https://timesofindia.indiatimes.com/india/navy-to-bring-9-somali-pirates-who-hijacked-iranian-vessel-with-pakistani-crew-to-india/articleshow/108892818.cms

## THE ECONOMIC TIMES

Sun, 31 Mar 2024

#### Technology Absorption to be Army's Focus Area: Lt Gen A K Singh

Indigenisation, technology absorption and operational capability enhancement will be the focus areas of the army's Southern Command, according to Lt General Ajai Kumar Singh, General Officer Commanding-in-Chief of the Southern Command.

The Southern Command, which celebrates its 130th Raising Day on April 1, is the oldest and the largest command of the Indian Army, covering 41 per cent India's landmass spread over 11 states and four Union Territories.

In an interview to PTI, Lt Gen Singh, the 38th GOC-In-C of the Southern Command, also spoke about the Command's commitment to leverage technology as a catalyst for transformative change during the year 2024, being observed by the army as the Year of Technology Absorption.

"This theme underscores our commitment to leverage technology as a catalyst for transformative change, as well as to use in-house expertise to innovate solutions to our operational and logistic requirements and give shape to these projects in collaboration with domestic defence industry," Lt Gen Singh said.

"The Southern Command has made a significant contribution in India's focus of being selfsufficient in defence manufacturing. Being geographically co-located with the industry hubs of the country and having a large number of Field Firing Ranges (FFRs), the Southern Command acts as a test bed for trials of various weapon platforms, critical defence equipment and sophisticated ammunition," he said.

Seven innovations fielded by Southern Command have been selected for pan-army implementation along with transfer of technology to industrial partners for production, he said.

As part of regular outreach to industry and academia, state wise seminars-cum-exhibitions are regularly conducted," he said, adding the the events are conducted at Pune in February and May and 150 industries participate in them.

Similar events are conducted at Chennai and Hyderabad and are also being planned in Coimbatore, Thiruvananthapuram, Ahmedabad and Bengaluru, Lt Gen Singh said.

The third directory featuring details of more than 650 industries was released in January this year, to strengthen the Atmanirbhar Bharat-enhancing outreach and collaboration with industrial stakeholders.

Maharashtra had its first Defence Expo of all MSMEs with an aim to enhance the state MSME ecosystem and position it as the hub of indigenous defence manufacturing under the Atmanirbhar Bharat initiative, he said.

"Southern Command displayed indigenous equipment and systems such as T-90 tank, BMP Mk-II amphibious infantry fighting vehicle, Soltam and Dhanush towed howitzers, K-9 Vajra artillery gun and Pinaka multiple rocket launcher developed by the Defence Research and Development Organisation for the army," he said.

All three service chiefs visited the exhibition, which highlighted the army's resolve to promote innovation and initiatives under Aatmnirbhar Bharat, he said.

The Southern Command covers most of peninsular India. Operational commands of the Indian Navy and IAF are situated within the Command area, including Frontier HQs of BSF and Coast Guard. This gives the Command a unique opportunity and added dimension to conduct tri-services operations or multi agency operations, he said.

"Joint integrated operations with multiple domains approach is the way ahead, and to improve the integration, and synergy between the three services, the Southern Command recently conducted two major joint exercises, Exercise Bharat Shakti and Exercise TriShakti Prahar. Exercise Bharat Shakti was witnessed by PM Narendra Modi," he said.

The exercises, involving all the three services, demonstrated the prowess of indigenously manufactured weapons and equipment of Indian armed forces and validated tri-service application on the western front in multi domain environment, he said.

"As part of the army's transformation and operational effectiveness, the first medium lift attack helicopter squadron in the Southern Command region was raised on March 15 this year. The squadron will be equipped with state-of-the-art Apache AH 64E helicopters from Boeing.

"Six contracted helicopters will be delivered in the country in two phases in the coming months," he said.

"The Induction of Apache helicopters will enhance the army's operational reach and aerial strike capabilities in the western sector. These helicopters are capable of undertaking missions in all weather and terrain conditions along our borders," Lt Gen Singh said.

The top army commander also spoke about Southern Command providing an "excellent opportunity" for joint training with friendly foreign countries.

"The Indian Army is currently engaged with over 100 countries and this includes bilateral joint exercises with over 25 countries, training of over 3,000 military personnel of 70 countries and manning of 16 training teams worldwide," he said.

Accordingly, several joint exercises are conducted regularly with friendly foreign countries like France, USA, Russia, Maldives, UAE, Japan, UK, Singapore, Vietnam, Sri Lanka, Seychelles and some other African nations, he said.

Southern Command is the hub of military diplomacy because of these numerous foreign exercises happening round the year, he said.

