

Current Affairs search results for: "DRDO"

1. Defence Minister Rajnath Singh holds talks with his US counterpart Lloyd Austin (June 6, 2023)

Defence-Minister-Rajnath-Singh

Defence Minister **Rajnath Singh**, held discussions with **US Defence Secretary Lloyd Austin** in New Delhi on 5th June.

An overview of the news

- The meeting focused on **strengthening defence cooperation** in various areas, including aligning strategic interests and enhancing security cooperation.
- During the talks, Minister Singh emphasized the significance of the **India-US partnership** in ensuring a free, open, and rules-based Indo-Pacific region.
- He expressed India's commitment to closely collaborate with the United States across different domains, aiming for capacity building and further **strengthening strategic partnership**.
- Both ministers explored opportunities to build resilient supply chains and identified areas for co-development of new technologies and co-production of existing and new systems.
- Facilitation to enhance cooperation between the **defense start-up ecosystems** of the two countries was also discussed.
- A roadmap for **US-India defense industrial cooperation** was agreed upon, which will shape their cooperation in the years to come.
- They welcomed the recent dialogues focused on **Defense Artificial Intelligence and Defense Space**.
- Regional security issues were also discussed, reflecting their shared interest in promoting **peace and stability in the Indo-Pacific region**.
- The meeting was attended by senior officials of the Ministry of Defense including Chief of Defense Staff General **Anil Chauhan**, Defense Secretary **Giridhar Armane** and DRDO Secretary and Chairman **Dr Sameer V Kamat**.

India America relations

Historical Background

- The establishment of diplomatic relations between India and the United States **dates back to 1947**.
- Both countries share common values of **democracy, pluralism and rule of law**.

Strategic Partnership

- India and the United States have developed a strong strategic partnership based on shared interests and values.

- The partnership has seen significant growth in various areas including defence, trade and
- technology.

Defense and Security Cooperation

- Defense cooperation between India and the US has expanded significantly in recent years.
- Both countries engage in joint military exercises, defense equipment cooperation and intelligence sharing.
- Defense ties have been strengthened by the signing of the **US-India Defense Technology and Trade Initiative (DTTI)**.

Economic and trade relations

- Economic relations between India and America have grown steadily.
- The US is one of India's largest trading partners and bilateral trade has grown over the years.
- Both the countries have signed various agreements to enhance economic cooperation and promote investments.

Technology and Innovation

- India and the US cooperate in the fields of **science, technology and innovation**.
- Cooperation has been promoted in areas such as space exploration, clean energy and information technology.
- The US has supported India's initiatives like **Digital India and Skill India**.

2. IIT Madras researchers partner for development of materials and micro-device processing techniques (May 11, 2023)

IIT Madras researchers have partnered with **Defence Research and Development Organisation (DRDO) scientists** to develop **sensor technology for underwater communications**, which will be advantageous to **defence applications, especially in the Navy**.

An overview of the news

- '**Piezoelectric MEMS technology**' is needed to develop high-performance thin films and to convert '**piezo-thin films**' into future naval sensors and devices for underwater applications.
- Piezo thin film is an important component of piezo MEMS devices and is considered for acoustics and vibration-sensing applications.

- The installation of **state-of-the-art Piezo MEMS technology** enables India to advance defense efficiency and allows the nation to execute strategic operations of critical applications.
- The large area piezo thin film and MEMS process technology will support the **ongoing/future technologies for DRDO's next generation sonar program for the Indian Navy.**

Defence Research and Development Organisation (DRDO)

- It is a premier defence research and development agency under the **Ministry of Defence, Government of India.**
- It is working on several cutting-edge military technology areas, including **aeronautics, armaments, combat vehicles, electronics, instrumentation, engineering systems, missiles, materials, naval systems, advanced computing, simulation, cyber, hypersonic technology, quantum computing and communications**
- DRDO's first project for the Indian military was in **surface-to-air missiles (SAM) known as Project Indigo.**
- Since inception, DRDO has made several breakthroughs in developing key systems and critical technologies such as **aircraft avionics, UAVs, small arms, artillery systems, EW systems, tanks and armoured vehicles, sonar systems, command and control systems and missile systems**
- It aims to make India self-reliant in **critical defence technology and systems.**
- It was set up in 1958.
- Headquarters - **New Delhi**
- Chairman - **Samir V Kamat**

3. DRDO scientist Pradeep Kurulkar arrested in Pune on charges of espionage (May 6, 2023)

DRDO scientist Pradeep Kurulkar arrested in Pune on charges of espionage

The **Maharashtra Anti-Terrorism Squad** recently arrested a scientist of the **Defense Research and Development Organization (DRDO)** on charges of espionage.

An Overview of the News

- The scientist named **Pradeep Kurulkar** was arrested in Pune on 3 May and brought to the ATS office in Pune on 5 May for further investigation.
- The Maharashtra ATS has accused Kurulkar of passing sensitive information to foreign intelligence agencies, which could compromise national security.
- According to the ATS, the scientist was in touch with Pakistan's intelligence agency operatives through various means including WhatsApp messages, voice calls and video calls.

