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SUCCESSFUL FUELFIESTS OF ASTRA-BYRAMIN WITH INDIGENOUS RF SEEMER FROM SU-SO MIX-I







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SUCCESSFUL FLIGHT-TESTS OF ASTRA-BVRAAM WITH INDIGENOUS RF SEEKER FROM SU-30 MK-I

Defence Research Development Organisation (DRDO) and the Indian Air Force successfully conducted the flight tests of the indigenous Beyond Visual Range Air-to-Air Missile (BVRAAM) 'Astra,' equipped with an indigenous Radio Frequency (RF) seeker, from the Su-30 Mk-I platform off the coast of Odisha on 11 July 2025. During the tests, two launches were carried out against high-speed unmanned aerial targets at different ranges, target aspects, and launch platform conditions. In both cases, the missiles destroyed the targets with pinpoint accuracy.

During the tests, all subsystems

performed as per expectations, including the RF seeker, which has been indigenously designed and developed by DRDO. The flawless performance of the Astra weapon system was validated through flight data captured by range tracking instruments deployed by the Integrated Test Range (ITR), Chandipur. These successful flight tests have re-established the accuracy and reliable performance of the Astra weapon system with an indigenous seeker.

The Astra BVRAAM has a range exceeding 100 km and is equipped with a state-of-the-art guidance and navigation system. In addition to various laboratories of DRDO,

more than 50 public and private industries, including Hindustan Aeronautics Limited (HAL), have contributed towards the successful realisation of the weapon system.

Hon'ble Raksha Mantri Shri Rajnath Singh complimented DRDO, IAF, and industry involved in the design and development of RF seeker and stated that the successful testing of the missile with indigenous seeker is a major milestone in critical defence technology.

Secretary, Department of Defence R&D and Chairman, DRDO Dr Samir V Kamat congratulated all the teams involved during the successful flight tests.



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DRDO AND AIIMS-BIBINAGAR UNVEIL ADIDOC: ADVANCED CARBON FIBRE FOOT PROSTHESIS

In a major boost to indigenous rehabilitation medical and technologies, the Defence Research and Development Laboratory (DRDL), Hyderabad, in collaboration with AIIMS, Bibinagar, successfully has developed ADIDOC-Optimised Carbon Foot Prosthesis. This marks the creation of the first 'Made in India' advanced carbon fibre foot prosthesis, tailored for high-performance, active users.

ADIDOC The Foot is cost-effective. high-profile prosthetic solution designed and manufactured entirely in India. Engineered with advanced carbon fibre technology, the foot has undergone biomechanical testing to support loads up to 125 kg, ensuring a sufficient factor of safety for real-world use. Optimized for K3-level active users—individuals who are capable of walking with variable cadence and navigating environmental barriers—ADIDOC offers high mobility, stability, and durability at a significantly lower cost compared to imported alternatives. This collaboration showcases the strength of interinstitutional synergy between the defence R&D sector and the medical community, and strongly supports the vision of Aatmanirbhar Bharat by delivering a world-class assistive device using 100% indigenous innovation and materials.



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GROUND TRIAL OF AUTOMATIC FIRE PROTECTION SYSTEM IN DORNIER-228 AIRCRAFT AT HAL, KANPUR

The automatic fire protection system for aircraft is one of the most important safety systems in any air platform, which automatically detects and suppresses any fire event in the engine nacelle, wings, avionics bay, auxiliary power compartment, and cargo compartment.

All the Indian air platforms are currently using imported systems, and repairs or maintenance are also dependent on the foreign OEMs. The Centre for Fire, Explosive, and Environment Safety (CFEES), Delhi, has taken up a mission mode project to develop the indigenous technology.

The system has been designed, developed, qualified, and tested for Dornier-228 aircraft.

CFEES conducted a ground trial on 28 June 2025 at Hindustan Aeronautics Limited (HAL), Kanpur, in association with representatives from DGAQA and RCMA, Kanpur.



Successful Test-firing of Prithvi-II and Agni-I Ballistic Missiles

Short-Range Ballistic Missiles - Prithvi-II and Agni-I - were successfully test-fired from the Integrated Test Range (ITR), Chandipur, Odisha on 17 July 2025. The launches validated all operational and technical parameters. These tests were conducted under the aegis of the Strategic Forces Command.

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SUCCESSFUL TRIAL OF AKASH PRIME AT HIGH-

ALTITUDE

India achieved major technological and strategic breakthrough by successfully intercepting and destroying two high-speed aerial targets at high altitude using Akash Prime, the advanced variant of the Akash Weapon System developed for the Indian Army. The tests were conducted in the challenging highaltitude terrain of Ladakh, above 4,500 metres, demonstrating the system's enhanced capabilities in extreme operational environment.

Akash Prime has been customized specifically for high-altitude operations and incorporates several critical upgrades, including an indigenously developed RF



Seeker. These enhancements are a direct outcome of user feedback, aimed at boosting operational effectiveness and reliability in realworld scenarios. The successful trial marked the validation of the first production model of the Akash Prime Weapon System. The system has been jointly developed by the DRDO and the Indian Army, in collaboration with Defence Public Sector Undertakings like Bharat Dynamics Limited (BDL) and Bharat Electronics Limited (BEL), along with other Indian industry partners.

USER TRIALS OF EXTENDED RANGE ANTI-SUBMARINE ROCKET FROM INS KAVARATTI

User trials of the Extended Range Anti-Submarine Rocket (ERASR) were successfully carried out from INS Kavaratti during 23 June 2025 to 7 July 2025. Armament Research & Development Establishment (ARDE), Pune, in association with High Energy Materials Research Laboratory (HEMRL) Naval Science & Technological Laboratory (NSTL), has designed developed and ERASR for Indigenous Rocket Launcher (IRL) of Indian Naval Ships.

ERASR is a totally indigenous anti-submarine rocket used to combat submarines and fired from onboard IRL of Indian Naval Ships. It has a twin-rocket motor configuration to meet a wide spectrum of range requirements with high accuracy and consistency.

The ERASR uses an indigenously developed electronic time fuze. A total of 17 ERASRs were successfully tested and evaluated in different ranges. All the specified objectives of the trials, such as performance, range time electronic fuze functioning, and warhead functioning, were successfully demonstrated.





DIPAS SIGNS MOU WITH AIIMS, RISHIKESH

Defence Institute of Physiology and Allied Sciences Delhi, (DIPAS), signs Memorandum of Understanding (MOU) with the All India Institute of Medical Sciences (AIIMS), Rishikesh, for conducting clinical trials and advanced research in the field of biomedical devices supplements related and human performance in extreme environments on 4 July 2025. This collaborative effort will facilitate the formulation and development of products, technologies, and strategies for the mitigation of the effects of extreme environments on human performance.

Director, AIIMS Rishikesh



emphasised on joint research projects in the areas of highaltitude physiology in medical research. Shri Devakanta Pahad Singh, Director DIPAS, also emphasised on the importance of this collaboration in advancing research at both institutions.

DRDO TRANSFERS SIX RADIATION MONITORING SYSTEMS TO INDIAN NAVY

handed DRDO six over strategically important, indigenously designed and developed systems to the Indian Navy. The systems have been developed in accordance Naval Staff Qualitative with Requirements and are aimed at enhancing the Navy's radiological surveillance and monitoring capabilities. The advanced systems handed over include:

- Gamma Radiation Aerial Surveillance System
- Environmental Surveillance Vehicle
- Vehicle Radiological Contamination Monitoring System
- Underwater Gamma Radiation Monitoring System
- Dirt Extractor and Cross



Contamination Monitor

• Organ Radioactivity Detection System

These technologies have been developed by Defence Laboratory, Jodhpur (DLJ), a premier DRDO laboratory specializing in radiation detection and environmental monitoring technologies.

At a ceremonial event held at DLJ, the Secretary, Department of Defence R&D & Chairman DRDO, formally handed over the systems to Rear Admiral Sriram Amur, Assistant Chief of Naval Staff (Submarine Safety and Protection), Naval Headquarters.



INAUGURATION OF CHAFF QUALIFICATION AND TESTING FACILITY AT DLJ

Chaff Qualification Test Facility (CQFT)-Hazard classification: 1.4S) was inaugurated by Dr Samir V Kamat, Secretary DD R&D & Chairman DRDO at Defence Laboratory, Jodhpur. Dr RV Haraprasad, DS & DG (NS&M); Dr Manu Korulla. OS & DG (R&M); Shri VS Shenoi, OS & Director, DLJ; Dr Bishwajeet Choubey, Sc 'G'; Director, DCW&E and Shri M Veera Shankar, IDSE, CE (R&D) were also present during the inauguration.

