CLAWS Newsletter

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by Amita Pilania

INDIA

29 April (*PIB*): DRDO & Indian Navy successfully conduct maiden salvo launch of Naval Anti-ship Missile-Short Range

DRDO and the Indian Navy successfully conducted the maiden salvo launch of the Naval Anti-Ship Missile–Short Range (NASM-SR) from a naval helicopter platform off the Odisha coast. Two missiles were launched in quick succession, validating salvo-launch capability and waterline-hit accuracy. The missile incorporates indigenous technologies including advanced seekers, fibre-optic gyroscope-based navigation, and high-bandwidth data links.

Strategic Assessment: The successful trial strengthens India's indigenous maritime precision-strike capability and enhances operational flexibility in anti-surface warfare. The development also reflects the growing maturity of India's domestic missile ecosystem and indigenous defence-industrial base.

30 April (*Business Standard*): India's LR-AShM hypersonic missile nears trials, DRDO outlines capabilities

DRDO Chairman Dr. Samir V. Kamat stated that India's Long-Range Anti-Ship Missile (LR-AShM) programme has entered an advanced stage, with initial trials expected soon. Designed primarily for the Indian Navy's coastal battery requirements, the hypersonic glide missile can engage both static and moving maritime targets while carrying multiple payload configurations. The system forms part of India's broader effort to develop layered strike capabilities integrating ballistic, cruise, and hypersonic missile systems. The missile reportedly utilises a two-stage solid propulsion architecture and builds upon India's expanding hypersonic technology base, including scramjet propulsion advancements and previous hypersonic flight demonstrations.

Strategic Assessment: The development reflects India's accelerating focus on hypersonic strike systems amid evolving Indo-Pacific maritime competition. Once operational, LR-AShM could significantly enhance India's anti-access/area denial (A2/AD) posture and improve survivable long-range precision strike capability against high-value naval assets.

03 May (*The Hindu*): GalaxEye launches Mission Drishti, India's largest privately developed Earth observation satellite

GalaxEye launched Mission Drishti, described as India's largest privately developed Earth observation satellite. The satellite is intended to provide all-weather imaging capability through advanced sensor integration and persistent observation architecture.

Strategic Assessment: Enhanced domestic Earth observation capability could strengthen India's ISR ecosystem by supporting border surveillance, maritime domain awareness, disaster management, and precision geospatial intelligence applications.

04 May (*SarvamAI*): Pixxel and Sarvam AI Plan India's First Orbital Data Centre Satellite

Indian space-tech company Pixxel and AI firm Sarvam AI announced plans to develop India's first orbital data centre satellite, aimed at enabling space-based data storage and processing capabilities. The initiative seeks to integrate satellite infrastructure with AI-driven computing architecture, potentially supporting low-latency data handling and advanced edge-computing applications in orbit.

Strategic Assessment: The project reflects the growing convergence of artificial intelligence, cloud infrastructure, and space systems in next-generation digital architectures. Orbital data centres could eventually support resilient communications, real-time ISR processing, autonomous systems, and distributed computing networks with potential dual-use strategic applications.

07 May (*The Hindu*): Indian space-tech company Skyroot Aerospace becomes unicorn

Indian launch startup Skyroot Aerospace attained unicorn status following significant investment inflows and continued progress in private launch vehicle development. The company remains among the leading actors in India's expanding private launch ecosystem.

Strategic Assessment: The milestone reflects increasing investor confidence in India's commercial space sector and signals the emergence of a competitive indigenous launch industry capable of supporting future strategic and commercial requirements.

08 May (*PIB*): DRDO & IAF successfully conduct maiden flight-trial of Tactical Advanced Range Augmentation weapon

DRDO and the Indian Air Force successfully conducted the maiden flight trial of the Tactical Advanced Range Augmentation (TARA) glide weapon. The stand-off precision strike system is intended to improve engagement range and survivability during air operations.

Strategic Assessment: The development strengthens India's indigenous precision-strike capability and supports the ongoing transition toward stand-off and network-centric warfare systems.

09 May (*PIB*): Major breakthrough in Hypersonic Missile development: DRDO conducts extensive long-duration test of Actively Cooled Full Scale Scramjet Combustor

DRDO successfully conducted an extensive long-duration ground test of an actively cooled full-scale scramjet combustor, marking a significant advancement in India's hypersonic propulsion programme. The test validated critical technologies required for sustained hypersonic cruise missile operation.

Strategic Assessment: The achievement represents a major technological milestone in India's hypersonic weapons development effort and could support future hypersonic cruise missile and reusable high-speed platform programmes.

09 May (*PIB*): India conducts successful flight-trial of Advanced Agni missile with Multiple Independently Targeted Re-Entry Vehicle system

India successfully carried out a flight trial of an advanced Agni missile equipped with Multiple Independently Targetable Re-entry Vehicle (MIRV) capability. The system demonstrated the ability to deploy multiple warheads against separate targets.

