

# Daily Defence Current Affairs

## 11 December 2025

### Moscow Approves HAL Koraput To Manufacture Su-57E Engines

- The recent developments concerning the Su-57E fighter jet engine technology mark a significant milestone for India's aerospace and defence ambitions.
- Following President Vladimir Putin's visit to New Delhi, Russia has reportedly granted India a Transfer of Technology (ToT) agreement, enabling Hindustan Aeronautics Limited (HAL) at Koraput in Odisha to manufacture the Izdeliye 177S engines.
- This move positions India alongside Russia, the US, and China as one of the few countries with indigenous capability to produce fifth-generation fighter propulsion systems. The engine in question, the Izdeliye 177S, is a highly advanced two-shaft, low-bypass turbofan engine equipped with thrust-vectoring control (TVC).
- This technology provides the Su-57 with exceptional low-speed and high angle-of-attack manoeuvrability, enhancing survivability and fuel efficiency during complex missions. Such attributes are critical for deep-penetration strike roles that modern air forces require for strategic advantage.



## India's First ₹250 Crores Deep Tech Fund

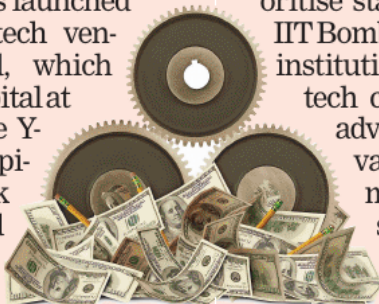
- IIT-Bombay has taken a significant stride in India's innovation ecosystem by launching the country's first deep tech venture capital fund linked to an incubator, with a capital base of ₹250 Crores.
- This pioneering initiative was unveiled by the Society for Innovation and Entrepreneurship (SINE), IIT-Bombay, marking a milestone in fostering early-stage deep tech entrepreneurship.
- The launch coincided with the announcement of IIT-Bombay's Strategy Plan for 2026 to 2030 and beyond, which received approval from the institution's Board of Governors under the chairmanship of Dr. K. Radhakrishnan.
- The newly introduced fund, named the Y-Point Venture Capital Fund, is unique in India's investment landscape. It is the first deep tech venture capital fund to be managed by a body directly connected to an academic incubator.
- This close association with academia ensures that the fund leverages intellectual capital and cutting-edge research emerging from IIT-Bombay. Such a blend of research and investment support is designed to help translate laboratory innovations into viable market solutions.
- The fund will primarily focus on high-impact sectors that are critical for future technology development and national priorities. These sectors include Artificial Intelligence, Advanced Computing, Advanced Manufacturing, Advanced Materials, Nuclear Technology, as well as Space and Defence technologies.

## IIT-Bombay Incubator Sets Up ₹250cr Deeptech Fund

**Bengaluru:** IIT-Bombay incubator, Society for Innovation and Entrepreneurship has launched a ₹250-crore deeptech venture capital fund, which aims to provide capital at an early stage. The Y-Point Venture Capital Fund will back 25-30 pre-seed and seed-stage star-

tups with ticket sizes of up to ₹15 crore. The incubator said it will prioritise startups emerging from IIT Bombay and other research institutions, focusing on deeptech categories such as AI, advanced computing, advanced manufacturing, materials, nuclear tech, space and defence, etc.

— Our Bureau



## TATA Secures Intel As First Major Buyer of Made-in-India Semiconductors

- TATA Group has achieved a significant milestone by securing Intel as its first major customer for its Made-in-India semiconductor products. This development marks a strategic breakthrough for India's semiconductor manufacturing ambitions, signalling TATA's emergence as a credible player in a highly competitive and technologically advanced segment.
- Intel's decision to source chips from TATA's facilities underscores the growing confidence global technology giants have in India's indigenous production capabilities. TATA's semiconductor venture is part of the broader national drive to reduce dependency on foreign supply chains and boost domestic technology manufacturing ecosystems.
- The TATA Group has invested heavily in state-of-the-art fabrication facilities within India, adopting cutting-edge production processes aligned with global standards. Their ability to meet Intel's rigorous quality and performance specifications highlights the maturity and technical capability TATA has attained in a relatively short time-frame.
- TATA's agreement with Intel represents a watershed moment for India's semiconductor journey and a significant boost to the country's aspirations to become self-reliant in critical technology sectors. This development will likely

stimulate innovation, skill development, and investment in the Indian semiconductor ecosystem in the years to come.



## **BEL Unveils First Prototype of Tactical Communication System For Indian Army**

- Bharat Electronics Limited (BEL), a premier Indian defence electronics company, has marked a significant milestone with the development of the first prototype of a Tactical Communication System (TCS) tailored for the Indian Army.
- This achievement underscores BEL's commitment to advancing indigenous defence technologies and enhancing the communication capabilities of India's ground forces.
- The Tactical Communication System is designed to address the critical need for secure, reliable, and robust communication in battlefield environments. Its development focuses on overcoming challenges faced by army personnel during operations, where conventional communication tools may fail due to hostile conditions or terrain limitations.
- The system aims to provide seamless voice and data transmission, ensuring uninterrupted connectivity among dispersed units. BEL's TCS prototype features cutting-edge technology that supports encrypted communication channels, thus maintaining operational security and preventing interception by adversaries.
- This capability is particularly vital in modern warfare, where information dominance and secure communication often determine mission success. The system is expected to integrate advanced frequency-hopping techniques and anti-jamming mechanisms to safeguard against electronic warfare threats.