The facility is housing of various qualification testing equipment/machines, viz., Vibration Test,



Shock Test, Bump Test, ISAT and Thermal Shock chamber. These testing machines will be used to carry out various qualification testings for explosive/nonexplosive defence stores.

FOUNDATION STONE LAYING CEREMONY OF PROCESSING-CUM-TESTING FACILITY AND DESERT TEST RANGE AT DLJ

The foundation stone laying ceremony for the 'Processing Cum Testing Facility (DOST) and Desert Test Range (DTR)' at Defence Laboratory Jodhpur (DLJ), held on 4 July 2025, marked a significant event in the realm of development of solutions for desert related problem faced by the Armed Forces. The foundation stones for these facilities were laid by Dr SV Kamat, Secretary DD R&D & Chairman DRDO in the solemn presence of DG (NS&M), DG (R&M), Director DCWE, Director DLJ, Chief Engineer (R&D), Delhi.

The DOST and DTR will includes following key facilities:



- Chemical processing laboratories for preparation of solutions for vegetation and dust suppression.
- mmW laboratory for characterization and testing of sensors for helicopter landing

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- aid for brownout.
- Signal processing and microwave laboratory for testing of drone-based buried object detection systems.
- Desert field site for testing of product/system.

FEATURE ARTICLE



New Column

FULL MISSION SIMULATOR FOR LCA MK-1

Aeronautical Development Establishment (ADE), Bengaluru, under DRDO is the leading laboratory in the country to design, develop, and deliver simulators to the armed forces for the past 3 decades. The ADE has established capabilities in all the technological areas required for developing state-of-the-art simulators that includes development of models for flight dynamics, aircraft systems, mission sensors, and weapons as well as their integration with pilot, controls and cueing systems. Real-time performance to ensure the replication of actual physical behavior with repeatability and its validation with actual flight is one of the biggest achievements that places ADE as a unique organisation with other contemporaries in this field. The cueing system that plays a significant role in providing high fidelity simulation with immersive visualisation to the pilots has been one of the major strengths of ADE. The cueing system includes wide area dome-based projection systems and their close integration with the flight dynamics to provide low latency visual scenery during the entire flight. The efforts of ADE have led to fault free flights of more than 5000 test flight sorties of LCA and preparing the flight crew of around 35 pilots for flying LCA.

A Full Mission Simulator (FMS) for LCA MK1 is indigenously designed, developed and commissioned at Air Force Station, Sulur, by ADE for training the



Full Mission Simulator (FMS) for LCA MK1

squadron pilots. This simulator is being extensively used for training of IAF pilots on LCA-AF Mk-I. The FMS allows pilots to be trained under both normal and emergency flying conditions. The cockpit environment is a near identical replica of actual aircraft with displays, indicators and panels including real pilot controls. The heart of the simulator is the high fidelity flight dynamics model. The avionics and mission systems are a combination of real as well as simulated LRUs and systems. The visual cueing system is one of its kind and is dome-based multichannel, seamless, high-resolution projection system with a wide field of view using 4K-UHD resolution. Visual scenery is developed using geo-specific terrain, imagery and airfields with capability to add special effects is presented to the pilot. Facility for HUD symbology is available with real HUD as well as using a separate projector.



Visual Cueing System

Aural cues are based on actual digital recording of the LCA sound as perceived in the cockpit for various sources such as engine noise, aircraft sounds, alert tones as well as voice warnings and rendered in real time during the simulator sorties.

A instructor operator station for remote operation, control and monitoring is also part of the training simulator setup and the instructor has the facility to take over the control during training. A time stamped history of the entire flight sortie is also incorporated for effective debriefing after the flight. In addition, a Tactical Control Station (TCS), jointly developed with Institute for Systems Studies & Analyses (ISSA), Delhi has also been integrated for mission scenario

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New Column

simulation to impart effective aircrew training on LCA missions.

This facility is setup to meet the conversion/abinitio training requirements of the LCA Squadron Pilots for procedures, flying under normal as well as emergency conditions and performing combat missions as per the training syllabus and is an invaluable training aid to train the pilots for various missions of LCA. It also meets the training requirements on simulated weapon systems and advanced mission sensors such as electronic warfare suite, multi-mode radar and laser designator pod among others. The system could be enhanced or upgraded to meet the additional requirements during the development /production cycle of the LCA-Tejas. Being fully designed and developed indigenously in the country and the system could be enhanced or upgraded based on the IAF requirements.

SALIENT FEATURES

- Simulation from engine start up to shutdown including taxying, take-off, execution of planned mission and landing.
- ♦ Training for normal and emergency procedures.
- ♦ Configured around distributed architecture and COTS sub-systems.
- ♦ Segmented dome and projection system (15 channels) with wide field of view projection system (300° x 135°).
- ♦ High fidelity LCA flight dynamics model.
- ♦ Simulated models for aircraft systems, mission sensors and weapons.
- ♦ Near replica of LCA squadron standard cockpit and real Avionics LRUs.
- ♦ Instructor Operator Station (IOS) for operation, monitoring, control of the Simulator and training on various missions.
- ♦ Tactical Control Station (TCS) for mission scenario simulation, monitoring and control with simulated friendly and enemy forces.
- ♦ Pilot brief/de-brief station with playback and what-if analysis capabilities.

MAJOR ACHIEVEMENTS

- ♦ State-of-the-art FMS facility is established at Air Force Station, Sulur.
- ♦ System extensively utilized for pilot training and around 2600+ hrs of flying in FMS completed.
- ♦ 20+ pilots trained and flown solo sorties.
- ♦ Aircrew Exam Board (AEB) conducted using FMS with support from ADE.
- ♦ Software updates/upgrades in line with upgrades in aircraft and fine tuning based on pilot feedback.
- ♦ Operational support provided by ADE to ensure continuous availability of FMS.

CONCLUSION

The system is designed, developed and commissioned by ADE, Bengaluru at AirForce Station, Sulur, and inaugurated by CAS and former Chairman, DRDO during October 2021, is extensively utilised by the squadron pilots for training and various emergency simulations satisfactorily and is

valuable training aid.

This is a stepping stone for the indigenous development of simulators for LCA variants including LCA Mk1A, LCA Mk II, AMCA, etc. Both for design support and training post induction concurrent with respective aircraft programmes).

(Aeronautical Development Establishment (ADE), Bengaluru)

Feature Article is a new column introduced to publish articles related to defence science and technology.



INDUSTRY INTERACTION MEET AT SSPL

The Microelectronic Devices, Computational Systems, and Cyber Systems (MCC) cluster of DRDO successfully organized the Industry Interaction Meet 2025 on June 27, 2025, at the Solid State Physics Laboratory (SSPL), Delhi. The event served as a strategic platform to foster collaboration between DRDO and Indian industry leaders in emerging technology domains.

Over 100 industry professionals representing companies 52 participated in the meet, reflecting a strong interest in technological synergy and innovation. The event focused on exploring technology transfer opportunities in advanced semiconductor materials technologies, and including silicon carbide (SiC), gallium arsenide (GaAs), gallium nitride (GaN), cadmium zinc telluride (CZT), and germanium. These materials are vital for highperformance electronics, defence applications and next-generation



communication systems.

In addition to semiconductor technologies, the event also highlighted critical advancements in trustworthy AI, secure IT infrastructure, and immersive technologies such as Augmented Reality (AR) and Virtual reality (VR). These areas align with India's national objectives in building self-reliant and secure digital ecosystems.

The meet laid the foundation for strategic alliances that can drive research translation from laboratory to market, supporting India's defence and industrial capabilities.

Overall, the meet proved to be a significant step toward deepening DRDO-industry engagement and creating an ecosystem conducive to technological excellence and national security.

PARTICIPATION IN INDO IDEF-2024

A delegation from DRDO, led by Dr Sogunuru Annapurna, Sc 'F', Centre for Airborne Systems (CABS), Bengaluru, with four members—Shri M Ashok Kumar, Sc 'F', DRDL Hyderabad; Shri Devender Sharma, Sc 'F', DPI, DRDO HQrs; Shri P Surya Venkata Jagadeesh, Sc 'E'; and Shri Nilesh Ramabhai Patel, Sc 'E' participated in Indo Defence Expo & Forum (IDEF 2024) during 11-14 June 2025 at JIExpo, Kemayoran, Jakarta, Indonesia. The theme of the event was 'Defence partnerships for Global Peace and Stability'. Shri Sandeep Chakravorty, Ambassador of India to Indonesia. inaugurated the India Pavilion. The Indonesian Ministry of Defence organises the event biennially, and is regarded as one of the most important event in regional and world-wide defence sector.





