INDO-PACIFIC DEFENSE

VOLUME 51, ISSUE 4, 2026

# FORUM



# WINNING TOGETHER

## With Equipment, Quality, Interoperability

PLUS

## Japan Enhances Support of Allies and Partners

Collective Defense




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## FORUM UNVEILS EXCLUSIVE DIGITAL FORMAT

**Indo-Pacific Defense FORUM is moving to a fully digital format. This edition is the first online-only version of FORUM magazine, which will continue to be available in 10 languages and provide in-depth analysis and perspectives. You also can access exclusive content daily and magazine archives at ipdefenseforum.com.**

**We're honored to have served our readers for more than 50 years and remain committed to fostering dialogue on regional security issues.**

**Thank you for your continued support.**

**ABOUT THE COVER**
This rendering of the strategy board game Go represents how Allies and Partners are engaging in collective defense activities to deter and, if necessary, defeat adversaries. FORUM ILLUSTRATION

Dear Readers,

This edition of Indo-Pacific Defense FORUM examines how the United States and its Allies and Partners have built a collective defense framework to deter aggression and ensure regional peace. Working together, nations are sustaining a balance of power to protect security, freedom and prosperity in the Indo-Pacific, and ensure that no individual country can dominate the region by force.

The opening article explores Allies and Partners collaborating to boost maritime domain awareness and create layered defenses in critical waterways in the face of mounting threats. In the Indian Ocean region, for example, India established an information fusion center to develop a "common coherent maritime situation picture" using cutting-edge surveillance, intelligence sharing and data analytics.

Another key article chronicles how the U.S. and its Allies and Partners are moving toward a more integrated model of combined planning, operational coordination and distributed force posture. In the Indo-Pacific, defense exercises, rotational deployments and policy coordination mechanisms increasingly form a broader strategic architecture. Focus is shifting to synchronize military capabilities and policy objectives across a network of like-minded nations to achieve a more resilient and unified approach to collective security.

Also in this issue, Ridvan Kilic, an Australia-based foreign affairs and defense analyst, details the emergence of a new partnership to expand the region's collective defense capabilities. He discusses how Australia, Indonesia, Papua New Guinea and Timor-Leste are working to formalize cooperation across a range of traditional and nontraditional security challenges.

In a call for collective action, Dr. Miemie Winn Byrd and Savannah Cantor, with the Daniel K. Inouye Asia-Pacific Center for Security Studies, delve into the global security ramifications of the industrial-scale fraud operations emanating from several Southeast Asian nations. In Myanmar, the scam centers are intertwined with the ruling military junta's finances, militia activities and China's regional interests. Untangling the web of interdependence among crime, conflict and geopolitics in Myanmar requires a comprehensive approach that addresses the underlying political and internal conflict dynamics as well as China's reach, they write.

We hope this edition deepens the dialogue about the importance of collective defense in the Indo-Pacific.

Please contact the FORUM staff at **ipdf@ipdefenseforum.com** to continue the conversation and share your comments.

All the best,

**FORUM Staff**

IPD FORUM

**Collective Defense**

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**US PACOM LEADERSHIP**



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Featured on Page 26



**DR. MIEMIE WINN BYRD**, a retired U.S. Army lieutenant colonel, joined the Daniel K. Inouye Asia-Pacific Center for Security Studies (DKI APCSS) in Hawaii as a professor in 2007. During her military career, she served as the deputy economic advisor, civil-military operations plans officer and interagency operations officer at the U.S. Pacific Command. She has a doctorate in education leadership from the University of Southern California. Her areas of expertise include the security dynamics in Southeast Asia and Myanmar.



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**ANUBHAV SHANKAR GOSWAMI** is a doctoral candidate at the Indo-Pacific Research Centre of Murdoch University in Perth, Australia. He is the author of the book "Deterrence from Depth: SSBNs in India's Nuclear Strategy." Featured on Page 60


# Join the Discussion

**WE WANT TO HEAR FROM YOU!**

**Indo-Pacific Defense FORUM serves military and security personnel in the Indo-Pacific region. A product of the U.S. Pacific Command, the magazine provides high-quality, in-depth content on security efforts across the region — from counterterrorism to international cooperation to natural disasters.**

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## QUAD NATIONS BOOST MARITIME SURVEILLANCE, CRITICAL MINERALS CAPACITY

Australia, India, Japan and the United States are enhancing regional maritime surveillance, bolstering critical minerals supply chains and expanding port infrastructure in the South Pacific under their Quadrilateral partnership.

The Indo-Pacific Maritime Surveillance Collaboration, unveiled in May 2026 by the nations' foreign ministers, will increase information sharing and maritime domain awareness capacity. It initially will focus on the Indian Ocean and incorporate emerging technology and simulated exercises.

The existing Indo-Pacific Partnership for Maritime Domain Awareness (IPMDA) initiative is a mutually reinforcing component to the newly established Indo-Pacific Maritime Surveillance Collaboration. The IPMDA is being operationalized through India's procurement of commercial MDA data. By subsequently sharing this critical intelligence with regional partners throughout the Indian Ocean Region, India cements its goal to be a reliable security provider.

**Australian Foreign Minister Penny Wong, from left, Indian External Affairs Minister Subrahmanyam Jaishankar, Japanese Foreign Minister Toshimitsu Motegi and United States Secretary of State Marco Rubio speak after their meeting in New Delhi in May 2026.**
THE ASSOCIATED PRESS

Meanwhile, the Quad's inaugural port project in Fiji highlights its emphasis on infrastructure resilience, particularly in a vital region where China is seeking a foothold, including through predatory lending practices and development pacts that have saddled host nations with debt.

Similarly, the new Quad Critical Minerals Initiative will bolster supply chains for mining, processing and recycling rare-earth elements (REE), which are essential for producing components used in civilian and military technologies.

China controls 60% of global REE production and 90% of mineral refining, according to the International Energy Agency. Analysts say Beijing wields its monopoly for economic and political coercion.

The Quad ministers said they will work with regional partners in four key areas: maritime and transnational security, economic prosperity and security, critical and emerging technologies, and humanitarian assistance and emergency response.

"There is great alignment between our interests," Australian Foreign Minister Penny Wong said. "We all share a vision for the Indo-Pacific, a region that is free and open." FORUM Staff

# U.S., ALLIES ESTABLISHING Integrated Space Warfare Plan

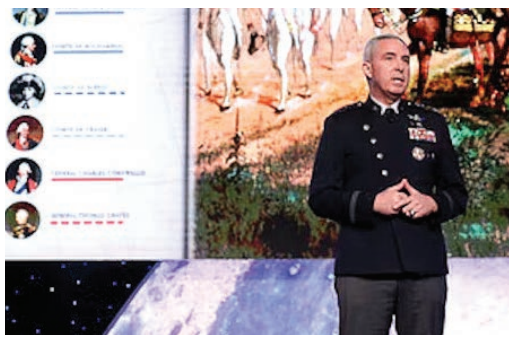
**The United States Space Command** (USSPACECOM) and six allied nations are developing a plan to protect and defend space assets from threats on orbit. The initiative builds on the Multinational Force – Operation Olympic Defender (MNF-OOD) partnership formed in 2013 under U.S. Strategic Command and expanded to include Australia, Canada, France, Germany, New Zealand and the United Kingdom.

Allies participating in MNF-OOD had discussed the need for "protect-and-defend capabilities, orbital warfare capabilities," U.S. Space Force Gen. Stephen N. Whiting, commander of USSPACECOM, said in May 2026, according to Air & Space Forces Magazine.

"We are in the process now of building a defense of orbital assets CONOPS [concept of operations] together," he said. "How do we leverage all of these capabilities that these nations will be bringing with our capabilities to deconflict them? We really want to be able to integrate them and synchronize them and synergize them."

Established as a planning group, MNF-OOD reached initial operational capability and member nations signed their first campaign plan, establishing a framework for interoperable combined space operations, officials previously announced.

USSPACECOM has executed three on-orbit operations under the MNF-OOD framework since 2024, part of the transition from data sharing among Allies to joint operations. Sentry



**U.S. Space Force Gen. Stephen N. Whiting, commander of U.S. Space Command, addresses the 41st Space Symposium in Colorado in April 2026.**
SPACE FOUNDATION




**Canberra and Jakarta are adopting a networked approach to regional security.** AUSTRALIAN DEFENCE DEPARTMENT

# AUSTRALIA-INDONESIA TREATY DEEPENS MARITIME SECURITY COOPERATION

**Australia and Indonesia** are transforming their maritime ties from border coordination into a model for regional multilateral security. By aligning operational practices and information-sharing protocols, the neighbors are addressing shared threats through a networked approach that supports peace through strength.

The Treaty on Common Security, also known as the Jakarta Treaty, commits the nations to consult in response to regional security threats, an arrangement that now includes embedding a senior Indonesian military officer within the Australian Defence Force. The February 2026 pact also supports development of joint defense training facilities in Indonesia and expands bilateral exercises such as Keris Woomera to strengthen operational integration between the forces.

Underlying the treaty are the 2024 Defence Cooperation Agreement (DCA) and the 2025 renewal of a maritime security memorandum of understanding, both within the framework of the nations' 2018 Comprehensive Strategic Partnership. The DCA established the legal framework for each nation's forces to operate in the other's territory, while the maritime security renewal strengthened cooperation between the Australian Border Force and the Indonesian Maritime Security Agency to counter transboundary threats such as illegal fishing and human trafficking.

The expanded ties have enhanced joint maritime operations, including Jawline Arafura and Gannet, and improved communication for regional maritime domain awareness.

Such cross-agency coordination creates a more stable security architecture, according to Dr. Marcellus Hakeng Jayawibawa, an analyst at Jakarta's Lemhannas Strategic Center.

"This demonstrates that modern maritime security is no longer solely about military patrols but also concerns the protection of resources, economic security and regional social stability," he said. FORUM Staff

# VIETNAM BECOMES LATEST SOUTHEAST ASIAN NATION TO BUY INDIA'S BRAHMOS MISSILES

**India signed a roughly $620 million deal** to sell BrahMos missiles to Vietnam, the third Southeast Asian nation to announce plans to buy the system, officials announced in late May 2026.

India also sold the supersonic cruise missile system to the Philippines under a $375 million agreement signed in 2022, with deliveries beginning in 2024. In March 2026, Indonesia announced a deal to procure the missile system, according to The Diplomat magazine. Malaysia and Thailand are also interested in acquiring BrahMos missiles.

The Vietnam agreement will strengthen ties between Hanoi and New Delhi, analysts said, and enhance Vietnam's preparedness and deterrence capabilities.

Other Southeast Asian nations have followed a similar course of action given China's increasing aggression in the resource-rich South China Sea, a vital global trade route. "Fears over China's intentions and its growing military capabilities" are spurring arms sales across the region, the Stockholm International Peace Research Institute reported in March 2026.



**A BrahMos missile system is featured in a New Delhi parade in January 2026.** AFP/GETTY IMAGES

The BrahMos can travel at more than 3,300 kilometers per hour, nearly three times the speed of sound, and be launched from air, land, sea and underwater platforms. In addition to providing stealth and precision-guidance capabilities, the missile can carry conventional warheads of up to 200 kilograms for a range of about 290 kilometers. FORUM Staff

# COOPERATIVE COGNIZANCE

## ALLIES, PARTNERS ARE COLLABORATING ON **INDIAN OCEAN MARITIME DOMAIN AWARENESS**



FORUM STAFF

The Indian Coast Guard seized three dark fleet tankers off Mumbai's west coast in February 2026 in an air-and-sea operation launched after advanced surveillance systems detected suspicious vessel movements inside India's exclusive economic zone (EEZ). Electronic data analysis and interviews with the tankers' crews revealed that the ships transferred large quantities of cheap oil and oil-based cargo while at sea to avoid customs duties and regulatory oversight in an attempt to move illicit oil to markets.

The Indian Coast Guard said the intercept highlighted its "strong maritime domain awareness digital tracking capabilities" and its enforcement of maritime law to protect India's coastal and economic interests. Afterward, the agency reinforced its efforts by deploying 55 ships and up to 12 aircraft for round-the-clock surveillance of its maritime zones.

New Delhi's first such operation against rogue vessels demonstrated a direct commitment to cracking down on the international dark fleet of ships under United States sanctions, analysts say. It also showed the significance of building maritime domain awareness (MDA) in the Indian Ocean.

The International Maritime Organization defines MDA as understanding anything associated with the global maritime domain that could impact security, safety, economy or environment. The concept is as old as fishing and seafaring, analysts say. Sailors need to know weather patterns, locations of sea-lanes and archipelagoes, the proximity of other vessels, and where to find fisheries and other resources. "Any activity you want to do at sea, you first must be aware of what is happening, what are the resources, what are the challenges," Dr. Sripathi Narayanan, a researcher at the Indian Council of World Affairs (ICWA), said in May 2025.

The concept grew in importance following terrorist attacks on the U.S. on September 11, 2001. Nations collaborated to boost MDA infrastructure while security forces teamed with researchers to strengthen capabilities.

**Indian and United States Sailors conducted anti-submarine warfare and maritime domain awareness training at the U.S. Navy Support Facility Diego Garcia in October 2025.**
PETTY OFFICER 1ST CLASS SAMANTHA JETZER/U.S. NAVY

Similarly, New Delhi invested substantially in MDA equipment and training after terrorist attacks in Mumbai in November 2008 revealed security vulnerabilities — coastal neighborhoods with no formal perimeter security, minimal policing and high volumes of unregulated fishing traffic that were exploited by terrorists.

MDA now is a vital component of a layered maritime defense, incorporating situational, threat and response awareness requiring a network of sensors and analysis of data from space, surface and underwater sources. The threats are many as the Indo-Pacific confronts sovereignty disputes; dark fleet shipping; piracy; illegal, unreported and unregulated (IUU) fishing; organized crime; and illicit trafficking of arms, narcotics and people.

## REGIONAL COOPERATION

Those challenges come as billions of dollars in annual trade transits the Indo-Pacific's critical waterways, including the East China and South China seas, Indian Ocean and Malacca Strait. Upholding international laws governing the seas, including freedoms of navigation and overflight, and ensuring unimpeded maritime commerce are vital for global peace and prosperity.

The expanse of the Indo-Pacific, stretching from the eastern coast of Africa to North America's Pacific coast, makes MDA collaboration imperative. India's EEZ, for instance, encompasses more than 2.3 million square kilometers. MDA "starts from the seabed [and goes] right up to the sky. It's enormous. Not one single nation can do this alone. There's where regional cooperation comes in," retired Indian Navy Capt. Sarabjeet Singh Parmar, a distinguished fellow at the Council for Strategic and Defense Research in New Delhi, told the ICWA in May 2025.

The MDA infrastructure put in place since 2001 includes the Combined Maritime Forces (CMF), which has grown to a 47-nation coalition to uphold international law and counter drug smuggling, piracy, terrorism and other illicit activities by nonstate actors in the Middle East and off East Africa. The CMF, based in Bahrain and led by the U.S., welcomed India as an associate in 2022 and as a full member in 2023. The CMF's five combined task forces (CTF) provide security in the Arabian Gulf, Arabian Sea, Gulf of Oman, Indian Ocean and Red Sea.

India, for the first time, assumed leadership of one of the task forces when it took command of CTF 154, leading multinational shore-based training, in February 2026.

"India's participation in CMF, and now the responsibility of leading CTF 154, reflects its enduring commitment to regional security, cooperative engagement and a rules-based international order," Indian Navy Commodore Milind Mokashi said. "Together, through training cooperation and shared purpose, we will enhance readiness, build trust and contribute meaningfully to maritime stability across the region and beyond."

India also boosted regional collaboration for maritime security when it established the Information Fusion Centre – Indian Ocean Region (IFC-IOR) in 2018. The Indian Navy-led center has 76 information and data links in 28 countries to monitor the Indian Ocean and adjoining seas to build a "common coherent maritime situation picture." In 2025, the center monitored and analyzed 3,774 incidents of piracy and armed robbery, contraband smuggling, IUU fishing, human trafficking, severe weather, and unsafe maritime operations, according to its annual report released in February 2026. The IFC-IOR hosts liaison officers from 15 nations, including Indo-Pacific partners Australia, Bangladesh, Japan, the Maldives, Singapore, Sri Lanka, Thailand and the U.S. Similar maritime information hubs operate in the Pacific island nation of Vanuatu — under Australian sponsorship — and in Madagascar and Singapore.

**An Indian Coast Guard hovercraft maneuvers during the multilateral humanitarian assistance and disaster response exercise Sanyukt Vimochan in Porbandar in November 2024.**
THE ASSOCIATED PRESS

## HIGH-TECH TEAMWORK

Cooperation between India and the U.S. also is advancing along high-technology corridors. The partnership benefits both nations, Kriti Upadhyaya, a visiting fellow in the Asian Studies Center at the Heritage Foundation, a U.S.-based think tank, wrote in 2025 for The National Interest magazine. The teamwork extends U.S. maritime awareness into critical zones without the need for new bases or constant patrols, while New Delhi receives world-class intelligence and surveillance technology to bolster its security and strategic autonomy.

U.S.-made aircraft already are a significant part of India's defense assets. The countries announced in 2025 that the U.S. would sell six additional P-8I maritime patrol aircraft to New Delhi to expand its Indian Ocean surveillance.

Underscoring its commitment to regional leadership and burden-sharing, India invested $131 million in national funds to acquire U.S. SeaVision software, training and technical support. This proactive procurement significantly enhances India's MDA, while enabling New Delhi to distribute critical maritime capabilities to partners across the region. The U.S. established the SeaVision platform in 2012 to share nonclassified information. Managed by the U.S. Navy, SeaVision aggregates automatic identification system and other vessel tracking data for secure, real-time monitoring. It also integrates commercial satellite-based radio frequency detection capabilities from HawkEye 360,





## INFORMATION FUSION CENTRE – INDIAN OCEAN REGION (IFC-IOR)

**monitored 3,774 incidents in 2025, including:**

- 1,428 severe weather and unsafe maritime operations
- 1,197 contraband smuggling
- 673 illegal, unreported and unregulated (IUU) fishing
- 227 piracy/armed robbery
- 208 human smuggling/trafficking

## SOUTH ASIA

730 maritime security incidents monitored, compared to 786 in 2024.

Capsizing and sinking of vessels in the Bay of Bengal, smuggling, seizure of illicit goods, and IUU fishing were top incidents.

## SOUTHEAST ASIA

2,875 maritime security incidents recorded, compared to 2,521 in 2024.

Severe weather, petty theft, irregular human migration, and smuggling of drugs, fuel and other contraband were top incidents.

FORUM ILLUSTRATION

Source: Information Fusion Centre – Indian Ocean Region

a U.S. company, that enables partner nations to locate and monitor vessels operating without transponders.

That is critical. The dark fleet, such as the three vessels intercepted by the Indian Coast Guard, is a sprawling network of about 1,300 aging tankers, The Wall Street Journal newspaper reported in February 2026, citing the ship-monitoring website TankerTrackers.com. The fleet transports oil from Iran and Russia in defiance of international sanctions, and often sails under false flags, changes identities and uses opaque corporate structures to conceal ownership. More than 25% of dark fleet vessels did not transmit locations in February 2026, the newspaper reported.

SeaVision and HawkEye 360 create a multilayered operational picture that significantly boosts India's ability to monitor its maritime domain and contribute to regional security objectives. The agreement strengthens the India-U.S. strategic relationship and improves the security of India, "which continues to be an important force for political stability, peace, and economic progress in the Indo-Pacific and South Asia regions," the U.S. Department of War's Defense Security Cooperation Agency said.



**Indian Coast Guard personnel conduct a coastal security exercise off Maharashtra in March 2026.** INDIAN COAST GUARD

The U.S. previously provided SeaVision to international coalition partners through the Indo-Pacific Partnership for Maritime Domain Awareness (IPMDA). Since the Quad partnership of Australia, India, Japan and the U.S. launched IPMDA in 2022, the U.S. has contributed more than $120 million in MDA support to facilitate regional coordination, according to the U.S. State Department.

India-U.S. cooperation also includes a 2025 agreement between Ultra Maritime, a U.S. company, and India's Bharat Dynamics Ltd. to coproduce U.S.-developed sonobuoys in India. The contract enables transfer of U.S. technology to New Delhi, a precursor to allowing India's maritime patrol aircraft to use the sonobuoys to detect submarines.

Likewise, Anduril Industries and Mahindra Group are collaborating on autonomous technologies to codevelop and coproduce maritime systems and advanced artificial intelligence-enabled counter-uncrewed aerial systems to strengthen regional security. Also, L3Harris and Bharat Electronics are codeveloping active towed array systems — cable-based sonar technology dragged behind submarines, surface ships or uncrewed vehicles to detect submarines at long distances.

