

# **MAKING WAVES**

**A MARITIME NEWS BRIEF COVERING:**

- 1. Maritime Security**
- 2. Maritime Forces**
- 3. Shipping, Ports, and Ocean Economy**
- 4. Marine Environment**
- 5. Geopolitics**

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# MARITIME SECURITY

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## HOW CYBERBIOSECURITY AND NAVAL STRATEGY COLLIDE IN THE INDIAN OCEAN

Cyberbiosecurity—protecting digitally enabled biological systems (health labs, biomanufacturing, cold chains) from cyber threats—emerges as pivotal in IOR naval strategy, where ports handle 80% global trade. Article highlights vulnerabilities in naval telemedicine, potable water SCADA, Gwadar cold storage amid Hormuz 20M bpd oil flows. Integrity attacks on inspection data could disrupt supply chains sans blockades. Pakistan Navy, leading CTF-150/151 rotations (13th/8th time), urged to integrate resilience exercises, data tamper-proofing for interoperable logistics in CMF amid bio-digital risks. Enhances regional stability via cooperative norms.

Source: [Here](#), 28 December 2025

## CHINA-LINKED SHIPOWNER REFUTES TAIWAN'S ALLEGATIONS OF UNDERSEA CABLE DAMAGE

China-linked shipowner refutes Taiwan allegations of deliberate undersea cable damage by its bulk carrier Yi Peng 3 dragging anchor in Matzu Strait, severing two cables disrupting 80% internet amid 2025 tensions. Captain claims strong currents, poor visibility forced emergency anchoring; Beijing denies sabotage, accuses Taipei politicisation. Taiwan probes grey-zone coercion mirroring South China Sea incidents, heightens patrols. India boosts Andaman cable protections via QUAD intel amid Indo-Pacific hybrid threats to \$10T+ data flows, maritime domain awareness.

Source: [Here](#), 30 December 2025

## FROM BUCCANEERS TO BATTLING A PANDEMIC: UNRAVELING THE CONNECTION BETWEEN PIRACY AND COVID-19

COVID-19 pandemic linked to piracy resurgence as lockdowns slashed patrols 40%, economic despair fueled Gulf of Guinea boardings (up 25%), Singapore Strait robberies exploiting idle crews. Reduced port calls, AIS spoofing enabled ransoms; post-2022 vaccine ops like India's Vaccine Maitri aided recoveries. Legacy: hybrid threats persist with drone-assisted piracy amid 2025 Red Sea chaos. India ramps up QUAD exercises, drone surveillance for IOR resilience versus socio-economic drivers amplifying maritime insecurity.

Source: [Here](#), 30 December 2025

## **2026 MARITIME THREATS: THREE SEAS PREDOMINANT FOR INCIDENTS, SALVAGE POTENTIAL**

2026 maritime threat outlook identifies Black, Red, and Baltic Seas as predominant hotspots for incidents due to state-backed actions like hybrid attacks, drone strikes, and sabotage, heightening salvage demands. Red Sea volatility persists post-Houthi disruptions (Suez traffic 60% below 2023), Black Sea endures Ukraine conflict spillovers, Baltic faces Russian hybrid threats amid NATO tensions. Global flux includes no Ukraine peace, tanker decarbonisation pressures, EU ETS rules. Salvage firms anticipate elevated ops; insurers flag state risks over non-state actors. India enhances IOR patrols, QUAD intel for chokepoint resilience.

Source: [Here](#), 31 December 2025

## **SURGE IN SEA ROBBERIES IN SINGAPORE STRAIT LINKED TO SOCIO-ECONOMIC FACTORS, REPORT FINDS**

Singapore Strait sea robberies surged 83% in H1 2025 (80+ incidents), ReCAAP ISC report links to socio-economic distress in Indonesia amid 7% unemployment, poverty driving opportunistic thefts from anchored bulk carriers. Perpetrators steal engines, spares during low-visibility boardings exploiting congestion; Malacca remains hotspot. Recommendations: 24/7 watchkeeping, lighting, alarms, patrols, rapid reporting for coordinated ReCAAP patrols. India bolsters Andaman patrols, Quad info-sharing to secure chokepoints vital for 120K vessels yearly, \$3T+ trade.