DESTINATION HIMACHAL @2025 EXHIBITION AT DHARAMSHALA, H.P.

Directorate of Human Development Resource (DHRD), DRDO HQrs along with Defence Geoinformatics Research Establishment (DGRE) as the nodal laboratory and Terminal **Ballistics** Research Laboratory (TBRL), Chandigarh participated in the mega exhibition on 'Destination Himachal @2025', which was organized at Dharamshala by the Central Bureau of Communication (CBC), Regional Office Chandigarh. The exhibition, held during 2-4 July 2005 was an initiative toward innovation, empowerment, and self-reliance. DRDO interacted with students and inspired them



to join DRDO under its 'Join DRDO Campaign'. Models of products developed by DGRE and TBRL were displayed in the stall. The exhibition attracted a significant number of school

and college students including young visitors. DRDO team was presented the award for 'Best Display' for its presentation by Dr Rajeev Bhardwaj, MP (Kangra, Chamba).

BHARAT SANRACHNA EXHIBITION AT SRINAGAR

Directorate of Human Resource Development (DHRD), HOrs and Terminal DRDO Ballistics Research Laboratory (TBRL), Chandigarh as the nodal laboratoy, participated in the national-level exhibition 'Bharat Sanrachna Jammu & Kasmir 2025', which was organised at Srinagar during 10-12 July 2025. Along with DRDO, the exhibition featured nearly 60 premier national institutions, including major organizations such as ISRO, ICMR, CSIR, BIS, NHPC, ICAR, and Geological Survey of India (GSI). Thousands of visitors, including professionals, students, and investors attended the event.



DRDO interacted with students and inspired them to join DRDO under 'Join DRDO Campaign'.

The DRDO was declared as the

winner of the exhibition and the award was presented by Hon'ble Rajya Sabha MP Er Gulam Ali Khatana.



RAISING DAY CELEBRATION

ACEM Nasik

Advanced Centre for Energetic (ACEM). Nasik, Materials celebrated its 14th Raising Day on 10 July 2025 with immense zeal and enthusiasm. Shri U Raia Babu, DS & DG (MSS), graced the occasion as the Chief Guest, and Prof. Prateek Kishore, DS & DG (ACE), was the Guest of Honour. Ms Hima Prasanth, Director, Admin O/o of DG (ACE); Dr Anil Kumar Upadhyay, Director PM, O/o of DG (ACE); Shri PK Gupta, CCE (R&D) West, Pune; Shri Sanjeev Kumar Dubey, CCE (R&DE) Estate, South; and other dignitaries attended the event.

The event was kicked off with the release of balloons, followed by the planting of trees by Chief Guest, Guest of Honour, General Manger, senior scientists of ACEM, and all dignitaries. Shri TV Jagadeeswar Rao, GM, ACEM, briefed about work carried out at ACEM, like the augmentation of facilities to 50T casting and 10T HD1.1 processing. He stressed the importance of safety, quality, and data storage in propellant processing. He also elaborated on various futuristic activities undertaken at ACEM as per the 10-year roadmap. Guest of Honour, Prof. Kishore in his address, appreciated the work carried out by each employee and noted that to date, ACEM has carried out processing of propellant without any incidents or accidents. He requested that ACEM achieve its targets with full safety compliance and maintain its record of zero accidents. Chief Guest Shri Raja Babu, in his



address, appreciated that ACEM has crossed its rated capacity of propellant processing and projects taken up by ACEM. He also noted that ACEM has set an example of efficiency and work culture.

DL, Jodhpur

67th Raising Day of Defence Laboratory, Jodhpur (DLJ) was celebrated on 4 July 2025, with great enthusiasm and pride, Dr Samir V Kamat Secretary DD R&D & Chairman DRDO, graced the occasion as the Chief Guest. The event was further honoured by the presence of Dr RV Haraprasad DS & DG (NS&M) and Dr Manu Korulla, OS & DG (R&M).

The Chief Guest addressed the gathering and highlighted the achievements and future vision of





the organisation. The celebration reflected the spirit of innovation, dedication, and national service that defines DRDO's mission. On this momentous occasion. Kamat congratulated DLJ family for their dedication, perseverance, and contribution to the collective success. Dr Haraprasad in his address, appreciated the efforts made by the laboratory in development of state-of-the-art technologies in strategically important areas. Shri VS Shenoi, OS & Director DLJ, in his address highlighted the laboratory's notable achievements and futuristic road-map.

On the occasion, commendation cards to meritorious employees, certificates to winners for various sports events were given by the Chairman DRDO. The employees who have completed 25 years of service in DRDO, were also felicitated during this event.

TBRL, Chandigarh

Terminal The **Ballistics** Research Laboratory (TBRL), Chandigarh, celebrated its 65th Raising Day with a special event held at the TBRL Ranges in Ramgarh. The event was graced by Shri U Raja Babu, DG (MSS), as the Chief Guest, and Dr Prateek Kishore, DG (ACE), as the Guest of Honor. Shri Raja Babu applauded the significant role and remarkable achievement of the laboratory, and highlighted that TBRL's stateof-the-art test facilities are being increasingly extended to Indian industries, R&D institutes, and academic institutions to promote collaboration and innovation.

He also indicated various areas of research where both the MSS & ACE clusters can work together. Dr M Raghavendra Rao, OS & Director TBRL, highlighted the laboratory's key accomplishments in 2024 and

shared ambitious plans for 2025. A key moment of the event was the inauguration of a statue of Dr APJ Abdul Kalam by the Chief Guest. The site where the statue was installed has been named 'Prerna Sthal' to honor the inspiring legacy of the former president and eminent scientist of missile technology.

Also, on the occasion, the Hindi Range Safety Manual and a Hindi book on Explosive Welding were released. Employees were recognized for their successful completion of 25 years of service in TBRL/DRDO, and appreciation certificates were also awarded for noteworthy contributions of employees.

During this occasion, former directors of TBRL Dr VS Sethi, and Dr Satish Kumar, and directors of DRDO laboratories and corporate directors from DRDO HQrs, were also present.





INTERNATIONAL YOGA DAY CELEBRATION

ACEM, Nasik

Advanced Centre for Energetic Material (ACEM), Nasik, celebrated International Day of Yoga (IDY) on 21 June 2025 with great enthusiasm. The theme for this year was "Yoga for One Earth, One Health". Shri TV Jagadeeswar Rao, General Manager, along with officers and staff of ACEM family participated in the event with full zeal and enthusiasm at DRDO Residential Colony, CIDCO.

Various asanas were performed and their benefits were explained by the yoga instructor Smt Ishrat Merchant. GM, ACEM, reiterated the benefits of yoga for the body, mind, and soul and asked employees to inculcate yoga as an indispensable habit in their life. He also emphasized the importance of yoga in relieving stress and maintaining a healthy body.



CAIR, Bengaluru

The IDY 2025 was celebrated at the Centre for Artificial Intelligence and Robotics (CAIR), Bengaluru, on 24 June 2025. The theme for IDY 2025 was "Harit Yoga". Dr Rituraj Kumar, OS & Director, CAIR, inaugurated the event and welcomed the instructor Smt Priya Murgesh from the Art of Living,

and the participants. Smt Priya Murgesh conducted a yoga session that involved warm-up, stretching, yoga asanas, pranayama, and meditation. This was followed by a tree sapling plantation drive led by Dr Rituraj Kumar, Smt Murgesh, and participants.



CASDIC, Bengaluru

Combat Aircraft **Systems** Development and Integration Centre (CASDIC), Bengaluru, celebrated IDY on 21 June 2025. The event was organised under the guidance of Ms S Sarala, Sc 'G'. Shri Rajeev Marathe, Centre Head, CASDIC, graced the occasion and actively participated in the yoga session. The celebration began at 7:30 am with an inaugural address by Shri Ajeet Kumar, Sc 'E', followed by an opening speech by the Centre Head, CASDIC, emphasizing the importance of yoga and its global relevance.

Thereafter, a guided yoga practice led by yoga teacher Dr C Srirama, TO 'C', covered asanas, pranayama, and meditation. Centre Head, CASDIC recommended conducting regular yoga sessions or workshops throughout the year and also to introduce yoga as part of daily physical activities.



CFEES, Delhi

On the occasion of IDY on 21 June 2025, a yoga training session was organized at the Centre for Fire, Explosive, and Environment Safety (CFEES), Delhi. The theme of the event was "Yoga for One Earth, One Health". Yoga instructor Mr Manish Sharma was invited for the session. He enlightened the participants on the importance of yoga and meditation. In the serene environment of the lush green park within the CFEES campus, officers and staff, including the Director, actively participated in practicing yoga and meditation.