## COUNTERING CHINA

The cooperation comes amid the growing maritime harassment and expanding submarine presence of the Chinese People's Liberation Army (PLA). Beijing's gray zone coercion in the South China Sea includes suspected sabotage of undersea internet cables and using its maritime militia and coast guard to harass civilian and government vessels operating legally within their nations' EEZs. In the face of such coercion, India-U.S. collaboration "is no longer optional, it is mandatory," Upadhyaya, of the Asian Studies Center, wrote.

China also conducts sweeping surveys of the Indian Ocean seabed, collecting data that could be crucial in deploying submarines, the Center for Strategic and International Studies (CSIS), a U.S.-based think tank, reported in 2024. The data showed the region had become one of the biggest domains for China's oceanic surveys, which purport to be civilian research but are tied to the PLA's military-civil fusion strategy to advance economic and military development simultaneously.

"The Indian Ocean is critical to China's strategic and economic interests, as well as its geopolitical rivalry with India," Matthew Funaiole, a senior fellow at CSIS, told The Washington Post newspaper. "Beijing is serious about fielding a blue-water navy, one that will be active in the Indian Ocean, and blurring the lines between its research ecosystem and its national security apparatus will help it get there."

China maintains the world's largest fleet of civilian research vessels, and CSIS reported that 80% of the 64 vessels operating globally since 2020 were believed to be tied to military activity.

"Now all these Chinese research vessels are all over the place, in the Indian Ocean and even now they are in the Middle East, collecting all kinds of data. There are five to six research vessels in this part of the world and they are generating underwater [data]," Dr. Arnab Das, a retired Indian Navy commander and founder and director of the Maritime Research Center in India, told FORUM in March 2026. "They obviously claim that they are doing it for research purposes, but that data is their national asset."

Chinese research vessels include those designed and optimized for research related to seismology, bathymetry, topography, climatology, deep ocean habitats, currents, temperatures and salinity, as well as for collecting seabed samples, operating crewed and uncrewed submersibles, and launching and recovering underwater monitoring systems, according to Girish Luthra of the Observer




**The Indian Navy guided-missile corvettes INS Kora, left, and INS Khanjar are docked in Kolkata in November 2025.** AFP/GETTY IMAGES

Research Foundation (ORF), Mumbai. Additionally, some vessels are designed to detect and track ballistic missiles.

While the Intergovernmental Oceanographic Commission advocates for open-access data, China rarely uploads complete hydrographic or bathymetric datasets to global databases. Instead, China favors targeted bilateral agreements and has established joint maritime research centers with Bangladesh, Indonesia, Pakistan, Vietnam and several African nations.

India, the U.S. and other Allies and Partners can strengthen maritime security collaboration by devising strategies to track PLA submarines and uncrewed underwater vehicles in the Indian Ocean, analysts say. They point to the Japan-U.S. undersea defense line as a model. It employs seabed sensor networks, satellites and other data to monitor submarine movement across the Western Pacific. The fishhook-shaped line, a network of hydrophones, stretches from Japan toward the Philippines with key nodes in the U.S. territory of Guam, the Japanese island of Okinawa and self-governed Taiwan.

The network "exemplifies successful regional cooperation, persistent surveillance, and intelligence sharing that Southeast Asia could emulate to cover the Malacca and Sunda Straits," Julia Rocio Gatdula, a former researcher with CSIS's Southeast Asia Program, wrote for the think tank in September 2025. The Sunda Strait between the Indonesian islands of Java and Sumatra connects the Java Sea and Indian Ocean.

Enhanced MDA must go below the surface where multiple obstacles exist. For instance, sonar technology developed during the Cold War for underwater surveillance does not work in the tropical littoral waters of the Indian and Pacific oceans, where sonar performance is degraded by 60%, Das said. More study and modeling are needed to determine how to deal with shallow water sediments, biofouling of underwater sensors and other issues.

Underwater domain awareness must address challenges in four key areas, Das said: strategic security, blue economy, sustainability, and science and technology. "A cohesive approach would allow resource pooling and synergized efforts among stakeholders, ensuring safe, secure, and sustainable growth in the tropical waters of the Indo-Pacific strategic space," he wrote for the ICWA in January 2025.

A similar cooperative strategy should be reinforced to overall MDA in the Indo-Pacific, analysts say.

"To chart a sustainable path forward, Indo-Pacific nations must prioritise regional partnerships, strengthen public-private collaborations, and invest in scalable, cost-effective solutions," Abhijit Singh, a retired Indian Navy officer and former head of the Maritime Policy Initiative at the ORF in New Delhi, wrote for the ICWA in 2025. "A unified strategy that integrates advanced technologies with strong international cooperation offers the best hope for closing capacity gaps and addressing shared maritime threats." □

# FOUNDATIONAL SUPPORT



FORUM ILLUSTRATION

# Japan's Official Security Assistance Framework Underpins Regional Peace and Stability

FORUM STAFF

Uncurl the Philippines' serpentine shoreline from the archipelago's 7,600 islands and it would stretch more than 36,000 kilometers, almost enough to circumnavigate the equator. Safeguarding the waters around one of the world's longest coastlines is a leviathan mission. It is not one, however, that Manila must accomplish alone.

Since 2023, Japan's Official Security Assistance (OSA) initiative has provided the Philippines with defense assets to enhance maritime domain awareness as Manila confronts China's gray zone coercion and militarization of South China Sea reefs. In January 2026, Manila and Tokyo announced a $5.6 million agreement to build boathouses and slipways for the Philippine Navy, the OSA's first infrastructure project. Weeks later, Japan presented the Philippines with five coastal surveillance radar systems in an agreement valued at $3.8 million. The "milestone marks a significant step in strengthening the Philippines' maritime domain awareness and coastal defense capabilities," the Philippine National Defense Department stated.

"At a time when the security environment is becoming increasingly complex and difficult, strategic challenges in the region serve as a clear reminder that peace and stability cannot be taken for granted. It must be actively and collectively sustained," Kazuya Endo, Japan's ambassador to the Philippines, said during the February handover ceremony in Manila. "As maritime democracies positioned along vital sea-lanes, Japan and the Philippines are natural partners.

"The South China Sea is a vital sea lane for many countries through which a large portion of our trade and energy supplies pass," he said, according to the Philippine News Agency. "Safety, openness and stability of these waters are therefore of direct importance to our own security and prosperity. Enhancing the Philippines' maritime domain capability is not only an investment in the Philippines' security, but also a meaningful contribution to regional and global stability."

## DETERRENCE NETWORK

As Japan accelerates its biggest defense buildup in decades — including doubling spending to 2% of gross domestic product — it is simultaneously enhancing the security and deterrence capabilities of Allies and Partners across the Indo-Pacific and beyond. The OSA has become a cornerstone of Tokyo's defense diplomacy, providing equipment, supplies and infrastructure development support to the armed forces and related organizations of like-minded countries. In addition to air and coastal radar systems and rigid-hulled inflatable boats for the Philippines, OSA commitments include high-speed patrol boats for the Indonesian Navy and maritime surveillance drones for Sri Lanka.

"Through OSA, Japan complements its own defense modernization and integrates its diplomacy, defense industry and technology base into a regional deterrence architecture," Hiroyasu Harada, chief analyst with Japan's Network for Security Business and Technology (NSBT), told FORUM. "OSA projects, particularly the provision of maritime drones to Sri Lanka and coastal radars to the Philippines, strengthen regional deterrence and resilience on multiple levels. These initiatives go beyond mere equipment transfers, establishing the foundation for an information-sharing network that enables early responses to gray zone incidents."

"First, they enhance deterrence," Harada said. "Maritime drones improve Sri Lanka's Indian Ocean surveillance, while coastal radars bolster the Philippines' monitoring of South China Sea approaches, preempting

attempts at changing the status quo by force. This creates a distributed deterrence network where recipient countries can independently alert and report, generating collective deterrence effects against China's maritime expansion.

"Additionally, they build resilience. These assets also serve peacetime disaster monitoring and search and rescue functions, increasing resistance to hybrid threats," he said. "Japan supports operational training through these projects and standardizes information-sharing protocols, ultimately elevating the region's overall crisis response capabilities and reducing Japan's own sea-lane defense burden."

Bolstering deterrence along the first island chain is critical as authoritarian regimes in Beijing and Pyongyang agitate for strategic gain, stirring geopolitical turbulence. The string of archipelagoes stretching from Japan to Indonesia is a vital first line of defense for the United States and its Allies and Partners, who are increasing collective defense engagements. For example, Japan and the Philippines have expanded trilateral maritime patrols and other exercises with the U.S., their decades-long mutual ally, including in the South China Sea.

The resource-rich waterway, a global trade route, is a flash point as China continues to disregard a 2016 international tribunal ruling that its expansive sovereignty claims have no legal basis. Beijing's maritime forces have harassed vessels of three of the 11 OSA partners — Indonesia, Malaysia and the Philippines — including within those nations' internationally recognized exclusive economic zones. In announcing its two OSA projects with Malaysia, including rescue and diving support vessels, Japan noted the Southeast Asian nation's location along the Malacca Strait. The maritime choke point links the Indian and Pacific oceans and is one of the world's busiest shipping routes.

For Japan, the OSA represents a strategic pivot to shaping the regional security architecture through capacity building, according to Dr. Stephen Nagy, a professor at Tokyo's International Christian University and a visiting fellow with the Japan Institute of International Affairs. "Every radar system installed and drone deployed creates a web of technical personnel who train together, share operational pictures and develop common procedures — this is grassroots interoperability that matters more than high-level agreements," he told FORUM. "These daily interactions build the muscle memory of cooperation that can be activated in crisis. More fundamentally, when Japan's equipment helps [nations] push back against intimidation, it creates trust that can't be bought. It must be earned through shared risk."

## SHARED VISION

The OSA initiative was unveiled in late 2022 as part of Tokyo's National Security Strategy, which also called for hiking defense spending over five years. "As Japan is finding itself in the midst of the most severe and complex



**The Japan Maritime Self-Defense Force frigate JS Noshiro, from left, the United States Navy destroyer USS Shoup and the Philippine Navy frigate BRP Jose Rizal conduct drills in the South China Sea in March 2025.**
ARMED FORCES OF THE PHILIPPINES/THE ASSOCIATED PRESS

# Japan's Investments in Regional Security

Japan's Official Security Assistance program, established as part of the 2022 National Security Strategy, has provided defense assets, equipment and infrastructure development support to the armed forces and related organizations of like-minded countries across the Indo-Pacific and beyond. The initiative, which has committed more than $73 million in assistance since 2023, strengthens the security and deterrence capabilities of partners, including:

- **Bangladesh:** patrol boats ($3.6 million)
- **Djibouti:** coastal radar system ($6.9 million)
- **Fiji:** patrol boats; ambulances and other emergency medical equipment ($5 million)
- **Indonesia:** patrol boats ($6.2 million)
- **Malaysia:** rescue boats; diving support vessel ($21.9 million)
- **Papua New Guinea:** heavy engineering equipment ($2.5 million)
- **Philippines:** air and coastal radar systems; patrol boats; boathouses and slipways ($19.4 million)
- **Sri Lanka:** maritime surveillance drones ($3.1 million)
- **Thailand:** disaster response, and maritime search and rescue equipment ($3.1 million)
- **Tonga:** military uniforms; uncrewed aerial vehicles for surveillance and disaster response ($1.8 million)

Source: Japan Foreign Affairs Ministry

security environment since the end of World War II, it is essential for us to drastically strengthen our own defense capabilities as well as enhance the security and deterrence capabilities of like-minded countries in order to prevent unilateral attempts to change the status quo by force, ensure the peace and stability of the Indo-Pacific region in particular, and create a security environment desirable for Japan," the Foreign Affairs Ministry stated.

The program mirrors Japan's Overseas Development Assistance (ODA), which was established in the 1950s to provide partner nations with funding for roads, dams and other civilian infrastructure. To comply with Japan's arms export controls, OSA projects are limited to fields not directly related to international conflict, such as monitoring and surveillance, counterterrorism and counterpiracy, and disaster response.

Program partners are selected based on factors such as "democracy, rule of law and respect for fundamental human rights," and include:

- **Bangladesh** – patrol boats to strengthen monitoring and surveillance capabilities, and disaster response.
- **Djibouti** – coastal radar system and related infrastructure to secure sea-lanes off the Horn of Africa. Djibouti hosts the Japan Self-Defense Forces' only overseas base, which conducts counterpiracy operations. The U.S. and China also have military bases in the East African nation.
- **Fiji** – patrol boats and related equipment for surveillance and disaster response, as well as ambulances and other emergency medical equipment to support joint military medicine projects by the nations' forces. At their November 2025 summit in Tokyo, Fijian Prime Minister Sitiveni Rabuka and Japanese Prime Minister Sanae Takaichi affirmed the importance of "facilitating OSA as a new form of collaboration to enhance security cooperation."
- **Papua New Guinea** – heavy engineering equipment for disaster response and infrastructure development. The agreement, which coincided with the 50th anniversary of the nations' diplomatic ties in 2025, complements projects between the Japan Ground Self-Defense Force (JGSDF) and the Papua New Guinea Defence Force.
- **Thailand** – disaster response, and maritime search and rescue equipment.
- **Tonga** – military uniforms and uncrewed aerial vehicles. "We expect these drones to play a significant role in enhancing Tonga's surveillance and disaster relief capabilities, contributing to your efforts to counter illegal, unreported and unregulated fishing, and illegal drug trafficking," Hisao Inagaki, Japan's ambassador to Tonga, said at the December 2025 signing ceremony. Crown Prince Tupouto'a 'Ulukalala, the Pacific island nation's minister for the armed forces and foreign affairs, highlighted Tokyo's support for "enhancing the Kingdom's capability with quality equipment and investment," contributing to the safety and prosperity of Tonga's maritime domain.

The OSA marks a significant shift in Tokyo's foreign assistance policies, according to Jumpei Ishimaru, an analyst with the International Institute for Strategic Studies' Japan Chair Program. "Japan has selected recipient countries which align with its [Free and Open






Personnel from the Papua New Guinea Defence Force's (PNGDF) Engineer Battalion operate a Japanese-made excavator. Tokyo's OSA program is providing engineering equipment to the PNGDF. PAPUA NEW GUINEA DEFENCE FORCE

Indo-Pacific] vision and which are located in strategic areas, such as near the sea-lanes between the Indian Ocean and the Pacific, and between Japan and the South Pacific," he wrote in 2024 for the United Kingdom-based think tank.

## EXPANDING NETWORK

Japan's OSA commitments, which had surpassed $73 million as of mid-2026, are part of the nation's deepening engagement in Indo-Pacific deterrence, including deploying domestically developed, extended-range missiles in early 2026 to enhance counterstrike capabilities. The overall defense budget hit a record $66.5 billion for fiscal year 2026, placing Japan among the world's top 10 spenders.

Tokyo also is expanding reciprocal access agreements with partners such as Australia and the Philippines. The bilateral pacts enable deployment of each nation's forces to the other's territory for joint exercises, disaster response and other missions to enhance interoperability. For example, about 1,400 JGSDF Soldiers participated in the annual Balikatan drills in the Philippines in April and May 2026, the first time Tokyo deployed ground troops to the Philippines-U.S. exercise, which included eight fully participating nations.

"Across the Indo-Pacific, networks of security cooperation involving Japan, the United States, Australia, and other partners are steadily expanding," Jun J. Nohara, an associate professor of international relations at Japan's Kyoto Sangyo University, wrote for The Diplomat magazine in March 2026. "Each new agreement adds another layer to this emerging architecture. Taken together, these partnerships may gradually raise the costs of coercion — and make Beijing think twice before escalating its actions."

As it broadens its network of partners, Japan also is expanding the OSA. Tokyo allocated about $115 million for the program in the fiscal year that ends March 2027, more than doubling annual spending, with Southeast Asian nations including Cambodia, Laos and Vietnam considered priority candidates, The Straits Times reported. "Each project will get bigger in scale," a senior Japanese official told the Singapore-based newspaper in early 2026. "We are responding to requests from partner countries or candidate countries for higher-performance and higher-quality equipment, especially for surveillance purposes, like radars or unmanned aerial vehicles."

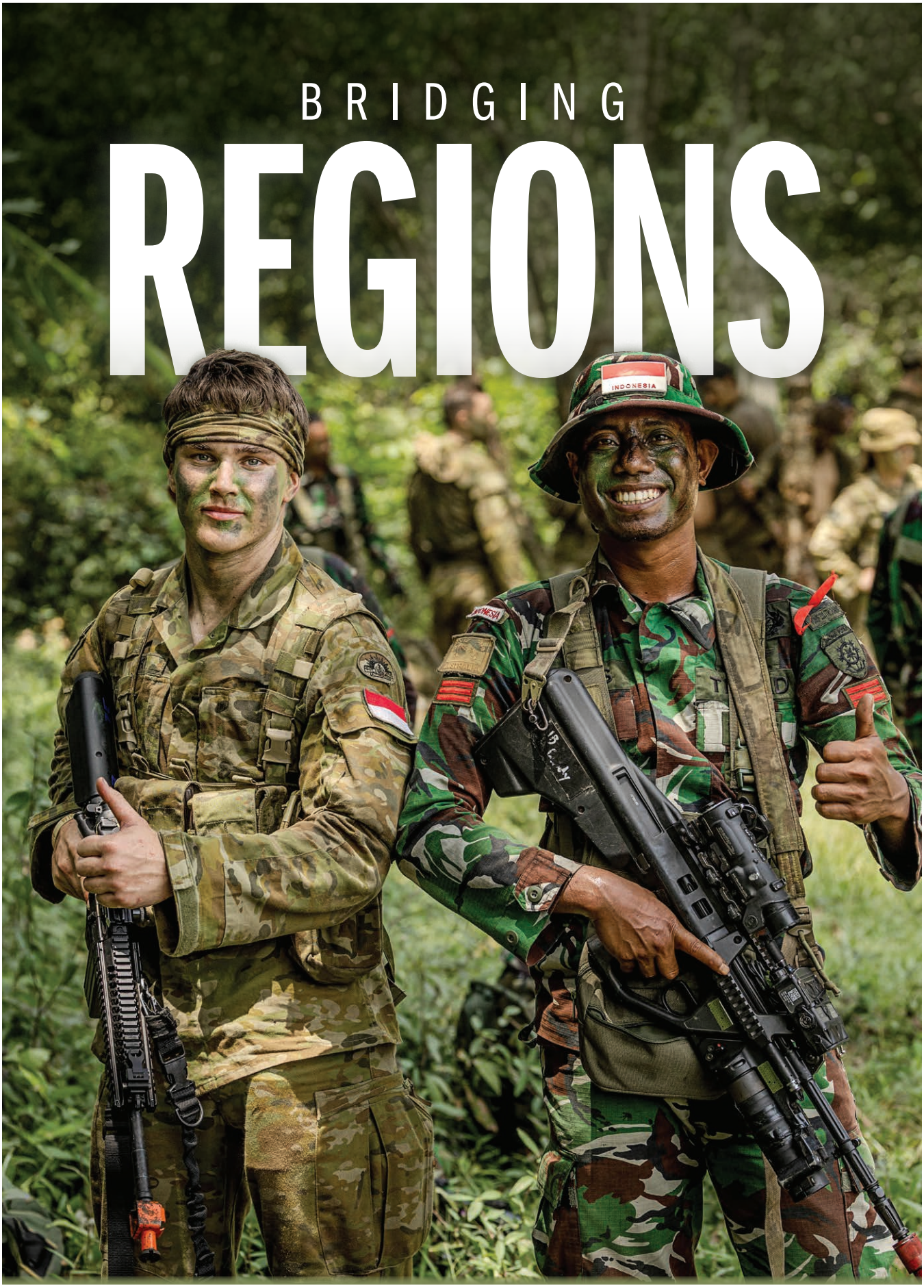
Japan is pursuing three interlocking goals through the OSA, said Nagy, the Tokyo-based professor: "Denying China the ability to dominate maritime choke points, creating early warning systems for the first island chain and building political capital that translates into diplomatic alignment when push comes to shove."

The program "systematically enhances interoperability and trust between Japan and recipient countries over the long term through post-transfer maintenance and operational training, joint exercises, and standardization of information-sharing protocols," said Harada, the NSBT's chief analyst. "Japan's expanding Official Security Assistance role strategically transforms the Indo-Pacific power balance into a multipolar, distributed deterrence model." □

**Philippine Marines stand guard at West York Island, also known as Likas Island, during a maritime patrol in the South China Sea in mid-2025.** AFP/GETTY IMAGES

FORUM correspondent Felix Kim contributed to this report.