Source: [Here](#), 31 December 2025

# **MARITIME FORCES**

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## **INDIAN COAST GUARD SHIP *SARTHAK* MAKES FIRST-EVER VISIT TO IRAN'S CHABAHAR PORT**

Indian Coast Guard Offshore Patrol Vessel ICG Ship *Sarthak* conducted the first-ever visit to Iran's Chabahar port from December 16-19, 2025, during its Gulf deployment. The crew will undertake joint exercises with the Iranian Navy and maritime agencies, covering search and rescue, law enforcement, and marine pollution response. This engagement advances bilateral cooperation at the strategic Chabahar facility, which supports the International North-South Transport Corridor (INSTC) and counters China's Gwadar influence. The visit aligns with India's *SAGAR* and *MAHASAGAR* doctrines, enhancing Indian Ocean Region domain awareness and joint patrols for chokepoint security amid Houthi threats.

Source: [Here](#), 17 December 2025

## **NAVY COMMISSIONS HELICOPTER SQUADRON INAS 335 'OSPREYS' IN GOA**

Indian Navy commissioned second MH-60R squadron INAS 335 "Ospreys" at INS Hansa, Goa, on Dec 17, 2025, with CNS Adm Dinesh Tripathi noting complex maritime threats—grey-zone ops, disruptions—amid Viksit Bharat 2047 goals. Versatile helicopters enhance ASW, surveillance via sensors amid 75th Fleet Air Arm anniversary, Operation Vijay legacy. Western Fleet bolsters deterrence with MQ-9B RPAs, 26 Rafale-M contracts for carrier strikes, UAVs extending reach. Complements shipborne rotary wings for persistent ops, securing SLOCs in contested Arabian Sea.

Source: [Here](#), 17 December 2025

## **INDIA'S MARITIME SURVEILLANCE AT SEA AS ALH *DHRUV* STAYS GROUNDED**

The Indian Coast Guard confronts a severe surveillance shortfall following the third grounding of its ALH Mk-III Dhruv fleet in January 2025 after a fatal Porbandar crash, linked to Non-Rotating Swashplate Bearing failure. Of 16 inducted helicopters, three have crashed; naval variants also remain sidelined despite Army/Air Force clearances. Reliance reverts to obsolete Chetak/Cheetah platforms, curtailing EEZ patrols, threat detection, medevac, spill response—as in May's MSC ELSA 3 incident off Kerala. HAL-Coast Guard consultations yield no timeline; 26 total ALH crashes underscore indigenous programme reliability concerns amid 7,500km coastline vigilance.

Source: [Here](#), 21 December 2025

## ***ANJADIP*, INDIGENOUS ANTI-SUBMARINE SHALLOW WATER CRAFT, JOINS THE NAVY**

Indian Navy inducted ASW Shallow Water Craft INS *Anjadip*, third of eight indigenous vessels from GRSE Kolkata, boosting near-shore anti-submarine warfare capabilities amid Chinese submarine threats in Arabian Sea, Andaman waters. 90m, 1,500-tonne ship displaces 3,000km endurance, 25kts speed, armed with 76mm gun, 30mm CRN-91, 2x torpedo launchers, 12.7mm guns, *Kavach* ECM; deploys ASW helicopters, drones, ROVs, sonar for mine countermeasures. Enhances archipelagic ops, low-intensity maritime threats under *Aatmanirbhar Bharat* naval modernization.

Source: [Here](#), 23 December 2025

## **PREZ MURMU CREATES HISTORY WITH SUBMARINE SORTIE ON INS VAGSHEER**

President Droupadi Murmu achieved a historic milestone on 28 December 2025 by conducting a submarine sortie aboard the indigenous Kalvari-class INS Vagsheer at Karwar Naval Harbour, accompanied by Chief of the Naval Staff Admiral Dinesh K Tripathi. This marked her as the second Indian President, following APJ Abdul Kalam, to undertake such an operation. The two-

hour engagement included operational demonstrations, crew interactions, and commendations for their professionalism, underscoring India's advancements in self-reliant undersea warfare capabilities.

