

SHORT NEWS:

1. TEJAS LCA-MK1A

NEWS: Recently, GE Aerospace delivered **the first of 99 F404-IN20** engines to Hindustan Aeronautics Limited (HAL) for Tejas Light Combat Aircraft (LCA) Mk1A.

About F404-IN20 engines

- The F404-IN20 engine is a customized variant of the F404 family.
- **Objective:** Specially designed for India's **Tejas Light Combat Aircraft (LCA) Mk-1A**.
 - It is built to offer high thrust, improved efficiency, and durability, making it



suitable for modern combat needs.

About Tejas LCA Mk1A

- The Tejas LCA Mk1A, developed by **Hindustan Aeronautics Limited (HAL)**, is an upgraded version of **India's indigenous Light Combat Aircraft (LCA)** with over 40 improvements.
- **Key Features of Tejas Mk1A**

- **Modern Radar:** Equipped with advanced **AESA Radars** – Israeli EL/M-2052 or India's Uttam AESA Radar.
- **Enhanced Flight Control:** Upgraded **Digital Fly-by-Wire Flight Control System (DFCC Mk1A)**.
- **Electronic Warfare (EW):** Features **Unified Electronic Warfare Suite (UEWS)** and **Advanced Self Protection Jammer pod**.
- **Increased Weapon Capacity:** Has **nine hardpoints** to carry BVR missiles, Air-to-Air/Ground missiles, and ASRAAM.

2. ABEL PRIZE

NEWS: Japanese mathematician Masaki Kashiwara was awarded this year's Abel Prize for his fundamental work in algebraic analysis and representation theory.

About Masaki Kashiwara work

- He is credited with developing the theory of **D-modules** and **discovering crystal bases**, which simplify complex mathematical calculations using simple graphs.



About the Abel Prize

- First awarded in 2003, the Abel Prize is often considered equivalent to the **Nobel Prize**, which lacks a category for mathematics.
- It was modeled on the Nobel Prize to recognize outstanding contributions in mathematics.

Prize Details:

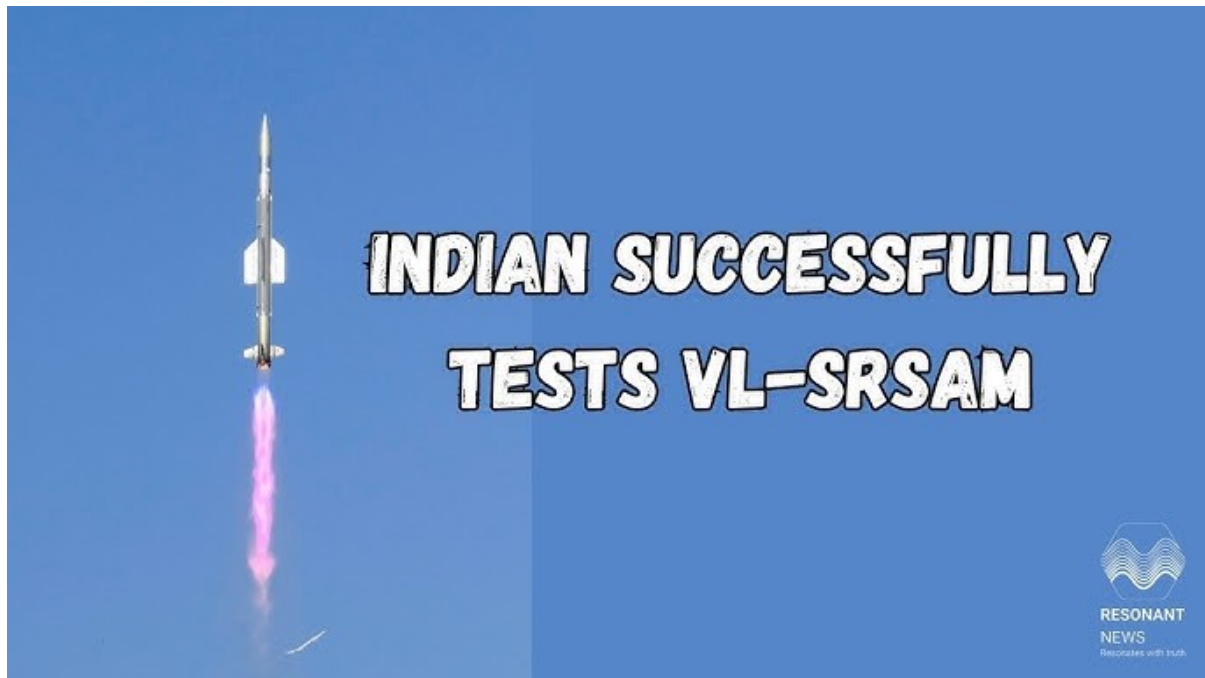
- Includes a **cash award of 7.5 million kroner** (around \$720,000).
Winners receive a glass plaque designed by Norwegian artist Henrik Haugan.
- **Purpose:** The Abel Prize aims to honor groundbreaking achievements in the field of mathematics.
- **Naming:** It is named after Niels Henrik Abel (1802-1829), a Norwegian mathematician known for his contributions to multiple mathematical areas.