# BRIDGING REGIONS



# A partnership among Australia, Indonesia, Papua New Guinea and Timor-Leste could anchor regional stability

**RIDVAN KILIC** | PHOTOS BY AUSTRALIAN DEFENCE DEPARTMENT

Amid growing uncertainty in the Indo-Pacific, Australia has a timely opportunity to forge a high-level quadrilateral partnership with its three most strategically important neighbors — Indonesia, Papua New Guinea (PNG) and Timor-Leste. Distinct from Australia's established partnership with India, Japan and the United States, known as the Quad, the proposed arrangement reflects a regionally grounded approach to cooperation focused on Canberra's immediate strategic environment.

Building on the momentum of recent trilateral arrangements, the four-nation framework would institutionalize cooperation across a spectrum of security challenges. Beyond a diplomatic initiative, it would reinforce the centrality of the Association of Southeast Asian Nations (ASEAN) and support PNG's growing engagement with the 11-nation bloc, of which Indonesia and Timor-Leste are members. It also strengthens ASEAN maritime security, leveraging regional frameworks to enforce a secure Indo-Pacific backed by international law. In doing so, the quadrilateral partnership could complement ASEAN-led mechanisms such as the ASEAN Regional Forum and the ASEAN Defence Ministers' Meeting Plus, bolstering rather than competing with existing institutional architecture.

Analysts consider the concept timely and grounded in shared interests. "The quadrilateral initiative … is a visionary initiative that represents a regional geostrategic repositioning that will not only strengthen the ties and closeness among the four — with a combined population of around 329 million inhabitants — it will also directly reinforce the spirit of collaboration for common interests and challenges in the sectors of land-sea border security, cybersecurity, policing, transnational crime, defense infrastructure development, IUU [illegal, unreported and unregulated fishing] and maritime security," said Jose Turquel, a foreign policy expert and former senior advisor to Timor-Leste's Ministry of Foreign Affairs and Cooperation. He added that the initiative "will uphold ASEAN's centrality in the vast and volatile Indo-Pacific region."



**Indonesian Defense Minister Sjafrie Sjamsoeddin, from left, Papua New Guinean Defence Minister Billy Joseph and Australian Defence Minister Richard Marles meet at the nations' inaugural defense ministers' gathering in Port Moresby, Papua New Guinea, in December 2025.**

Australia has identified the Pacific and maritime Southeast Asia as the country's primary areas of defense interest, underscoring the importance of its immediate neighborhood. Consequently, strong relations with Indonesia, PNG and Timor-Leste are a strategic necessity and a diplomatic imperative. This is particularly evident as regional cohesion is tested by geopolitical competition, alongside a range of persistent and emerging security challenges. This

**Australian and Indonesian Soldiers complete the jungle phase of multinational exercise Super Garuda Shield 2025 in Sumatra, Indonesia.**

**All four democracies share a commitment to upholding international laws and norms in the Indo-Pacific and support ASEAN's central role in shaping a peaceful, stable and prosperous region where sovereignty and international law are respected.**

includes territorial disputes in the South China Sea, instability stemming from the protracted Myanmar civil war, tensions along the Cambodia-Thailand border and internal security concerns such as tribal violence in parts of PNG. In this environment, closer communication, consultation and cooperation among neighboring states represents a long-term investment in shared stability, resilience and crisis response capability.

Australia's strategic interests in the region closely align with those of its northern neighbors. All four democracies share a commitment to upholding international laws and norms in the Indo-Pacific and support ASEAN's central role in shaping a peaceful, stable and prosperous region where sovereignty and international law are respected. Strengthening relationships among the four countries, therefore, presents an opportunity to build momentum toward a more structured, though still informal, quadrilateral partnership that reflects shared priorities.

## GROWING CONSENSUS

Recent years have brought meaningful developments at the trilateral level. The Australia-Indonesia-PNG partnership has taken shape at the defense ministerial level, reflecting a growing convergence of interests, particularly in maritime security and disaster response. At the same time, the Australia-Indonesia-Timor-Leste relationship is well established at the foreign ministerial level, providing a platform for diplomatic coordination and policy alignment. Beyond these arrangements, all four countries have engaged in quadrilateral cooperation through the Arafura and Timor Seas Ecosystem Action (ATSEA) program, which aims to protect shared marine resources, enhance biodiversity conservation and improve coastal livelihoods across that maritime region.

Under ATSEA's Strategic Action Programme 2024-2033, the four countries are addressing IUU fishing through improved coastal and marine governance, strengthened enforcement mechanisms, and sustainable resource management. Beyond the environmental dimension, the initiative highlights the practical security benefits of deeper coordination. Turquel said the proposed quadrilateral "will undoubtedly create economic opportunities for the four countries and [their] people and is the most beneficial for both Timor-Leste and PNG, particularly in combating illegal activities" around the nations' exclusive economic zones (EEZ), while also deepening cooperation under existing frameworks such as ATSEA.

**The Papua New Guinea Defence Force (PNGDF) patrol boat HMPNGS Ted Diro, left, and the Royal Australian Navy patrol boat HMAS Albany sail during Exercise Paradise in Papua New Guinea in October 2025. The Ted Diro was presented to the PNGDF under Canberra's Pacific Maritime Security Program.**





Australian Army and PNGDF Soldiers prepare to clear a building during Exercise Wantok Warrior in Papua New Guinea in October 2025.

Importantly, the quadrilateral concept would not replace or overshadow existing bilateral or trilateral arrangements. Rather, it is designed to complement and enhance these mechanisms by providing a platform for coordination without requiring a formal, treaty-based security alliance. This flexible, nonbinding approach is particularly suited to the region's political and strategic sensitivities, especially for countries such as Indonesia that prioritize autonomy.

Under such an arrangement, annual leaders' and ministerial-level summits could be convened, with the ASEAN Secretariat invited as a permanent guest to ensure alignment with regional frameworks. Talks could address an array of shared interests and challenges, including border security, cybersecurity, policing, peacekeeping, humanitarian assistance and disaster response, climate change and energy transition, health and food security, transnational crime, intelligence cooperation, defense infrastructure development, coastal and marine governance, subsea cable connectivity, IUU fishing, and maritime security. Over time, such institutionalized engagement could foster trust, improve interoperability and enhance collective responses to traditional and nontraditional threats.

Analysts see the initiative as a bridge between Southeast Asia and the Pacific, helping to connect two regional systems that often operate in parallel rather than in coordination. "A quadrilateral arrangement between Australia, Indonesia, PNG and Timor-Leste could be a first realistic step for a larger regional minilateral cooperation that includes ASEAN and the [18-member] Pacific Islands Forum," said Aristyo Rizka Darmawan, a foreign policy scholar and assistant professor of international law at the University of Indonesia. That could help "forge closer ties between the two major regional organizations," strengthening collective security and advancing shared interests.

## SECURING THE SEAS

Maritime security cooperation is likely to be at the forefront of a quadrilateral initiative. The concept envisions joint maritime patrols, coordinated surveillance, regular military exercises, training programs and reciprocal port visits to enhance interoperability and maritime domain awareness. A task force could be established to assess cooperation opportunities on a nonbinding, case-by-case basis. As part of this mechanism, communications tools such as real-time information sharing and hotlines could prevent illegal incursions into territorial waters, disrupt transnational criminal networks and improve coordinated crisis response.




Those initiatives would particularly benefit PNG and Timor-Leste, which have limited maritime enforcement capabilities. IUU fishing costs PNG an estimated $260 million and Timor-Leste about $300 million each year. Strengthening maritime enforcement through coordinated patrols, shared intelligence and training support would deliver economic and security benefits, while contributing to the long-term sustainability of marine resources.

Australia plays a leading role in supporting PNG's maritime and defense capabilities through long-term initiatives such as the Pacific Maritime Security Program (PMSP), including providing patrol boats to enhance PNG's ability to monitor its vast maritime domain and counter transnational crime and IUU fishing. Bilateral ties have deepened through agreements such as the October 2025 mutual defense pact, known as the Pukpuk Treaty. The agreement is Canberra's first formal security alliance since the 1951 ANZUS Treaty with New Zealand and the U.S., highlighting PNG's increasing importance. The Pukpuk Treaty was signed as PNG marked the 50th anniversary of its independence from Australia.

Similarly, Australia's defense cooperation with Timor-Leste has expanded significantly in recent years. The 2022 Defence Cooperation Agreement strengthened security ties, particularly in the maritime domain, by facilitating joint training, operational coordination and personnel exchanges. In early 2026, the nations announced the New Partnership for a New Era initiative, reaffirming cooperation across shared priorities, including maritime security, defense infrastructure and combating transnational crime such as human trafficking.

Since achieving independence in 2002, Timor-Leste has pursued a foreign policy focused on securing ASEAN membership — which it did in October 2025 — and maintaining strong ties with Australia and Indonesia. Its strategic location between Southeast Asia and the Pacific gives it a unique role in bridging regional dynamics, making its participation in a quadrilateral framework particularly valuable.

## INTEGRATING OPERATIONS

Indonesia is a central pillar of the proposed four-nation framework. Australia shares its longest maritime boundary with Indonesia, and the bilateral relationship has evolved significantly in recent decades. Agreements such as the 2018 Comprehensive Strategic Partnership and the 2006 Lombok Treaty, which focuses on security cooperation, set the groundwork for deeper collaboration.

The February 2026 signing of the Australia-

**Despite differences in size, capabilities, political systems and historical experience, Australia, Indonesia, PNG and Timor-Leste have converging priorities and concerns.**

Indonesia Treaty on Common Security, also known as the Jakarta Treaty, expands consultation mechanisms at the leader and ministerial levels, enabling regular talks on shared security challenges. In addition, there are plans to embed Indonesian Armed Forces officers with the Australian Defence Force and to jointly develop training facilities in strategically important locations such as Morotai, an island in Indonesia's North Maluku province. Such initiatives reflect growing trust and operational integration.

Jakarta traditionally has avoided formal security alliances in favor of a "free and active" foreign policy that emphasizes strategic autonomy and balanced engagement with major powers. The policy seeks to give Jakarta flexibility and independence to diversify its partnerships in accordance with national interests. Indonesia has trilateral partnerships with Australia and PNG; Australia and India; Australia and Timor-Leste; and Malaysia and the Philippines, and is considering a similar grouping with Australia and Japan.

Jakarta's nonaligned approach has been tested in recent years by China's increasing assertiveness in Indonesia's EEZ in the North Natuna Sea, where Beijing's illegal territorial claims have heightened tensions. Although Indonesia maintains economic ties with China, it remains cautious about Beijing's strategic intentions.

In this context, closer cooperation with regional partners such as Australia, PNG and Timor-Leste lets Indonesia strengthen its security posture without formally aligning with a major power bloc. An informal quadrilateral framework provides a pragmatic avenue for cooperation that aligns with Indonesia's foreign policy principles while enhancing regional resilience.

## 'OVERLAPPING INTERESTS'

The quadrilateral partnership also would reinforce ASEAN's centrality in the Indo-Pacific. Australia has long viewed ASEAN as the cornerstone of regional stability, becoming its first dialogue partner in 1974. Over time, this relationship has deepened significantly, including through the long-standing ASEAN-Australia-New Zealand Free Trade Area agreement and the elevation of ASEAN-Australia ties to a Comprehensive Strategic Partnership in 2021.

Despite differences in size, capabilities, political systems and historical experience, Australia, Indonesia, PNG and Timor-Leste have converging priorities and concerns. "In a more interconnected and contested world, what they have in common is drawing them more closely together than ever before," said John Blaxland, professor of international security and intelligence studies at the Australian National University. "They share geography, but also a set of overlapping interests in security, stability and prosperity."



**A Royal Australian Air Force KC-30A refuels Indonesian Air Force F-16C Fighting Falcons during Exercise Elang Ausindo 2025 in Indonesia.**

Blaxland noted that quadrilateral cooperation could extend beyond traditional security domains to areas such as trade, education and cultural exchanges, and may eventually expand to include regional partners such as Malaysia, New Zealand, the Philippines and Singapore. Such an evolution would reflect the growing importance of flexible, issue-based coalitions in addressing complex regional challenges.

Ultimately, Australia's focus on strengthening ties with its immediate neighbors reflects a broader shift toward flexible cooperation in an increasingly complex and multipolar Indo-Pacific. An Australia-Indonesia-PNG-Timor-Leste partnership would not only enhance collective security in the strategically important Arafura-Timor corridor but also it would reinforce the growing role of minilateralism in shaping a stable, inclusive and resilient region. □

# ASYMMETRIC EDGE

## Japan's Defense Strategy Transforms Security Posture, Embraces Special Operations Forces

**DR. KATSUYA TSUKAMOTO**/NATIONAL INSTITUTE FOR DEFENSE STUDIES



**Japan Ground Self-Defense Force (JGSDF) troops participate in an exercise in Funabashi in January 2026.**

REUTERS

IN December 2022, the Japanese Ministry of Defense released the first National Defense Strategy (NDS) replacing the National Defense Program Guidelines (NDPG), which had been formulated six times since 1976. The purpose of this strategy is to align with the United States National Defense Strategy and, more importantly, to clearly articulate the means to ensure Japan's security.

The NDS emphasizes strengthening Japan's defense capabilities by doubling the defense budget over five years. The government planned to spend $107.8 billion from fiscal year 2019 to fiscal year 2023 on services and equipment, but the NDS and the Defense Build-up Program pledge to allocate $272.8 billion by 2027. This marks the largest increase in the defense budget and the most significant shift in the nation's defense posture since the Defense Ministry and the Japan Self-Defense Forces (JSDF) were established in 1954.

### Changing Security Environment

This transformation is driven by the changing security environment. The NDS focuses on three concerns. First is the challenge posed by China. The strategy asserts that Beijing's activities have become a pressing matter and present an "unprecedented and significant challenge." The NDPG released in 2018 noted that China's military and other developments "represent a serious security concern for the region, including Japan, and for the international community." This shows how Japan's threat assessment has changed in just four years.

Second is the threat from North Korea, which increasingly has launched cruise and ballistic missiles in the past three years. Given Pyongyang's long-standing nuclear ambitions, the NDS upgraded its threat assessment of North Korea by designating it as an "even more grave and imminent threat" to Japan's national security.

Third, the NDS elevates the threat assessment regarding Russia. The 2018 NDPG did not provide a specific assessment for Russia; however, influenced by the war in Ukraine, the NDS states that Russia's military activities in the Indo-Pacific are of significant concern. Additionally, given the close cooperation among China, North Korea and Russia in the context of the war in Ukraine, Japan is paying close attention to possible strategic coordination among the three countries.

The NDS stipulates that unilateral changes to the status quo by force pose significant challenges to the free and open international order. It also conveys urgency, stating that the international community is facing its greatest post-World War II trial and is entering an era of crisis. This heightened sense of concern is broadly shared by the Japanese people.



**Japanese and United States forces conduct flight operations in U.S. Osprey tilt-rotors during the 2025 Iron Fist exercise above Nagasaki, Japan.** REUTERS



**The U.S. Navy guided-missile destroyer USS Shoup, left, and the Japan Maritime Self-Defense Force frigate JS Noshiro maneuver during a drill with Philippine forces in the South China Sea in March 2025.** THE ASSOCIATED PRESS

### Capabilities and Coordination

Against this backdrop, the NDS identifies three objectives to maintain Japan's security:

- Shaping a security environment that does not tolerate unilateral changes to the status quo by force.
- Deterring such unilateral changes through cooperation with the U.S. and like-minded Allies and Partners.
- Responding to an invasion in a tailored and seamless manner if deterrence fails.

To achieve these goals, the NDS articulates three approaches. The first is Japan's defense proficiencies.



**A JGSDF member enters a tent next to a mobile aerial radar at a naval base in Zambales province, Philippines, during Exercise Balikatan in April 2026.** AFP/GETTY IMAGES

Without such capabilities, Japan cannot enhance deterrence or defend itself if deterrence fails. However, Japan's defense capability alone cannot deter a formidable China. Therefore, the strategy aims to leverage "comprehensive national strength" by emphasizing a whole-of-government approach. For example, in addressing gray zone scenarios and hybrid warfare, close-knit interagency coordination among the police, the Coast Guard and other relevant agencies is necessary.

The second approach is enhanced coordination with the U.S. The centrality of the Japan-U.S. alliance remains unchanged from the 2018 NDPG; however, the aggregated power of the two allies needs to be further enhanced in light of China's increased military capability. To this end, orchestration regarding bilateral operations, postures and force structures is indispensable to better address the challenges posed by China.

Third, the strategy acknowledges that "no country can now protect its own security alone." To achieve a favorable balance of power in the region, Japan needs to expand its network of defense cooperation, working alongside the U.S.

The key to these approaches is Japan's enhanced defense capability. The NDS lays out the basic tenets of Japan's new defense posture, affirming that Japan should take primary responsibility for disrupting and defeating any invasion against its territory. By becoming more self-reliant, Japan can allow the U.S. and its partners to focus their resources and attention on other regional contingencies, including Taiwan, the self-governed island that China claims and threatens to annex by force. Enhanced defense capabilities can change adversaries' risk calculations, thereby enhancing deterrence. Tokyo also recognizes the importance of closely working with the U.S. to achieve a more potent deterrent effect in the region. Japan's enhanced defense capabilities will serve as the foundation for bilateral and multilateral cooperation.

The NDS identifies seven capabilities and functions to fundamentally enhance defense: Standoff defense capabilities; integrated air and missile defense capability, including counterstrike capabilities; uncrewed defense capabilities; cross-domain operation capabilities; command and control/intelligence-related functions; mobile deployment capabilities/civil protection; and sustainability and resilience.

In particular, the NDS emphasizes standoff defense capabilities centered on long-range cruise missiles, such

**JGSDF personnel conduct drills with U.S.-developed robotic dogs at Camp Narashino in Funabashi in January 2026.** REUTERS



as the U.S. Tomahawk. Most of the standoff missiles the JSDF plans to acquire will be able to strike surface ships to disrupt invading forces. The JSDF will also strengthen integrated air and missile defense capabilities. Instead of relying solely on missile defense systems such as the Patriot PAC-3, the NDS articulates employing standoff defense capabilities that can serve as counterstrike options to disrupt adversaries' missile attacks. The goal is not necessarily to strike hostile missile launchers directly, but rather to deter adversaries' missile-related assets.

The 2022 NDS was transformative in terms of its fundamental enhancement of defense capability centered on the seven capabilities and functions, particularly the standoff defense capabilities.

### Accelerated Strategic Review

Japan announced in 2025 that it would revise three key strategic documents — the National Security Strategy, the Defense Build-up Program and the NDS — by late 2026, one year ahead of schedule. In her inaugural policy speech, Prime Minister Sanae Takaichi announced Japan would allocate 2% of its gross domestic product to the defense budget for fiscal 2025, two years ahead of the original goal.

Following her decisive victory in the February 2026 general election, Takaichi emphasized the need to accelerate the revision based on the principle of "defending Japan by its own means." The review will focus on adapting defense capabilities to reflect lessons from the protracted war in Ukraine, which began in February 2022, such as the mass deployment of uncrewed systems.

It also must consider the increased possibility of strategic collaboration among China, North Korea and Russia, particularly given the economic and military assistance that Beijing and Pyongyang have provided Moscow during the conflict.

### Special Operations Forces

Emerging capabilities such as drones and AI are expected to play a critical role under the special operations forces (SOF) and can serve the strategic goal of preventing unilateral changes to the status quo by force. Such roles may include reconnaissance and targeting support for standoff defense capabilities, discreet intelligence collection and force protection on remote islands in the East China Sea, and preparation for unconventional warfare in contested environments.

In March 2027, Japan's Defense Ministry is scheduled to upgrade the Special Operations Group into the Special Operations Brigade. The restructuring will integrate the Central Readiness Regiment, which previously supported the Special Operations Group. Officials have said the objective is to enhance flexibility and efficiency in addressing conflict scenarios and to strengthen the capacity to respond to simultaneous, complex contingencies. In particular, they emphasized the necessity of addressing asymmetric security threats, specifically from nonstate actors such as terrorist groups.



**JGSDF personnel operate an anti-tank weapon during the multilateral Super Garuda Shield exercise in Lampung, Indonesia, in September 2025.** AFP/GETTY IMAGES

As stated in the 2022 NDS, cooperation with like-minded countries is crucial and a broad network of strong relationships is one of Japan's strategic advantages. However, effective cooperation in real contingencies requires more than goodwill. Opportunities to deepen functional and substantive cooperation, including beyond the Indo-Pacific, should be pursued. In this context, Japan's SOF will play a vital role, as it is well-suited to strengthen ties among SOFs in like-minded nations and potential partners to enhance the capacity to deal with gray zone conflicts, particularly through persistent engagement, joint training and intelligence sharing.