Strategic Assessment: The successful demonstration significantly enhances India's strategic deterrence posture and places India among a limited group of states possessing operational MIRV technology.

14 May (*Dhruva Space*): Dhruva Space Secures INR 105 Crores RDIF Backing to Develop 'Project Garud', Advancing India's Private-Sector 500 kg-Class Communications Satellite Capability for Constellation-Scale Missions

Hyderabad-based space company Dhruva Space secured INR 105 crore in funding support for 'Project Garud', aimed at developing a 500 kg-class communications satellite platform for constellation-scale missions. The initiative seeks to strengthen India's indigenous private-sector satellite manufacturing and communications capability while supporting future scalable orbital infrastructure.

Strategic Assessment: The project highlights the growing maturity of India's commercial space ecosystem and the increasing role of private industry in strategic communications and dual-use satellite architectures. Such developments could strengthen India's sovereign satellite capability and reduce long-term dependence on external systems.

16 May (*Ministry of External Affairs*): India and Netherlands Strengthen Semiconductor Cooperation

India and the Netherlands strengthened strategic technology cooperation through a partnership between Tata Electronics and ASML to support India's first semiconductor fabrication plant in Dholera, Gujarat. The collaboration is expected to contribute to the development of India's domestic semiconductor manufacturing ecosystem and advanced chip production capability.

Strategic Assessment: The partnership marks a significant step in India's semiconductor ambitions amid intensifying global competition over critical technology supply chains. Indigenous semiconductor capability is increasingly linked to strategic autonomy in sectors such as AI, defence electronics, telecommunications, and space systems.

18 May (*The Hindu*): Space Meetings Veneto 2026: Nine Indian space startups sign multiple strategic collaborations in Italy

Nine Indian space startups signed multiple strategic collaboration agreements during Space Meetings Veneto 2026 held in Italy. The agreements covered areas including satellite technology, launch systems, Earth observation, and international industrial partnerships.

Strategic Assessment: The collaborations demonstrate increasing global interest in India's emerging commercial space ecosystem and reflect the expanding international integration of Indian private-sector space innovation.

18 May (*ISRO*): Chandrayaan-3 "Hop" Experiment Reveals Hidden Lunar Secrets: Scientists Uncover Regolith Heterogeneity at Moon's South Pole

ISRO released new findings from Chandrayaan-3's Vikram lander "hop" experiment, revealing significant thermophysical and structural variations in lunar regolith near the Moon's south polar region. During the manoeuvre, the lander reignited its engines and shifted approximately 50 cm, enabling the ChaSTE instrument to analyse disturbed subsurface material and twilight thermal behaviour. Scientists observed a layered "cake-like" regolith structure, with highly porous surface dust overlaying denser and more cohesive material below. The experiment also revealed erosion effects caused by lander engine exhaust and provided critical insights into thermal behaviour, soil cohesion, and subsurface conditions relevant for future lunar exploration.

Strategic Assessment: The findings enhance scientific understanding of lunar surface mechanics and could support future lunar habitat construction, mobility systems, and resource utilisation missions. The experiment also demonstrates India's increasing capability in conducting advanced planetary surface science operations.

19 May (*Times of India*): DRDO successfully tests UAV-launched precision guided missile

DRDO conducted successful trials of an indigenous UAV-launched precision-guided missile designed for lightweight aerial strike roles. The missile is intended to enhance unmanned combat capability and precision engagement potential.

Strategic Assessment: The successful test strengthens India's growing focus on integrating precision-guided weapons with unmanned aerial platforms, a capability increasingly relevant in modern network-centric warfare environments.

20 May (*Times of India*): Space bonding with Europe: Sweden joins India's Venus mission, Norway ties up with ISRO for space cooperation

Sweden joined India's planned Venus mission initiative while Norway signed agreements with ISRO for expanded bilateral cooperation in space technologies and applications.

Strategic Assessment: The agreements reflect increasing international confidence in India's space programme and support India's expanding role in collaborative scientific and strategic space missions.

21 May (*Times of India*): Delhi, Seoul to work on air defence and energy weapons systems

India and South Korea agreed to enhance bilateral cooperation in air-defence technologies and directed-energy weapon systems during high-level strategic discussions. The engagement reportedly focuses on emerging defence technologies and future battlefield systems.

Strategic Assessment: The partnership reflects India's broader effort to diversify defence technology cooperation while accelerating indigenous capability development in next-generation warfare technologies including directed-energy systems.