DEAL, Dehradun

11th IDY was celebrated by Defence Electronics Applications Laboratory (DEAL), Dehradun, on 21 June 2025. More than 150 DEAL employees participated in the event. Yoga sequence was



executed under the guidance of expert yoga teachers. In the event, demonstrations of yoga postures was exhibited by experienced yoga teacher so that the practice could be incorporated in daily life to improve physical, mental, emotional and spiritual health. In his message, Director, DEAL encouraged all to make yoga part of their life for physical and mental health. The event ended with a message that yoga promotes the holistic health of every individual, and helps to stay healthy and rejuvenated.



DMSRDE, Kanpur

Defence Materials and Stores Research & Development Establishment (DMSRDE). Kanpur, celebrated IDY 21 June 2025 in the Transit Facility of DMSRDE, Kanpur. The program was inaugurated by the Chief Guest Dr Mayank Dwivedi, OS & DG (HR), DRDO HQrs, New Delhi, along with Dr Kingsuk Mukhopadhyay, Sc 'G' & Officiating Director, DMSRDE. Dr Rakesh Kumar Gupta, Sc 'F' explained the benefits of yoga in achieving the perfect harmony between the mind and body. He also showcased vogasanas, pranayama, and dhyana as per common yoga protocol issued by the Avush Ministry, Govt of India. Chief Guest himself performed



various yogasanas and motivated the DMSRDE family to maintain good physical and mental health by doing yoga. The yoga session was completed with the administration of an oath (sankalp) about yoga and shantipath by the Chief Guest. The celebration included the tree plantation and cleanliness drive.

DRL, Tezpur

A special yoga session was organized on the occasion of IDY on 21 June 2025 at Defence Research Laboratory (DRL), Tezpur. Yoga instructors from Vivekananda Kendra led the morning yoga session, highlighting the physical, mental, and emotional benefits of practicing yoga. As part of the Harit Yoga activities, a plantation drive and clean-up campaign were also conducted. The employees planted saplings to promote green cover in the DRL Campus.

DYSL-QT, Pune

DRDO Young Scientist Laboratory-Quantum Technologies (DYSL-QT), Pune, celebrated **IDY** on June 2025 with tremendous enthusiasm and reverence for the ancient practice. The event was inaugurated by Dr Santu Sardar, Director, DYSL-OT, Pune, in the







presence of officers and staff of the laboratory. The highlight of the event was a special session led by state-level yoga instructor Ms Pratiksha Kivale, whose 15 years of experience in practicing voga brought depth and authenticity to the occasion. Participants engaged in various asanas and breathing techniques, learning both the physical and mental benefits of yoga. Ms Kivale's guidance inspired attendees to embrace yoga as a daily discipline. The celebration nopromoted wellness and strengthenedommunity bonds through shared mindfulness and holistic practices.

ISSA, Delhi

On 25 June 2025, the Institute for Systems Studies & Analyses (ISSA), Delhi, celebrated 2025 IDY with an engaging yoga event attended by all officers, staff, and support contract staff. The yoga session was led by Smt N Rabita Devi, Sc 'F,' and Shri Jay Shankar Kumar, Sc 'F', within the organisation who demonstrated and led various yoga poses, emphasizing the importance of physical fitness, mental clarity, and overall well-being. The initiative aimed to inspire mindfulness and promote healthy lifestyles among all participants. The event was well-received and strengthened the spirit of wellness and unity within the workplace. Prior to the



aforementioned event, 15 officers and staff also attended the yoga event conducted by DIPAS, Delhi, on 21 June 2025.

ITM, Mussoorie

IDY 2025 was observed at the Institute of **Technology** Management (ITM), Mussoorie, on 19 June 2025. Shri BP Upreti, yoga instructor. assisted employees during a live demonstration of yoga. He demonstrated various yoga asanas, pranayama, and meditation. He explained the merits of different asanas and suggested putting them into practice in daily life. He further suggested the names of corresponding asanas for common health issues like back pain, mental stress, anxiety, and other ailments. Addressing the gathering, Shri SP Dobhal, Director ITM, highlighted the benefits of yoga in achieving the perfect harmony between the mind and body and requested employees to practice to reap its benefits.



LRDE, Bengaluru

The 11th IDY was celebrated with great zeal and enthusiasm at Electronics & Radar Development Establishment (LRDE), Bengaluru, on 21 June 2025. Shri Gampala Viswam, DS & Director, LRDE, inaugurated the event and addressed the gathering,

emphasizing the benefits of yoga in achieving the perfect harmony between the mind and body. Several yoga asanas were practiced during the event. More than 100 officers and staff participated in the event. Later, Shri Viswam and Shri Sheik Althaf M, Associate Director, planted the saplings on the campus.



MTRDC, Bengaluru

Microwave Tube Research & Development Centre (MTRDC), Bengaluru, celebrated IDY 2025 on 21 June 2025. Certified yoga instructors Smt Lalitha Narayan and Shri Prakash Chandra from Paphulla Vipassana Dhamma Meditation & Research Centre, Bengaluru, graced the occasion the Chief Guests. conducted a meditation session for the participants. At the onset, Dr SK Datta, OS & Centre Head MTRDC, addressed the gathering and welcomed the Chief Guests. A tree plantation session was also conducted during the celebration.





NPOL, Kochi

Physical Naval and Oceanographic Laboratory (NPOL), Kochi, celebrated IDY on 21 June 2025 with enlightening focusing programs significance of yoga for a healthy and happy life. Shri S Vasudevan, Sc 'H', Officiating Director, NPOL Kochi, addressed the gathering with an insightful speech. In his address, he emphasized the role of voga in enhancing physical health, mental clarity, emotional stability, and overall well-being. The highlight of the event was the yoga session led by Yoga Guru



Shri Dinachandran B, General Secretary of Patanjali Yoga Research Center, Kochi, who was accompanied by instructors Ms Divya and Ms Reena.

Smt Chethana Badekar, Academic Director, Yogachethana College of Yoga and Research, Mangalore, conducted a lecture and led a session on yoga practices on 23 June 2025 for NPOL employees. In the yoga practice session, yoga disciple Dr Manasa K Shet demonstrated yoga and pranayama. All officers and staff participated in the session.

PXE, Chandipur

11th IDY was observed at Proof and Experimental Establishment (PXE), Chandipur. The event started with a brief on the importance of yoga in day-today life with the history behind the celebration of IDY by Shri Subodha Kumar Nayak, OS & Director, PXE. Shri Ranjan Kumar Swain, Yoga Specialist, Paradeep, was the Chief Guest on the occasion. Smt Tilotama Senapati, co-instructor, assisted him during the live demonstration on yoga. They demonstrated various yoga asanas, pranayama, and meditation. The chief guest explained the merits of different yogas and suggested putting them into practice in daily life. He also clarified doubt raised by the participating employees. Around 550 PXE employees, including civilians, service personnel, and security personnel, participated in the event. A tree plantation drive was also carried out as part of the celebration.



FOOD SAFETY DAY CELEBRATION AT NPOL

Physical Naval and Oceanographic Laboratory Kochi organized (NPOL), lecture on 'Safe Food Today for a Healthy Life Tomorrow' in connection with the World Food Safety Day together with Food Safety and Standards Authority of India (FSSAI), Kochi, on 11 June 2025. Shri Tinto Chacko, Tech 'B' & Secretary Works Committee welcomed the gathering. Smt Dhanya KN, Deputy Director, FSSAI, Kochi gave an overview of the mandate, structure and activities of FSSAI. Dr Urmila Unnikrishnan, Technical Officer,



FSSAI, Kochi gave a lecture on food safety. Based on the inspections carried out by FSSAI team, NPOL was presented with "Eat Right Campus" award by the FSSAI. Shri. Mohanan K, Sc 'H' & Officiating Director received the award from Smt Dhanya.



DOMS-SERVICE AND RESOURCE CONCLAVE

Best Management Practice for Service Contract

The Directorate of Management Services (DMS), functioning under the R&M Cluster of DRDO HQrs organized two-day DoMS-Service and Resource Conclave (Engagement of Alternate Manpower), "Best Management Practice for Service Contracts" during 23-24 June 2025 at DRDO HOrs. Delhi, to create awareness among the officers and staff dealing with multiple facets of handling service contracts with the aim of bringing out a uniform policy for service contracts in organization. The conclave was inaugurated by Secretary DD R&D & Chairman DRDO, with keynote addresses by Prof. Seema Sharma, ex-HoD, Deptt. of Management Studies, IIT-Delhi and Dr Arvind, DG, VV Giri National Labour Institute.