More importantly, SOF can impose asymmetrical costs on adversaries by leveraging advanced capabilities to operate in highly contested environments. Through enhanced interoperability and a partner network, the SOF increases capacity for integrated deterrence, complicating an adversary's risk calculus and ensuring long-term regional stability. Such a networked approach transforms the SOF into a highly effective instrument of long-term strategic competition and serves to enhance integrated deterrence in the region.

Even with the fundamental and ongoing enhancement of the nation's defense capabilities since the 2022 NDS, the reality remains that Japan must operate within a robust network of partnerships to address regional security challenges. As the NDS articulates, seamless cooperation with the U.S. and other Allies and Partners is essential. The SOF serves as a unique strategic asset to help strengthen these partnerships. By fostering deep military-to-military ties and enabling rapid, flexible responses, Japan's SOF can create an environment that imposes long-term costs on adversaries. Consequently, the SOF is not merely a tactical tool, but also an indispensable strategic component for Japan to prevail. □

The views expressed in this article are the author's and do not necessarily represent those of the Japanese government or the National Institute for Defense Studies.



# MYANMAR GRIFTERS

## Junta Control of Regional Scam Centers Drives Conflict, Geopolitics

**DR. MIEMIE WINN BYRD** AND **SAVANNAH CANTOR**
DANIEL K. INOUYE ASIA-PACIFIC CENTER FOR SECURITY STUDIES

Victims worldwide lost an estimated $75 billion to cyber scam centers in Southeast Asia between 2020 and 2024, with Myanmar's border regions the epicenter of this growing transnational crime sector. Predatory governance, ongoing armed conflict and entrenched corruption have created ideal conditions for industrial-scale fraud operations to flourish in this Mekong River subregion, the SecDev Foundation, a Canada-based nongovernmental organization, reported in 2025.

Myanmar, Cambodia and Laos are the hub of global fraud perpetrated from scam centers in repurposed hotels, casinos and private compounds operated by criminal networks near each nation's border with Thailand, according to the Switzerland-based Global Initiative Against Transnational Organized Crime (GI-TOC).

The scam operations are believed to have enslaved tens of thousands of workers lured with the promise of well-paying jobs in online sales and information technology. Instead, the workers are forced to trick victims into investing in schemes involving fake business portfolios, nonexistent cryptocurrency, false tax bills and romantic relationships.

Myanmar's scam centers are intertwined with the country's broader political and economic landscape. The networks are shaped by the protracted civil war, the military junta's brutal tactics and growing regional rivalry. Scam operations benefit the junta's finances, deepen militia ties and interact with China's regional interests, creating layers of interdependence among crime, conflict and geopolitics.

**People await processing after a multinational crackdown at a suspected scam compound in Myawaddy, Myanmar, in February 2025.** THE ASSOCIATED PRESS

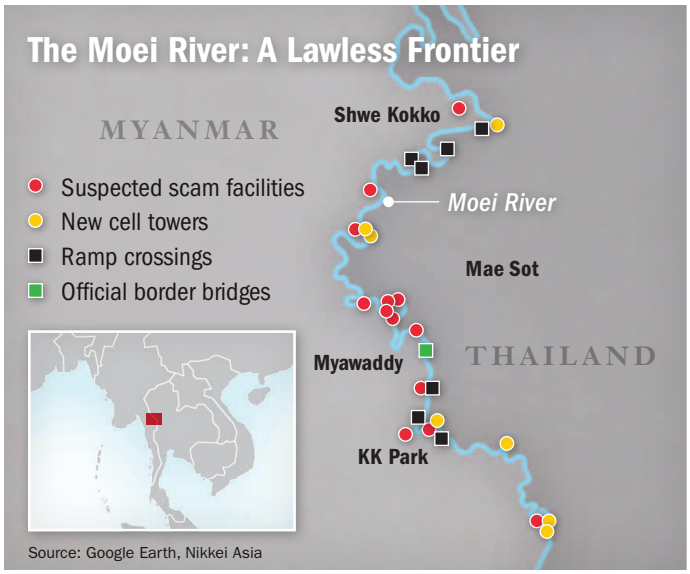
Addressing this phenomenon requires moving beyond traditional law enforcement. The scam centers are part of a complex adaptive system that features three dynamics: the symbiosis between fraud operations and the military junta; the more complex relationship between these networks and China; and the regional and global implications.

### THE JUNTA'S SURVIVAL

The relationship between scam centers and Myanmar's military junta is direct, structural and mutually reinforcing.

The junta has a direct role in scam compound operations through the use of affiliated militias in Karen State and the Kokang region as well as similar entities in northern Myanmar, according to a May 2024 report, "Transnational Crime in Southeast Asia: A Growing Threat to Global Peace and Security," by the United States Institute of Peace (USIP).

In exchange for leasing land, supplying utilities, facilitating human trafficking and smuggling networks, and providing armed security for scam operations, these





A November 2025 satellite image shows an alleged scam center, known as KK Park, along Myanmar's border with Thailand.
PLANET LABS/THE ASSOCIATED PRESS

militia groups receive substantial revenue, which sustains militia operations and the junta's war against Myanmar's citizens, according to the U.S. Treasury Department.

"Cyber scam operations generate billions in revenue for criminal kingpins and their associates, while depriving victims of their hard-earned savings and sense of security," then-U.S. Treasury Deputy Secretary Michael Faulkender said in May 2025. "Treasury is committed to using all available tools to disrupt these networks and hold accountable those who seek to profit from these criminal schemes."

Scam operations generate most of the revenue needed for the junta to stay in power, highlighting how criminal networks mesh with political-military structures. Such links exist through direct financial support, operational partnerships and facilitation by local authorities. Scam centers serve as instruments of political control. The junta creates a dependency loop by enabling militias to profit from the operations, reinforcing loyalty, and reducing reliance on traditional economic concessions and resource extraction. The junta has little incentive or interest in disrupting scam centers.

As a result, its periodic crackdowns on scam compounds are mostly performative. Telecommunications data shows links between alleged scam hubs, such as Myawaddy, Shwe Kokko and KK Park, along the Moei River, and government centers in Naypyitaw. Smaller or newer compounds might be targeted by the junta for public display, but major hubs largely remain operational and even are allowed to expand, according to a 2025 report by C4ADS, a Washington, D.C.-based nonprofit that uses data-driven analysis to expose illicit networks globally.

## EXPANSION OF SCAM ECONOMIES

The rapid expansion of scam centers into industrial-scale operations is closely tied to labor supply dynamics after the junta's introduction of its 2024 conscription law to replace the dwindling number of military personnel because of significant combat losses.

Internally displaced and facing forced military service, many young Myanmar citizens fled to border regions, providing a vulnerable labor pool. Unlike most trafficking-based labor, many desperate entrants join voluntarily but unwittingly. They are then controlled and coerced into compliance.

Some compounds host tens of thousands of workers with operations structured like assembly lines. Low-level workers generate contacts, often targeting victims in Canada and the U.S. Higher-level financial manipulation is handled by more skilled actors, often from China.

This dynamic reflects a pattern in which conflict-driven displacement feeds transnational criminal economies. Junta violence sustains a labor pipeline that fuels the expansion of scam operations, freed scam center workers told researchers at the Hawaii-based Daniel K. Inouye Asia-Pacific Center for Security Studies in November 2025.


Scam centers in Shwe Kokko, Myanmar, are seen from across the border in Mae Sot, Thailand, in March 2025.
REUTERS

## Scam Compounds in Southeast Asia

**Approximate locations of known casinos, reported or raided compounds, or related special zones in Cambodia, Laos and Myanmar (each location may include multiple casinos or compounds)**




Source: Council on Foreign Relations

More than 200,000 people have been trafficked into Cambodia and Myanmar and forced to work in such centers under inhumane and abusive conditions, according to the United Nations High Commissioner for Human Rights.

### CHINA'S ROLE IN THE SCAM ECOSYSTEM

China's relationship with Myanmar's scam centers is more complex and indirect than the junta's role. It involves selective enforcement, strategic tolerance and opportunistic engagement. Chinese-led crime syndicates working with Myanmar armed groups run most of the centers, experts say. Many of the crime groups moved to Myanmar and other Southeast Asian nations after Beijing targeted illegal cross-border gambling and money laundering in Macau, a special administrative region of China on its southern coast.

Beijing has taken steps to pressure Myanmar's rulers to crack down on scam operations, especially those targeting Chinese citizens. China often participates directly in joint law enforcement operations, which have led to arrests and the repatriation of tens of thousands of individuals, particularly along the China-Myanmar border.

These efforts are highly selective. Crackdowns align closely with Beijing's interests and focus on areas affecting China's stability, such as scams targeting its citizens or compounds near its border. They also generate propaganda for the junta. The raids are orchestrated to alleviate pressure from Beijing without decreasing the revenue streams that finance the junta's militia allies, human rights monitors say.

Such efforts often displace but don't eliminate scam networks, pushing them deeper into Myanmar's interior, including major urban centers such as Yangon and Mandalay, or helping expand established hubs such as Myawaddy and Shwe Kokko. The networks' adaptability and ongoing governance gaps enable continued growth.

China in February 2026 reportedly executed at least four people tied to scam operations that allegedly caused the deaths of six Chinese citizens and the theft of billions of dollars. But China also appears to tolerate scam center operations that support its interests. Many scam centers are operated by Chinese criminal groups connected to Chinese businesses, political organizations or influential regional networks. Some prominent figures behind the scams maintain ties to Chinese entities, including companies and associations tied to broader state interests.

"The Chinese party-state has pursued a differentiated law-enforcement approach, in line with its long-standing opportunistic engagement with marginalized and criminal groups to support its policies," Simon Menet, a research fellow at the Paris-based Foundation for Strategic Research, wrote in September 2025 for the National Bureau of Asian Research. "From Mao Zedong's co-optation of the 'Gelaohui' brotherhood during the revolutionary period to the involvement of Hong Kong triads in suppressing the 2019 democratic protests, the Chinese Communist Party has repeatedly exploited the influence of underworld actors in exchange for tolerating their illicit activities."

This web of relationships in Myanmar increases the complexity and ambiguity of China's role, blending economic, criminal and political elements. The dual approach, selective crackdowns and tolerance for broader operations reveal that Beijing prioritizes stability and its interests over full enforcement, according to the USIP report.

"Beijing appears to see opportunity in instrumentalizing the rising global reach and influence of criminal groups to advance China's [One Belt, One Road] Initiative and its new Global Security Initiative, which aims directly at countering global security norms. Beijing has found in countries such as Cambodia and Laos that leaders will align closely with China politically in exchange for Beijing ignoring lucrative criminal activity," the report said. "Meanwhile, rampant corruption in China also poses a major challenge to any Chinese crackdown,

with anti-corruption agencies struggling with countless cases of police accepting bribes or favors to ignore illicit activity or undermine enforcement."

## CHINA'S STRATEGIC AMBITIONS

Myanmar holds strategic importance for China for three primary reasons:

- **The Malacca Dilemma and Energy Security:** China relies heavily on maritime energy imports passing through the Malacca Strait, a maritime choke point and critical vulnerability in times of conflict. Access to Myanmar provides an alternative overland corridor through pipelines and infrastructure, linking the Bay of Bengal to China's landlocked interior and reducing dependence on the strait, according to a 2023 report by the Asia Society's Center on U.S.-China Relations.
- **The China-Myanmar Economic Corridor:** As part of the One Belt, One Road infrastructure scheme, the corridor connects China's landlocked Yunnan province to the Indian Ocean. Projects such as development of the Kyaukphyu port are vital. Even where illicit economies are present, development in Myanmar's border regions reinforces perceptions of Chinese-led progress and influence, according to a July 2025 report by the U.S.-China Economic and Security Review Commission.
- **Critical Minerals Supply:** Myanmar's strategic value to China includes its rare-earth minerals supply, with Myanmar accounting for an estimated 40% to 70% of China's critical mineral imports. With many of the mines in ethnic group-controlled conflict areas along the border, Beijing's access relies heavily on managing nonstate actors in the region. This instability brings risks and opportunities to China's resource security, analysts assert.

More broadly, Myanmar functions as a geopolitical gateway among China, South Asia and Southeast Asia. Influence in Myanmar enables Beijing to shape regional security dynamics across multiple subregions. The endemic corruption of the Myanmar junta and internal conflict present China with the opportunity to expand influence through multiple channels: engagement with the junta, relationships with selected ethnic armed organizations and indirect ties to illicit economic networks.

Within this permissive environment, defined by conflict and predatory governance, scam centers have become embedded within wider networks linking local actors, militias and external stakeholders. While not explicitly part of China's formal state policy, the networks provide platforms for individuals and groups with ties to China to increase their economic and social presence in Myanmar. This enables these players to exert influence beyond the immediate region, reinforcing complex networks that cross state and nonstate boundaries. As these issues intensify, China's growing security reach through such entities as the Lancang-Mekong Law Enforcement Cooperation positions Beijing as a security player. Although such organizations remain largely symbolic, they could contribute to a power imbalance if other partnerships are not strengthened.

## TECHNOLOGICAL ADVANCEMENT ENABLES EXPANSION

Emerging technologies such as artificial intelligence (AI) also have accelerated the evolution of scam centers and amplified their global impact. AI boosts the sophistication, scale and elusiveness of the scam tactics.

Conflict in Myanmar continues to create ungoverned and contested spaces that enable these illicit economies to expand and evolve. Meanwhile, increased international enforcement has driven criminal networks, once identified, to rapidly adapt and relocate across regions including Africa, the Pacific Islands and South Asia.



**People await processing at an alleged scam compound inside the KK Park on the Myanmar-Thailand border after a multinational crackdown in Myawaddy, Myanmar, in February 2025.** REUTERS

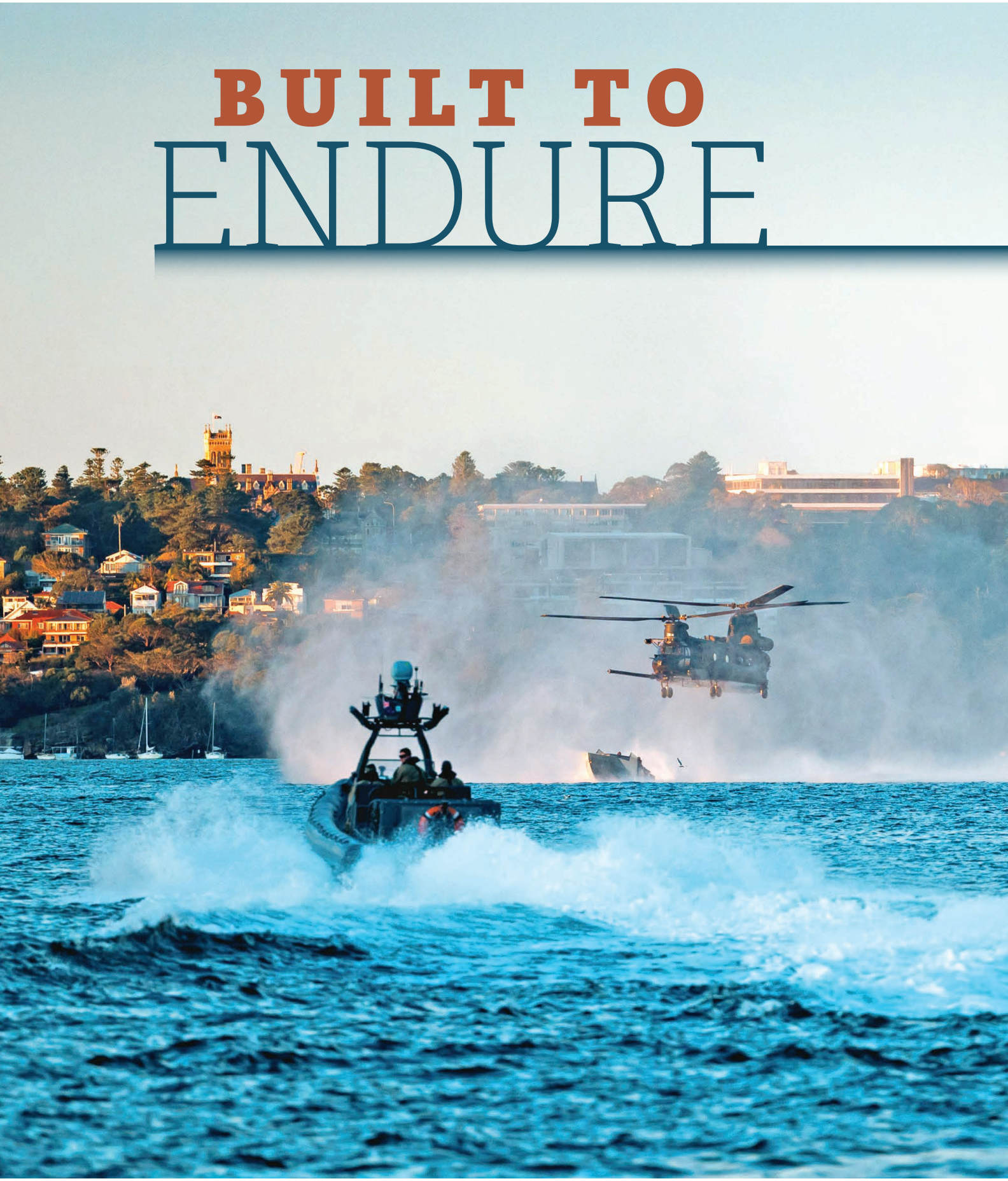
## EXPOSING THE THREAT, RESPONDING EFFECTIVELY

Scam centers in Myanmar are not an isolated transnational crime issue. Instead, they are embedded within an ecosystem characterized by endemic corruption, armed conflict and geopolitical competition.

For Myanmar's junta, scam centers provide critical financial resources and reinforce militia loyalty, sustaining its capacity to wage war against its own people. For China, these networks exist within a flexible strategic environment — selectively constrained when necessary but broadly tolerated where they support core interests. Both the junta's and China's involvement in scam centers victimizes people in Myanmar and beyond, causing cascading damage.

Effective responses require more than tactical law enforcement. A comprehensive approach is necessary to acknowledge the interconnected nature of conflict, predatory governance, transnational crime and strategic competition. Allies and Partners must address the underlying political and internal conflict dynamics in Myanmar to succeed in dismantling scam networks. □

# BUILT TO ENDURE



## How the U.S. and its Allies and Partners

# Synchronize Power Across the Indo-Pacific



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The United States and its Allies and Partners are evolving beyond traditional bilateral security guarantees toward a more integrated model of combined planning, operational coordination and distributed force posture. The developments are particularly evident in the Indo-Pacific, where military exercises, rotational deployments and policy coordination mechanisms increasingly function as parts of a broader strategic architecture. Instead of focusing solely on deterrence through presence, an emerging emphasis is on synchronizing military capabilities and policy objectives across a network of like-minded nations. The result is a more resilient and cohesive approach to collective security.

The U.S. "has moved more mobile and lethal military forces to strategic locations" in the Indo-Pacific, Ely Ratner of the U.S.-based Marathon Initiative think tank wrote for Foreign Affairs magazine in 2025. "Crucially, it has overhauled its security partnerships in the region. … The United States has pursued a more networked approach that gives U.S. allies greater responsibilities and encourages closer ties not just with Washington but among the allies themselves."

Among the clearest shifts is the growing emphasis on aligning theater strategy — a comprehensive approach that includes planning and executing military operations in a specific area — with allied force posture planning. Historically, U.S. military deployments abroad were structured around U.S. operational requirements. While

**Australian, United Kingdom and United States military personnel conduct force integration training during Talisman Sabre 2025.**
AUSTRALIAN DEFENCE DEPARTMENT

Allies and Partners participated in exercises or hosted bases, strategic planning was frequently driven by U.S. command structure.

That dynamic is changing. Allied militaries are increasingly participating in joint and combined planning that determines not only where forces are stationed but also how they are organized, integrated and employed in potential contingencies. Multinational command conferences, combined operational planning and interoperability initiatives are becoming standard features of alliance management.

The evolution reflects strategic realities. Security challenges in the Indo-Pacific span vast distances and all domains — air, cyber, land, sea and space. Regional crises could involve multiple allied and partner territories simultaneously. Technological integration requires early coordination rather than impromptu cooperation.

Allies and Partners are reshaping operational frameworks, which enhances collective security. Nations participating in regional defense initiatives are working to ensure that logistics networks, command and control (C2) systems, and basing arrangements are compatible across militaries.

Defense exercises demonstrate how the concept operates. For example, the biennial Australia- and U.S.-led Talisman Sabre, designed to improve combat readiness and interoperability among multiple partner nations, relies on multilateral planning, according to the Australian Defence Department. The largest and most recent iteration in 2025 involved more than 40,000 military personnel from 19 nations, signaling the scale and collective commitment behind such engagements. "Talisman Sabre demonstrates our enduring alliance with the United States, through deepening cooperation in training and force integration," said Royal Australian Navy Vice Adm. Justin Jones, chief of joint operations. "It is a key opportunity to work with our partners from across the region and around the globe, demonstrating our combined capability to achieve large-scale operational outcomes together."

