

# FORUM



## DELIVERING STABILITY

**Allies, Partners Strengthen  
Pacific Island Engagements**



# features

- 8 Building Resilience**  
Indo-Pacific militaries adapt, fortify against climate impacts
- 12 Protecting Civilians During Conflict**  
International law mandates that militaries minimize noncombatant harm when at war
- 16 Critical Minerals: A Resource Race**  
Multilateral partners aim to overcome risky supply chains, uphold environmental, social standards
- 24 Unifying Efforts**  
Myanmar's pro-democracy forces seek tipping point against military rule
- 30 Cobra Gold 2023**  
Deepening shared purposes and regional cooperation
- 34 Transnational Repression**  
CCP's covert, often illegal overseas policing draws international condemnation
- 40 Japan's Defense Technology Strategy**  
Nation has plan to acquire, incorporate innovative technologies
- 44 Framework for Success**  
Allies, partners pledge resources, support for resilient Pacific
- 50 Ocean of Data**  
Consortium improves access to technology, data to curb illegal fishing, protect economies and ecosystems
- 54 Unified Resolve**  
Allies, partners converge in Australia for an unprecedented exercise Talisman Sabre
- 60 Stronger Together**  
Special Operations Forces build partner capacity, collective strength





60

# departments

## 4 Indo-Pacific View

## 5 Contributors

## 6 Across the Region

News from the Indo-Pacific

## 66 Contemplations

A joint scientific expedition catches and films fish at deepest depth ever off Japan.

## 67 Parting Shot



### ABOUT THE COVER:

An Australian Army helicopter delivers supplies after cyclones devastated Vanuatu in 2023.

AUSTRALIAN DEPARTMENT OF DEFENCE

Dear Readers,

Welcome to Indo-Pacific Defense FORUM's issue on global resilience.

Indo-Pacific military and security partners are building individual and collective resilience to counter worldwide threats, including those posed by authoritarian regimes and strategic competitors as well as nontraditional security challenges such as natural disasters and mass migration.

Resilience takes many forms. This edition's opening article examines how like-minded militaries are initiating whole-of-government efforts to brace installations against the existential threat of climate change and its range of potential hazards. An in-depth feature explores why international cooperation and evolving sustainability models are essential in enabling a global green energy transition that relies heavily on critical mineral production. Another piece looks at how allied and partner militaries and nations are collaborating to strengthen regional resilience and protect vulnerable nations against climate impacts, particularly in Pacific Island Countries (PICs). In 2023, the United States Agency for International Development (USAID), for example, provided U.S. \$1.5 million to Samoa for community-led initiatives to bolster its ability to withstand disaster-related disruptions. The award is part of USAID's 2022–27 Strategic Framework for the Pacific Islands, a multibillion-dollar, public-private initiative to strengthen community resilience, democratic governance and economic growth in 12 PICs.

Large-scale global exercises allow militaries in the Indo-Pacific to build resilience and demonstrate robust, enduring partnerships. Articles in this edition also highlight the security benefits generated by multilateral exercises such as Cobra Gold in Thailand and Talisman Sabre in Australia. Such drills allow joint and multinational forces to reinforce a shared commitment to regional stability, peace and prosperity. They also enhance interoperability with allies and partners across the Indo-Pacific.

Resilience contributes to resistance. More than two years since the military junta seized power in Myanmar, the resistance coalition, comprised largely of civilians, has demonstrated the power of its resolve. Retired U.S. Army Lt. Col. Miemie Winn Byrd, a professor at the Daniel K. Inouye Asia-Pacific Center for Security Studies, explains the importance of the people's resilience in reaching a tipping point against the junta. She argues that the resistance coalition needs a unified command system and more international support to fully regain control of the country and reinstate democracy.

We hope these articles encourage regional conversations on the value of resilience for Indo-Pacific nations and militaries. We welcome your comments. Please contact us at [ipdf@ipdefenseforum.com](mailto:ipdf@ipdefenseforum.com) to share your thoughts.

All the best,  
FORUM Staff

## IPD FORUM

### Global Resilience

Volume 48, Issue 4, 2023

#### USINDOPACOM LEADERSHIP

JOHN C. AQUILINO  
*Admiral, USN Commander*



STEPHEN D. SKLENKA  
*Lieutenant General, USMC  
Deputy Commander*

JEFFREY T. ANDERSON  
*Rear Admiral, USN  
Director for Operations*

#### CONTACT US

## IPD FORUM

Indo-Pacific Defense FORUM  
Program Manager,  
HQ USINDOPACOM Box 64013  
Camp H.M. Smith, HI 96861 USA

[ipdefenseforum.com](http://ipdefenseforum.com)

email:

[ipdf@ipdefenseforum.com](mailto:ipdf@ipdefenseforum.com)

**Indo-Pacific Defense FORUM** is a professional military magazine published quarterly by the commander of the U.S. Indo-Pacific Command to provide an international forum for military personnel of the Indo-Pacific area. The opinions expressed in this magazine do not necessarily represent the policies or points of view of this command or any other agency of the U.S. government. All articles are written by FORUM staff unless otherwise noted. The secretary of defense has determined that the publication of this magazine is necessary for conducting public business as required by the Department of Defense.