The conclave culminated in a set of actionable recommendations aimed at strengthening service frameworks contract and optimizing alternate manpower utilization. These initiatives are expected to enhance DRDO's operational agility, reduce contractual risks, and ensure judicious use of resources, thereby contributing to the organization's strategic objectives and mission readiness.

In today's scenario, it is evident that though the strength of permanent manpower is depleting gradually, the activities being pursuedintheformofnewprojects/ programs catering to cuttingedge and futuristic technology domains have increased manifold. Completion of associated activities within stipulated time mandates hiring of contractual manpower through service contracts by all the labs/establishments/centers. Management of contractual manpower plays a pivotal role as issues related to their day-today handling, retention, vigilance aspects, appropriate T&C for RFP & GeM bidding, social welfare benefits, etc., are becoming critical. The goal is to raise awareness among the officers and staff who handle various aspects of service contract management.

The DMS is the powerhouse behind DRDO's operational success, commands the flow resources, navigates the complexities of personnel, and masters the art of seamless procurement, ensuring that the wheels of innovation never stall. Without DMS, the visionary feats of DRDO's scientists would remain dreams unrealized. DMS maintains order amidst complexity, balancing finance, manpower, and logistics into a harmonious blend of efficiency and agility. It empowers DRDO to push boundaries, break barriers, and emerge victorious in the quest for self-reliance. When the DRDO demands strength, DMS delivers the framework. When innovation calls, DMS answers with unwavering precision.

The Conclave was held with the aim to foster the culture of "Listening, Learning, Mentoring, and Sharing Best Management Practices," familiarize people with new labor codes, amendments, and industrial relations/social security aspects, and provide a platform for synergy and deliberations among all DRDO laboratories/ establishments.

"Managing Excellence, Empowering Innovation."





WORKSHOP ON AERO PROPULSION DESIGN & TESTING OF HYPERSONIC MISSILES AT CAS

A world class one-meter diameter Hypersonic Wind Tunnel facility and a Scramjet Connected Pipe Mode Test facility have been established at Centre for Advanced Systems (CAS), Hyderabad. Both these test facilities are going to play a major role to provide critical design input for aero propulsion design of Hypersonic Cruise Missile (HCM) of DRDO. Frequent interactions of domain knowledge among organization academia. R&D are required for development of critical technologies associated with scramjet engines. Therefore, a one-day workshop on 'Aero Propulsion Design and Testing Hypersonic Missile' was conducted at CAS on 22 May 2025.

The workshop was inaugurated



by Chief Guest Dr S Christopher, Former Chairman DRDO & Secretary DDR&D. Dr Satish Kumar, Former DG (MSS) & former Director NIT Kurukshetra was the Guest of Honour. Dr N Sivasubramaniam, DS & Director CAS and Shri Sandip Chattopadhyay, OS & Associate Director, CAS also spoke on the occasion. The workshop was concluded with a vote of thanks by Dr Bikamjit Podder, Sc 'G', TD HWT, CAS.

DRDO CONDUCTS WEBINAR ON FMECA TO STRENGTHEN DEFENCE SYSTEM RELIABILITY

The Directorate of Quality, Reliability & Safety (DQR&S), DRDO organized an impactful webinar on Failure Mode, Effects, and Criticality Analysis (FMECA) — a structured methodology to identify, evaluate, and mitigate potential failure risks in defence systems on 15 July 2025. The session was chaired by Dr Chandrika Kaushik, DG (PC & SI), and saw enthusiastic participation from over 150 experts across various DRDO laboratories and the Armed Services.



HRD ACTIVITIES



An eminent subject matter expert delivered an insightful presentation highlighting the latest developments in reliability engineering and risk assessment. The session underscored the importance of integrating FMECA into the design and development of

advanced defence and aerospace platforms to enhance system performance and mission readiness. Participants gained valuable technical knowledge and practical tools to proactively address failure risks, thus contributing to the broader goal of enhancing safety, reliability,

and operational effectiveness in critical national security systems.

This initiative reflects DRDO's continued commitment to fostering technological excellence, quality assurance, and a culture of systematic risk management in indigenous defence development programs.

WORKSHOP ON KNOWLEDGE MANAGEMENT FOR R&D ECOSYSTEM AT DESIDOC

Defence The Scientific Information & Documentation (DESIDOC), organized a one-day workshop "Knowledge Management (KM) and its Application to R&D Ecosystems" on 9 July 2025. The objective of the workshop was to explore the key challenges, share best practices being adopted across DRDO laboratories, and the need of developing a comprehensive framework for seamless integration of KM practices throughout the organization.

Dr Mayank Dwivedi, OS & Director General (HR), DRDO, was the Chief Guest and formally inaugurated the workshop. In his address, Dr Dwivedi underscored the pivotal role of documentation as the cornerstone of effective knowledge management. emphasized that well-structured unified documentation and systems will foster transparency, improve access to institutional knowledge, and help avoid redundant research efforts across DRDO.

Ms Kiran Chauhan, Director, DESIDOC, highlighted DESIDOC's role in bridging information gaps by offering platforms for



knowledge sharing, standardizing documentation practices, and disseminating strategic research outputs. She reaffirmed DESIDOC's commitment to supporting DRDO's evolving knowledge needs.

The valedictory session was graced by Dr Ravindra Singh, OS & Director, DMS, who served as the Chief Guest. He provided valuable insights into the Government's perspective on Knowledge Management and shared a futuristic roadmap to

strengthen KM practices within the defence R&D ecosystem. The workshop witnessed enthusiastic participation from around 55 scientists and officers representing various DRDO laboratories. The sessions featured thought-provoking discussions on KM frameworks, policy-level enablers, and digital documentation tools.

Shri Arvind Kumar, Sc 'F', DESIDOC served as the moderator and nodal officer, ensuring smooth coordination and facilitation of the event.



FAMILIARIZATION PROGRAMME & AVALANCHE AWARENESS TRAINING BY DGRE

enhance the troops preparedness towards safer mobility on operational duties and commitments the Indian Himalayas, the Defence Geoinformatics Research Establishment (DGRE), Chandigarh, conducted a familiarization program and Avalanche Awareness Training for the troops of HQ 14 Corps at Siachen Battle School (SBS). Various cadres undergone training before induction to Siachen. The training to officials of 14th Bn NDRF was also imparted at DGRE RDC, Manali, during May 2025. They were briefed about the snow, dangers of avalanches, snow-meteorological



data instruments including AWS and their operational working, various avalanche safety-rescue procedures, and operational issues in snowbound regions of mountains.

COURSES AT ITM, MUSSOORIE

Course on Systems Engineering

three-day course Α on **'Systems** Engineering' was organised by the Institute of Technology Management (ITM), Mussoorie, during 17-19 June 2025. The objective of the course was to provide an overview of systems engineering through structured lectures and case studies to highlight challenges, methodologies, and innovations in the design and development of complex systems.

The course was inaugurated on 17 June 2025 by Ms Santhya P, Director CABS, and Shri SP Dobhal, Director, ITM. The Chief Guest emphasised that systems engineering is crucial for managing the complexity of



modern technological systems, ensuring they are designed, built, and operated effectively, safely, and cost-effectively.

The course concluded with an online valedictory address by Chief Guest Dr (Ms) Chandrika Kaushik,

DS & DG (PC&SI).

She reiterated the importance of systems engineering and also gave an overview of the recently compiled document 'Defence R&D Product Development Process Handbook'.



Course on Train the Trainer on Technology Forecasting

A one-day course on 'Train the Trainer on Technology Forecasting' was organized by the ITM, Mussoorie, on 11 June 2025. The course was inaugurated by Shri SP Dobhal, Director, ITM, and Prof. (Dr) Bala Ramadurai. In the inaugural address. Director. ITM emphasized the importance of Technology Forecasting (TF) fundamental concepts and



and practical application of technology forecasting, exploring methods to predict technological advances in real-world scenarios.

Course on Project Documentation: Lessons Learnt & Best Practices

A three-day course on 'Project Documentation: Lessons Learned & Best Practices' was organized by the ITM, Mussoorie, from 30 June 2025 to 2 July 2025. The objective of the course was to equip the essential knowledge and skills for effective documentation in a project environment, with emphasis on project documentation in DRDO. The course was inaugurated by Shri Purusottam Bej, Former OS & DG (R&M), and Director, ITM.

The course concluded with a session on 'Experience Sharing



on Project Documentation' and an address by Dr Manoranjan Patri, OS (Retd.) & Chairman, CEPTAM.

Course debriefing and a vote of thanks were done by Shri Aditya Verma, Sc 'D'.