The U.S.-led Rim of the Pacific (RIMPAC) exercise also illustrates how Allies and Partners are involved from the earliest stages. During the RIMPAC Commanders Conference in March 2026 in Sydney, senior leaders and planners from more than 30 nations reviewed exercise design, aligned objectives and coordinated operations before forces were deployed to Hawaii for the 30th iteration in June.

## MULTILATERAL PLATFORMS

Another defining trend is framing multilateral exercises as platforms for operational integration in addition to training. Traditionally, exercises have focused on basic interoperability — ensuring that forces from different countries could communicate or operate together in certain scenarios. Today's exercises are becoming more ambitious.

Super Garuda Shield, for example, has evolved from a bilateral Indonesia-U.S. training event into a multilateral exercise in Indonesia involving more than a dozen nations and thousands of troops. It incorporates combined C2 simulations, airborne and amphibious operations, and live-fire drills.

Exercises now serve as laboratories for testing coalition warfare concepts. Among the operational priorities:

- **Logistics integration:** Military operations depend on supply chains, mobility infrastructure and sustainment capabilities. Exercises increasingly test the abilities of allied and partner forces to move personnel, vehicles and equipment across long distances. Exercise





Balikatan 2026 exemplified the principle as Armed Forces of the Philippines (AFP) and U.S. military personnel conducted maritime pre-positioning that showcased military-to-civilian and ally-to-ally collaboration. Months of planning among the AFP and U.S. Marine Corps commands, port authorities and local transportation contractors culminated in the arrival of the U.S. Navy Military Sealift Command vessel USNS Sgt. William W. Seay to the Philippines' Cagayan de Oro port with equipment vital to supporting Balikatan.

- **C2 interoperability:** Command structures must function across languages, doctrines and technological systems. Multinational exercises simulate real-world scenarios where Allies and Partners share command responsibilities. For more than a decade, RIMPAC has incorporated multinational command roles. In 2026, the Republic of Korea (ROK) commanded the maritime component while Canada commanded the air component and Chile filled the role of combined task force deputy commander.
- **All-domain operations:** Multilateral exercises increasingly demonstrate all-domain integration among Allies and Partners. Trilateral drills such as Freedom Edge among Japanese, ROK and U.S. forces combine air, maritime, cyber, space and special operations capabilities. Larger-scale events include RIMPAC and Valiant Shield, a Guam-, Japan-, Northern Mariana Islands- and Palau-based exercise that integrates air, maritime, space and cyberspace domains across dozens of partners, including Canada, France, Japan and the U.S. Such engagements highlight the shift toward coordinated all-domain warfare that spans physical and digital battlefields. Their scope reflects the reality that future conflicts likely will unfold simultaneously across domains.

Analysts view multilateral exercises as strategic signals. The rapid growth of multinational participation demonstrates a regional commitment to cooperative security. Increasingly, additional nations attend exercises as observers, indicating interest in deeper integration. For example, Canada, France, Japan and New Zealand sent observers to Balikatan in the Philippines before becoming participants. This trend reinforces a coalition-oriented Indo-Pacific security environment.

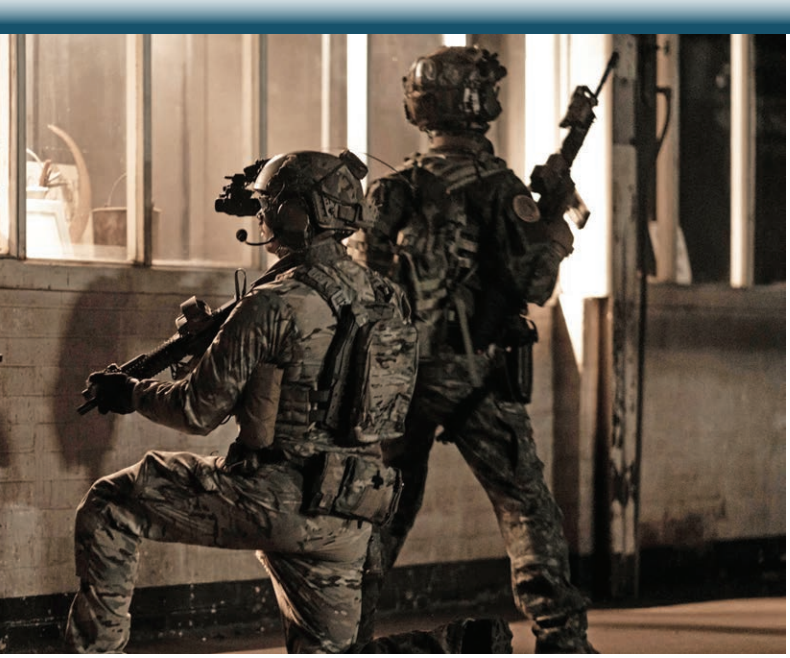
## DYNAMIC DEPLOYMENTS

Also emerging across the defense landscape is the concept of an adaptable and distributed force posture. For decades, the backbone of U.S. overseas military presence consisted of large, permanent bases in allied countries. While those installations remain important, a developing strategy emphasizes flexibility. Rotational deployments — with forces temporarily operating from allied and partner nations without establishing permanent bases — are becoming a central component of this approach.

**LEFT: Dutch, Indonesian, Republic of Korea and U.S. military personnel gather on the Indonesian Navy ship KRI Makassar during Super Garuda Shield 2025.** CPL. ANITA RAMOS/U.S. MARINE CORPS

**Australian and U.S. special operations forces train during Exercise Talisman Sabre 2025.** AUSTRALIAN DEFENCE DEPARTMENT

**Indonesian National Armed Forces Air First Marshal Ronny Moningka, left, presents a gift to U.S. Army Maj. Gen. Stephen Logan during the Super Garuda Shield 2025 closing ceremony.** SGT. SEAN WALKER/U.S. ARMY NATIONAL GUARD







**Armed Forces of the Philippines personnel and U.S. Marines attend a March 2026 key leader engagement supporting Balikatan.**
LANCE CPL. MADISON M. LUCIANO/ U.S. MARINE CORPS

U.S. Marine Corps rotational forces (MRF) have operated in Australia — where MRF-Darwin has grown from a force of 200 to 2,500 since 2011, according to the Australian Broadcasting Corp. — and across Southeast Asia, extending a Philippine deployment in April 2026 as the combined troops deepened partnerships. The move "reflects a deliberate shift from presence to presence with purpose," stated Col. Robert Bunn, MRF-Southeast Asia commanding officer. "We are integrating with the AFP to strengthen combined capabilities, enable faster response in crisis and contribute to a credible, forward posture in the Indo-Pacific. Our alliance is not symbolic. It is operational, historic and built to endure."

Factors driving the shift to rotational deployments include:

- **Strategic resilience:** A widely distributed network of access points to reduce the vulnerability associated with concentrating forces in a few locations.
- **Operational agility:** The U.S. and its Allies and Partners can adjust their presence in response to emerging threats or crises.
- **Political sustainability:** Some countries prefer rotational access agreements rather than permanent foreign bases.

The Indo-Pacific has become a testing ground for this concept. U.S. Army formations, for example, regularly move among partner nations as part of exercise frameworks and operational programs. The deployments strengthen interoperability and maintain readiness while reinforcing regional deterrence.

## STRATEGY ALIGNMENT

Beyond exercises and deployments, recent analysis highlights an important trend: deepening defense policy and strategy among Allies and Partners. Countries are supporting national defense strategies with shared regional objectives, including coordinated threat assessments and joint planning.

Coordination among Australia, Japan, the Philippines and the U.S., an informal grouping dubbed the Squad that first convened at the Shangri-La Dialogue security forum in Singapore in 2023, illustrates broad policy synchronization. The group focuses on defense cooperation, intelligence sharing and joint operations.

Expanding engagement among Japan, the ROK and the U.S. offers another example of defense synchronization. Multilateral activities include joint training exercises, expert exchanges, real-time data sharing of missile warnings and capacity-building initiatives, Adm. Samuel J. Paparo, Commander of the U.S. Pacific Command, told the U.S. House Armed Services Committee in 2025. Plans are "aimed at enhancing our combined ability to respond to regional challenges and promote a more integrated and effective regional security architecture," he said.

Allies and Partners also are negotiating agreements that allow military forces to operate from each other's territory, pre-position equipment and train for contingencies. The Philippines-U.S. Enhanced Defense Cooperation Agreement is among the clearest examples. It allows U.S. forces access to agreed locations in the Philippines, with equipment storage and maintenance. The U.S. committed $144 million for infrastructure investments at those sites during the 2026 budget year. Such moves enable distributed force posture and provide logistics hubs and staging areas — representing shared infrastructure for coalition operations.

The Philippines' expanding security cooperation illustrates evolving multinational integration. In addition to its long-standing mutual defense treaty with the U.S., Manila has visiting forces agreements with Australia, Canada, France, Japan, New Zealand and the United Kingdom, most of which were signed in 2025. Emerging security partners include Germany, the European Union, Lithuania, the ROK and Singapore, which have held talks or signed defense agreements with the Philippines.

Meanwhile, shiprider agreements between Pacific Island Countries and the U.S. allow partner nation personnel to operate aboard U.S. Coast Guard vessels to conduct maritime law enforcement in the partner nation's waters. The Federated States of Micronesia and Palau have also expanded their agreements to allow the U.S. Coast Guard to board and intercept suspicious ships on their behalf without a local officer aboard. The arrangements provide functional access to U.S. platforms, enabling shared maritime domain awareness and distributed enforcement operations, and offering a unique example of operational access without permanent basing.

Defense industrial cooperation also is becoming a pillar of alliance integration. Joint development programs, technology sharing and coproduction pacts are taking shape across numerous partnerships. The Philippines and the U.S. have committed to increasing regulation compatibility, enabling technology transfers, and



**Australian and French Soldiers participate in Talisman Sabre 2025.**
AUSTRALIAN DEFENCE DEPARTMENT

expanding coproduction and supply cooperation. The arrangement moves beyond military exercises into shared production ecosystems and supports deepening strategic alignment in nontraditional security.

The U.S.-led Partnership for Indo-Pacific Industrial Resilience (PIPIR) expanded in 2026 with a program to produce solid rocket motors for guided weapons, with Japan taking the lead. The 16-nation group also is pursuing drone cooperation across the Indo-Pacific and ammunition production in the Philippines. With its focus on supply chain resilience and forward production, PIPIR is one of the region's strongest examples of coalition-based coproduction. Such joint production and technology sharing will likely deepen as Allies and Partners strengthen collective capabilities.

## COLLECTIVE READINESS

Exercises, deployments and policy coordination are increasingly interconnected components of a strategic framework designed to strengthen coalition operations and maintain regional stability. Rather than focusing solely on military presence, the emerging model emphasizes integration — aligning strategy, posture, logistics and capabilities across partners. Multilateral exercises illustrate how this concept is being implemented in practice, providing operational platforms where allied militaries can train, experiment and demonstrate collective readiness.

At the same time, rotational deployments and distributed access agreements are reshaping how military power is positioned across the Indo-Pacific. Together, these developments suggest a future where regional security increasingly depends on the strength of integrated alliances rather than the capabilities of any single nation. In a region defined by vast distances, complex geopolitics and evolving security challenges, the success of this networked approach could prove decisive in maintaining stability and preventing conflict. □

# SECURITY TRIUMVIRATE

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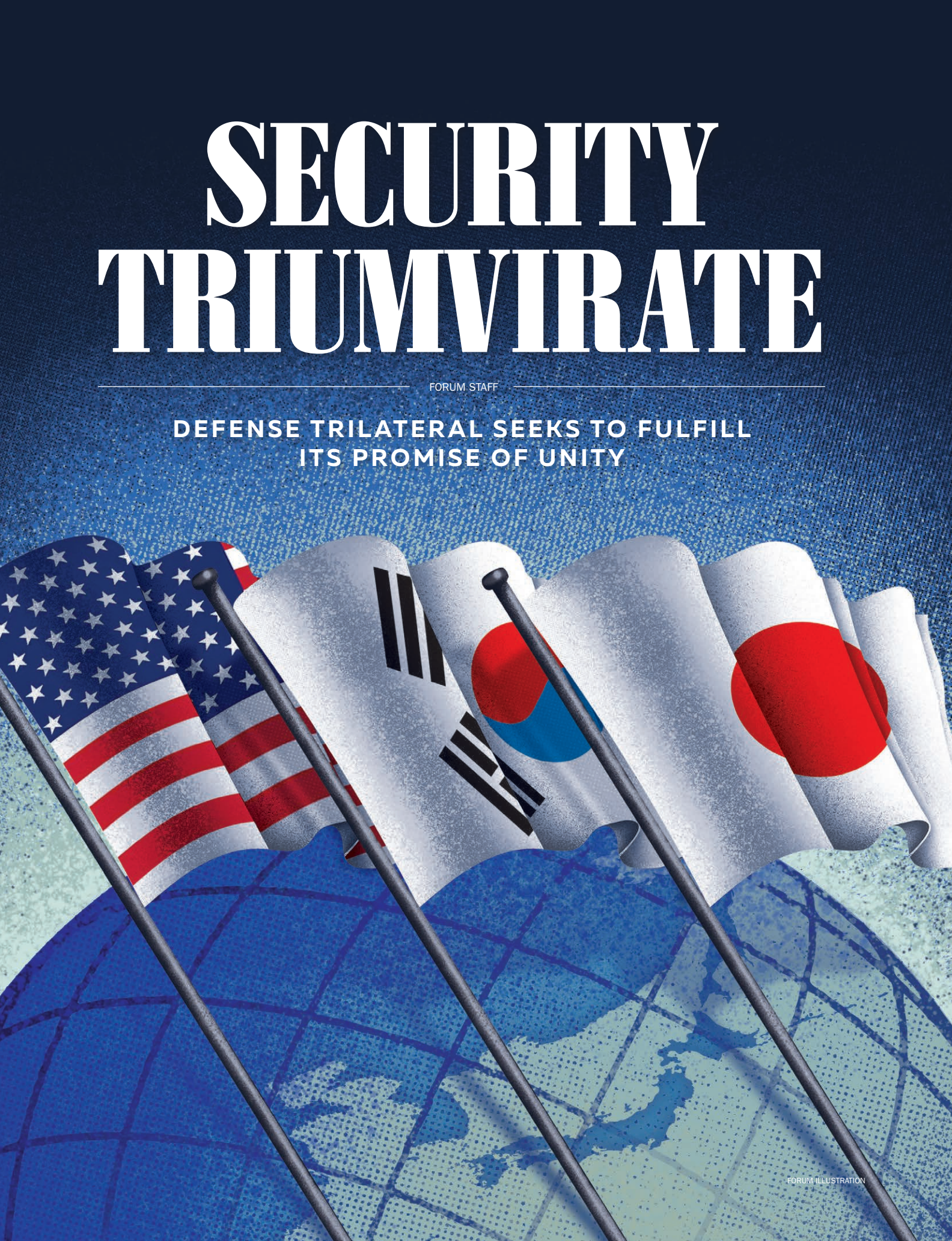
## DEFENSE TRILATERAL SEEKS TO FULFILL ITS PROMISE OF UNITY



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**Japanese, Republic of Korea and United States fighter jets escort a U.S. Air Force B-1B bomber in November 2024.**
SENIOR AIRMAN MARIA UMANZOR GUZMAN/U.S. AIR FORCE

Japanese, Republic of Korea (ROK) and United States forces deployed south and east of South Korea's Jeju Island in September 2025 for the third iteration of Freedom Edge, the nations' premier trilateral defense exercise. The training "demonstrates the countries' shared commitment to collectively achieve and maintain peace," the U.S. Pacific Command said.

The nations dispatched personnel and equipment including ships and aircraft to the five-day, multidomain drills in the East China Sea that featured training in air defense, ballistic missile capabilities, cyberwarfare, maritime interdictions, and medical and special operations.

Freedom Edge, previously held in June and November 2024, is an example of security collaboration among the three nations following an August 2023 summit at the U.S. presidential retreat outside Washington, D.C. At that landmark session, the countries committed to working as a cohesive unit that deters coercion, projects power and upholds the status quo in an increasingly tense Indo-Pacific.

Japan and the ROK are longtime bilateral allies of the U.S. but historically infrequent collaborators with each other, especially on defense. A central goal of the trilateral summit was to move beyond the Northeast Asian democracies' past relations and leverage their shared values and geographic proximity to face challenges together and with the U.S.

Japanese Prime Minister Sanae Takaichi and ROK President Lee Jae-myung, who were both elected after the trilateral's launch, support the call for enhanced defense collaboration and mutual trust. Both want their nations to move beyond imperfect histories, a forward-looking rapprochement that Takaichi repeatedly has elucidated by respectfully bowing before Lee and the ROK flag.

In a joint statement after their September 2025 meeting in New York, the foreign ministers of Japan, the ROK and the U.S. reaffirmed their nations' commitment to bolster trilateral defense capabilities and deterrence through robust security cooperation.

ROK Foreign Minister Cho Hyun said the commitment to trilateral cooperation is stronger than ever. "We believe that our initiative to restore the shuttle diplomacy and our [the ROK] initiative to work with Japan have been well received," Cho told the Asia Society, a U.S.-based think tank.

## ACCOMPLISHMENTS

A key goal of the trilateral partnership is to institutionalize relations among the countries, especially between Japan and the ROK.




**Japanese and Republic of Korea maritime leaders hold bilateral talks during Exercise Rim of the Pacific 2026 in July in Hawaii.**

YUSUKE TANAKA/ JAPAN MARITIME SELF-DEFENSE FORCE

Seoul and Tokyo in recent years have strived to deepen ties to confront mutual threats, including North Korea's illicit missile and nuclear programs, China's increasing assertiveness in the East China and South China seas, and Russia's ties with Beijing and Pyongyang.

Japanese Defense Minister Shinjiro Koizumi and ROK Defense Minister Ahn Gyu-back held talks in Yokosuka, Japan, in January 2026 after meeting in Seoul in September 2025. At the January summit, they reaffirmed a call for the complete denuclearization of the Korean Peninsula — a position advocated by the United Nations and the U.S. — and announced the resumption of a bilateral naval search and rescue exercise last held in 2017. They vowed to meet regularly and improve communication between their departments "to boost mutual understanding and trust," according to a news release.

"We agreed that, amid an increasingly severe security environment, both countries will cooperate to maintain regional peace and stability, and that we will continue Japan-South Korea and Japan-U.S.-South Korea cooperation," Koizumi said.

## WORKING TOGETHER

Among the trilateral's initiatives, the nations triangulate ROK data with information collected by Japan and the U.S. to track missiles and other threats.

The countries also share intelligence, surveillance and reconnaissance information and collaborate on artificial intelligence and uncrewed systems. With potential adversaries increasing their capabilities, a threat to any one country could have repercussions for all three.

Japan and the ROK restored the General Security of Military Information Agreement shortly before the 2023 trilateral summit. It calls for Japan to share satellite imagery and electronic intelligence with the ROK in exchange for human intelligence about an adversary's capabilities and intentions, the Breaking Defense publication reported.

Routine joint exercises such as Freedom Edge and Freedom Shield — annual ROK-U.S. drills across air, land, sea and space domains — reinforce trilateral relations. Some Freedom Shield drills take place in Japan and include the Japan Ground Self-Defense Force.




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"These gestures signal a significant intention to lay a foundation for improved defense cooperation between the JSDF [Japan Self-Defense Forces] and the ROK military," Dr. Chiew-Ping Hoo, co-founder of the Malaysia-based East Asian International Relations Caucus, told FORUM. "It would be wise for both countries to further strengthen mutual understanding and cooperation."

## COMMON CHALLENGES

Although the three nations have unique perspectives, their key priorities and challenges overlap in important and synergistic ways. The trilateral effort strives for mutually beneficial cohesion.

- Japan is increasingly focused on China, especially since Beijing reacted strongly after Takaichi in November 2025 said a Chinese naval blockade of Taiwan could pose a "survival-threatening situation" for Japan. China claims sovereignty over self-governed Taiwan and threatens to annex the island by force.
- The ROK is most concerned about North Korea's aggressive nuclear and ballistic missile programs, which violate U.N. Security Council resolutions and have spurred international sanctions. The ROK does not have nuclear weapons.
- The U.S. has pledged an "ironclad" commitment to defend Japan and the ROK if needed under its long-standing treaties with each ally.
- Russia's deepening military ties with North Korea, and joint Chinese-Russian military activities near Japanese and ROK airspace and waters, contribute to regional destabilization.