ISSN 2333-1593 (print)  
ISSN 2333-1607 (online)





**DR. MIEMIE WINN BYRD**, a retired U.S. Army lieutenant colonel and now a professor at the Daniel K. Inouye Asia-Pacific Center for Security Studies in Hawaii, specializes in U.S.-Myanmar relations, Indo-Pacific economics, organizational

development and adult learning. Her work focuses on civil-military operations, interagency collaboration and corporate financial accounting standards. She received a bachelor's degree in economics and accounting from Claremont McKenna College and a master's degree in business administration from the University of Hawaii. She earned her doctorate in education leadership from the University of Southern California. **Featured on Page 24**



**DR. SHIGENORI MISHIMA** is vice commissioner and chief technology officer of the Acquisition, Technology & Logistics Agency (ATLA) for Japan's Ministry of Defense. He oversees research and development for the Japan Self-Defense Forces,

international equipment and technology cooperation, and advanced technology enhancement among government, industry and academia. He previously directed ATLA's Department of Technology Strategy and Project Management Division. He has undergraduate and master's degrees in naval architecture from the University of Tokyo, and a doctorate in hydrodynamics from the Massachusetts Institute of Technology. **Featured on Page 40**

## 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 U.S. Indo-Pacific Command, the quarterly magazine provides high-quality, in-depth content on security efforts across the region — from counterterrorism to international cooperation to natural disasters.

Indo-Pacific Defense FORUM offers extensive content online, with new articles posted daily at

**[www.ipdefenseforum.com](http://www.ipdefenseforum.com)**

Visitors can:

- Access exclusive online content
- Browse back issues
- Learn how to submit articles
- Request a free subscription
- Send us feedback



**DOWNLOAD  
OUR APP!**

Search "FORUMNEWS" on iTunes or Google Play to download the free app.

**FORUM ONLINE IS NOW  
IN 11 LANGUAGES!**

Chinese (Simplified and Traditional)  
English  
Hindi  
Indonesian  
Japanese  
Khmer  
Korean  
Russian  
Thai  
Vietnamese

# FORUM



Join us on Facebook, X, Instagram,  
WhatsApp: @IPDEFENSEFORUM and Line: @330WUYNT





## Philippines Names 4 New Camps for U.S. Forces

The Philippine government in April 2023 identified four new military camps, including some across the sea from Taiwan, where rotating batches of United States forces may be stationed indefinitely.

Philippine President Ferdinand Marcos Jr. said expanding the U.S. military presence from the five existing sites under the longtime allies' 2014 Enhanced Defense Cooperation Agreement would boost his nation's coastal defense.

The new sites include a Philippine Navy base in Santa Ana and an international airport in Lal-lo, both in northern Cagayan province. Those locations have infuriated Beijing because they would provide U.S. forces with a staging ground near southern China and Taiwan. (Pictured: Philippine and U.S. Marines conduct a drill during the bilateral exercise Balikatan in the Philippines' Cagayan province in March 2022.)

The other new sites are in northern Isabela province and a Navy camp on Balabac Island in the western province of Palawan.

Palawan faces the South China Sea, a global trade route that Beijing arbitrarily claims nearly in its entirety and where it is taking increasingly aggressive actions to threaten smaller claimant states, including the Philippines.

"That's where more or less U.S. \$3 trillion worth of trade passes. Our responsibility in collectively securing that is huge," said Carlito Galvez Jr., then head of the Philippine National Defense Department.

The four new sites for U.S. forces are "suitable and mutually beneficial" and will be a springboard for humanitarian and relief work during natural disasters and other emergencies, Marcos' office said.

In a statement, the U.S. Defense Department said the new locations "will strengthen the interoperability of the U.S. and Philippine Armed Forces and allow us to respond more seamlessly together to address a range of shared challenges in the Indo-Pacific region." The Associated Press

## PARTNER NATIONS TARGET SPREAD OF MALICIOUS SPYWARE

Nearly a dozen countries in March 2023 called for strict domestic and international controls to counter the proliferation of commercial spyware.

The governments of Australia, Canada, Costa Rica, Denmark, France, New Zealand, Norway, Sweden, Switzerland, the United Kingdom and the United States issued the joint statement.

The countries committed to preventing the export of technology and equipment to end users who are likely to use them for "malicious cyber activity." The statement also said the partners would share information on spyware proliferation, including intelligence to better identify such tools.

Days earlier, U.S. President Joe Biden signed an executive order intended to curb the malicious use of digital spy tools targeting U.S. personnel and civil society.

The order aims to pressure the secretive industry by placing new restrictions on U.S. defense, law enforcement and intelligence agencies' purchasing decisions.

In 2021, the iPhones of at least nine U.S. State Department employees were targeted by an unknown hacker using spyware developed by an Israeli company. In late March 2023, a senior U.S. official said at least 50 U.S. government staffers stationed in 10 countries became victims of commercial hacking tools.

Reuters







# INDIA APPROVES PURCHASE OF MILITARY EQUIPMENT WORTH U.S. \$8.5 BILLION

THE ASSOCIATED PRESS

India in March 2023 approved purchases of missiles, helicopters, artillery guns and electronic warfare systems worth U.S. \$8.5 billion as it seeks to bolster its military.