Outreach Program & Zonal Conf. of DDGEs & DEs of AIR & Doordarshan

A one-day training program followed by a two-day conference for Deputy Director Generals Engineer (DDGEs) and Directors Engineer (DEs) of All India Radio and Doordarshan Kendras of the North Zone and National Zone was organized by the ITM, Mussoorie, during 23-25 June 2025. This was conducted as an outreach program by ITM, Mussoorie. The Training cum Conference was inaugurated on 23 June 2025 by Shri SP Dobhal, Director ITM. Shri RB Ram, DDGE (AVM), and Shri Rajendra



Kumar, DDGE (DDM), were also present. During the Valedictory Session, Courser Director Smt Anita Mohindra, Sc 'F' gave the debriefing about the feedback by participants. Shri Aftab Ahmed, ADG (E), and Shri RP Joshi, ADG (E), from Doordarshan and All India Radio were also present during the valedictory session.

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DRDO SAFETY PROFESSIONAL MEET CUM TRAINING PROGRAM AT PILKHUWA

The Centre for Fire, Explosive, and Environment Safety (CFEES), Delhi, being the safety laboratory and a regulatory body for ensuring fire, explosive, and environment safety in DRDO, is committed to fostering a safety culture by way of conducting regular awareness drives and structured training programs. **Following** these principles, CFEES arranged a oneday DRDO Safety Professional Meet cum Training Program at SDC, Pilkhuwa, on 4 July 2025. The objective of the event was to facilitate participants' engagement with safety experts and share innovative safety practices. The program featured expert lectures



in safety domains, viz., fire safety, explosive safety, environmental safety, and industrial safety. The participants had an opportunity to witness a fire safety and rescue

demonstration. A panel discussion was organized on 'Innovation in Safety Management for DRDO' to encourage dialogue and share innovative safety practices.

COURSE ON ADVANCES IN TORPEDO SEEKER TECHNOLOGIES AT NSTL

Science Naval and Technological Laboratory (NSTL), Visakhapatnam, conducted course on 'Advances in Torpedo Seeker Technologies' during 23-27 June 2025. The sessions and lectures were meticulously planned with domain experts invited as speakers, with the objective of improving the technical knowledge related to futuristic torpedo seeker design. The course had diverse participants from DRDO, the Indian Navy, and industry. The course was inaugurated by the Chief Guest Dr Abraham Varughese, OS & Director, NSTL, and the Guest of Honour Dr Vijayan



Pillai, former director, NPOL. Dr HN Das, OS & PD (HEAUV), was the Chief Guest for the valedictory function. The Chief Guest appreciated the contributions

of M Sujatha, Sc 'F', Course Director; Ch. Challam Naidu, Sc 'E', Deputy Course Director; and all committee members for the successful conduct of the course.



VIGILANCE AND SECURITY SENSITIZATION PROGRAM AT NSTL

Naval Science & Technological Laboratory (NSTL), Visakhaconducted patnam, a one-'Vigilance Security and Sensitization Awareness Training Program' on 27 June 2025. Lt. Col. BP Acharya, Chief Security Officer, delivered a lecture on security guidelines and how to overcome the espionage attempts by PIOs post-Op-Sindoor and formulate a concerted strategy to mitigate the same. Shri Abhisekh Kumar Singh, Security Officer, delivered a lecture on mobile and internet security in day-to-day life. He covered various cyber financial frauds, digital arrest, cybercriminals showing how



operate in the real world. He also covered the Official Secrets Act of 1923 and cybersecurity protocols to be followed by defence establishments. To create general security consciousness among all contractual employees, Shri A Visweswara Rao, Security Officer, presented a talk covering all aspects of physical and document security. All the do's and don'ts at the laboratory were also covered.

INVITED TALK BY DR VK SARASWAT AT LRDE

Saraswat, Dr VK Padma Bhushan Awardee, Hon'ble Member, NITI Aayog & Former Secretary DD R&D & Chairman, Electronics & visited Radar Establishment Development (LRDE), Bengaluru, on 19 June 2025. Along with Dr Saraswat, Dr GM Cleetus, Former Director, LRDE, also graced the occasion. Shri Gampala Viswam, DS & Director, LRDE, presided over the event. The event commenced with a welcome address by Shri Viswam. He highlighted commendable contributions made by Dr Saraswat and Dr Cleetus and how they were his role models. On the occasion, Dr Cleetus shared his experiences in LRDE. Later, Dr Saraswat interacted with the LRDE



fraternity and delivered a highly inspirational and motivational speech, sharing his experiences and vision.

He appreciated the excellent work done by LRDE in the field of radars and shared his views on the changing nature of R&D in the current scenario and inspired all to take up new challenges. The dignitaries also toured the Radar Gallery, showcasing all the radar models and portable radar systems.

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INVITED TALK AT NPOL

Naval Physical and Oceanographic Laboratory (NPOL), Kochi organised an invited talk on 'The Hidden War Within' by Dr Rose Mary Antony, Founder and Chief Psychologist, Solforge, Kochi, on 5 June 2025. The talk mainly focused on emotional power, emotional

freedom, and self-discovery. An interactive session followed the talk. Dr Duvvuri Seshagiri, Director, NPOL, chaired the session and presented the memento to the speaker as a token of appreciation. NPOL Women's Cell coordinated the conduct of this health awareness program.



WORKSHOP ON MAYURPANKH AT DEAL

A four days workshop on 'Mayurpankh' by faculty from R&D Engg. Pune was organized at Defence Electronics Applications Laboratory (DEAL), Dehradun during 8-11 July 2025 for all the three laboratories of Dehradun region, viz. DEAL, Instruments Research & Development Establishment (IRDE) and

Institute of Technology Management (ITM). A total of 17 sessions were delivered by the expert faculty on admin, finance, security and HR management applications of Mayurpankh ERP. The workshop found wide audience from DRDS, DRTC and admin & allied cadres. The workshop was attended by 91 participants.



NAVAL AVIATION INDIGENISATION SEMINAR

Aviation Indigenization Seminar was conducted at Kochi during 25-26 June 2025 under the aegis of Naval Aircraft Yard, Kochi, focusing on airworthiness certification aspects, wherein CE(A), CEMILAC was the Chief Guest for the event. During the keynote address, he covered the initiatives and reforms undertaken by CEMILAC to facilitate and fasttrack airworthiness certification of air stores being indigenized by our industries. An exhibition was set up for MSMEs in and around Coimbatore/Kerala to display their products. An industry outreach was also session conducted where all the industries got an



opportunity to interact directly with CEMILAC and clarify their doubts/holdups on certification.

Recognizing the challenges of airworthiness and certification, fifty certification kits developed by CEMILAC were distributed. The kit contained relevant technical & procedural directives and standards along with newly created templates and forms. It also included 8 compendiums, 20-plus directives/guidelines, and various supporting materials, viz., flowcharts, standards, etc. For easy assimilation and in-depth coverage of various aspects, 18 video lectures by airworthiness certification domain experts were also included.



INDUSTRY COLLABORATION MEET ON FUTURISTIC AVIONICS AT CASDIC

In a major step towards strengthening indigenous capabilities, Combat Aircraft **Systems** Development Integration Centre (CASDIC), Bengaluru, organized a dynamic industry collaboration event on 30 June 2025. The meet focused on futuristic technologies in avionics, Electronic Warfare (EW), and space domains for focusing majorly on MSMEs and startups. The event witnessed huge participation from numerous startups and MSMEs, who showcased their cuttingedge products and innovative solutions at CASDIC. The event was inaugurated by Shri Rajeev

Marathe, OS & Centre Head CASDIC. Scientists and other staff of CASDIC, Project Directors, IAF Project Management Team of ECS Cluster, Technology Director of CEMILAC, Senior scientists of O\o DGECS, CEOs and other representatives industries participated in the event. CASDIC actively engaged industry participants offering valuable insights and on-the-spot solutions to their technical and regulatory queries. This platform enabled direct interaction between CASDIC and industry partners, fostering collaboration



for upcoming research projects and defense tenders. The initiative reflects DRDO's continued commitment to Atamanibhar Bharat by empowering homegrown technology providers and nurturing a vibrant defence innovation ecosystem.

CAPACITY BUILDING THROUGH FOCUSED TRAINING COURSES BY CEPTAM

As a part of its ongoing efforts to enhance professional skills, CEPTAM organized 10 training courses at 8 different venues in June 2025, each catering to specific functional needs.

Trainings on 'AI & ML' and 'PCB Design, Fabrication & Testing' were held at NIELIT, Kolkata with 23 participants and NIELIT, Aurangabad with 22 participants respectively. At IDEMI, Mumbai, 20 participants attended the course on 'Welding Technology'. Two trainings entitled 'Certificate Course in Practical IT Skills' were organized through CDAC, Noida to cater to the basic technological needs of DRTC and Admin & Allied cadre personnel. A training



on 'Embedded System Design and Application' was conducted at NIELIT, Ropar, attended by 24 participants.