Source: [Here](#), 29 December 2025

# SHIPPING, PORTS AND OCEAN ECONOMY

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## ODISHA CHARTS A BOLD COURSE TO BECOME INDIA'S GATEWAY TO THE EAST

Odisha is pursuing a comprehensive port-led industrialisation strategy under its 2022 Port Policy, targeting 500 million tonnes per annum capacity by 2047 through public-private partnerships and the BOOST model. The plan includes 14 new ports and expansions at Paradip, Dhamra, and Gopalpur. Specialised hubs feature Paradip's PCPIR anchored by IOCL, Dhamra's technical textiles cluster, and Gopalpur's Tata SEZ for green energy. MoUs worth ₹50,000 crore support cargo generation, complemented by coastal highway and rail connectivity. Investments exceeding ₹2 lakh crore in green hydrogen and ammonia, alongside the Bahuda Port and Mahanadi shipbuilding cluster, position Odisha as a regional maritime and industrial hub.

Source: [Here](#), 19 December 2025

## MUMBAI SET FOR WORLD-CLASS MARINA AS GOVT CLEARS ₹887-CRORE PROJECT

The Union Ministry of Ports, Shipping, and Waterways has approved the ₹887 crore *Viksit Bharat Mumbai Marina* project at Mumbai Harbour to promote coastal shipping, maritime tourism, and waterfront development. Spread over 12 hectares, the marina will accommodate 424 yachts up to 30 metres in length. The Mumbai Port Authority will invest ₹470 crore in core marine infrastructure under the EPC model, while a private operator will deploy ₹417 crore for onshore facilities. Key features include breakwaters, pontoons, a Namoo Bharat Sailing School, marina terminal, hotel, clubhouse, and repair yards. The project is expected to generate over 2,000 jobs and aligns with Maritime India Vision 2030, Sagarmala, and the Cruise Bharat Mission.

Source: [Here](#), 19 December 2025

## **CENTRE TO SET UP STATUTORY BUREAU OF PORT SECURITY TO STRENGTHEN MARITIME SECURITY FRAMEWORK**

The Government of India establishes the statutory Bureau of Port Security (BoPS) under Section 13 of the Merchant Shipping Act, 2025, within the Ministry of Ports, Shipping, and Waterways. Union Home Minister Amit Shah chaired the initiative, mandating risk-based security frameworks considering vulnerabilities, trade, and geography. Led by an IPS Director General (Pay Level-15), modelled on BCAS, BoPS oversees intel sharing and cyber protection with a dedicated IT division; Director General of Shipping transitions for one year. CISF serves as Recognised Security Organisation for assessments, plans, and private agency training/certification. Enhances port resilience amid digital threats.

Source: [Here](#), 20 December 2025

## **RUSSIA SHOWS INTEREST IN INDIA-BACKED CHABAHAR PORT TO ENHANCE EURASIAN TRADE CORRIDOR**

Russia expresses interest in partnering at India-operated Chabahar Port, Iran, to integrate it into the International North-South Transport Corridor (INSTC), enhancing Eurasian connectivity to Central Asia, Afghanistan, and Europe while bypassing Pakistan. Amid Trump administration's extended sanctions freeze to early 2026—following Indian advocacy—and threats of 25% tariffs on Iran-trading nations, Russian involvement counters US/Pakistan pressure and bolsters Chabahar's viability. India invested \$120M plus \$250M credit; 700-km rail links Russia-Iran corridor. Reduces Suez reliance, cuts transit costs amid Gwadar rivalry. Strategic win for Indo-Pacific maritime access.

Source: [Here](#), 23 December 2025

## **ADANI VIZHINJAM PORT WINS NATIONAL PROJECT EXCELLENCE AWARD 2025**

Adani Vizhinjam Port Private Limited (AVPPL) received the National Project Excellence Award 2025 in the Mega Infrastructure category at the 33rd Global Symposium & 7th World Project Management Forum in New Delhi. The accolade recognises exemplary planning, execution, risk management, and innovation in developing India's first deep-water transshipment hub at Vizhinjam, Kerala, strategically positioned on international sea lanes. Operational since May 2025, the port reduces reliance on foreign hubs like Colombo/Singapore, saving \$220 million annually in transshipment costs while advancing Sagarmala and Maritime Amrit Kaal Vision 2047. Reinforces Adani's port-led development amid Indo-Pacific trade shifts.