The Defence Acquisition Council (DAC), the top government body for capital acquisition approvals for the Indian military, approved the orders for all its services, the Indian Defence Ministry said in a statement. All orders will be placed with Indian companies, the ministry said, in keeping with a push by Prime Minister Narendra Modi's government to boost domestic defense manufacturing. (Pictured: India commissioned its first domestically built aircraft carrier, INS Vikrant, in September 2022.)

Flanked by fellow nuclear-armed nations the People's Republic

of China (PRC) and Pakistan, and with tensions along the disputed Himalayan border with the PRC, India is modernizing its mostly Soviet-era military equipment. The focus on the Indian Navy, which accounted for about 80% of the approved acquisitions, comes after New Delhi expressed concern in 2022 over Chinese activity in the Indian Ocean.

The approved purchases include 200 BrahMos missiles, 50 utility helicopters and electronic warfare systems for the Navy. The DAC also approved manufacturing a diesel marine engine, which will be a first for India, and the Air Force's proposal for a long-range, standoff weapon for Sukhoi-30MKI fighter jets. The Indian Army got approval to buy 307 units of 155 mm/52-caliber towed artillery guns, along with high mobility vehicles and gun-towing vehicles. Reuters

## New Japanese Policy to Allow Overseas Defense Funding



AFP/GETTY IMAGES

Japan plans to offer countries financial assistance to help them bolster defenses, marking Tokyo's first unambiguous departure from rules that forbid the use of international aid for military purposes.

Japan's Overseas Security Assistance (OSA) will be managed separately from the Overseas Development Assistance program that for decades has funded roads, dams and other civilian infrastructure, Chief Cabinet Secretary Hirokazu Matsuno said in April 2023.

"By enhancing their security and deterrence capabilities, OSA aims to deepen our security cooperation with the

countries, to create a desirable security environment for Japan," the Ministry of Foreign Affairs said in a statement.

The change comes as Japan undertakes its biggest defense buildup since World War II in a marked shift from the pacifism that is set out in its constitution.

The OSA program prohibits the use of aid to buy lethal weapons that could be used in conflicts, in accordance with principles governing arms exports, the Foreign Affairs Ministry said.

Projects are expected to include satellite communication and radio systems for maritime surveillance, and the first recipients likely will be Bangladesh, Fiji, Malaysia and the Philippines. The ministry planned to begin an OSA feasibility study in those countries, with an eye on strengthening their maritime security. (Pictured: Japanese and Philippine Coast Guard vessels conduct an anti-piracy exercise near Manila.)

Japan is considering providing radars to the Philippines to help it monitor Chinese activity in the contested South China Sea, the Yomiuri newspaper reported in April 2023.

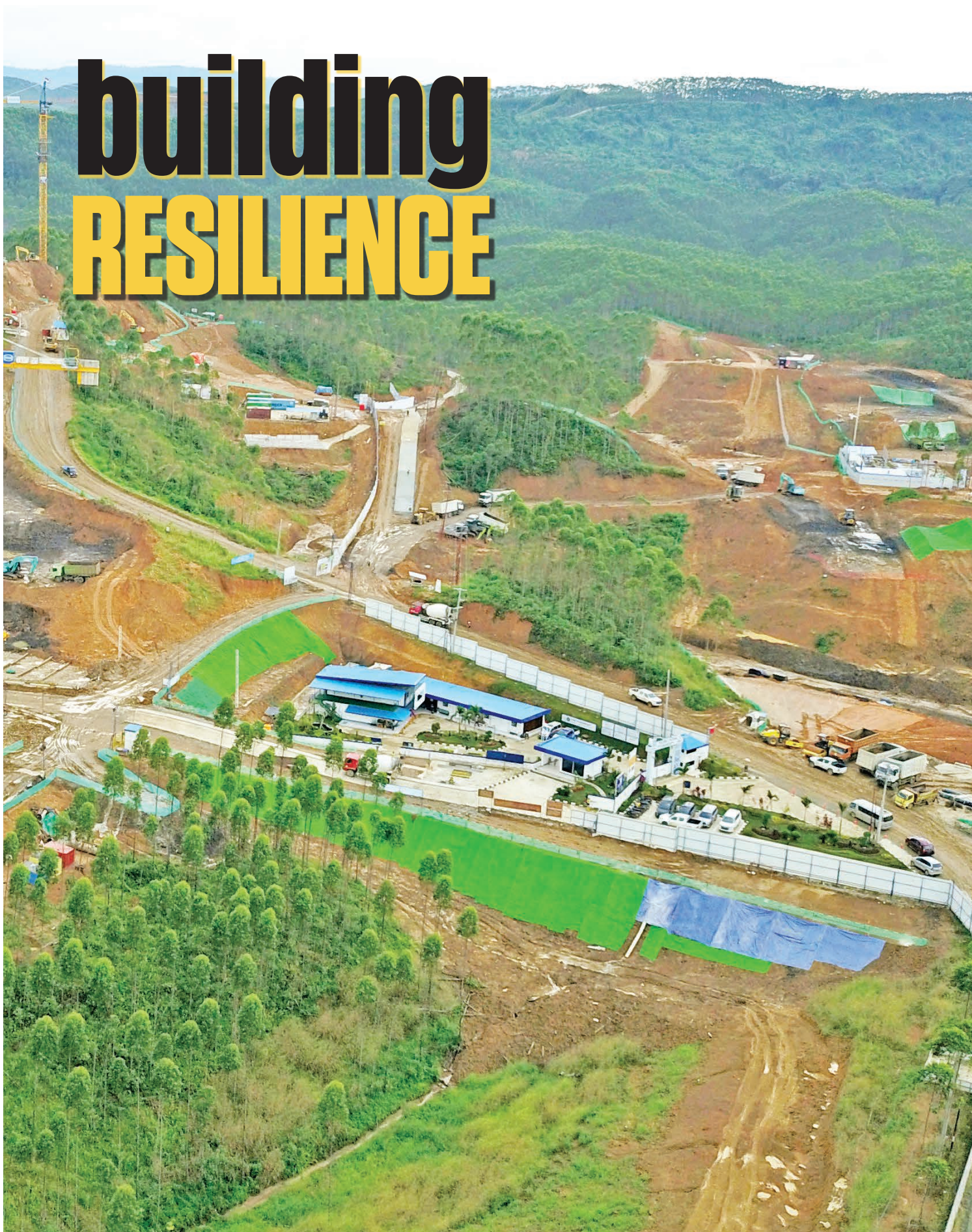
In principle, only developing countries will be eligible for the aid given that it will be provided as grants, according to the ministry.