CEPTAM Delhi hosted a mandatory training for 28 Officers Admin and Senior Admin Assistants, covering office procedures, service rules, etc. strengthen administrative to

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efficiency. Parallelly a mandatory course for 30 Stores Officerswas conducted at TTC, Bengaluru, focusing on inventory management, procurement processes, and other stores aspects. Induction course for Accountants was held at DAKSH, Jodhpur, covering all key areas of budget and finance, attended by 39 participants.



TECHNOLOGY DEMONSTRATION OF AGRI ALLIED TECHNIQUES BY DRL

A technology demonstration of agri-allied techniques under the civil-military fusion program was conducted by the Defence Laboratory Research (DRL), Tezpur, in remote border villages along the Indo-China and Indo-Myanmar borders of Arunachal Pradesh. The demonstration consisted of two modules: theory and on-site field demonstration. Training on mushroom cultivation was conducted at border villages under the Mechuka block (Shi-Yomi district) and the Nacho & Siyum block (Upper Subansiri district) of Arunachal Pradesh during 9-11 May and 28-31 May



2025, respectively. A technology demonstration on the agroforestry system was also conducted at the Khimiyang and Nampong blocks (Changlang district) of Arunachal Pradesh during 23-30 May 2025.

COURSE ON FUNDAMENTALS OF VISUAL TRACKING AT IRDE

Instruments Research Development Establishment (IRDE), Dehradun, conducted a three-day course on 'Fundamentals of Visual Tracking' during 18-20 June 2025. The course was designed to cover in details the various aspects of visual tracking including EO sensors, target detection, multi-target tracking and scene simulation. Course included combination of lectures, lab visits, demonstrations and interactive sessions from various The course speakers. inaugurated by Dr Ajay Kumar, OS & Director, IRDE. The course was conducted in 19 sessions with advanced modules.

The lectures were delivered



by eminent speakers from ADE, CAIR, IRDE, IIT Kanpur, and IIT-Roorkee. Industry experts from Mathworks, India were also invited and they gave latest insights in multi-sensor data fusion & object tracking using MATLAB & simulink and prototyping & implementing image processing applications on FPGA & SoCs. The

course enabled the participants to equip themselves with latest trends and technologies in the area of visual tracking. A total of 63 participants from various DRDO laboratoriess attended the course. Dr Zahir Ahmed Ansari, Sc 'F' was the Course Director and Shri Manvendra Singh Chauhan, Sc 'D' was the Deputy Course Director.



DEAL STRENGTHENS INDUSTRY PARTNERSHIPS THROUGH COLLABORATIVE EFFORTS

The Industry Interaction Group (IIG) of Defence Electronics Applications Laboratory (DEAL), Dehradun is actively engaged with leading private sector companies to explore opportunities for collaboration, indigenization and technology transfer. The effort has resulted in significant partnerships, including a recent signing of the Legal Agreement for Transfer of Technology (LAToT) by five prominent defence and communication technology companies. These industry partners, including Bharat Electronics Limited, ICOMM Pvt Ltd, Astra Microwave Pvt Ltd, Decibel Pvt Ltd, and HFCL Pvt Ltd have signed the LAToT for the Compact Transhorizon Communication System (CTCS), a man-portable communication terminal that



enables communication beyond the horizon.

Additionally, DEAL has hosted several industry players, including CoreEL Tech-nologies Pvt Ltd, Siemens, Nicomatic India Electronics Pvt Ltd, Carbon Light Fibre Pvt Ltd, Fluke Technologies Pvt Ltd, and Varisis Advance Engineering Pvt Ltd, who have delivered technical presentations and demonstrated their products and solu-tions. These sessions provided valuable insights into the latest advancements in the field of military communication.

WORKSHOP ON ENSURING SAFE WORKPLACES AT DESIDOC

Defence Scientific Information and Documentation Centre (DESIDOC), Delhi. conducted a workshop **Ensuring** Safe Workplaces: Internal Complaints Committee & POSH Act' on 23 July 2025.

Ms Kiran Chauhan, Director, DESIDOC inaugurated the workshop. In her address,



PERSONNEL NEWS



she talked about promoting a safe workplace culture that is respectful and free from any form of harassment or discrimination. She also said that a respectful workplace benefits everyone as it boosts morale, productivity, and overall well-being. Ms Alka Bansal, Sc 'G' & Presiding Officer, provided the overview of the workshop along with composition and role of IC in DESIDOC. She

announced the winners of the poster and slogan competitions held at DESIDOC as part of the ongoing effort.

Ms Tunika Sharma and Ms Neha Singh, Legal Counsellors, from National Commission for Women, were invited as orators for the workshop. They talked about importance of the POSH Act in protecting employees from sexual harassment, consequences of indulging in sexual harassment and role of IC in dealing with the complaints. The orators also discussed various case studies out of their experience in the related field. Dr Yousuf Ansari, Sc 'G', also addressed the gathering. About 150 employees (permanent and temporary) of DESIDOC participated in the event. Team, IC, DESIDOC coordinated the event.

PERSONNEL NEWS

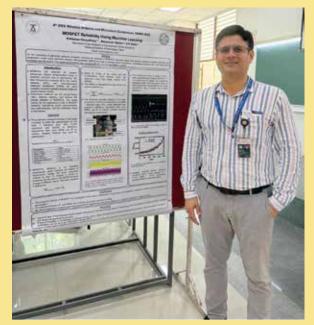
Award in Poster Presentation at Young Scientist Meet -2025

Shri Shesh Kumar Sc 'B', Microwave Tube Research & Development Centre (MTRDC), Bengaluru, was awarded the poster winner for his paper titled 'Next –Generation Microwave Weapon Technologies for Defence' during Young Scientist Meet 2025. Shri Shesh Kumar received the award from from Director, IRDE and Director, DEAL.



Best Poster Paper Award (second place) at WAMS-2025

Shri Khilawan Chaudhuary, Sc'F', Microwave Tube Research & Development Centre (MTRDC), Bengaluru, received the best poster paper award (second place) for presenting the paper titled 'MOSFET Reliability Using Machine Learning' by Khilawan Chaudhary, Manipuran Mahto, and Shri SK Datta at WAMPS 2025, held at IIITDM, Kancheepuram.





HINDI WORKSHOPS

DMSRDE, Kanpur

The first Hindi Karvashala during the FY 2025-26 on 'Digital yug mein Hindi ki prasangikta aur sambhawnayein' was organised Rajbhasha Karyanyayan Samiti at Defence Materials and Stores Research & Development Establishment (DMSRDE), Kanpur, on 30 June 2025. The Karyashala was inaugurated by Dr JN Srivastava, Associate Director, DMSRDE. Prof. Indu Yadav, Head of Department, Hindi Department, DG College, Kanpur, was the invited speaker. In his inaugural Associate Director address. appraised the Rajbhasha activities the ongoing in laboratory. Dr Indu Yadav said that the use of Hindi in technical fields in India needs to be popularized. She said that Hindi software and interfaces should be used in day-to-day life to make Hindi more acceptable to large masses. She also spoke about various schemes launched by the Government of India with the Hindi portal, such as PM Awas Yojana, PM Ujjwala Yojana, etc. Shri Ashish Kumar Singh, Technician 'B,' delivered the vote of thanks.



NPOL, Kochi

Naval Physical and Oceanographic Laboratory (NPOL), Kochi, organized a one-day Hindi workshop for the



officers of the Admin & Allied Cadre on 23 June 2025 as part of official language implementation activities. The workshop was inaugurated by Sri K Mohanan, Sc 'H' & Director (Management). Dr Santhosh Alex, Chief Technical Officer (Rajbhasha) from CIFNET, Kochi, was the resource person for this workshop. The key topics covered under this workshop were 'Rajbhasha Policy and Annual Programme' and 'Parliamentary Committee on Rajbhasha'. The faculty elaborated on India's linguistic and cultural diversity while emphasizing the pivotal role of Hindi in administrative functions. The session interactive and well received by the participants, fostering active engagement and discussions on the usage of Hindi in official works. Shri Ramlochan awasthi, Sc 'E' & Member Secretary, OLIC proposed the vote of thanks.