"GIVEN THE RISING MILITARY CAPABILITIES OF CHINA AND NORTH KOREA, AS WELL AS NORTH KOREA-RUSSIA MILITARY COOPERATION, IT IS LOGICAL FOR JAPAN AND SOUTH KOREA TO ADVANCE THEIR DEFENSE RELATIONS."

**— Dr. Chiew-Ping Hoo**
East Asian International Relations Caucus




**The JMSDF amphibious transport ship JS Kunisaki, from left, ROK Navy destroyer ROKS Yulgok Yi I and U.S. Navy submarine USS North Carolina sail during the 2024 Rim of the Pacific exercise.** PETTY OFFICER 1ST CLASS EZEKIEL DURAN/U.S. NAVY



Japanese Defense Minister Shinjiro Koizumi, left, and ROK Defense Minister Ahn Gyu-back review troops in Tokyo in January 2026. REUTERS

"Given the rising military capabilities of China and North Korea, as well as North Korea-Russia military cooperation, it is logical for Japan and South Korea to advance their defense relations," Hoo said.

There is much the nations can do now to prepare for a contingency, Dr. Jeffrey Hornung, a defense analyst and Japan specialist with the Rand Corp., a U.S.-based think tank, told FORUM. He posed a hypothetical example of an ROK ship disabled by enemy fire that arrives in a Japanese port. Today, the damaged ship could not undergo repairs because Seoul and Tokyo do not have an acquisition and cross-servicing agreement, he said. The bilateral pacts allow equipment and service support between nations' defense departments.

Establishing such agreements and combined strategies in peacetime will enhance the trilateral's ability to function as a cohesive unit in a crisis, Hornung said.

The Japan-ROK-U.S. initiative compares favorably with the Triple Entente of France, Russia and the United Kingdom during World War I, the Lowy Institute reported in October 2025. Though the nations were not formal allies and had clashed, they built an effective coalition through trust and interoperability to prevail in the conflict. Similarly, Japan, the ROK and the U.S. should focus on mutual defense, the Australian think tank said.

The trilateral nations have strong assets: state-of-the-art missile defense systems, blue-water navies, formidable air power and substantial defense budgets. Through planning, multidomain exercises, a unified command structure, and economic and technological links they could form a deterrence structure "that no adversary would dare to challenge," the Lowy Institute said.

## GOING FORWARD

At their January 2026 summit in Nara City, Japan, Lee and Takaichi noted the urgency in addressing defense matters. Lee said cooperation between the nations "is more important than anything else," while Takaichi noted that amid an increasingly severe strategic environment, "we have shared our recognition of the strategic importance of Japan-South Korea relations and confirmed that our two countries should work together to contribute to regional stability." She also emphasized the importance of trilateral security cooperation with the U.S.

Seoul and Tokyo also are enhancing ties in areas such as economics and trade. At their summit, Lee and Takaichi agreed to explore cooperation in supply chains, critical minerals, semiconductors and emerging technologies.

"By deepening cooperation across ideological lines and managing expectations, Tokyo and Seoul have a rare opportunity to construct an alignment resilient enough to withstand the political winds of the future," Foreign Affairs magazine reported in December 2025.

Engagements such as Freedom Edge offer a preview of what's possible.

"Freedom Edge is a continuing effort among the three nations to make information sharing and interoperability routine, repeatable and real," said U.S. Air Force Col. Craig Rumble, the 2025 exercise's lead planner. "Freedom Edge turns policy into procedures, and procedures into muscle memory so the U.S., Japan, and [the] Republic of Korea can train and improve together." □

# MONUMENTAL GAMBLE

## Why China's Military Is Not Prepared to Invade Taiwan

FORUM STAFF

FOR much of the past decade, defense experts have warned that China is approaching the military capability to seize Taiwan by force. The argument seems straightforward: China's economic rise has fueled rapid military modernization, and its leader, Chinese Communist Party (CCP) General Secretary Xi Jinping, has explicitly tied national rejuvenation to unification with Taiwan, setting a goal of 2027 as a deadline to be ready for a potential invasion. Military exercises around the democratic, self-governed island have grown in scale and frequency, and the People's Liberation Army (PLA) has unveiled increasingly sophisticated weapons systems.

Yet this narrative oversimplifies complex realities, analysts say. Beneath the outward display of strength lies a military institution grappling with deep structural weaknesses that strike at the core of combat effectiveness. Corruption, political purges, command instability, limited operational experience and the extraordinary difficulty of amphibious warfare cast doubt on the PLA's readiness to invade Taiwan, an island of 23 million people with an increasingly well-equipped military.

Xi's attempts to strengthen and discipline the PLA have exposed its vulnerabilities. He has produced a force that appears modern and powerful but is immature and unproven in war.



**Taiwan Soldiers conduct drills in Taichung County in January 2026.** THE ASSOCIATED PRESS

## The Amphibious Challenge

A cross-strait invasion of Taiwan would represent one of the most difficult military undertakings in modern history, analysts say. Amphibious operations demand a rare combination of planning, coordination and sheer logistical capacity. Historical precedents such as the Allied landings in Normandy in World War II or the United States operation at Inchon during the Korean War succeeded only after years of preparation, overwhelming superiority and favorable strategic conditions.

The Taiwan Strait presents a harsh environment. Stretching roughly 126 kilometers at its narrowest point between mainland China and Taiwan, it endures unpredictable weather patterns and strong currents that complicate large-scale troop movements. Taiwan's coastline offers few suitable landing beaches, all of which are well-mapped, fortified and covered by defensive fire.

Taiwan has spent decades preparing for such a scenario. Its defense strategy emphasizes denial, focusing on anti-ship missiles, coastal defenses, mobile artillery, uncrewed systems and hardened infrastructure designed to slow and disrupt an invading force. Any PLA landing would be contested from the moment it began, and likely before.



**Chinese Communist Party General Secretary Xi Jinping, middle, and Vice President Gen. Zhang Youxia, front, attend a meeting in Beijing in March 2025. Xi ousted Zhang, his top general, in January 2026 and placed him under investigation.** REUTERS

Even Chinese analysts acknowledge the inherent difficulty of such an operation. An ongoing war-gaming project modeled on the estimated 2027 capabilities of Allies and adversaries determined that a Taiwan invasion would be "extremely risky" for China. In its initial study released in 2023, the Center for Strategic and International Studies (CSIS), based in Washington, D.C., ran its war game 24 times, factoring in a range of conditions, assumptions and uncertainties. In most scenarios, the U.S., cooperating with Japan and Taiwan, defeated a conventional amphibious invasion by China and maintained Taiwan's self-governance.

"Our conclusion was we could sustain defense of an amphibious invasion at very high costs [to the U.S., Japan and Taiwan], but that China would also lose a lot," retired U.S. Marine Corps Reserve Col. Mark Cancian, a senior advisor with the CSIS International Security Program, told FORUM. The costs to China would include more than expensive equipment and lives. "It might threaten CCP rule, including Xi's rule. It's not a riskless operation for them." If China fails to occupy Taiwan, "there would be 20,000 to 30,000 PLA prisoners paraded in Taipei," said Cancian, a co-author of the study.

The CSIS assessment reflects the number of simultaneous objectives the PLA would need to achieve in an amphibious invasion. It would have to establish air superiority, neutralize Taiwan's naval and missile defenses, transport large numbers of troops across contested waters, and rapidly secure ports to sustain follow-on forces. All of this would need to occur under the threat of external intervention. While complexity alone does not preclude such an operation, it does raise the threshold for success to a level that only the most capable and cohesive military could achieve. The PLA has not demonstrated that level of capability, military experts say.

Since the CSIS study's release, the team has run about 80 iterations, including evaluating the use of nuclear weapons and different types of blockades, and is continuing its research. The lead authors believe the study's core conclusions hold for the near future, said Eric Heginbotham, co-director of the war-gaming lab at the Massachusetts Institute of Technology's Security Studies Program and Cancian's co-author. On the surface, after U.S. combat operations in Iran and the ongoing costs of the Russia-Ukraine conflict, some aspects of an amphibious invasion may look more favorable to China. For example, some U.S. munitions heavily relied upon in Iran may take many months to replenish to optimal levels, Heginbotham told FORUM, yet "none of this is to say that [the prospect of a Taiwan invasion] looks good for the Chinese perspective."

A January 2026 study by the German Marshall Fund was even less favorable for China. It predicted the PLA could suffer up to 100,000 fatalities in a conflict with Taiwan, with hundreds of thousands of additional military personnel wounded, captured or missing. The study, "If China Attacks Taiwan," by the U.S.-based think tank, evaluated two scenarios: a minor conflict of several weeks of Chinese blockades and air and maritime confrontations between the PLA and Taiwan that ends with a bilateral agreement to de-escalate; and a major monthslong




war involving Japanese and U.S. forces that ends in "the humiliation of a defeat" for China. In the latter, Beijing would incur multitrillion-dollar economic losses, international sanctions and significant social unrest, the authors said.

Other conditions that evolved in the past year work against China's probable success. For a start, Japan is more likely to enter any conflict, Heginbotham said. Tokyo also is better prepared to do so than ever.

Given its geographical proximity, Japan views a Taiwan contingency as a direct threat to its security. In recent years, through its revamped National Defense Strategy, Japan has significantly increased its defense spending and posture, especially in its southwest Nansei, or Ryukyu, island chain, which stretches from southern Kyushu to Taiwan and includes Okinawa. There it has enhanced air, sea and land capabilities as well as evacuation infrastructure to ensure readiness. Those investments compound the risk in Beijing's calculation.

In early 2026, the U.S. demonstrated its ability to conduct intricate operations that no other military can do while forces also gained even more combat experience in operations in Iran and Venezuela.

"Although no one can read the psyche of Xi, on balance, I think [such combat operations] would give him pause and he'd be more cautious," Cancian said.

## Corruption: A Persistent Structural Weakness

One of the most significant obstacles to PLA readiness is corruption. This is a deeply embedded problem that has persisted despite repeated attempts at reform. For years, reports have documented widespread graft within the PLA. Procurement processes have been particularly vulnerable, with funds diverted, contracts manipulated and equipment quality compromised. Promotions have reportedly been influenced by bribery rather than merit, undermining the professional integrity of the officer corps.

The consequences are profound. A military plagued by corruption is incapable of reliably assessing its own readiness. Training reports may be falsified, equipment performance exaggerated and weaknesses concealed from senior leadership. Such distortions can prove fatal in conflict. "If military leaders are corrupt or politically unreliable, that inherently leads to problems of readiness," Lyle Morris, an expert on the Chinese military at the New York-based Asia Society Policy



**A Taiwan Air Force fighter jet deploys flares during the Lien Yung exercise in Pingtung in April 2026.** REUTERS

Institute, told The Washington Post newspaper. Corruption wastes resources, erodes trust, distorts decision-making and undermines military effectiveness.

Recent investigations underscore the severity of the problem. Allegations of corruption within the PLA Rocket Force, which is responsible for China's strategic missile arsenal, raised concerns about the reliability of critical systems. In a conflict, uncertainty about missile performance could have cascading effects across an operational plan.

Reports in 2026 have highlighted technical failures of Chinese-made radar, missiles and drones in combat operations in Iran, Pakistan and Venezuela. Beijing, for instance, sold its JY-27A long-range air surveillance and guidance radar to several nations claiming it could detect stealth aircraft at nearly 400 kilometers. In Venezuela, the radar failed to detect U.S. fighter jets and other aircraft, allowing special operations forces to fly helicopters to the nation's capital, Caracas, without resistance, according to Gen. Dan Caine, chairman of the U.S. Joint Chiefs of Staff. In May 2025, a four-day skirmish between India and Pakistan revealed the poor performance of Chinese-produced systems used by Pakistan's military.

Accounts also have surfaced about the compromised performance of China's J-20 stealth aircraft, which, if confirmed, could single-handedly stymie any Taiwan invasion plans. Now-deposed PLA officers, weapons scientists and defense industry executives, including the aircraft's designer, reportedly falsified test data to cover the fighter jet's shortcomings, according to sources, including the Global Defense Corp. The falsifications may also have undermined development of China's counterstealth radar, analysts say.

## Xi's Purges: Discipline Through Disruption

In response to such systemic issues, Xi launched an extensive anti-corruption campaign within the PLA. While intended to restore discipline and loyalty, the campaign has had far-reaching and often destabilizing consequences. Since 2022, more than 100 senior PLA officers have been cast aside or gone missing, according to the CSIS China Power Project report. These include high-ranking figures within the Central Military Commission (CMC), theater commands and key operational units such as the Rocket Force, which span China's armed forces.

In January 2026, China's National Defense Ministry announced investigations into Gen. Zhang Youxia, the PLA's top general and CMC vice chairman, and Gen. Liu Zhenli, the CMC Joint Staff Department's chief of staff, for "serious disciplinary and legal violations." Their ouster left only one general, Zhang Shengmin, serving on the CMC alongside Xi. The fate of Zhang and Liu, like many of their purged colleagues, remains unknown, but they disappeared from public view.



**Taiwan's military conducts an exercise in the self-governed island's northern Hsinchu County in January 2025.** THE ASSOCIATED PRESS

Their timeline for PLA joint operations training did not align closely enough with Xi's deadline for the PLA to be capable of invading Taiwan, according to K. Tristan Tang, co-founder of the Taiwan Defense Studies Initiative. "Although the probability of achieving the 2027 Taiwan invasion capability remains extremely low, Xi Jinping will likely appoint successors who are willing to execute his military blueprint in place of Zhang and Liu," Tang wrote in a January 2026 analysis for the U.S.-based Jamestown Foundation. "As a result, while the Chinese military remains unlikely to invade Taiwan in the near term, PLA training and exercise activity may become more aggressive and more frequent than in recent years." The main reason for their removal, however, was likely because they posed a direct threat to Xi's authority, Tang wrote.

In the meantime, Xi's purge has significantly disrupted the PLA's command structure and operational readiness, according to a February 2026 report by the London-based International Institute for Strategic Studies (IISS). Leadership positions have been vacated or filled by officers with limited experience at the highest levels of command. In some cases, entire chains of command have been reshaped. "From an organisational perspective, until the vacancies are filled, the PLA is operating with serious deficiencies in its command structure," IISS said in its annual Military Balance survey.

Beyond structural disruption, the purge has damaged morale and trust. Military effectiveness depends not only on equipment and doctrine but also on the cohesion and confidence of personnel. "The purges will also aggravate existing strains in party-army relations," Dr. Phillip Saunders, an expert on Chinese military affairs at the National Defense University, wrote in the February 2026 issue of The Interpreter, a publication of the Australia-based Lowy Institute think tank. "Xi's confidence in the less experienced leaders running the PLA will be limited, and he is well aware that his generals may be reluctant to offer honest assessments of PLA readiness for war. These factors decrease the likelihood that Xi will be willing to roll the dice on a Taiwan invasion."

The PLA's challenge is not merely to replace purged officials but also to rebuild trust within its ranks. This process cannot be rushed, and it is unlikely to be achievable in the near term, analysts said.

## The Experience Gap: An Untested Force

The PLA's lack of combat experience is a critical limitation. The last major conflict involving Chinese forces occurred in 1979 during the brief but intense war with Vietnam. Since then, the PLA has undergone extensive modernization but has not been tested in large-scale combat.

Training exercises, no matter how realistic, can't replicate the chaos, uncertainty and psychological stress of war, experts say. Commanders must make decisions with incomplete information; units must operate under fire and adapt to unforeseen developments. "With the removal of Zhang Youxia and Liu Zhenli — the last senior commanders with real combat experience who rose through the ranks mostly based on merit — the professional core of the PLA has been left gutted. Their downfall is likely going to implicate all of their associates, potentially unleashing further chaos," Dr. Zi Yang, a research fellow at the S. Rajaratnam School of International Studies at Nanyang Technological University in Singapore, explained in The Diplomat magazine.

Recent conflicts underscore the importance of experience. The performance of Russian forces in Ukraine demonstrates how a military that appears formidable can falter when confronted with the realities of warfare. Logistics failures, poor coordination and rigid command structures all contributed to outcomes that diverged sharply from prewar expectations. The PLA must contend with the possibility that similar challenges could arise in its own operations, particularly in an environment as demanding as a Taiwan invasion.

## Joint Operations: Progress and Limitations

Modern warfare requires seamless integration across domains. Air, naval, ground, cyber and space forces must operate in concert, sharing information and coordinating actions in real time. The PLA has made progress in developing joint operational capabilities. Reforms initiated under Xi have reorganized the military into theater commands designed to facilitate integrated operations. Large-scale exercises around Taiwan have demonstrated elements of this capability.

However, these drills remain controlled environments. For example, China may fail to establish air superiority during an amphibious invasion, meaning the PLA would be conducting the operation not only in contested waters but also contested airspace. Analysts note that the PLA has not conducted rehearsals at the scale required for a successful invasion of Taiwan. The true measure of joint capability lies in the ability to sustain coordination under pressure over extended periods across all domains, which remains unproven for China, they say.

The ongoing purges raise additional concerns about the interoperability of the PLA's forces. Disruptions within command structures, particularly in joint operations centers, have likely hindered the integration the PLA seeks to achieve, analysts say.

## Political Control, Loss of Military Effectiveness

At the core of the PLA's challenges lies a fundamental tension between political control and military effectiveness. The PLA is not a national army in the traditional sense; it is, as Xi has stated, the armed wing of the CCP. Its primary loyalty is to the party and its leadership and Xi himself, according to the Mercator Institute for China Studies.

This structure ensures centralized control of the military but can constrain operational flexibility.

Military effectiveness often depends on decentralized decision-making, where commanders at various levels are empowered to adapt to changing situations. A system that prioritizes political reliability may inhibit such adaptability and limit the initiative required for complex operations.

## External Constraints: The Shadow of Intervention

Any assessment of a potential Taiwan invasion must consider the likelihood of external intervention. The U.S. maintains a long-standing commitment to Taiwan's defense, and while its potential response to a conflict remains deliberately ambiguous, the prospect of military involvement looms large.

The presence of U.S. forces in the region, along with expected support of nearby Allies such as Japan and the Philippines, significantly complicates China's strategic calculus. Even a limited intervention could disrupt PLA operations, extend the conflict and increase the risk of escalation.

Since the early 1970s, Japan, like the U.S., has followed a policy of intentional ambiguity, recognizing Beijing's "One China" stance but maintaining unofficial yet deep ties with Taipei. In November 2025, Japanese Prime Minister Sanae Takaichi indicated to lawmakers that Japan might take a stronger approach if China attacked Taiwan. Such an action could be considered a survival crisis under Japanese law, which would justify the use of force, she said.

As part of establishing formidable defensive capabilities in its southwestern islands, Japan has built a system for joint operations of its amphibious, ground and maritime forces to enable better defense and recapture of remote islands. Those enhancements expand the depth and intensity of the multinational resistance China would face in an invasion.

The Philippines also has hardened its stance on defending Taiwan. In May 2026, President Ferdinand Marcos Jr. said the nation likely would be involved in any conflict over Taiwan because of its proximity, the Bloomberg news agency reported. "In the Philippines, we do not have a choice because Taiwan is so close to the Philippines and we have almost 200,000 Filipino nationals living and working in Taiwan," he said.

He made similar comments in August 2025 after another in a series of encounters between the Philippine Coast Guard and China's maritime forces near Scarborough Reef in the South China Sea. Marcos emphasized that the Philippines does not want war but said he would not order vessels to withdraw from contested areas if conflict erupts.

Like Japan, the Philippines has been strengthening its deterrence posture through collective defense initiatives, including increased participation in multilateral exercises and multinational defense partnerships.

Tested at the 2026 Balikatan exercise in the Philippines in conjunction with a new command and control hub, the PACOM Mission Network (PMN) is emblematic of this effort. The U.S. Pacific Command (US PACOM) platform linked forces from Australia, Canada, Japan, New Zealand, the Philippines and the U.S. across a series of combined and joint operations, according to Adm. Samuel J. Paparo, Commander of US PACOM.

The PMN enables allied and partner forces to integrate operations by securely sharing operational data, intelligence and battlespace information across domains using an architecture that requires constant authentication and authorization to thwart adversaries, while enabling rapid and coordinated threat response.

Such increased deterrence activities may be a key factor in U.S. intelligence officials updating their assessment of China's intent to invade Taiwan in 2027. "The [intelligence community] assesses that Chinese leaders do not currently plan to execute an invasion of Taiwan in 2027, nor do they have a fixed timeline for achieving unification," the Office of the Director of National Intelligence's 2026 Annual Threat Assessment noted.

"Beijing almost certainly will consider a variety of factors in deciding whether and how to pursue military approaches to unification, including PLA readiness, the actions and politics of Taiwan, and whether or not the U.S. will militarily intervene on Taiwan's behalf," the report said.