The decision to expand the scope of international aid to military-related projects follows Japan's announcement in December 2022 of a substantial increase in defense spending over the next five years as Tokyo looks to counter the People's Republic of China's (PRC) growing military.

Japan has also been increasing engagement with developing nations to counter the PRC. Japanese Prime Minister Fumio Kishida in March 2023 announced a U.S. \$75 billion investment across the Indo-Pacific to forge stronger ties with South and Southeast Asia. Reuters



# building RESILIENCE







# Indo-Pacific Militaries Adapt, Fortify Against Climate Impacts

FORUM STAFF | PHOTOS BY THE ASSOCIATED PRESS

**T**he targets are moving at Foxtrot Range, a strategic repositioning as Ewa Beach yields ever more of itself to the advance of a relentless force — the crashing and scouring of Pacific surf and tide. In early 2023, crews began moving the pistol range about 40 meters inland, the first step in relocating four short-distance firing ranges at United States Marine Corps Base Hawaii's Pu'uloa Range Training Facility (PRTF), where troops have honed their marksmanship for a century. The project at the 55-hectare site on the leeward side of the island of Oahu will shield the ranges from coastal erosion while limiting the risk of munitions contaminating the ocean.

“We have a responsibility to protect the natural resources we are entrusted to manage,” Maj. Jeffry Hart, director of the base's environmental compliance and protection division, said in a news release. “As stewards of this land, we must preserve and protect resources while maintaining the operational effectiveness of PRTF to keep Marines, joint force members and law enforcement officers trained and ready.”

From the mid-Pacific to Southeast Asia and beyond, militaries are engaged in whole-of-government efforts to adapt and fortify installations against the existential threat of climate change and its arsenal of challenges — rising sea levels, thawing permafrost, and intensifying floods and storms. “These climate-change effects and associated risks create security challenges and impact defense strategies, plans, capabilities, missions, material, equipment, vehicles, weapon systems and even personnel,” Robert Evans Jr., an engineer with the U.S. Department of the Air Force (DAF), wrote in an August 2022 essay for DAF's Journal of Indo-Pacific Affairs. “Mission planning must include identification and assessment of climate-change effects on missions, incorporation of climate-change effects into plans and procedures, and anticipation and management of these climate change risks to build resiliency, especially for base infrastructure and support systems.”

---

**Indonesia is building a new capital city, Nusantara, in the jungle highlands of East Kalimantan province on the island of Borneo.**

In particular, Evans wrote, as nations pivot their attention “toward China and the threat in the Indo-Pacific, the United States and its allies and partners must evaluate the climate-change effects and risks as related to military basing choices.”

## STRATEGIC SHIFTS

There are few places where such considerations are as acute as Indonesia, a nation of 13,500 islands and 280 million people that recently began the herculean task of building a new capital from the ground up. The current capital — the megacity of Jakarta on the island of Java, whose 11.2 million inhabitants live at an average elevation of 8 meters — is sinking up to 25 centimeters a year, the victim of unrestrained groundwater extraction and the Java Sea's breaching of seawalls. Within two decades, one-third of Jakarta will be submerged, the United Nations estimates.

About 1,400 kilometers northeast of the island of Java, the new capital is rising in the jungle highlands of Borneo's East Kalimantan province. When complete, Nusantara — or “archipelago” in Javanese — will be home to national defense and security infrastructure, including bases for an estimated 30,000 troops and the Indonesian Armed Forces headquarters, analysts say. “The primary consideration in developing military facilities and installations is the safety and security of the personnel and the population, and the effectiveness of the job implementation, function and the form of threats,” Khairul Fahmi, a military expert at Indonesia's Institute of Security and Strategic Studies, told FORUM. “By that, resilience to natural disasters like storms, earthquakes, floods becomes essential in developing military facilities and installations.”