- As per reports, Kurulkar was working at **DRDO's Armament Research and Development Establishment (ARDE)** in Pune, which develops and designs armaments for the **Indian Armed Forces**.
- Despite being in a responsible position, the scientist allegedly misused his position to compromise sensitive government secrets, which could pose a threat to India's security if it fell into wrong hands.
- The Maharashtra ATS registered a case against the scientist under Section 1923 of the Official Secrets Act 1923 and other relevant sections.

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4. DRDO and Indian Navy Conduct Successful Trial of BMD Interceptor (April 23, 2023)

Defence Research and Development Organisation (DRDO) and Indian Navy successfully

Defence Research and Development Organisation (DRDO) and Indian Navy successfully conducted a maiden flight trial of **sea-based endo-atmospheric interceptor missile off the coast of Odisha in the Bay of Bengal on April 21.**

An overview of the news

- The objective of the test was **to target and destroy the effect of an enemy ballistic missile threat.**
- The test could place the Indian **Navy in an elite club of nations with BMD capabilities.**
- Earlier, DRDO had successfully demonstrated the capability of the **surface-based BMD system** and thus achieved the capability to neutralize incoming ballistic missile threats from the enemy.

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5. Ministry of Defence inks Rs 3,700 crore contracts with BEL (March 25, 2023)

Indian Air Force (IAF),

To enhance the operational capabilities of the **Indian Air Force (IAF)**, the **Defense Ministry** on March 23 signed **two separate contracts with Bharat Electronics Limited (BEL)** at a total cost of over **Rs 3,700 crore**.

An overview of the news

- The **first contract**, worth over **Rs 2,800 crore**, pertains to the **supply of Medium Power Radar (MPR) 'Arudhra'** to the IAF.
- The **second contract**, at a total cost of about **Rs 950 crore**, pertains to '**Radar Warning Receivers' (RWR)**.
- Both the projects are under the **indigenously designed, developed and manufactured-IDMM category**.
- The radar has been designed and developed by the **Defense Research and Development Organization (DRDO)** and will be **manufactured by BEL**.
- The RWR has been designed to also enhance the **capabilities of Su-30 MKI aircraft**.

About Arudhra Radar

- **This 4D radar** is capable of automatic detection and tracking of slow moving aerial targets ranging from fighter jets.
- The system has an instrumented **range of 400 km**.

- It is capable of **detecting RCS targets** with a range of **300 km with altitudes ranging from 100 m to 30 km.**
- The radar operates in either Staring or Rotation mode.

6. The developed drug gets DCGI approval (March 16, 2023)

The developed drug gets DCGI approval

Recently, **DGCI developed an important drug, developed by DRDO technology** that has been approved for **radiological and nuclear emergencies.**

An Overview of the News

- The drug is called '**Prussian Blue**' insoluble formulation and has been developed under the Technology Development Fund (TDF) scheme.
- It has got approval from the Drugs Controller General of India (DCGI).
- The drug has been developed by the industry based on technology from the Institute of Nuclear Medicine and Allied Sciences (INMAS), Delhi, a laboratory of the Defense Research and Development Organization (DRDO).
- This drug will be available under the trade names **Pru-DecorpTM and PruDecorp-MG.**
- The formulation is used for the purification of Cesium and Thallium and its Active Pharmaceutical Ingredient (API).
- It is one of the important medicines listed by the **World Health Organization (WHO)** for radiological and nuclear emergencies.

About Drug Controller General of India (DCGI):

- The Drug Controller General of India (DCGI) is the head of the Central Drugs Standard Control Organization (CDSCO) in India.
- DCGI is also the **Central Licensing Authority for Medical Devices under the Medical Devices Rules 2017.**
- CDSCO is the Central Drug Regulatory Authority in India, overseen by the Drugs Controller General of India.
- CDSCO works under the Directorate General of Health Services, Ministry of Health and Family Welfare, which is part of the Government of India.
- The headquarters of CDSCO is located in New Delhi, and it also has six regional offices across the country.
- CDSCO's mandate is to ensure the safety, efficacy and quality of medical products manufactured, imported and distributed in India by promoting transparency, accountability and uniformity in its services.

About Defense Research and Development Organization (DRDO)

- The **Defense Research and Development Organization (DRDO)** is an agency of the Government of India responsible for the research, development, and manufacture of advanced technology systems in the fields of defense, aerospace, and security.
- It was **established in 1958** with the aim of designing and developing indigenous defense technologies to strengthen India's defense capabilities.
- It operates under the Ministry of Defense and consists of more than 50 laboratories, centers, and establishments spread across the country.
- Its primary mission is to provide technological solutions for the country's defense and security requirements, which includes developing new technologies, systems, and platforms for the Indian Armed Forces.

7. DRDO successfully flight tests indigenous power take off shaft on LCA Tejas in Bengaluru (March 15, 2023)

flight-test of power take off (PTO) shaft

A successful **flight-test of power take off (PTO) shaft** was conducted by **Defence Research and Development Organisation (DRDO)** on the **Light Combat Aircraft Tejas** in Bengaluru on 14 March.