Source: [Here](#), 24 December 2025

# MARINE ENVIRONMENT

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## MARINE ELITE FORCE INTENSIFIES PATROLS TO PROTECT SEA TURTLES

Tamil Nadu's newly launched Marine Elite Force (MEF) intensifies patrols within five nautical miles off Chennai coast to curb mechanized trawlers violating a decades-old ban, which ensnare nesting olive ridley sea turtles—a Schedule I vulnerable species under the Wildlife Protection Act, 1972. During peak breeding from December to April, MEF teams with three patrol boats, forest guards, marine watchers, and local fishers coordinate with police and fisheries to document violations, issue warnings, and protect biodiversity amid confirmed turtle sightings and mating near Besant Nagar. Equipped for surveillance and rescues, the Rs 96 lakh initiative counters seabed damage and drownings from illegal nets, bolstering coastal enforcement.

Source: [Here](#), 24 December 2025

## YEAR IN REVIEW: THE BIGGEST CLIMATE HEADLINES OF 2025

2025 marked the joint-second warmest year on record with temperatures 1.48°C above pre-industrial levels, driven by record greenhouse gas concentrations and ocean heat, per Copernicus data, while sea ice hit historic lows and glaciers lost 450 gigatonnes. COP30 omitted a binding fossil fuel phaseout despite 80 nations' calls, settling for a voluntary roadmap amid 1,600 fossil lobbyists' presence, as plastic treaty talks collapsed again without production caps. ICJ's landmark ruling held states accountable for emissions harming vulnerable nations; NOAA confirmed the largest coral bleaching event affecting 84% of reefs; Asian storms killing 1,800 got supercharged by warming; Trump revived US coal via executive orders; the UN High Seas Treaty activated for 30% protection; green sea turtles downlisted from endangered; and fossil majors linked to intensifying 213 global heatwaves.

Source: [Here](#), 24 December 2025

## *SAMUDRA PRATAP*: INDIA'S OCEAN GUARDIAN AGAINST MARINE DISASTERS

The Indian Coast Guard has commissioned *Samudra Pratap*, the largest indigenously built Pollution Control Vessel, constructed by Goa Shipyard Ltd. The vessel strengthens marine disaster response across India's EEZ amid growing shipping and offshore risks. Measuring 115 metres with a displacement of 4,170 tonnes, it features DP-1 dynamic positioning, FiFi-2 firefighting, oil-fingerprinting laboratories, spill recovery systems, advanced automation, and naval guns for security. *Samudra Pratap* supports *Atmanirbhar Bharat*, environmental stewardship, fisheries protection, and blue economy objectives, while enhancing India's capacity for regional assistance and Indian Ocean Region maritime diplomacy.

Source: [Here](#), 25 December 2025

## **COULD GLOBAL WARMING PARADOXICALLY FREEZE THE PLANET: HOW TINY OCEAN ORGANISMS COULD FLIP EARTH'S CLIMATE**

Global warming could paradoxically trigger planetary cooling through tiny ocean organisms, such as phytoplankton, which enhance the biological carbon pump by sequestering atmospheric CO<sub>2</sub> through photosynthesis and sinking organic matter to the seafloor. During the Ordovician period, approximately 445 million years ago, the proliferation of plankton drove carbon removal despite stable CO<sub>2</sub> levels, spurring chemical weathering, an increase in oxygen, and rapid glaciation, despite no observed emission drops. Modern warming alters marine ecosystems, nutrients, and circulation, potentially shifting carbon dynamics nonlinearly and risking abrupt climate flips as ancient records warn.

Source: [Here](#), 27 December 2025

## **HIDDEN THREATS IN THE DARK: ALARMING LEVELS OF HUMAN-MADE DEBRIS IN MEDITERRANEAN SEA CAVES**

A comprehensive survey of 23 Cypriot Mediterranean Sea caves reveals unprecedented marine debris accumulation, averaging up to 97 items per square meter—exceeding open beach levels. Plastics constitute 66% (24,000+ items, 176kg total), including "plastitar" encrustations on walls. Caves trap flotsam via wave dynamics and beach proportions, endangering biodiversity hotspots, notably pupping sites for endangered Mediterranean monk seals (*Monachus monachus*). Microplastics confirmed in seal digestive tracts; rear cave zones, safest for pups, hold the highest concentrations. Calls for pan-Mediterranean monitoring, standardised protocols to inform EU policy, and conservation.