Indonesia's location along the so-called Ring of Fire, a 40,000-kilometer-long belt of seismic instability that encompasses 75% of Earth's volcanoes and produces 90% of its earthquakes, heightens the need for resilient infrastructure. “The need to upgrade current military installations in order to prepare for prospective weather issues, to relocate military sites that are vulnerable, and assess the building and procurement strategy, is the closest impact of the changing weather patterns,” Fahmi said.



By 2100, other major Indo-Pacific cities could be swamped by rising seas, according to a March 2023 article in the journal *Nature Climate Change*. Among them: Bangkok, Thailand; Chennai and Kolkata, India; Ho Chi Minh City, Vietnam; Manila, the Philippines; and Yangon, Myanmar. Costs will rise with the waters, with global damage potentially reaching U.S. \$5.5 trillion this century, the Organisation for Economic Co-operation and Development reported. At the same time, worsening storms and floods mean that buildings and other infrastructure “designed to withstand once-in-a-100-year events are becoming more challenged as these extremes happen more often and with more intensity,” The Associated Press reported in March 2023, citing new research by U.S. National Aeronautics and Space Administration scientists.

## MISSION IMPACTS

Such a scenario threatens to displace tens of millions of people, potentially sparking a widespread security crisis and further straining armed forces dealing with historic demand for humanitarian aid and disaster relief. That has militaries increasingly attuned to the “tremendous threat” of climate change, Abbie Tingstad, co-director of the Rand Corp.’s Climate Resilience Center, told FORUM. “I think some are particularly looking at impacts to mission. These can be the change and frequency of their existing types of missions, and perhaps some new missions coming on board,” said Tingstad, who has a doctorate in geography and is a senior physical scientist with the U.S.-based nonprofit research institution. “Another area in which militaries are taking heed is ... human and infrastructure readiness and resilience.”

Sea levels around Japan have been trending up since the 1980s, with 2022 producing the second-highest average since 1906, according to the Japan Meteorological Agency. In terms of military installations, Japanese and U.S. bases on the Okinawa islands “are among the most vulnerable, as scientific estimates reveal that the sea level around those locations will rise about 30 centimeters or more by the end of 2100, compared with the year 2000,” retired Japan Maritime Self-Defense Force Rear Adm. Kazumine Akimoto, a senior research fellow at the Sasakawa Peace Foundation’s Ocean Policy Research Institute, told The Japan Times newspaper in March 2023.

Japan’s National Defense Strategy, updated in late 2022, notes that climate change “will inevitably further impact future [Ministry of Defense/Self-Defense Forces] operations, including various plans, facilities, defense equipment and security environment surrounding Japan. ... To this end, by [fiscal year] 2027, Japan will promote measures to construct underground command headquarters, and relocating and consolidating facilities in major bases and camps to improve resiliency of respective facilities. In addition, Japan will promote reinforcement of facilities and infrastructure against disasters such

as tsunamis, starting from bases and camps that are anticipated to be damaged significantly and are important for operations.”

Additionally, Japan’s military is boosting its use of solar and other renewable energy sources to lessen reliance on fossil fuel supply chains and electrical grids. “The idea is to adapt military facilities to withstand increasingly challenging climate conditions and strengthen their ability to rapidly recover from disruptions to public infrastructure,” The Japan Times reported.

The Singapore Ministry of Defence (MINDEF), meanwhile, launched the Heat Resilience and Performance Centre in early 2023 to address “the long-term challenges that rising ambient temperature pose to training and operational readiness.” A collaboration among the Singapore Armed Forces, the National University of Singapore and the defense research and development organization DSO National Laboratories, the center incorporates climate simulation, performance evaluation and recovery science technologies to reduce heat stress in troops, which can cause injuries, degrade performance and compromise decision-making. Researchers are studying heat-mitigating clothing and infrastructure, among other advances.

“While the focus of the R&D [research and development] is targeted towards a military context, key fundamental outcomes and approaches will be applicable outside the military to paramilitary and civilian context,” according to a MINDEF news release.

## ‘SHARED COMMITMENT’

Partners are collaborating to buttress the region against climate impacts, particularly in the Pacific Islands, where coastal villagers already are relocating to higher ground as saltwater intrudes into their communities. Under its Indo-Pacific Enhanced Engagement program announced in 2019, Australia “seeks to deliver security-related infrastructure and capabilities with partner nations, contributing to building a region that is economically stable, strategically secure, capable and politically sovereign,” an Australian Defence Department spokesperson told FORUM. “This includes working with Pacific partners to promote resilience to climate change. All Australian-delivered infrastructure meets specific standards that enhance their resilience against natural disasters. ... Australia supports a shared commitment to build Pacific resilience through collective action. Investment in enhanced security infrastructure across the Pacific supports partner nation pre- and post-disaster response mechanisms and collaboration to respond to climate challenges.”

Collective security also is the foundation of a Philippine-U.S. initiative to upgrade infrastructure at nine locations in the Philippines that will host rotating batches of U.S. troops, including four new sites announced in early 2023 under the longtime allies’ Enhanced Defense Cooperation Agreement (EDCA). Washington is investing



**Tidal flooding inundates a neighborhood of Indonesia's capital, Jakarta, which is sinking up to 25 centimeters a year.**

U.S. \$100 million for the improvements, which officials said will support Manila's disaster preparedness and response capacities, create local jobs, and enhance military interoperability. "These new EDCA locations will allow more rapid response for humanitarian and climate-related disasters in the Philippines, as well as respond to other shared challenges," Carlito Galvez Jr., then officer in charge of the Philippine National Defense Department, said in a February 2023 statement.