Although China's ambitions may have dimmed in the short term, they have not been extinguished. The Annual Threat Assessment stated that Beijing must seize Taiwan by 2049 to achieve its goal of a "national rejuvenation" by the 100th anniversary of the People's Republic of China.

For Xi, the stakes remain "exceptionally high," Cancian and Heginbotham reiterate. A failed invasion would have profound political consequences, domestically and internationally, for China. It would undermine the legitimacy of CCP leadership and potentially destabilize the broader strategic environment.

## Stepping Up Deterrence

It's imperative that Allies and Partners continue to advance their deterrence efforts despite indications that China's PLA is not ready to invade Taiwan, defense analysts say. Allies and Partners must avoid complacency.

Despite the long shadow cast by internal corruption, the PLA continues to reform problem areas and modernize capabilities, analysts say. Allies and Partners must persist in strengthening their overmatch in quality, equipment integration and technological capabilities. They also must continue to establish multinational agreements, conduct multilateral exercises, demonstrate superior equipment performance and capabilities, and elevate interoperability.

Although the PLA lacks the cohesion, confidence and competence at every level of command required to execute a successful invasion of Taiwan, Allies and Partners must work together to ensure their overmatch endures in the decades to come. □



# COUNTERPUNCH

## More Spacefaring Militaries Work to Defend Space Assets, Prevent Attacks

APOGEE STAFF

Counterspace capabilities that can degrade, destroy or disrupt other systems once were the province of only the largest space superpowers: China, Russia and the United States. But as space has become more essential for both military operations and daily life on Earth, the collection of militaries protecting assets in the highest domain is growing rapidly.

Just five years ago, the nonprofit Secure World Foundation's (SWF) annual Counterspace Capabilities Report examined eight spacefaring militaries that were deploying counterspace assets. By 2025, the SWF report had grown to 12 nations, with the rapidly developing space programs of Australia, France and India making the list's top half-dozen. Iran, Israel, Japan, North Korea, South Korea and the United Kingdom round out the top 12.

"The space domain is undergoing a significant set of changes," the 2025 SWF report states. "A growing number of countries and commercial actors are getting involved in space, resulting in more innovation and benefits on Earth, but also more congestion and competition in space."

From a security perspective, the report states, more countries are looking to enhance their military capabilities and national security with counterspace capabilities that can "deceive, disrupt, deny, degrade, or destroy space systems." North Korea, for instance, is seeking to expand its space capabilities, focusing on developing anti-satellite (ASAT) weapons.

Australia, France and India are rapidly building their own policy frameworks and counterspace assets with a mixture of maturing space alliances and homegrown ingenuity.

**An Indian military communications satellite launches into orbit from the state of Andhra Pradesh. India is developing more counterspace capabilities to protect its growing array of space assets.** AFP/GETTY IMAGES

### AUSTRALIA TRANSCENDS FROM SUPPORT ROLE

The report describes Australia as a "relative newcomer" to space, although it has long played a support role by hosting ground infrastructure for satellite communications and command and control. Recently, however, Australia has been laying the groundwork for more domestic space capabilities. In 2022, Australia created the Defence Space Command, which since has been renamed Space Command. Australia is "building out a policy framework for its military space priorities, is putting concerted efforts and resources into building its own SSA [space situational awareness] capabilities, is examining an EW [electronic warfare] capability for its Department of Defence, and is looking into non-destructive ways in which to interfere with enemy satellites," the SWF report states.

Australia, one expert contends, entered the global counterspace competition with some trepidation. "Australia has been reluctant to go down the path of counterspace, but has come to recognize that space governance and space law alone won't necessarily constrain the actions of adversaries prior to, or at the outset of a war, or prevent gray zone actions in space that could deny Australia and its allies access to vital space support," Malcolm Davis, senior analyst for defense strategy and national security at the Australian Strategic Policy Institute, told Apogee.

Australia has deep connections with space defense officials in the United States. In 2017, the U.S.-made Space Surveillance Telescope was dismantled at the White Sands Missile Range in New Mexico and moved to the Harold E. Holt Naval Communication Station in Exmouth in Western Australia.

Australia also is a partner with the U.K. in the Deep Space Advanced Radar Capability (DARC) project, an all-weather, global radar system that can track small

objects in geostationary orbit about 35,800 kilometers above Earth. Military experts say this capability is crucial to protect critical satellite service for communications, defense and navigation. The project is the result of a partnership involving the Australian Defence Department, U.K. Defence Ministry and U.S. Space Force. The first DARC site in Western Australia was completed in December 2024, and the network eventually will include locations in the U.K. and the U.S.

Australia also is considering a range of space control capabilities to support deterrence with its Five Eyes alliance partners of Canada, New Zealand, the U.K. and the U.S., and from within the Combined Space Operations Initiative, which, besides the Five Eyes partners, consists of France, Germany, Italy, Japan and Norway.

Davis said that while Australia is pursuing counterspace capabilities, it is building only non-destructive assets. "Any space control capability we eventually acquire will be nondestructive, soft kill, with the aim being for scalable and reversible effects to deny or degrade rather than physically destroy," Davis said.



**A C-Band space surveillance radar owned by the U.S. Air Force operates from Exmouth, Australia, where it covers the Southern and Eastern hemispheres.** PETTY OFFICER 2ND CLASS JEANETTE MULLINAX/U.S. NAVY

"The goal is to strengthen deterrence by denial and deterrence through resilience against adversaries that have counterspace capability. Australia is also developing the architecture of its space capability through proliferated small satellite constellations across multiple orbital regimes, rather than investing in small numbers of large and complex satellites."

Policy framework updates are supporting Australia's efforts. Davis noted that Australia's National Defence Strategy and Integrated Investment Program, which were released in 2024 and updated in 2026, make clear that the Defence Department will consider "measures to enhance Defence's space control capability to deny attempts to interfere with, or attack, Australia's use of the space domain."

## FRENCH MOMENTUM

Also in the top half of the countries listed on the SWF report is France, which has long had a space program and military satellites. But it was "not until recently that France had an explicit focus on offensive and defensive counterspace activities," the report states.

A big change occurred in July 2019 with the release of the first French Space Defence Strategy, which elevated military space efforts and control of military satellites. The strategy focuses on improving situational awareness around space assets and providing them with active defenses, including ground-based lasers and satellites for on-orbit inspection.

France's counterspace pursuits coincide with a deepening relationship with the U.S. In September 2025, the countries announced they were stepping up joint satellite maneuvers to counter China in space.

The announcement of a planned second joint mission of coordinated satellite maneuvers is part of a broader plan to sharpen allied surveillance capabilities as China expands its military footprint in space, Reuters reported. The operation involving France and the U.S. would be the U.S. Department of War's third known mission conducted in space with an ally after its first joint maneuver with two spacecraft in orbit in 2024, which also involved France. U.S. Space Command conducted a joint mission with the U.K. in 2025.

Like the other countries in the SWF report, France is acknowledging an inescapable fact: Space is now a warfighting domain. "Space is no longer a sanctuary; it has become a battlefield," French President Emmanuel Macron told military officials at the Space Command facility in Toulouse in November 2025, according to an Agence France-Presse report. Macron detailed a litany of aggressive acts by what he termed "powers of aggression."

To meet the challenge, France is expanding its military




**French Air and Space Force Col. Olivier Fleury speaks at the SparteX exercise in Toulouse in February 2026. France is focusing on offensive and defensive counterspace capabilities.** AFP/GETTY IMAGES

space capabilities and accelerating development of what Macron described as active defense systems to protect French satellites and potentially neutralize on-orbit threats, such as lasers and patrol satellites.

## INDIA'S ASCENSION

India, which ranked fourth in the SWF report, has more than five decades of experience developing space capabilities.

Most of that, however, was focused on civil space. "It is only relatively recently that India has started organizationally making way for its military to become active users of space and creating explicit military space capabilities," the report states.

In 2019, India joined the small group of nations that have tested an ASAT weapon when it destroyed a satellite in low Earth orbit during Mission Shakti. China, Russia and the U.S. also have tested ASAT weapons, although the U.S. subsequently committed to not conducting such tests, which can create long-term space debris.

In addition to possessing offensive capabilities that could destroy another nation's satellites, India showed its ability to intercept an intercontinental ballistic missile.

India has stated it opposes the weaponization of space, although it may be moving toward an offensive counterspace posture, the SWF report states. India is reportedly working on directed energy weapons. And in January 2025, it showcased its ability to maneuver civilian space assets on orbit, marking an important step toward rendezvous and docking technology.

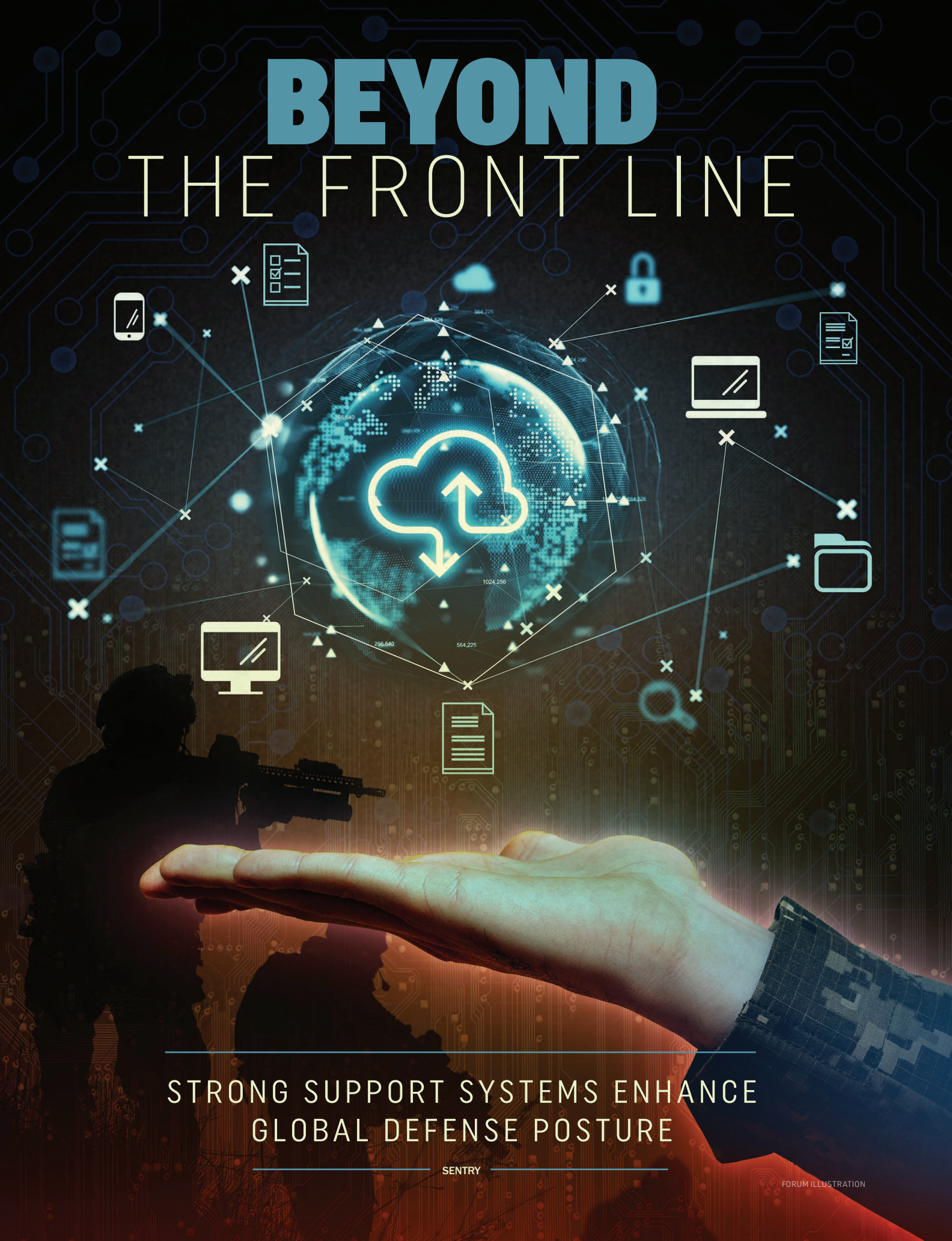
Japan also is quickly advancing in counterspace research and development, with its activities mainly defensive and surveillance oriented to support long-range strike planning and improve threat detection and targeting accuracy. Tokyo has transitioned its assets into the renamed Japan Air and Space Self-Defense Force and is engaged in SSA cooperation with the U.S. Pacific Command and U.S. Space Command.

From GPS navigation to global internet coverage and military surveillance, space-based technology is integral to communication, commerce and security. Because of that, space assets must be defended.

"The existence of counterspace capabilities is not new, but the circumstances surrounding them are," the SWF report concludes. "Today there are increased incentives for development, and potential use, of offensive counterspace capabilities. There are also greater potential consequences from their widespread use that could have global repercussions well beyond the military, as huge parts of the global economy and society are increasingly reliant on space applications." □

Apogee is a professional military magazine published by the U.S. Space Command to strengthen U.S. security partnerships in space and provide an international forum to address global space defense challenges.

# BEYOND THE FRONT LINE



## STRONG SUPPORT SYSTEMS ENHANCE GLOBAL DEFENSE POSTURE

SENTRY

FORUM ILLUSTRATION




**U.S. Army Soldiers prepare an M142 High Mobility Artillery Rocket System off-loaded from a U.S. Air Force C-130J Super Hercules during Exercise Cobra Gold 2026 in Thailand.**
TECH SGT. GIOVANNI SIMS/U.S. AIR FORCE

Defense leaders don't just consider the front lines when planning for battle. Support systems that ensure combat readiness and endurance remain crucial. Shifts in geopolitical dynamics, combined with emerging technologies, make attention to those support systems — sometimes called the "strategic rear" — critical. In addition, today's multidomain operations require systems that enable the ability to communicate across the joint force and with Allies and Partners.

The strategic rear has historically included command and control (C2), logistics and sustainment infrastructure, personnel and reserves, and security measures to protect high-value assets. Those principles remain regardless of technological advances in warfare, but today's complex global environment also demands attention to data sharing and interoperability, which play a vital role in strategic posture.

"Modern warfare is undergoing a transformation in which information is no longer just a combat multiplier — it is the battle space," Benjamin Jensen, director of the Futures Lab at the Center for Strategic and International Studies (CSIS), wrote in "War and the Modern Battlefield," a September 2025 report by the United States-based think tank. "The ability to collect, fuse, and disseminate information is a defining feature of military power and calls for new ways of thinking about the correlation of forces and means in modern war."

The U.S. and its Allies and Partners are strengthening data sharing and interoperability in key areas that build the strategic rear to counter threats as competitors develop their own capabilities.

## NEXT-GENERATION C2

Joint All-Domain Command and Control (JADC2) is the U.S. military's push to upgrade systems that will protect the joint force's C2 capabilities. The goal is "to empower our joint force commanders with the capabilities needed to command the joint force across all warfighting domains and throughout the electromagnetic spectrum to deter, and, if necessary, defeat any adversary at any time and in any place around the globe," the U.S. Department of War reported in 2022.

"JADC2 provides a coherent approach for shaping future Joint Force C2 capabilities and is intended to produce the warfighting capability to sense, make sense, and act at all levels and phases of war, across all domains, and with partners, to deliver information advantage at the speed of relevance."

The report identified five areas to achieve capability goals:

- **The data enterprise:** Data is a strategic asset to be managed, maintained and protected. "To accelerate decision-making, the joint force and our mission partners must be able to discover and access any data and information from all warfighting domains and at all levels of warfare." Standardization objectives include metadata tagging, access practices and security best practices.
- **The human enterprise:** The use of artificial intelligence and machine learning tools to collect and aggregate data while establishing authority chains for rapid decision-making. Professional development programs would prepare leaders across all warfighting domains.
- **The technical enterprise:** Operations including enhanced shared situational awareness, collaboration, planning, real-time force visualization and management, and improved abilities to assess joint force and mission partner performance. "Joint force commanders require



**A U.S. Air Force B-1B Lancer is refueled by a KC-135 Stratotanker during a November 2025 bomber task force mission over the Indian Ocean.** STAFF SGT. CEDRIQUE OLDAKER/U.S. AIR FORCE



**The Royal Australian Navy frigate HMAS Ballarat, left, and the Royal New Zealand Navy sustainment ship HMNZS Aotearoa conduct a replenishment during Exercise Bersama Lima 2025 off the Malay Peninsula.** AUSTRALIAN DEFENCE DEPARTMENT

secure, worldwide communications networks with sufficient speed and bandwidth" for decision-making.

- **Integration of nuclear C2 and communications (NC3) with JADC2:** The U.S. Strategic Command has identified modernization of NC3 systems as a vital part of upgrading the nation's nuclear triad and enhancing deterrence. Combined JADC2 will provide the framework and methodology to allow interoperability between conventional C2 capabilities and NC3, ensuring commanders' intent by providing automation for accelerated decision-making. The new capabilities will also provide resilience and redundancy, bolstering strategic deterrence.
- **Modernize mission partner information sharing:** This priority seeks a common understanding of the operational environment among the U.S. and its Allies and Partners. In addition to the U.S.'s JADC2 initiative, Allies and Partners including NATO and the United Kingdom are developing enhanced data sharing and C2 capabilities. "Ideal mission partner system integration is realized when data from each partner's C2 systems can be accessed, viewed, and acted upon by every other approved partner," the report stated. "Ultimately, JADC2 system interoperability is foundational for conducting combined and partnered operations with speed, precision, relevance and security."

## SUSTAINING OPERATIONS FROM THE REAR

Having the right equipment and supplies at the right place at the right time is vital not only for readiness but also for maintaining a strategic posture that can enhance deterrence. "Even as warfare evolves and the concepts, equipment and supplies develop and change, there can be no success in warfare without the logistics enterprise," Cynthia Cook, a senior fellow with CSIS's Defense and Security Department, wrote in the center's 2025 report. "There is a persistent cliché that amateurs study strategy and experts talk logistics. A more exact formulation would be that experts understand the importance of logistics and readiness to their strategy, and plan and resource accordingly."

As the risk of protracted wars such as the Russia-Ukraine conflict increases, the need for large stockpiles to

be ready — or rapidly surged — also grows, Cook wrote. With the development of hypersonic weapons, advanced cruise missiles and uncrewed aerial systems, areas previously considered safe are at risk. Geographic distance no longer guarantees security, requiring weapons systems, infrastructure and networks to be hardened or designed for redundancy to ensure continued operations.

Sustainment is an increasingly vital element of integrated deterrence, Christopher Lowman, then U.S. assistant secretary of defense for sustainment, wrote in a January 2024 article for National Defense magazine. "Today, the strategic environment is defined by challenges to logistics agility, flexibility and survivability through kinetic and non-kinetic disruptions," he wrote. "To navigate and prevail through a contested logistics environment means ensuring that logistics, supply chain operations and transportation capabilities are resilient and can operate effectively in hostile environments."

Defense leaders "must ensure that the combatant commands are postured with sufficient resources such as munitions, fuel and spare parts. They must also have the capabilities to perform maintenance, manufacturing at echelon, storage and transportation, and withstand and recover quickly from disruptions," Lowman wrote.

He noted that advanced manufacturing techniques, including 3D printing, could mitigate the risks of disrupted or contested supply chains, allowing the joint force to "produce crucial parts in contested environments in a distributed manner, increasing an adversary's dilemma and ultimately U.S. integrated deterrence posture."

Defense leaders also must consider the unique nature of the Indo-Pacific, where vast scale, complex topography and susceptibility to natural disasters present complex challenges.

Any Indo-Pacific conflict or war over self-governed Taiwan, which China claims as its territory and threatens to annex by force, "would be fought at sea and in the air, across thousands of nautical miles, and against a peer adversary with robust [intelligence, surveillance and reconnaissance] and precision strike capabilities," Cook wrote in the CSIS report. "Nations participating in that or any other conflict could not assume secure overflight rights, permissive air bases, or nearby overland supply routes. Logistics would be contested, and the persistence of satellite surveillance means that operating in secrecy is increasingly impossible.

"Along with the warfighting capabilities of potential adversaries, nations should look to understand an enemy's logistics capabilities and investments as an indicator of how challenging any engagement might be."

## SUSTAINING THE FORCE

In a military conflict, necessary personnel aren't limited to front-line troops. Forces also need staff to maintain the strategic rear — ensuring that essential logistical, administrative and command functions continue uninterrupted. In 2022, the U.S. Army updated its operational concept from unified land operations to multidomain operations, acknowledging the increasingly complex battle landscape. "Multidomain operations require integration of Army and joint capabilities from all domains to defeat the enemy's integrated fires, electronic warfare, cyber, and air defense systems, and to allow maneuver forces to exploit the resulting freedom of action," the U.S. Army reported in January 2025. In addition, combatant commands tailor rotational forces based on the type of operation, geographic location, operational environment and potential threat.