Southern Command was raised on April, 1895 and has continued to be stationed in Pune since its existence.

The Command has successfully participated in various pre and post-Independence operations.

Southern command played an important role in the merger with the Indian Union of Junagarh and Hyderabad shortly after Independence and also in liberation of Goa and Diu in 1961.

The Command was also involved in assistance to neighbouring countries, like thwarting a coup attempt in Maldives during 1988 and Operation Pawan in Sri Lanka in 1987.

Operation Pawan was the code name assigned to the operation by the Indian Peace Keeping Force to take control of Jaffna, the capital city of the Northern Province of Sri Lanka, from the Liberation Tigers of Tamil Eelam.

The Southern Command guards 1,200 km of India's international border and 7,000 km of coastline.

https://economictimes.indiatimes.com/news/defence/technological-absorption-to-be-armys-focusarea-lt-gen-a-k-singh/articleshow/108915737.cms



Thu, 28 Mar 2024

#### India, China Hold Fresh Round of Diplomatic Talks with no Tangible Breakthrough

Senior Indian and Chinese diplomats held another round of talks in Beijing on the stand-off in the Ladakh sector of the Line of Actual Control (LAC) and, with no immediate signs of a breakthrough, agreed to maintain regular contact through diplomatic and military channels.

"The two sides had an in-depth exchange of views on how to achieve complete disengagement and resolve the remaining issues along the Line of Actual Control (LAC) in the Western Sector of India-China border areas," the ministry of external affairs said in a statement.

"In the interim, both sides agreed to maintain regular contact through diplomatic and military channels and on the need to uphold peace and tranquility on the ground in the border areas in accordance with existing bilateral agreements and protocols," the readout said without giving details.

The Indian delegation for the 29th meeting of the Working Mechanism for Consultation and Coordination (WMCC) on India-China Border Affairs was led by the Joint Secretary (East Asia) from the ministry of external affairs. Director General of the Boundary & Oceanic Department of the Chinese ministry of foreign affairs led the Chinese delegation.

In June 2020, the Galwan Valley in the Ladakh region became a focal point of heightened tensions between India and China. The situation escalated when violent clashes erupted between Indian and Chinese troops in the Galwan Valley. The clash resulted in casualties on both sides, including fatalities, marking the most serious escalation in the border dispute between the two countries in decades.

The clash prompted both sides to deploy additional troops and military equipment to the region and also triggered diplomatic and military-level talks between the two countries to defuse the situation and prevent further escalation.

India-China ties are currently at their lowest point in six decades, with New Delhi maintaining that the overall relationship cannot be normalised without the restoration of peace and tranquillity along the LAC. Both sides have arrayed more than 50,000 troops each in the Ladakh sector since the standoff began.

Despite four rounds of disengagement from Galwan Valley, Pangong Tso, Gogra (PP-17A) and Hot Springs (PP-15), the Indian and Chinese armies still have tens of thousands of troops each and advanced weaponry deployed in the Ladakh theatre. Problems at Depsang and Demchok are still on the negotiating table.

https://www.hindustantimes.com/india-news/india-china-hold-fresh-round-of-diplomatic-talkswith-no-tangible-breakthrough-101711594196899.html

## THE ECONOMIC TIMES

Sat, 30 Mar 2024

#### Anxiety Grips China as Japan Strengthens Defence Capabilities & Outreach

A deep sense of anxiety grips China whenever Japan, engages in military and security-related activities. On March 26, as Japan removed restrictions on transfer of defence technology in order to allow the worldwide export of advanced fighter jets that it is jointly developing with Italy and the UK, China expressed its concern on the development.

"China noted relevant reports and expresses grave concern over the decision. Given Japan's nottoo-distant history of militarist aggression, Japan's military and security moves are closely watched by its Asian neighbours and the international community," China's Foreign Ministry Spokesperson Lin Jian said.

The Japanese government-led by Prime Minister Fumio Kishida approved revised export rules on transfer of defence equipment and technology after the ruling outfit, the Liberal Democratic Party and its coalition partner, the Komeito Party agreed on these rules, according to a report in The Japan Times.

As per revised rules, Tokyo can export fighter jets which are being developed jointly by Japan along with Italy and the UK. They are expected to be deployed by 2035 to a third country. Work on the fighter jet development is currently in the design phase and three countries aim to "draft specifications and performance in the next five years or so," Japan's Defence Minister Minoru Kihara said. These warplanes will not be sold to a nation where conflict is taking place, the Japanese Defence Minister said.