History and Administration of the Abel Prize

- **Establishment:**
 - Founded by **the Norwegian Parliament in 2002 on Abel's 200th** birth anniversary.
 - Originally proposed in **1899 by mathematician Sophus Lie** after learning that the Nobel Prize excluded mathematics.

3. VERTICALLY-LAUNCHED SHORT-RANGE SURFACE-TO-AIR MISSILE (VLSRSAM)

NEWS: The flight Test of the **indigenously-developed Vertically-Launched Short-Range Surface-to-Air Missile (VLSRSAM)** for the Navy was successfully conducted.



About Vertically-Launched Short-Range Surface-to-Air Missile (VLSRSAM)

- **Conducted By:** Defence Research & Development Organisation (DRDO) and the Indian Navy
- **Location:** The trial was conducted in conjunction with the Indian Navy at the **Integrated Test Range (ITR) in Chandipur off the coast of Odisha**
- The flight-test was carried out **from a land-based vertical launcher** establishing the **Near-Boundary-Low Altitude capability** of the missile system.
- **Weapon Systems:** All the weapon system elements including **missile with indigenous Radio Frequency seeker, Multi-Function Radar and Weapon Control System**, were deployed in combat configuration
- **Performance:** The performance of the system was **validated by the flight data** captured by various Range Instruments **developed by ITR Chandipur**.
- **Significance:**
 - The missile **demonstrated its near-boundary, low-altitude capability** during a test fire.

4. ZO COMMUNITY

NEWS: Violent **clashes broke out in Churachandpur, Manipur** recently between individuals belonging to the **Zomi community** on one side, and those belonging to the **Hmar and Kuki** communities on the other.

- All the three communities ie. **Zomi, Hmar and Kuki** fall under the **larger Zo umbrella**.



About Zo People

- **Etymology:** The term “Zo” is means “highlander” or “people of the hills”
- **Linguistic Group:** The Zo people are an **ethnolinguistic group who speak the Kuki-Chin languages** (a group of related Sino-Tibetan languages)
 - The Kuki-Chin language is **alternatively also called “South-Central Trans-Himalayan”** languages by Linguist Linda Konnerth in 2018.
- **Spread:** A majority of the Zo population lives in **Manipur and Mizoram in Northeast India, Chittagong Hills in Bangladesh and Chin State of Myanmar.**
- **Origin:** The Zo people trace **their ancestry to the Tibeto-Burman family** and are widely believed to have **settled in Myanmar thousands of years ago**, travelling from China via Tibet.
 - Few clans moved westward to **modern-day Mizoram and parts of Manipur in the 17th century.**
- **Sub-tribes and Clans:** The Zo is an umbrella community and comprise various sub-tribes and clans such as,
 - **Chin, Kuki, Mizo, Lushei, Zomi, Paitei, Hmar, Ralte, Pawi, Lai, Mara, Gangte, Thadou, etc.**
- **Religious Beliefs:** The Zo people traditionally were **animists and practiced ancestral worship.**

- The proselytisation activities from the 19th century onwards, by the **British missionaries converted a majority of Zo people to Protestant Christians.**