NSTL, Visakhapatnam

Rajbhasha workshop organized on 14 July was at the Naval Science 2025 and Technological Laboratory Visakhapatnam, (NSTL). enhance all employees' interest Raibhasha Hindi and to eliminate their hesitations when using Hindi in official duties. The invited speaker was honoured by Shri Vivek Sharma, Sc 'F' & Raibhasha Officer, and then the workshop commenced. A lecture was delivered by the invited speaker, Shri A Siva Prasad, a corporate renowned trainer, educator, and motivator, on the topic of 'Communication Skills and Correspondence' in a single session. An interactive session was also held for the trainees. A total of 80 participants from all cadres participated enthusiastically in this workshop.





AGCM OF DRDO SPORTS BOARD

DRDO Sports Board (DSB) Annual General Council Meeting (AGCM-2025) was held on 2 July 2025 in hybrid mode at New Delhi, chaired by Dr Manu Korulla, OS, DG (R&M) & Vice Patron-in-Chief, DRDO Sports Board and Shri Arun Chaudhary, Director DIITM & Vice President DRDO Sports Board. The meeting was attended by members of newly constituted DRDO Sports Board Members, Zonal Sports Council Members, Invited Members from laboratories and JCM.

Shri KPC Rao, Sc 'G' HEMRL, Chairperson, West Zone Sports Council. Dr Akhilesh Pandey, Sc 'F', SSPL, Chairperson North Zone



Sports Council; Ms Tanizaroy, Sc 'F' LRDE, Chairperson, South Zone Sports Council; and Shri Om Parkash, Sc 'F', DRDL Chairperson Central Zone Sports Council; presented the zonal achievements of FY2024-25 and budget requirements for the FY 2025-26. With a shared vision and spirit of collaboration, the AGCM set the course for an exciting year 2025-26 of sporting excellence, inclusivity, and participation across all DRDO establishments.

WORLD BLOOD DONOR DAY

DGRE, Chandigarh

World Blood Donor Day 2025 was observed at Defence Geoinformatics Research Establishment (DGRE), Chandigarh, on 14 June 2025 to honor the invaluable contribution of voluntary blood donors. The effort was aimed at ensuring a steady supply of blood for patients in need and at encouraging public participation in voluntary blood donation. DGRE in association with Rotary and Blood Bank Society Resource Centre. coordinated the event at Blood Center, Sector 37, Chandigarh, and encouraged the DGRE employees to come forward to donate blood. In addition to blood donation, DGRE officials also submitted their written commitment, 'a pledge,' that they will continue to donate blood regularly and whenever the need arises, without any benefit or discrimination, they will give their blood to the person in need so that no one dies because of lack of blood.



DRL, Tezpur

Defence Research Laboratory (DRL), Tezpur, in collaboration with Kanaklata Civil Hospital, Tezpur, organized a blood donation camp on 13 June 2025, to observe World Blood Donor Day. This year's theme, "Give

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Blood, Give Hope: Together We Save Lives," aptly captured the spirit of the event. The campaign aimed to raise awareness about the vital role of blood donation and inspire more individuals to become regular donors. DRL staff and local residents participated wholeheartedly, demonstrating strong sense of social responsibility. The success of the event reflects DRL's commitment to public health and community welfare.



AUGUST 2025



VISITORS TO DRDO LABORATORIES

CAIR, Bengaluru

Naresh Cmde Chhabra, DACIDS (ICT & N), visited the Centre for Artificial Intelligence and Robotics (CAIR), Bengaluru, on 2 June 2025. There was a briefing by Dr Rituraj Kumar, OS & Director, CAIR, followed by discussion and demonstration of technologies developed by CAIR in the area of Intelligent Systems & Robotics, Command and Control technologies for naval and land forces, and Geographical Information Systems.

DEAL, Dehradun

Shri Jitendra JJadhav, DS&DG, ADA visited Defence Electronics Applications Laboratory (DEAL), Dehradun, on 21 June 2025 along with his team comprising of Dr V Madhusudana Rao, OS & PD (LCA AF Mk2), Ms Padmavathi, OS & TD (Av & WS), Shri Paramesh KV, OS & GD (ASAD), Gp Capt. Senthil Kumar and Gp Capt. Sidharth. They were greeted by Shri Manoj Kumar Dhaka, OS & Director DEAL, DEAL team made live demonstration of secure voice communication on SDR and presented the achievements of recent trials carried out. DS & DG ADA reviewed the status on development of SDR for LCA AF Mk2 and appreciated the progress made by DEAL on SDR.

DGRE, Chandigarh

Trainees of the Government Industrial Training Institute, Chandigarh, of Geo-Informatics, Assistant Trade, along with faculty members, visited the Defence Geoinformatics



Cmde Naresh Chhabra, DACIDS (ICT & N), during his visit at CAIR, Bengaluru



Shri Jitendra J Jadhav, DS & DG, ADA during his visit at DEAL, Dehradun



Trainees of the Govt Industrial Training Institute, Chandigarh at DGRE, Chandigarh



Research Establishment (DGRE), Chandigarh, on 16 June 2025 on an industrial visit to gain practical exposure and understanding of field applications of Geo-Informatics.

Trainees were briefed about recent geospatial technologies and their applications in geohazards (avalanches, flash floods and GLOFs, and landslides) mitigation and management in the mountainous region of the Himalayas. They also gained knowledge about various remote sensing and GIS tools available in DGRE for terrain image processing and analysis.

DMSRDE, Kanpur

The Hon'ble Union Minister of State for Defence, Shri Sanjay Seth, visited the Defence Materials and Stores Research & Development Establishment (DMSRDE), Kanpur, on 29 June 2025. Hon'ble Raksha Rajya Mantri (RRM) paid homage to the Dr APJ Abdul Kalam statue at the DMSRDE main gate, followed by tree plantation inside **DMSRDE** premises. Dr RV Hara Prasad, DS & DG (NS&M) also joined him. The dignitaries visited the DMSRDE exhibition, where the materials, technologies, and products developed by DMSRDE were displayed.

Director DMSRDE gave a presentation highlighting the laboratory's vision, mission, charter, ongoing projects, and technology focus areas. Hon'ble RRM addressed the DMSRDE fraternity appreciated and their efforts in the successful realization products, of especially the Bulletproof Jacket (Level 6), naphthyl fuel

for the BrahMos missile, highpressure polymeric membrane for Indian Coast Guard ships, silicon carbide fiber, ACF-based CBRN suit, and various stealth products. Hon'ble RRM stressed women's empowerment in all three wings of Indian defence.

applauded successful use of indigenous technologies developed by DRDO during Operation Sindoor. Hon'ble RRM admired the DMSRDE for carrying out the maximum number of transfers technology (ToT) for the last two years among all DRDO laboratories and supporting the AtmaNirbhar Bharat campaign of the Government of India. He also cherished the interaction of DMSRDE with industry and academia to realize the Hon'ble PM's set goal of Viksit Bharat by 2047.



Hon'ble Union Minister of State for Defence, Shri Sanjay Seth, along with senior scientists of DMSRDE, during his visit at DMSRDE, Kanpur



IRDE, Dehradun

Dr Parimal Kumar, OS & SA to CISC. visited Instruments Research & Development Establishment (IRDE), Dehradun, on 12 June 2025. He was welcomed by Dr Ajay Kumar, OS & Director IRDE and Ms Ruma Dhaka, OS & Associate Director, IRDE. Dr Ajay Kumar presented major R&D initiatives taken by IRDE and technologies developed at IRDE towards Atmanirbhar Bharat. He also briefed about various products which have been developed and inducted into the Services.

Dr Ajay Kumar also presented future technologies and systems in which IRDE is spearheading development work. Parimal appreciated the efforts of IRDE in developing state-ofthe-art systems. A guided tour was conducted to IRDE Diamond Jubilee Gallery to showcase all technologies and products IRDE. Dr Parimal appreciated the efforts of IRDE in achieving the self-reliance for India's defence sector. He wished all the very best to the lab towards excellence. Ms Ruma Dhaka honored Dr Parimal Kumar with a memento.

LRDE, Bengaluru

Dr PK Mishra, Principal Secretary to the Prime Minister, visited Electronics & Radar Development Establishment (LRDE), Bengaluru, on 8 July 2025. During the visit, he was



Ms Ruma Dhaka felicitating Dr Parimal Kumar, OS & SA to CISC, during his visit at IRDE. Dehradun

briefed about the activities being carried out by various laboratories of DRDO at Bengaluru and their future plans.

Dr Mishra appreciated the

ongoing efforts and encouraged the team to develop Next Generation Systems for the Armed Forces under Hon'ble Prime Minister's vision of Atmanirbhar Bharat.



Dr PK Mishra, Principal Secretary to the Prime Minister, during his visit at LRDE, Bengaluru

Please mail your feedback and suggestions at: director.desidoc@gov.in; drdonl.desidoc@gov.in; Contact at: 011-23902403; 23902472; Fax: 011-23819151

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