An overview of the news

- First successful flight test of **PTO shaft on LCA Tejas Limited Series Production (LSP)-3 aircraft**.
- The PTO shaft has been indigenously designed and developed by the **Combat Vehicles Research & Development Establishment (CVRDE), Chennai** of the **Defense Research and Development Organization (DRDO)**.
- The PTO is an important device that transmits power from the **aircraft engine to the gearbox**.
- With this successful test, DRDO has **achieved a major technological achievement** with the realization of complex high-speed rotor technology that only a few countries have achieved.

Light Combat Aircraft (LCA) programme

- It was started by the center in **1984**.
- It replaced the **Mig 21 fighter planes**.
- It was Designed by **Aeronautical Development Agency under the Department of Defence Research and Development**.
- It was Manufactured by **State-owned Hindustan Aeronautics Limited (HAL)**.

- It features as the lightest, smallest and tailless multi-role supersonic fighter aircraft in its class.

About Light Combat Aircraft Tejas

- It is a **single-engine multirole light combat aircraft**.
- It was designed and developed by India's **HAL (Hindustan Aeronautics Limited)**.
- It replaced the ageing **Mig 21 fighter planes**.
- It is the lightest and smallest multi-role supersonic fighter aircraft in its class.
- It is designed to be **air-to-air, air-to-surface, precision guided and weapon-carrying**.

Variants of Tejas

- LCA Tejas Navy MK2
- LCA Tejas Mk-1A
- LCA Navy

8. JP Nadda launches book 'Modi: Shaping a Global order in flux' (Feb. 23, 2023)

BJP national president **J P Nadda** on 22 February launched a book "**Modi: Shaping a Global Order in Flux**" in Chanakyapuri, Delhi.

An overview of the news

- In this book, an attempt has been made to tell how PM Modi has taken such decisions which have changed the image of India around the world.
- It is important to understand what was the image of India before Modiji came to power.
- The book has been forwarded by Union External Affairs Minister **S Jaishankar**.
- The editors are **Sujan Chinoy, Vijay Chauthaiwala and Uttam Kumar Sinha**.

9. MEA's annual flagship event Asia Economic Dialogue begins in Pune (Feb. 23, 2023)

External Affairs Ministry's annual flagship event on Geoeconomics, **Asia Economic Dialogue** began on 23 February in **Pune, Maharashtra**.

An overview of the news

- It is being hosted in association with the **Pune International Center** from February 23-25.
- The main theme of the dialogue is '**Asia and the Emerging World Order**'.
- The dialogue will also discuss topics such as **Global Growth Prospects, How the Global South Will Shape the G20 Agenda and the Metaverse**.
- The inaugural session began with talks between External Affairs Minister **Dr. S. Jaishankar**, **H.E. Leonpo Namgye Tshering**, Minister of Finance, Royal Government of Bhutan and **H.E. Ibrahim Ameer**, Minister of Finance of Maldives.
- More than 44 speakers from different countries including **Brazil, USA, UK, South Africa, Bhutan, Maldives, Switzerland, Singapore and Mexico** are participating in this dialogue.

Asia Economic Dialogue (AED)

- The **Asia Economic Dialogue (AED)** is the External Affairs ministry's annual event and is hosted in collaboration with the Pune International Centre.
- It is the flagship **geo-economics conference**.
- The dialogue focuses on the dynamics of trade and finance in Asia and its neighbouring countries.

10. Cabinet approves the extension of the term of the Twenty-second Law Commission of India (Feb. 22, 2023)

The **Union Cabinet** has approved the extension of the tenure of the **22nd Law Commission of India** which has been **extended till August 31, 2024**.

22nd Law Commission

- The Union ministry of Law and Justice constituted the **22nd Law Commission** on 7 November 2022 and appointed former Karnataka High court chief justice **Rituraj Awasthi** as the **chairperson** of the Law Commission.
- The **five member** 22nd Law Commission will have a term of **three years**.
- Justice **BS Chauhan** was the chairman of the **21st Law Commission** whose term expired in August 2018.

Other members

- Former Kerala High Court judge Justice **KT Sankaran**, **Prof. Anand Paliwal**, **Prof. DP Verma**, **Prof.(Dr) Raka Arya** and **M Karunanithi** have been appointed members of the Law Commission.

Law Commission of India

- Law commission is a **non-statutory body** which is set up by the **Union Ministry of Law and Justice** for suggesting reform in laws in India.
- Its recommendations are **not binding on the government**.
- The provision for the Law commission was made in the **Charter act 1833** and the first Law commission was set up in **1834** under the chairmanship of **Lord Thomas Babington Macaulay**.
- The **Indian Penal Code 1860** is based on the recommendation of the **Macaulay commission**.
- The First Law commission in Independent India was **set up in 1955** and **M.C Setalvad** who was also the first Attorney General of India was the chairman of the Law Commission.