

7. Short news

1. Anjadip

The Indian Navy has received 'Anjadip', the third of eight Anti-Submarine Warfare Shallow Water Crafts (ASW SWC),

About Anjadip Shallow Water Craft

Type - Anjadip is a shallow water craft designed for anti-submarine warfare (ASW) operations.

Built by - The vessel has been constructed by Garden Reach Shipbuilders and Engineers (GRSE), a Kolkata-based public sector shipyard. The project was executed through a public-private partnership between GRSE and L&T Shipyard, Kattupalli.

Technical Specifications - Approximately 77 metres in length, It is the largest Indian naval warship propelled by waterjets, enhancing manoeuvrability in shallow waters.

Combat and Surveillance Capabilities - The vessel is equipped with advanced lightweight torpedoes. It carries indigenously developed anti-submarine rockets. Shallow water sonar systems enable effective detection and tracking of underwater threats. The vessel is designed to conduct anti-submarine operations in coastal waters, support low-intensity maritime missions, and carry out Mine-laying operations.

Indigenous Content - The vessel features over 80 percent indigenous content. It is fitted with an indigenous 30 mm Naval Surface Gun, reflecting self-reliance in weapons integration.

Name Origin - The ship is named after Anjadip Island, located off the coast of Karwar, Karnataka. It carries forward the legacy of the earlier INS Anjadip, a Petya-class corvette, decommissioned in 2003.

About ASW Shallow Water Craft Programme - The ASW SWC programme aims to enhance anti-submarine warfare in shallow coastal waters, where conventional large warships face limitations. A total of eight ASW SWCs are being inducted into the Indian Navy.

2. 'Shakti Scholars' Young Research Fellowship

The National Commission for Women (NCW) has launched the 'SHAKTI Scholars - NCW Young Research Fellowship' to promote policy-oriented research on issues affecting women in India.

About the 'SHAKTI Scholars' Young Research Fellowship

Objective - The fellowship aims to encourage evidence-based, multidisciplinary research that can inform policymaking and strengthen interventions related to women's rights, safety, and empowerment.

Key Thematic Areas -

1. The fellowship supports research on women's safety and dignity.
2. It covers gender-based violence and access to justice.
3. It includes cyber safety and implementation of the POSH framework.
4. It focuses on women's leadership, political participation, and governance.
5. It examines health, nutrition, education, and skill development.
6. It also covers economic empowerment, labour force participation, socio-cultural practices, and work-life balance.

Eligibility Criteria

1. The fellowship is open to Indian citizens between 21 and 30 years of age.
2. Applicants must hold at least a bachelor's degree from a recognised institution.
3. Preference is given to candidates pursuing or having completed postgraduate or higher research degrees.
4. Independent researchers with demonstrated research experience are also eligible.
5. Financial Support - Selected candidates will receive a research grant of ₹1 lakh.

The grant will be released in installments, linked to the progress of the research work.

Duration - The fellowship duration is six months.

3. Superkilonova

Astronomers have reported evidence of a possible superkilonova, a rare cosmic explosion observed 1.3 billion light-years away, combining features of supernovae and kilonovae. A light-year is

the distance light travels in one year in a vacuum, approximately 9.46×10^{12} km.

About Superkilonova

A superkilonova is a hypothetical, extremely energetic cosmic explosion that extends beyond a standard kilonova produced by merging neutron stars.

Formation Process – When two neutron stars collide, heavy radioactive elements such as gold, platinum, and neodymium are ejected. Their radioactive decay emits optical and infrared light, observed as a kilonova. In a superkilonova, additional energy sources make the event brighter and longer-lasting.

Key Features

Enhanced Brightness – Extra heating from fallback matter onto the merged object intensifies surrounding ejecta.

Bluer Emission – Higher temperatures shift radiation towards the blue end of the spectrum.

Dual-Stage Evolution – Initial kilonova-like behaviour may later resemble a supernova.

Alternative Model – A newly proposed scenario suggests a massive star first explodes as a supernova, forming two neutron stars that subsequently merge, triggering a kilonova with amplified luminosity.

Scientific Significance

Astrophysical Insights – Helps explain unusually bright transient events that do not fit neatly into known categories.

Element Formation – Supports understanding of heavy element synthesis through neutron star mergers.

Future Research – Confirmation requires more observations, but the discovery opens new directions in studying extreme cosmic explosions

4. 'Ghostpairing'

CERT-In has warned Indian users about 'GhostPairing', a high-severity cyber scam that can hijack WhatsApp accounts by exploiting the device-linking feature.

CERT-In (Indian Computer Emergency Response Team) is India's national nodal agency for responding to computer security incidents and strengthening the security-related defence of the Indian Internet domain.

About GhostPairing

GhostPairing is a new cyber-attack technique that allows criminals to gain full access to a WhatsApp account without passwords, OTP theft, or SIM swapping. The attack exploits WhatsApp's device-linking feature, which enables multiple devices to access one account.