22 May (*News on Air*): India's Chandrayaan-3 lunar mission honoured with 2026 Goddard Astronautics Award

India's Chandrayaan-3 mission received the 2026 Goddard Astronautics Award in recognition of its achievements in lunar exploration and space technology innovation. The mission marked India's successful soft landing near the Moon's south polar region and demonstrated advanced landing, mobility, and scientific exploration capability.

Strategic Assessment: The recognition reinforces India's growing stature as a leading spacefaring nation capable of conducting cost-effective and technologically sophisticated planetary missions.

USA

01 May (*US Department of War*): US War Department Signs AI Agreements for Classified Military Networks

The US War Department announced agreements with eight leading AI firms — including OpenAI, Google, Microsoft, NVIDIA, AWS, Oracle, SpaceX, and Reflection — to deploy advanced AI capabilities across classified military networks at Impact Level 6 and 7 security environments. The initiative supports the Department's "AI-first fighting force" strategy and aims to enhance warfighting, intelligence processing, operational planning, and decision-making through platforms such as GenAI.mil, already reportedly used by over 1.3 million personnel.

Strategic Assessment: The development reflects the accelerating integration of frontier AI into military command-and-control systems and highlights the growing convergence between Silicon Valley and defence establishments in shaping future AI-enabled warfare architectures.

12 May (*Space.com*): SpaceX Expands Starlink Constellation; Starship V3 Deployment Planned

SpaceX continued expanding its Starlink constellation through multiple Falcon 9 launches during April–May 2026, with active satellites nearing 10,500 by 19 May 2026. The company also announced plans to deploy next-generation Starlink V3 satellites using the Starship launch system later in 2026. The upgraded satellites are expected to significantly enhance network capacity and global connectivity. Concurrently, Starlink's military-focused Starshield variant continues supporting US Department of Defense requirements for secure communications and ISR applications.

Strategic Assessment: The rapid expansion of Starlink highlights the growing strategic role of commercial mega-constellations in resilient military communications, precision navigation, and network-centric warfare architectures.

19 May (*SDA*): SDA Advances Proliferated Warfighter Space Architecture (PWSA)

The US Space Development Agency (SDA) formally appointed Dr. Gurpartap "GP" Sandhoo as its permanent director on 19 May 2026. Under his leadership, the SDA continued development of the Proliferated Warfighter Space Architecture (PWSA), a low Earth orbit satellite network designed for missile tracking, tactical communications, and joint all-domain operations. The agency is advancing Tranche 2 satellite development and pursuing airborne optical communication integration for direct aircraft connectivity with orbital networks.

Strategic Assessment: The PWSA reflects the growing militarisation of low Earth orbit and the increasing integration of resilient satellite constellations into future network-centric warfare architectures.

20 May (*Vandenberg Space Force Base*): US Conducts Test Launch of Nuclear-Capable ICBM

The United States military conducted a test launch of a nuclear-capable intercontinental ballistic missile (ICBM) from Vandenberg Space Force Base, California, as part of routine operational readiness and system reliability validation.

Strategic Assessment: The launch reaffirms the credibility of the US strategic deterrence posture and highlights the continuing centrality of nuclear force modernisation in major power competition.

21 May (*PR NewsWire*): Stratolaunch Conducts Hypersonic Test Flight with Missile Defense Agency

US aerospace company Stratolaunch successfully conducted a hypersonic test flight in partnership with the Missile Defense Agency (MDA). The mission supported the testing and validation of high-speed flight technologies relevant to future hypersonic systems and missile defence applications.

Strategic Assessment: The test demonstrates continued US prioritisation of hypersonic capability development amid intensifying global competition in high-speed strike and missile defence technologies.

22 May (Source: *Air & Space Forces Magazine*): US Space Force Awards Rocket Lab Contract for GEO Satellites

The US Space Force awarded Rocket Lab a USD 90 million contract to develop two Geostationary Earth Orbit (GEO) satellites under the Space Test Program. The satellites are intended to support advanced military space experimentation and operational capability development.

Strategic Assessment: The contract highlights the expanding role of private commercial firms in US military space infrastructure and reflects growing emphasis on diversified and resilient orbital capabilities.

CHINA

03 May (*Foundation for Defense of Democracies*): China Develops 'Robot Wolf' Quadrupedal Combat Swarm System

China has reportedly developed the "Robot Wolf," a quadrupedal bionic unmanned combat swarm system designed by the Automation Research Institute of China Ordnance Equipment Group. The platform is divided into multiple operational variants, including reconnaissance ("Shadow"), strike ("Bloodbath"), and support ("Polar") configurations. Training reportedly focuses on complex terrain mobility, intelligent swarm coordination, reconnaissance-strike-support integration, and human-machine teaming operations under extreme environmental conditions.

Strategic Assessment: The development reflects China's increasing focus on AI-enabled autonomous ground combat systems and swarm warfare concepts. Such platforms could enhance battlefield reconnaissance, distributed strike capability, and human-machine integrated operations in future intelligentised warfare environments.