## MoU For Maintenance of Scorpene-Class Submarines

- During the official visit of Chief of Naval Staff Admiral Dinesh K Tripathi to Brazil, a significant tripartite Memorandum of Understanding (MoU) was signed between the Indian Navy, Brazilian Navy, and Mazagon Dock Shipbuilders Limited.
- The agreement centres on the exchange of information related to the maintenance of Scorpène-class submarines and other naval vessels, marking a substantial step in bilateral defence cooperation.
- This MoU aims to enhance the life-cycle support of such sophisticated naval platforms, facilitating the sharing of expertise in maintenance, logistics, and training. It is expected to strengthen cooperation not only between the naval forces of both countries but also amongst government agencies and defence industries.
- Moreover, the agreement will serve as a cornerstone for Defence Research and Development collaboration, spurring technological innovation in the upkeep and advancement of Scorpène-class submarines and related naval assets.



## REVIEW QUESTIONS

**1. Which engine has HAL Koraput received approval to manufacture under the new ToT agreement with Russia?**

- A. AL-31FP
- B. Izdeliye 117
- C. Izdeliye 177S
- D. RD-33MK

**ANSWER: C**

**2. What is the major significance of the Y-Point Venture Capital Fund launched by IIT-Bombay?**

- A. It is India's first government-owned VC fund
- B. It is the first deep tech VC fund connected directly to an academic incubator
- C. It focuses only on Artificial Intelligence start-ups
- D. It is entirely funded by private companies

**ANSWER: B**

**3. Which company became the first major buyer of TATA's Made-in-India semiconductor products?**

- A. AMD
- B. Qualcomm
- C. Intel
- D. Nvidia

**ANSWER: C**



**4. What key capability does BEL's Tactical Communication System prototype provide for the Indian Army?**

- A. Satellite navigation
- B. Secure and uninterrupted battlefield communication
- C. Autonomous drone control
- D. Enhanced missile targeting

**ANSWER: B**

**5. The tripartite MoU signed in Brazil focuses on the maintenance of which naval platform?**

- A. Kalvari-class destroyers
- B. Talwar-class frigates
- C. Scorpène-class submarines
- D. Arihant-class nuclear submarines

**ANSWER: C**

**6. Which is the 6<sup>th</sup> largest Submarine Under P75?**

- A. INS Karanj
- B. INS Vagsheer
- C. INS Kirpan
- D. INS Vela

**ANSWER: B**

**7. National College for Policing and Law Enforcement is one of India's largest funded projects in**

- A. USA
- B. UK
- C. Maldives
- D. None of the above

**ANSWER: C**

**8. The MiG-29 Is A**

- A. Qatar
- B. Oman
- C. UAE
- D. UK

**ANSWER: D**

**9. "Naam Namak Nishaan" Is The Motto Of**

- A. THE GRENADIERS
- B. Rajputana Rifles
- C. Gorkha
- D. None

**ANSWER: A**

**10. IATA Stands For**

- A. International Air Transport Associate
- B. International Apex Transport Association
- C. International Air Transport Association
- D. None of the above

**ANSWER: C**

**11. K2 Black Panther Tank Belongs To**

- A. Oman
- B. Qatar
- C. Sri Lanka
- D. South Korea

**ANSWER: D**

**12. Ankara Is The Capital Of**

- A.** Oman
- B.** Qatar
- C.** Turkey
- D.** Maldives

**ANSWER: C**

**13. "India 2020: A Vision for the New Millennium" Book Is Written By**

- A. Shashi Tharoor
- B. Rabindra Nath Tagore
- C. M K Gandhi
- D. Dr A P J Abdul Kalam & Dr Y S Rajan

**ANSWER: D**

**14. North-West Region Of ICG Located In**

- A. Kochi
- B. Vishakhapatnam



- C. Gandhinagar
- D. Mumbai

**ANSWER: C**

**15. AH-64 Apache Is A**

- A. Transport Helicopter
- B. Attack Helicopter
- C. Light Utility Helicopter
- D. None of the above

**ANSWER: B**

**16. Operation Ganga Was Conducted By IAF In**

- A. UK
- B. USA
- C. Ukraine
- D. Afghanistan

**ANSWER: C**

**17. Department of Defence Production Comes Under**

- A. Ministry of Culture
- B. MHA
- C. MOD
- D. MEA

**ANSWER: C**

**18. Defence Institute of High-Altitude Research Is In**

- A. New Delhi
- B. Jammu
- C. Ladakh
- D. None of the above

**ANSWER: C**

**19. Dhanush (howitzer) Manufactured By**

- A. L & T
- B. Boeing
- C. ISRO
- D. Advanced Weapons and Equipment India Limited

**ANSWER: D**

**20. BRICS Stands For**

- A. Brazil Russia India China And South Africa
- B. Brazil Russia India China And South Asia
- C. Brazil Russia Indonesia China And South Africa
- D. None of the above

**ANSWER: A**