Regional partnerships focused on climate adaptation and resilience are in stark contrast to the People's Republic of China's environmentally destructive campaign of constructing and militarizing artificial reefs in the disputed waters of the South China Sea. Dredging military bases into existence amid rising seas may well prove an act of folly — a cautionary tale for future generations about the perils of hubris. "It would seem to be a rather precarious situation to conduct a land reclamation project in an area where you were already mostly underwater and, in the future, most likely going to be further underwater," Tingstad said.

### **'CLIMATE-INFORMED' DECISIONS**

The U.S. Department of Defense (DOD) considers climate change a "critical national security threat," including posing a risk to military operations and installations. Rising sea levels "and more frequent and intense storms put individuals, families and whole communities at risk — while pushing the limits of our collective capacity to respond," U.S. Defense Secretary Lloyd Austin noted at the 2021 Leaders Summit on Climate in Washington, D.C. The DOD has enlisted data

analytics, predictive modeling and computer mapping to protect its 5,000 installations worldwide, one-third of which are in coastal areas susceptible to storm surge exacerbated by rising sea levels.

Designed by the U.S. Army Corps of Engineers and unveiled in 2020, the DOD Climate Assessment Tool (DCAT) uses data from hurricanes, wildfires, droughts, flooding and other extreme weather events, as well as analysis of changing sea levels, to assess installation vulnerability based on three factors: exposure, sensitivity and adaptive capacity. "The DCAT enables personnel at all levels of the department — from installation planners to leadership — to understand each location's exposure to climate-related hazards using historical data and future climate projections," according to a DOD news release.

In the Indo-Pacific, the U.S. has committed to sharing the DCAT with allies including Australia, Japan and South Korea, and "continues to collaborate with allies and partners in the Pacific to prepare for a combined response capability for climate-related emergencies," Melissa Dalton, U.S. assistant defense secretary for homeland defense and hemispheric affairs, said during a U.S. congressional hearing in mid-2021, identifying priorities. The DOD "is inculcating a culture of climate-informed decision-making and incorporating climate change into threat assessments, budgets and operational decision-making ... [and] taking care of our people, including members of the Armed Forces and the civilians who serve with them, by buttressing the resilience of our installations and the structures where people work and live." □

FORUM correspondents Gusty Da Costa, Jacob Doyle and Maria T. Reyes contributed to this report.



# PROTECTING CIVILIANS DURING CONFLICT

FORUM STAFF

INTERNATIONAL LAW MANDATES THAT MILITARIES  
MINIMIZE NONCOMBATANT HARM WHEN AT WAR



**T**erritorial disputes, political ambitions and resource competition often spark or escalate armed conflicts. The resulting wars, regardless of their cause, come with complicated consequences. Among them: short- and long-term devastation, and civilian deaths that account for nearly 90% of wartime casualties, according to a 2022 United Nations Security Council report.

One of the grimmest pictures of conflict's toll on the general population is Russia's war on Ukraine, where bystanders have been killed "in their homes and while simply trying to meet their essential needs, such as collecting water and buying food," U.N. High Commissioner for Human Rights Volker Türk said in a news release.

"The very young to the very old have all been affected. Students have seen their education halted or disrupted by attacks on educational facilities, while older people and people with disabilities have faced immense challenges, in some cases unable to reach bomb shelters or having to spend prolonged periods in basements in conditions affecting their health," Türk said in February 2023. "Every day that violations of international human rights and law continue, it becomes harder and harder to find a way forward through mounting suffering and destruction, towards peace."

The war has reverberated across the globe, leading to higher food and fuel costs and deepening misery, especially among the most vulnerable. "The toll on civilians is unbearable," Türk said.

#### 'TAKE ALL FEASIBLE PRECAUTIONS'

The Law of Armed Conflict, also called the International Humanitarian Law, does not prohibit fighting in populated areas, but the presence of civilians increases the obligation of warring parties to limit civilian harm, according to Human Rights Watch, an international nongovernmental organization (NGO) based in New York City. The law requires militaries "take all feasible precautions" to avoid or minimize damage to civilian objects or loss of civilian life.

"These precautions include doing everything feasible to verify that the objects of attack are military objects and not civilians or civilian objects and giving 'effective advanced warning' of attacks when circumstances permit," the NGO reported in February 2023. "The

attacking party is not relieved of its obligation to take into account the risk to civilians simply because it considers the defending party responsible for locating legitimate military targets within or near populated areas."

The International Committee of the Red Cross (ICRC), based in Geneva, Switzerland, published a handbook titled "Enhancing Protections for Civilians in Armed Conflict and Other Situations of Violence" that shares information and tips on safeguarding the innocent. The guide focuses on people deprived of freedoms during an armed conflict or other violent situation, civilians not taking part in an armed conflict or violent situation, and those exposed to risks, such as women and children, the elderly and those displaced from their homes.