19 May (*CGTN* *ESA*): China-Europe SMILE Mission Launched for Solar Wind Research

The China-Europe Solar wind Magnetosphere Ionosphere Link Explorer (SMILE) mission was launched from French Guiana to study interactions between solar wind and Earth's magnetosphere. The mission is a joint collaboration between the China National Space Administration and the European Space Agency.

Strategic Assessment: The mission demonstrates expanding international scientific cooperation in space research while strengthening China's role in advanced global space science programmes.

24 May (*CGTN*): China Tests Indigenous 600 kg-Thrust Drone Turbofan Engine

China successfully completed the maiden flight test of an indigenous 600 kg-thrust-class turbofan engine designed for unmanned aerial systems. The engine is expected to support medium and high-endurance drones and reduce dependence on foreign propulsion systems for advanced UAV platforms.

Strategic Assessment: The development strengthens China's indigenous aero-engine ecosystem and supports the expansion of long-range unmanned combat and reconnaissance capabilities, which are increasingly central to future intelligentised warfare concepts.

24 May (*CGTN*): China Accelerates Crewed Lunar Exploration Programme

Chinese authorities announced continued progress in lunar exploration technologies, including heavy-lift launch systems, lunar landers, and astronaut training for future Moon missions targeted before 2030.

Strategic Assessment: China's advancing lunar programme highlights intensifying geopolitical competition in deep-space exploration and the growing strategic significance of cislunar infrastructure and lunar resource access.

24 May (*People's Daily Finance* *CGTN*): Shenzhou-23 Astronaut Crew Departs for Space Mission

China officially launched the Shenzhou-23 astronaut crew aboard a Long March rocket, commencing a new crewed mission to the Tiangong space station. The mission will support station operations, scientific experiments, and long-duration human spaceflight activities.

Strategic Assessment: The mission reinforces China's expanding permanent orbital presence and reflects its broader objective of establishing sustained human space operations ahead of future lunar exploration missions.

Other Nations

25 May (*CGTN*): China Launches Pakistan's PRSC-EO3 Earth Observation Satellite

China successfully launched Pakistan's PRSC-EO3 Earth observation satellite aboard a Long March-6 rocket from the Taiyuan Satellite Launch Center on 25 April 2026. Developed by Pakistan's SUPARCO, the satellite is intended to support remote sensing, environmental monitoring, disaster management, agricultural assessment, and urban planning applications. The mission marked the 640th launch of China's Long March rocket series and reflects deepening China–Pakistan cooperation in the space domain.

Strategic Assessment: The launch highlights the expanding strategic and technological partnership between China and Pakistan, particularly in dual-use space infrastructure. Enhanced Pakistani Earth observation capability could strengthen ISR, geospatial intelligence, and surveillance applications, while also reinforcing China's role as a key enabler of Pakistan's long-term space ambitions.

13 May (*NATO*): Netherlands Assumes Chair of NATO's Transatlantic Quantum Community

The Netherlands assumed the chairmanship of NATO's Transatlantic Quantum Community; an initiative focused on advancing cooperation in quantum technologies across alliance members. The platform aims to strengthen collaboration in quantum sensing, communications, computing, and defence-related research.

Strategic Assessment: The initiative reflects NATO's growing emphasis on quantum technologies as a critical component of future military competitiveness, secure communications, and advanced sensing capabilities.

23 May (*Defence Industry Europe*): United Kingdom Activates Borealis Space Awareness System

The United Kingdom activated the Borealis space domain awareness system to improve monitoring and protection of satellites and critical orbital infrastructure. The system is designed to enhance detection, tracking, and analysis of space-based threats and anomalies.

Strategic Assessment: The activation highlights increasing international focus on protecting space assets amid rising orbital congestion, counter-space threats, and the growing militarisation of outer space.

02 May (*Spaceflight Now*): SpaceX Launches South Korean Earth Observation Satellite

SpaceX launched a South Korean Earth observation satellite alongside 44 additional payloads aboard a Falcon 9 rideshare mission. The mission demonstrated the growing role of commercial launch providers in supporting international satellite deployment and Earth observation capabilities.

Strategic Assessment: The launch underscores the expanding strategic importance of commercial launch ecosystems and Earth observation infrastructure in ISR, disaster monitoring, and dual-use geospatial intelligence applications.

About the Author

Amita Pilania is currently serving as a Research Assistant at the Centre for Land Warfare Studies (CLAWS), New Delhi. Her research focuses primarily on Space and Disruptive Technology. Prior to joining CLAWS, she completed her Master's degree in Defence and Strategic Studies from Amity University, Noida, Uttar Pradesh. She also holds a B.Sc. (Hons.) in Physics from Kalindi College, affiliated with University of Delhi.