But China fears that Japan will export these warplanes to Beijing's rivals in the Pacific, Southeast Asia, and South Asia regions. Particularly, its concern is in the immediate neighbourhood as Japan has drawn a new 10-year roadmap to strengthen its defence relations with Indonesia, Philippines, Vietnam, and Malaysia.

In November 2023, under the Official Security Assistance (OSA) framework, Japan agreed to provide \$4 million worth of coastal surveillance radars to the Philippines. Tokyo is also helping the

Philippines in enhancing its Air Domain Awareness capabilities through the supply of air surveillance radars.

In December 2023, Tokyo and Manila agreed for the early conclusion of the Reciprocal Access Agreement (RAA)—a pact that provides the legal framework for greater bilateral security cooperation, The Yomiuri Shimbun said. Once Japan and Philippines conclude RAA, the armed forces of the two countries will get access to each other's bases and undertake rotational deployment of troops and begin joint exercises.

To further strengthen security arrangements in the Indo-Pacific region, Japan along with the Philippines and the US will have a trilateral summit in Washington DC on April 11. Japan's NHK World said it will be the first such meeting between leaders of three countries. The meeting is expected to strengthen the ironclad alliances between the three countries. A year ago, Japan had a trilateral summit with South Korea and the US in Camp David, lying a few kilometres away from Washington DC.

With Malaysia, Japan's defence and security engagement is witnessing a significant turnaround. During his visit to Malaysia on November 4, 2023, Japanese Prime Minister Fumio Kishida agreed to "accelerate coordination for the implementation of the OSA and concurred to further strengthen cooperation in the maritime field, including joint training and exchanges between the Japan Self-Defence Forces and the Malaysian Armed Forces as well as joint training between coast guard agencies of the two countries," Japan's Ministry of Foreign Affairs said. Japan has already agreed to provide \$2.8 million to Malaysia to boost its maritime security.

With Vietnam, Japan has agreed to deepen military cooperation to maintain a free and open international order based on the rule of law in the South China Sea. During Vietnamese President Vo Van Thuong's visit to Japan in November 2023, the two countries had concurred upgrading Tokyo-Hanoi ties to a comprehensive strategic partnership. Japan had also agreed to provide weapons and defence technology to Vietnam under the OSA framework which is under discussion between the two countries.

Japan has also agreed to provide the Indonesian coast guard with a patrol vessel worth \$63million to help Jakarta enhance its maritime capability. Along with such moves, Japan has been enhancing its spending on defence year after year even as it has been busy in readjusting its security policy and sealing defence pacts with its friends and allies in the Indo-Pacific region in recent years.

It launched the National Security Strategy (NSS) two years ago with the aim to establish a new framework that would provide equipment and assistance for infrastructure development to likeminded countries. Japan has planned a record \$290 billion as defence outlays for five years, beginning from fiscal 2023. On the back of such measures, Japan's decision to develop fighter jets with the two NATO members and sell them to a third country, has unnerved China.

"In recent years, Japan has been drastically readjusting its security policy, increasing defence spending year after year, relaxing restrictions on arms export and seeking military breakthroughs. These moves trigger serious concerns among Japan's neighbouring countries and the international community," China's Foreign Ministry Spokesperson Lin Jian said.

"We urge Japan to earnestly respect the security concerns of neighbouring countries, deeply reflect on its history of aggression, commit itself to the path of peaceful development and earn the trust of its Asian neighbours and the international community through concrete actions," he added.

But Japan appears ready to ride a roughshod over China's pretensions as Beijing, using all falsehood, continues to lay claims over South and East China Seas and the Taiwan Strait. Beijing's such behaviour has given birth to a radically altered geo-security situation in the Indo-Pacific

region. Faced with such alarming conditions, Japan's pacifist idealism has given place to pragmatism.

While churning is within Japan's ruling establishment on hosting US nuclear weapons facilities on Japanese soil, Tokyo has not ruled out developing the capability to strike at enemy bases.

https://economictimes.indiatimes.com/news/defence/anxiety-grips-china-as-japan-strengthensdefence-capabilities-outreach/articleshow/108888673.cms

### Science & Technology News

## THE TIMES OF INDIA

Thu, 28 Mar 2024

#### Skyroot Aerospace Successfully Test-fires Stage-2 of Vikram-1 Rocket

Continuing its trajectory towards the launch of its first orbital launch vehicle – Vikram-1, Hyderabad-based space-tech startup Skyroot Aerospace has successfully test-fired stage-2 of the rocket at the propulsion testbed of the Indian Space Research Organisation (ISRO) at Satish Dhawan Space Centre (SDSC) in Sriharikota of Andhra Pradesh on March.