"Civilians are not only increasingly directly caught up in the violence, but control over the civilian population is often one of the things at stake in a conflict," according to the ICRC handbook. "The development of such a situation can be attributed to increased intercommunal, ethnic and religious tensions, the collapse of state structures, the struggle for control over natural resources, the widespread availability of weapons, the rise of acts of terror and the proliferation of so-called asymmetric armed conflicts. Nowadays, the general lack of protection in crises affecting civilians caught up in armed conflict and other situations of violence is due, not to an inadequate framework, but to poor compliance."

The ICRC recommends that nations develop at least a partial protection plan for times of conflict, including:

- Present, explain, promote and discuss the implementation of protection activities with relevant authorities.
- Ensure that law enforcement understands its role and is willing to ensure the law is respected.
- Develop a network of reliable contacts among authorities and with influential stakeholders, especially in civil society, that might provide resources during crisis.
- Select regions, periods of time and people to preauthorize for providing services or assistance.
- Implement complementary activities that facilitate protection on behalf of civilians, such as assistance programs and communication activities.
- Establish and build protection activities in the field, including presentations to civilians.

#### Clockwise from top left:

**A U.S. Soldier patrols the border village of Panmunjom in Paju, South Korea, on October 4, 2022, the same day that North Korea fired an intermediate-range ballistic missile over Japan for the first time in five years.** THE ASSOCIATED PRESS

**U.S. Army medics airlift a wounded Soldier during the Korean War in 1951.** UNITED NATIONS/U.S. AIR FORCE

**Police evacuate residents in a Ukrainian city in April 2023.** AFP/GETTY IMAGES

**A man inspects a survival kit for distribution to residents in Kyiv, Ukraine, who lost electricity in Russian attacks.** THE ASSOCIATED PRESS





“While implementing its protection activities, each organization should proactively seek field-based and action-oriented complementarities with other humanitarian actors to ensure the most comprehensive response and therefore the greatest chance of making a difference in the lives of people at risk,” the ICRC handbook states.

### A THREAT TO HUMANKIND

One of the biggest offenders in the Indo-Pacific is North Korea, which continues to develop its nuclear weapons program and launch missiles in defiance of U.N. sanctions. The risk of nuclear weapons being used is “growing at a worrying pace,” Laurent Gisel, head of the ICRC’s Arms and Conduct of Hostilities Unit, testified at the U.N. General Assembly in October 2022. “Nuclear weapons are one of the biggest threats to humanity,” Gisel said. “Their use would cause irreversible harm to future generations and threaten the very survival of humankind.”

There are more than 13,000 nuclear weapons worldwide, Gisel testified, and that number is expected to grow along with the risk of weapons being used.

“This risk is further fueled by the modernization of nuclear arsenals, including the development of smaller nuclear weapons alleged to be more useable, and technological developments that may increase the vulnerability of nuclear weapons and their command and control systems to human or machine errors and

cyberattacks,” Gisel testified. “These developments are taking place despite the overwhelming evidence of the horrific, long-term and irreversible effects of nuclear weapons on health, the environment, the climate and food security — despite the absence of adequate capacity for a humanitarian response in the case of nuclear weapon use, and despite the risk of escalation that any use would involve.”

Growing tensions on the Korean Peninsula due to Pyongyang’s missile threats prompted South Korean President Yoon Suk Yeol in August 2022 to order an update of his country’s military operational plan (OPLAN), which outline contingencies based on various wartime scenarios.

“We need to urgently prepare measures to guarantee the lives and property of our people, including updating the operational plans against North Korea’s nuclear and missile threats that are becoming a reality,” Yoon said, according to Reuters.

Current plans don’t consider the extensive advances North Korea has made in developing weapons of mass destruction. “This is the right thing to do,” a senior United States defense official said, according to Voice of America.

“The strategic environment has changed over the past few years and it’s appropriate and necessary that we have an [operational plan] that is updated and keeps it in tune with the strategic environment,” the official said. South Korea’s capabilities have improved as well, and the OPLAN must account for that, authorities added.



“OUR ULTIMATE GOAL IS PEACE AND NOT CONFLICT, AND TOWARD THAT END, OUR COUNTRIES HAVE WORKED SIDE BY SIDE TO DETER LARGE-SCALE CONFLICT, TO STRENGTHEN OUR COMBINED CAPABILITIES AND TO DEFEND THE RULES-BASED INTERNATIONAL ORDER THAT KEEPS US ALL SECURE.”

– U.S. DEFENSE SECRETARY LLOYD AUSTIN

The OPLAN integrates the combined defense posture of Republic of Korea (ROK) Forces and U.S. Forces Korea. An updated plan would have three phases: intercepting a North Korean invasion across the Demilitarized Zone (DMZ), mounting a counterdefense to prevent troops from crossing the DMZ, and ROK-U.S. combined forces crossing the DMZ in a counterattack, according to *The Diplomat* magazine.

“Our ultimate goal is peace and not conflict, and toward that end, our countries have worked side by side to deter large-scale conflict, to strengthen our combined capabilities and to defend the rules-based international order that keeps us all secure,” U.S. Defense Secretary Lloyd Austin said in January 2023 following a meeting with South Korean Defense Minister Lee Jong-Sup. “Our commitment to the defense of the ROK remains ironclad. The United States stands firm in its extended deterrence commitment, and that includes the full range of the U.S. defense capabilities, including our conventional, nuclear and missile defense capabilities.”