Source: [Here](#), 31 December 2025

# **GEOPOLITICS**

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## **INDIA-OMAN TIES: BRIDGING HISTORY, SECURITY AND ECONOMIC GROWTH**

India–Oman relations, formalised in 1955 and elevated to a strategic partnership in 2008, rest on nearly 5,000 years of historical linkages. Key milestones include Prime Minister Narendra Modi's 2018 visit and Sultan Haitham bin Tarik's 2023 State Visit to India, alongside Oman's growing G20 engagement. Defence cooperation forms a core pillar, encompassing tri-service exercises, the Joint Military Cooperation Committee, and Coast Guard interactions that strengthen

maritime security in the Indian Ocean Region. Bilateral trade reached USD 10.61 billion in FY 2024–25, driven by energy, supported by over 6,000 joint ventures, OIJIF, and OMIFCO. These initiatives advance India’s SAGAR vision and regional stability.

Source: [Here](#), 17 December 2025

## **STRATEGIC CONVERGENCE IN THE INDO-PACIFIC: IMPLICATIONS OF THE TAKAICHI DOCTRINE**

Japan's PM Sanae Takaichi's 2025 doctrine promotes strategic autonomy and Indo-Pacific security, raising defence to 2% GDP with pacts alongside Australia, UK, Philippines, India, and Vietnam for maritime surveillance and tech. It counters China's aggression through a Free and Open Indo-Pacific framework, aligning with India's sovereignty-focused Quad role. Enhanced bilateral ties cover exercises, semiconductors, rail, and Arctic logistics, building resilience against China’s reliance amid US and Russian dynamics. Takaichi prioritises "controlled assertiveness" via joint patrols and supply chain diversification. This convergence strengthens regional deterrence without entrapment.

Source: [Here](#), 19 December 2025

## **IS WAR AT SEA BACK? WHAT TRUMP’S ‘GOLDEN FLEET’ REVEALS ABOUT NAVAL POWER, WHERE INDIA STANDS**

President Trump's "Golden Fleet," unveiled in December 2025, signals a naval renaissance with Trump-class battleships—30,000-40,000 ton guided-missile behemoths armed with hypersonics, lasers, railguns, and AI—starting with USS Defiant to project power across Pacific chokepoints. Reviving battleship relevance amid carrier vulnerabilities, the initiative counters China's 400+ ship fleet via frigates, unmanned corvettes, and production reforms slashing delays, echoing Reagan's 600-ship navy. India, with 140 warships and expanding blue-water ambitions, aligns via Quad interoperability, joint exercises, and BrahMos co-production, bolstering Indo-Pacific deterrence against PLAN aggression while pursuing NSR diversification.

Source: [Here](#), 25 December 2025

## **STRENGTHENING MARITIME ALLIANCES AT THE INDIAN OCEAN CONFERENCE IN MUSCAT**

Indian Ocean Conference 2025 in Muscat strengthened maritime alliances amid Houthi threats, piracy resurgence via IORA, IONS pacts on domain awareness, and joint patrols. India hosted keynotes on MAHASAGAR and QUAD interoperability; Oman pledged upgrades to the Berbera hub. Discussions tackled cable sabotage (Taiwan Strait echoes), unmanned ASW, green shipping corridors versus China’s Djibouti-Maldives ports. Outcomes: Trilateral India-US-Oman exercises, an anti-scam task force with Thailand, and a \$5 billion blue bond for sustainable fisheries. Secures \$7T IOR trade, counters grey-zone coercion.

Source: [Here](#), 30 December 2025

# HOW ARCTIC THAW AGGRAVATES CLIMATE CONCERNS, IGNITES GEOPOLITICAL COMPETITION

The NOAA Arctic Report Card 2025 reveals record-high air temperatures—the warmest in 125 years—with the last decade marking the hottest on record, accelerating Arctic amplification at over twice the global rate. Sea ice hit its lowest March extent in 47 years, snow cover has halved since the 1960s, and Atlantification brings warmer Atlantic waters northward, weakening ocean stratification, boosting phytoplankton yet threatening circulation and ecosystems. Permafrost thaw releases iron, rusting rivers and degrading biodiversity, while new routes like Russia's Northern Sea Route spur geopolitical competition among Arctic Council states, China, and India, whose 2022 Policy eyes science, climate protection, and NSR energy access amid monsoon disruption risks.

Source: [Here](#), 31 December 2025