How the Scam Works

1. Victims receive a message such as "Hi, check this photo", appearing to come from a trusted contact.
2. Clicking the link opens a fake Facebook-style page prompting users to "verify" their identity.
3. Users are tricked into entering their phone number, unknowingly authorising an attacker's device as a linked device.

Associated Threats

Account Takeover – Attackers gain real-time access to chats, media, and group conversations, similar to WhatsApp Web.

Impersonation and Fraud – Hijacked accounts are used to send messages and scam contacts, spreading the attack further.

Privacy Breach – Personal, professional, and confidential communications become exposed to unauthorised parties.

Safeguards and Preventive Measures

User-Level Precautions

1. Avoid clicking suspicious links, even from known contacts.
2. Never enter your phone number on external websites claiming WhatsApp or Facebook verification.
3. Regularly review Settings → Linked Devices and remove unknown devices immediately.

Organisational Measures

4. Conduct cybersecurity awareness training on phishing and social engineering.

5. Establish clear incident response protocols for rapid detection and account recovery.
6. Telecom Cyber Security Amendment Rules, 2025, mandated that app-based communication services must be continuously linked to the active SIM card in the user's device

5. Kashiwazaki – Kariwa Nuclear Plant

Japan has approved restarting the Kashiwazaki-Kariwa nuclear plant, signalling a strategic return to nuclear energy nearly 15 years after Fukushima.

About Kashiwazaki-Kariwa Nuclear Power Plant

Kashiwazaki-Kariwa, the world's largest nuclear power plant, was shut after the 2011 Fukushima disaster. It consists of seven reactors and is operated by Tokyo Electric Power Company (TEPCO).

Features – Reactors 1–5 are standard Boiling Water Reactors (BWRs) and Units 6 & 7 as the first Advanced BWRs (ABWRs), totaling around 8.2 GW (8,212 MW) of net capacity, supplying power to millions of homes in Japan.

Recent Approval – The Niigata Prefecture Assembly approved a vote of confidence in the Governor, effectively clearing the restart. Reactor No. 6 is expected to resume operations by January 2026.

Strategic Rationale – Japan seeks to reduce dependence on imported fossil fuels, which supply 60–70% of electricity.

Energy Transition Goals – Japan aims to raise nuclear power's share to 20% by 2040 and accelerate power-sector decarbonisation.

Safety and Public Opposition – Local protests persist due to memories of Fukushima and seismic risks.

Trust Deficit – TEPCO's past failures raise concerns about regulatory oversight and emergency preparedness.

Top Nuclear Energy Producers – United States (95 GW), France (61 GW), China (57 GW), Russia (29 GW) and South Korea (26 GW). Together, these five countries account for about 71% of global nuclear generation capacity (IAEA, June 2025).

6. SC Tightens Safeguards for Great Indian Bustard

The Supreme Court has tightened safeguards for the Great Indian Bustard, reshaping Green Energy Corridor (GEC) routes in Rajasthan and Gujarat to prioritise conservation over transmission expansion.

About the Great Indian Bustard (GIB)

Introduction – The Great Indian Bustard (*Ardeotis nigriceps*) is one of the heaviest flying birds and a flagship species of India's grassland ecosystems.

Habitat – Found mainly in arid and semi-arid grasslands.

Range – Restricted to India and a small part of Pakistan. 90% of India's population is in Rajasthan (Jaisalmer/Barmer). They are also found in Gujarat, Maharashtra, Karnataka, and Andhra Pradesh.

Threats – Power line collisions, habitat loss, and past hunting pressures. Fragmentation of habitat due to infrastructure and renewable energy projects.

Conservation Status – Listed as Critically Endangered by the IUCN.

Protected Area – Desert National Park (DNP) in Rajasthan (a major hub with breeding programs), Rollapadu Wildlife Sanctuary (AP) and Kutch Bustard Sanctuary (Gujarat).

Conservation Effort

Project Great Indian Bustard (Rajasthan) – Launched in 2013 to conserve the remaining population.

Habitat Improvement and Conservation Breeding – A major initiative funded by National CAMPA (Compensatory Afforestation Fund Management and Planning Authority) for integrated in-situ (habitat) and ex-situ (captive breeding) conservation.

Key Supreme Court Guidelines to Protect GIB

Conservation as Non-Negotiable – Protection of the critically endangered Great Indian Bustard (GIB) was declared paramount, overriding infrastructure convenience.

Redrawing Green Energy Corridors – Priority conservation zones of 14,013 sq km in Rajasthan and 740 sq km in Gujarat were finalised, restricting renewable expansion.

Transmission Restriction – Overhead power lines in sensitive habitats must be undergrounded, rerouted, or insulated, with evacuation confined to narrow, designated corridors.

Balanced Approach – The Court rejected blanket undergrounding, allowing limited GEC continuity while embedding ecological boundaries into energy planning.

Significance – The verdict integrates biodiversity protection with energy transition, redefining how India balances clean energy growth and ecological survival.