The test, which took place on Wednesday, lasted 85 seconds and recorded a peak sea-level thrust of 186 kilonewtons (kN), which is expected to result in a fully expanded vacuum thrust of around 235kN during flight, Skyroot said.

The stage-2 engine, called Kalam-250, features a high-strength carbon composite rocket motor utilizing solid fuel and a high-performance Ethylene-Propylene-Diene terpolymers (EPDM) thermal protection system (TPS).

It also incorporates a carbon ablative flex nozzle and high-precision electro-mechanical actuators for thrust vector control, which helps in achieving the desired trajectory, Skyroot added.

Stage-2 is crucial in propelling the launch vehicle from the atmospheric phase into the deep vacuum of outer space, it added.

Skyroot co-founder & CEO Pawan Chandana said the successful testing of Kalam-250 marks a significant milestone for the Indian space industry.

"All test parameters are within the expected range, bringing us closer to the upcoming orbital launch of the Vikram-1 rocket," Chandana said, pointing out this marks the testing of the largest propulsion system ever designed and manufactured by the Indian private sector and that Kalam-250 was the first carbon-composite-built motor to be tested at ISRO.

"In this crucial test, we validated the flex nozzle control system during firing for the first time, a significant milestone in our journey towards the maiden orbital launch of Vikram-1 in 2024. We are focused on achieving our upcoming milestones with the dedication of our team and the support from IN-SPACe and ISRO," added Naga Bharath Daka, co-founder and COO, Skyroot.

https://timesofindia.indiatimes.com/india/skyroot-aerospace-successfully-test-fires-stage-2-of-vikram-1-rocket/articleshow/108847839.cms

## The**Print**

Sat, 30 Mar 2024

#### "What India is Accomplishing in Space is Astonishing": European Space Agency Director Praises ISRO

Director General of European Space Agency (ESA), Josef Aschbacher, heaped praise on the Indian Space Research Organisation (ISRO) for its recent successful launches and said that India's accomplishments in space and especially in lunar exploration is 'astonishing'.

Aschbacher posted an appreciation post on X, after ESA hosted its 323rd Council meeting in Paris which was attended by the ISRO Chairman, S Somanath.

ESA Member States met in Paris, France, for the 323rd session of the ESA Council on March 26 and 27, 2024.

The European scientist also underscored that the significance of strengthening ties and deepening cooperation with international partners cannot be underestimated.

"What India is accomplishing in space – especially in Lunar exploration – is astonishing. We hosted ISRO's Chairman, Dr. S. Somanath at ESA Council today. It was a milestone occasion for Delegates to learn more about current and future plans for ESA-ISRO cooperation," he posted on X.

"The strategic importance of strengthening ties and deepening cooperation with international partners cannot be underestimated," he added.

Additionally, Astronaut Thomas Pesquet also shared about meeting with the ISRO chairman and the ESA Director and said that the they witnessed enthusiastic exchanges between the two leaders.

"Very proud to welcome ISRO chairman Shri. S. Somanath at ESA HQ in Paris yesterday, with our director Josef Aschbacher. Enthusiastic exchanges between the two men, and abounding cooperation opportunities between the two organisations. Let's co-travel to space together!," he posted on X.

In a stellar display of prowess, India soared to new heights in 2023 with the successful soft landing of Chandrayaan-3 on the South Pole of the Moon and the launch of Aditya-L1, India's first solar mission.

These milestones not only secured India's standing in the global space economy but also fueled the engines for the private space sector in India.

On August 23, 2023, the Chandrayaan-3 mission created history with the successful soft landing on Moon's surface.

India is now the first nation to reach near the Moon's unexplored South Pole and ranks amongst the top four nations to carry out a soft landing on the lunar surface.

Chandrayaan-3 is India's third lunar mission and the second attempt to land softly on the moon's surface. It's part of the Chandrayaan program, a series of missions developed by the Indian Space Research Organisation (ISRO) to explore the moon. The mission consists of a Vikram lunar lander, a Pragyan lunar rover, and a propulsion module that carries the spacecraft from Earth orbit to lunar orbit.

Additionally, in a major milestone, India placed its first dedicated solar mission, the Aditya-L1 spacecraft, in the Halo orbit. The country went gaga over this historic achievement, especially since this mission came at the back of India's moon landing, the Chandrayaan-3 mission.

Aditya-L1 reached Lagrange Point L1 which is about 1.5 million km from earth. The PSLV-C57.1 rocket carrying the Aditya-L1 orbiter lifted off successfully from the Satish Dhawan Space Centre in Sriharikota, Andhra Pradesh, in September.

https://theprint.in/world/what-india-is-accomplishing-in-space-is-astonishing-european-space-agency-director-praises-isro/2020710/

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