Defense forces also must train together. Increased demand for interoperable systems requires military and support personnel to integrate as well. Large-scale, combined exercises bring Allies and Partners together to rehearse not just military maneuvers but also the logistical and support activities required for mission success.

To enhance regional defense, the Quadrilateral partnership of Australia, India, Japan and the U.S. established the Indo-Pacific Logistics Network in September 2024 to leverage shared capabilities. The project reflects a long-term strategic goal to integrate logistics, basing and sustainment infrastructure across the Indo-Pacific.

Such exercises and initiatives remain crucial to sustaining a strong deterrence posture, Patrick Kelleher, U.S. deputy assistant secretary of war for materiel readiness, said during a July 2025 discussion hosted by CSIS. "When we look at the conflicts that are ongoing, [the focus] is our ability to endure," he said. "Our ability to endure through logistics by generating and maintaining readiness is as much a deterrent effect, or should have as much a deterrent effect, on an adversary as anything else." □



**A U.S. Marine secures a field-expedient antenna on a communications tower during Exercise Freedom Shield in South Korea in March 2026.** CPL. MESHAQ HYLTON/U.S. MARINE CORPS

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# INDIA EDGES CLOSER TO CONTINUOUS AT-SEA DETERRENCE



FORUM ILLUSTRATION

# With its third nuclear-powered ballistic missile submarine, New Delhi is bolstering its maritime capabilities

ANUBHAV SHANKAR GOSWAMI

India's commissioning of the submarine INS Aridhaman in April 2026 is significant as a strategic marker in the evolution of the nation's sea-based nuclear deterrent.

In adding a third vessel to India's fleet of nuclear-powered ballistic missile submarines (SSBN), the commissioning demonstrates that New Delhi is no longer speaking of an undersea nuclear deterrent in purely aspirational terms. Enlarging the fleet changes the conversation around the credibility and maturity of India's nuclear triad.

As well as getting India closer to keeping an SSBN at sea at all times, a practice known as continuous at-sea deterrence (CASD), induction of the Aridhaman into service adds a more capable submarine to the fleet. The Aridhaman displaces around 7,000 metric tons submerged, compared with the 6,000 metric tons of India's first two SSBNs, the INS Arihant and INS Arighaat. The Aridhaman represents a shift to a partially redesigned new class of vessels.



**Indian Prime Minister Narendra Modi announces the inaugural deterrence patrol of INS Arihant, the nation's first nuclear-powered submarine, in late 2018.** INDIAN PRIME MINISTER'S OFFICE

More importantly, Aridhaman has eight vertical launch tubes rather than the four fitted on the older subs. This allows it to carry either eight K-4 submarine-launched ballistic missiles with a range of about 3,500 kilometers, or 24 K-15 missiles with a range of about 750 kilometers. This improved capacity is strategically important. While the K-15 is primarily useful for deterring potential Pakistani nuclear attacks from patrol areas close to possible targets, the K-4 gives India far greater standoff reach. From suitable patrol areas, it will allow India to hold all of Pakistan at risk and extend deterrent coverage to major targets in southeastern China.

Altogether, Aridhaman has a more substantial missile load, wider geographic reach and greater operational flexibility.

The importance of CASD is that an enemy must always consider that an SSBN is patrolling, hidden somewhere in the depths and ready to retaliate even in the case of a devastating first strike. Achieving CASD is especially important for India because it sits between two hostile nuclear-armed neighbors, China and Pakistan, each of which shapes its deterrence calculations in different ways.

Operationalizing CASD is a far more demanding standard than merely possessing submarines that can carry nuclear weapons. Arihant and Arighaat alone cannot maintain such a deployment.

However, the significance of having a third SSBN should not be overstated. It does not guarantee continuous patrols. Because submarines must rotate through patrols, maintenance, rearming, crew changes and unforeseen repairs, a three-vessel fleet leaves little operational slack and only a narrow margin for disruption. A prolonged repair, systems fault or other unforeseen setback could create a gap in deterrent coverage.

This is why commissioning a fourth SSBN is so important in strategic terms. With four, one submarine can be on deterrent patrol while another prepares to deploy, the third returns from patrol and the fourth undergoes refit or overhaul — and within that schedule there will still be slack in case of unforeseen unavailability. This is the minimum force structure that gives CASD operational elasticity.

India's fourth SSBN, likely to be almost identical to Aridhaman, reportedly began sea trials in December 2025. After the fourth vessel, called S4 for now, a larger class with a much more powerful nuclear reactor is expected to join India's SSBN fleet. The S5 class reportedly will carry K-6 missiles with intercontinental range. It will give India a quieter, longer-range and more credible sea-based deterrent capable of holding all of China at risk from Indian Ocean patrol areas.

Expected to enter service in the mid-2030s, the S5s likely would begin taking over from the Arihant and Arighaat as the older vessels enter maintenance and eventual replacement cycles, giving India the basis for a more durable, four-vessel CASD structure.

This article originally appeared May 5, 2026, in The Strategist, a publication of the Australian Strategic Policy Institute. It has been edited to fit FORUM's format.

# 'UNITED BY THE SEAS'

## Cooperation is a cornerstone of maritime security, says the Indonesian Navy's chief of staff

FORUM STAFF



Adm. Muhammad Ali has served as chief of staff of the Indonesian Navy since December 2022. A graduate of the Indonesian Naval Academy in Surabaya, he was commissioned in 1989 and qualified as a submarine officer in 1991.

Across a career spanning more than three decades, he has combined extensive submarine command experience with senior shore-based assignments. From 2004-06, he commanded the diesel-electric attack submarine KRI Nanggala-402 and from 2006-08 he was a staff officer in naval planning and budgeting. His previous roles also include assistant for operations at the Makassar Main Naval Base, commander of the Submarine Squadron, commandant of Dumai Naval Base and aide-de-camp to Indonesia's vice president.

Since his promotion to flag rank, Adm. Ali has commanded the Western Fleet's Maritime Security Task Force. He also served as governor of the Indonesian Naval Academy and commander of the 1st Fleet and 1st Regional Joint Defense commands.

He has bachelor's and master's degrees in management science, a master's in naval operations science, and a doctorate in management, and is a frequent speaker at international maritime security symposiums. His service commendations include the Bintang Dharma Medal and the Bintang Jalasena Utama Medal.

Adm. Ali spoke with FORUM about the Indonesian Navy's modernization, how technology is transforming the maritime domain and the vital role of partnerships. "Together, we can ensure that our shared maritime domain remains a highway for commerce and cooperation rather than an arena for conflict."

The interview has been edited to fit FORUM's format.

***FORUM: How would you describe the Indonesian Navy's evolving role within the regional security architecture? What strategic priorities are shaping engagement with partner navies?***

**ADM. ALI:** Our role within the broader Indo-Pacific security architecture is fundamentally shaped by Indonesia's geographic position and our commitment to the principles of our independent and active foreign policy. We see ourselves not as aligned with any particular bloc but as a bridge builder and stability provider in a region of increasing strategic competition.

Our strategic priorities have evolved to focus on three key areas. First, we are strengthening our maritime domain awareness capabilities across our vast archipelago, which spans three time zones and sits astride critical sea-lanes connecting the Indian and Pacific oceans. Second, we are enhancing our capacity to address nontraditional security threats, including illegal fishing, piracy, trafficking and humanitarian disasters. Third, we are building partnerships with multiple regional and extraregional navies based on mutual respect and common interests, not exclusive alignments.

The Indonesian Navy serves as a stabilizing force by maintaining open channels with all parties. We conduct exercises with the United States, Australia, Japan and India, while simultaneously engaging with China, Russia and other partners. This approach allows us to contribute to regional stability while preserving our strategic autonomy.

***FORUM: How is the Navy adapting its force posture and operations to safeguard sea lines of communication amid rising challenges?***

**ADM. ALI:** Our geographic position places enormous responsibility on our shoulders. The Malacca, Sunda and Lombok straits, along with our three archipelagic sea-lanes, are vital arteries for global maritime trade. Approximately 40% of global trade passes through these waters, making their security a matter of international importance.

We are adapting our force posture through our Strategic Plan for 2025-2029 and our Naval Force Development Posture, which extends to 2044. This includes expanding our fleet of patrol vessels and submarines; procuring an aircraft carrier, maritime patrol aircraft, and surface and underwater surveillance systems; and modernizing our major surface combatants. All of this is to increase our ability to monitor and secure our maritime domain effectively. Such upgrades are crucial in addressing asymmetric threats and ensuring a credible deterrence posture. The vision for the future is to be a modern, regionally deterrent force and a globally projected Navy.

We emphasize forward presence through our network of naval bases, which are now transforming into naval area commands in the most strategically sensitive locations. We are also investing heavily in maritime domain awareness systems to maintain comprehensive situational awareness across our waters. The construction of new facilities, including our submarine bases, demonstrates our commitment to maintaining credible deterrence in key strategic areas. Interoperable task forces support these initiatives, enhancing our responsiveness and adaptability in the face of diverse challenges.

***FORUM: What is the main value of Indonesia's participation in multilateral exercises such as Komodo and Super Garuda Shield as it relates to defense readiness and regional trust-building?***

**ADM. ALI:** The Komodo exercise, which we have hosted biennially since 2014, exemplifies our approach to building regional maritime cooperation. The most recent iteration in February 2025 brought together 38 countries and 19 foreign warships alongside 17 Indonesian vessels. The theme, "Maritime Partnership for Peace and Stability," reflects our core belief that maritime security is a shared responsibility. We also participate in many multilateral, regional and bilateral exercises held by many friendly countries across the globe.

These multilateral engagements provide several critical benefits. Operationally, they enable our personnel to train alongside various partner navies and Marines, enhancing interoperability and exposing them to diverse tactics and technologies. This is particularly valuable given the varying array of platforms we operate. The exercises also build trust and establish personal relationships between naval officers across the region, creating channels for dialogue that prove invaluable during times of tension.

Moreover, exercises such as Komodo and Super Garuda Shield, as well as our various bilateral engagements, demonstrate Indonesia's commitment to inclusive security cooperation. For Komodo, we deliberately designed it to be noncombatant-focused, emphasizing humanitarian assistance and disaster relief [HADR], and search and rescue operations. This approach aligns with our principle of avoiding entanglement in great power competition while still contributing meaningfully to regional security.

***FORUM: How is the Navy strengthening cooperation with Association of Southeast Asian Nations (ASEAN) partners to enhance maritime domain awareness and respond to nontraditional threats such as piracy, illegal fishing and trafficking?***

**ADM. ALI:** Strengthening cooperation with our ASEAN partners remains a cornerstone of our maritime security strategy. We recognize that the maritime challenges facing our region — from illegal, unreported and unregulated fishing to maritime trafficking and piracy — do not respect national boundaries and require collective responses.

We are working closely with fellow ASEAN navies to enhance information sharing and coordinated patrols, particularly in areas of overlapping jurisdiction. Through mechanisms such as the ASEAN Defence Ministers' Meeting Plus framework and various bilateral arrangements, we are building a network of maritime domain awareness that benefits all parties.

We also support capacity-building initiatives, hosting collaborative programs at our education institutions and training ships, aiming to share our experiences in archipelagic maritime security. The ASEAN Plus Cadet Sail program, for instance, helps build relationships among the next generation of naval officers while fostering a common understanding of maritime challenges and solutions.

***FORUM: Indonesia also has expanded its extraregional partnerships, including with Australia, India, Japan and the U.S. How do you ensure such partnerships remain consistent with Indonesia's foreign policy principles?***



**Multinational naval ships sail during Exercise Komodo off Bali, Indonesia, in February 2025.** AFP/GETTY IMAGES

**ADM. ALI:** Our deepening ties with [those] and other partners are entirely consistent with the "Bebas-Aktif" [independent and active] foreign policy as we approach these relationships from a position of strategic autonomy rather than alignment.

Indonesia maintains a clear stance of nonalignment and does not subordinate our national interests to any external power or bloc. The key principle is that we retain the freedom to say no. We cooperate where our interests align, but we do not enter into arrangements that would compromise our independence or draw us into someone else's strategic competition. For example, we welcome maintenance and repair cooperation that enhances our capabilities, we participate in exercises that improve our readiness, and we pursue defense acquisitions that meet our needs — but we do so on our terms.



**Indonesian Marines fire an RM-70 multiple rocket launcher system during the multinational exercise Super Garuda Shield 2025 in Baturaja.** STAFF SGT. GODFREY AMPONG/U.S. MARINE CORPS

Importantly, we maintain similar engagement with countries that others might see as rivals to our other partners. We conduct navy-to-navy talks with Russia, we have naval exercises with China, such as the Heping Garuda series, and we welcome port visits from nations across the political spectrum. This is not hedging or playing both sides. It is the operationalization of our fundamental foreign policy principle. We refuse to be forced into binary choices in a multipolar world.

***FORUM: What lessons have been learned from the Navy's HADR missions and how are they shaping doctrine and training?***

**ADM. ALI:** The Indonesian Navy has been at the forefront of numerous humanitarian operations, from earthquake and tsunami responses to medical evacuations and disaster relief across our archipelago and beyond. These missions have taught us invaluable lessons that are now being integrated into our doctrine and training.

First, we have learned that rapid-response capability and preparedness are critical. The ability to quickly deploy the exact required medical facilities, supplies and personnel can mean the difference between life and death for affected populations. This has driven our investment in amphibious capabilities and the establishment of rapid-response units equipped with the necessary resources and logistical support to be mobilized promptly in the event of disasters.

Second, civil-military coordination is essential. Our most successful operations have involved seamless integration with civilian disaster management agencies, international organizations and nongovernmental organizations. We are now incorporating this into our training programs and establishing standard operating procedures for humanitarian operations.

Third, these missions have demonstrated that our naval vessels must be versatile. A ship that can conduct maritime security operations one day and transform into a floating hospital the next provides tremendous value to the nation. This influences our acquisition decisions and the specifications we require from shipbuilders.

These humanitarian missions also serve our diplomatic interests by demonstrating Indonesia's commitment to being a force for stability and assistance in our region, reinforcing our position as a responsible maritime nation.

***FORUM: How does Indonesia's blue economy and maritime development agenda intersect with naval responsibilities?***

**ADM. ALI:** They are deeply interconnected. Our waters cover 6.4 million square kilometers and hold enormous potential for sustainable fisheries, marine biotechnology, renewable energy and tourism. However, realizing this potential requires security and the rule of law at sea.

The Navy plays several critical roles in supporting the blue economy. We conduct law enforcement operations to combat illegal fishing, which costs Indonesia billions of dollars annually in lost resources. We protect offshore installations and ensure safe navigation for commercial shipping. We also conduct hydrographic and oceanographic surveys that support maritime development and provide essential data for marine resource management.

Our cooperation with civilian agencies such as the Indonesian Coast Guard, Maritime Security Agencies, and the Ministry of Maritime Affairs and Fisheries exemplifies a whole-of-government approach to maritime governance. We provide the security backbone that allows sustainable economic activities to flourish while ensuring that our marine resources are protected for future generations.

***FORUM: Technology and innovation are transforming maritime operations globally. How is the Indonesian Navy adopting technologies such as uncrewed systems and artificial intelligence (AI)-driven surveillance to enhance operational effectiveness?***

*We believe that maritime security is a shared responsibility and that cooperation benefits all nations.*

**ADM. ALI:** Technological advancement is critical to our future effectiveness, particularly given the vast maritime domain we must secure with finite resources. We are pursuing several technological initiatives to enhance our operational capabilities.

We are investing in integrated sensor networks, satellite communications and enhanced radar coverage to maintain comprehensive situational awareness. We are also exploring the potential of unmanned systems, both aerial and maritime, to extend our surveillance reach and provide persistent monitoring in key areas. These systems provide real-time data, improving decision-making processes during naval operations and humanitarian missions alike. AI-driven surveillance technologies are starting to be implemented to analyze vast amounts of data from various sources, enabling the Navy to identify threats and patterns more effectively and thereby enhance situational awareness and response times.

We are working with domestic and international partners to integrate modern combat management systems, improved sensor suites and network-centric warfare capabilities into our fleet.

Initiatives are underway to test hybrid propulsion systems in patrol vessels. As we modernize our fleet, we are also considering more efficient propulsion systems and exploring ways to reduce our environmental footprint. This aligns with Indonesia's commitment to environmental stewardship and practical operational considerations regarding fuel efficiency and logistics.

***FORUM: What are your priorities for fleet modernization and personnel development to ensure readiness for future challenges?***

**ADM. ALI:** Our modernization priorities focus on achieving a balanced, capable and sustainable fleet. We are working to acquire platforms that match our operational requirements while being realistic about budgetary constraints and the need for operational diversity.

The modernization agenda includes the procurement of cutting-edge warships, submarines and patrol vessels equipped with advanced combat systems, stealth technologies and enhanced surveillance capabilities. This strategic enhancement of naval assets aims to improve operational flexibility and deterrence capabilities against potential threats. We consistently seek to obtain technology transfer through the foreign procurement program. This not only enhances our capabilities but also develops our domestic defense industry through technology transfer and local production. Modernization also includes upgrading existing assets.

Equally important is personnel development. We are investing in professional military education, technical training and leadership development. As we introduce increasingly sophisticated platforms with diverse systems from multiple countries, our personnel must be capable of operating and maintaining complex technologies. We are also emphasizing proficiency in the English language to facilitate international cooperation and professional exchanges.

We recognize that our people are our greatest assets. A well-trained, motivated and professional naval force is more valuable than any platform. Therefore, we are working to improve service conditions, career development opportunities, and the overall quality of life for our personnel and their families.

**FORUM:** ***What is your message to Indonesia's partners about the Navy's commitment to maintaining peace, stability and cooperation across the Indo-Pacific?***

**ADM. ALI:** First, we are committed to being a stabilizing force in the Indo-Pacific. Indonesia does not seek to dominate or exclude any nation from our waters. Instead, we work to ensure that our seas remain open, safe and governed by international law. We believe that maritime security is a shared responsibility and that cooperation benefits all nations.

Second, we remain committed to the principle of Bebas-Aktif. We will engage with all partners who share our interest in regional peace and stability, regardless of their position in global politics. We will not be forced to choose sides in competitions that are not ours. This independence is not obstinacy but principle, and it allows us to serve as a bridge and honest broker in our region.

Third, we are committed to multilateralism and international law, particularly the United Nations Convention on the Law of the Sea. As an archipelagic state, we have a strong interest in resolving maritime disputes peacefully through established international mechanisms rather than through coercion or force.

The Indonesian Navy has always been ready to work with all nations of goodwill to maintain peace, stability and prosperity across the Indo-Pacific. Our doors are open, our hands are extended and our commitment to maritime cooperation is unchanging. Together, we can ensure that our shared maritime domain remains a highway for commerce and cooperation rather than an arena for conflict.

We are united by the seas and strengthened by collaboration. The challenges facing our region are significant, but through dialogue, cooperation and mutual respect, I am confident we can navigate them successfully to a lasting peace in the region and ultimately in the world. □

FORUM correspondent Gusty Da Costa contributed to this report from Jakarta, Indonesia.

# SPACE CONNECTIONS

## Satellite Network a Critical Component of Golden Dome Missile Defense Shield

PHOTOS AND STORY BY REUTERS

**THE UNITED STATES SPACE FORCE** has awarded SpaceX a $2.29 billion contract to build a secure, high-speed satellite communications network to connect military sensors and weapons platforms across the globe.

The agreement covers the Space Data Network (SDN) Backbone, a resilient network to provide fast, high-capacity data transport for the U.S. military. The U.S.-based SpaceX must deliver a fully operational prototype capability by late 2027, officials announced in mid-2026.

Among other roles, the SDN will provide communications pathways to integrate and move data from missile warning and tracking sensors to interceptors in near real time, a capability essential for the Golden Dome initiative, a space-based missile defense shield for the U.S. homeland.

"The SDN Backbone leverages the best of commercial innovation and delivers a strong foundation for the SDN mission set — a huge benefit and enabler for our warfighters," said Space Force Col. Ryan Frazier, who oversees the program.

The SDN Backbone is a proliferated low Earth orbit constellation that will expand a mesh of satellites delivering worldwide communication services, the U.S. Department of War said. It will work alongside the U.S. Space Development Agency's Transport Layer to form a unified architecture providing critical data transport for missions.



**TOP: The SpaceX logo adorns a corporate building in Starbase, Texas.**

**A SpaceX Falcon 9 rocket carrying Starlink satellites launches from Florida in May 2026.**

# SECURING THE SHORELINE




**Japanese and Philippine personnel conduct an amphibious assault drill during Balikatan 2026, the first time Tokyo deployed ground troops to the multinational exercise in the Philippines.**

JAPAN GROUND SELF-DEFENSE FORCE

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