### HOW TO PREPARE CIVILIANS: A LESSON FROM SOUTH KOREA

The South Korean government conducts regular evacuation and emergency drills and has issued contingency plans to embassies for distribution to foreign nationals who might be affected. The guidelines provide instructions based on four alert levels:

#### • LEVEL 1: HEIGHTENED ALERTNESS

**Indicators:** Continuous provocations such as missile and nuclear tests and inflammatory rhetoric. This is the default alert in South Korea.

**What to do:** Remain calm but be vigilant. Exercise caution and monitor announcements from the embassy and the South Korean government.

#### • LEVEL 2: RESTRICTION OF MOVEMENT

**Indicators:** North Korean and ROK troop buildup along borders. Embassies and international organizations based in Seoul issue advisories and warnings restricting travel to certain locations. The Ministry of Public Safety and Security issues frequent advisories on civilian safety. There may be more military encounters in isolated places, most likely along the DMZ.

**What to do:** Minimize movement and avoid places of potential conflict. Follow instructions from police or civil defense forces. Prepare for possible evacuation to

local shelters. Prepare a survival kit of essential items to last 72 hours.

#### • LEVEL 3: VOLUNTARY REPATRIATION

**Indicators:** Encounters between North Korean and ROK forces along borders increase. The South Korean government issues evacuation instructions for border areas. More military personnel begin to deploy and arrive from the U.S. and possibly Japan. Troop buildup along the DMZ increases. Embassies and international organizations based in Seoul advise against travel to South Korea.

**What to do:** Local embassies advise nationals to leave South Korea voluntarily and may provide financial assistance to do so. Travel with a survival kit, which should be checked every six months to ensure readiness.

#### • LEVEL 4: MANDATORY EVACUATION

**Indicators:** Large-scale military conflict is imminent. Embassies prepare their nationals for mass evacuation from South Korea. South Korea declares a national emergency. Civilian entities halt operations. South Korean men registered for conscription are called into service.

**What to do:** Head to a designated evacuation point, likely a location farther south, away from the DMZ. Each person should have a survival kit.

### BUILDING RESILIENCE

Armed conflict presents nuanced challenges, but being unprepared to protect civilians shouldn't be one of them. Resources such as the ICRC and the U.N., and examples like South Korea provide a starting point for developing a plan. “It can be hard to find often-invisible scenarios where the rules of war have saved lives,” according to the ICRC. “We don't see the stories of the pilots who decided not to drop a bomb after assessing that too many people would be harmed. We don't see footage of health workers crossing frontlines in conflict to provide essential health care.”

While violations of international humanitarian laws exist, there also are operational plans that protect civilians and combatants who respect the rules of engagement and honor their obligations to do no harm to civilians.

“There is undoubtedly terror, pain and heartbreak in conflict,” according to the ICRC. “There is, however, resilience, rebuilding and restoration as well. The people impacted by conflict, as with conflicts themselves, are multifaceted.” □





# Critical Minerals: A RESOURCE RACE

Multilateral Partners  
Aim to Overcome  
Risky Supply Chains,  
Uphold Environmental,  
Social Standards





Indonesian President Joko Widodo, right, helps charge an electric car in March 2022 at the launch of the country's first public charging station. AFP/GETTY IMAGES



Rare-earth elements are essential components of wind turbines such as these in Gujarat, India. THE ASSOCIATED PRESS

FORUM STAFF

**P**owering a global green energy transition — one that combats the destabilizing effects of climate change on governments, militaries and citizenry — will require vast increases in the world's critical mineral production. Meeting explosive demand while easing impacts on Earth and its inhabitants will demand international cooperation and evolving models of sustainability.

Environmental devastation surrounding mineral mining and processing is well documented, particularly in the People's Republic of China (PRC), where a near-monopoly on the world's critical mineral supplies is driven by economic factors as much as mineral endowment. Concerns over inequitable treatment of Indigenous people and developing nations surround PRC and other projects worldwide. Supply chains concentrated in limited areas mean access to minerals could be unreliable at best. At worst, the vital materials could be — and have been — weaponized against import-dependent nations.

Multilateral partnerships forming worldwide aim to diversify supply chains and address the environmental and social costs of producing critical minerals. For example, the Minerals Security Partnership (MSP), with members Australia, Canada, the European Union, Finland, France, Germany, Italy, Japan, Norway, South Korea, Sweden, the

United Kingdom and the United States, formed in 2022 to support sustainable mineral sourcing and ethical mining.

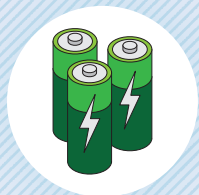
### Transformative Minerals

Critical minerals are those that governments, militaries and industries recognize as essential to technologies, economies, defense and security. They are key components in smartphones, computers, fiber-optic cables, and medical and defense equipment in addition to low-emission technology. Critical minerals include familiar elements such as cobalt, graphite and lithium, which have uses ranging from electric vehicle (EV) batteries to alloys for jet engines. More obscure rare-earth elements (REE), such as lanthanum used in night-vision goggles and hybrid automobile batteries or samarium used in laser technology and precision-guided weapons, are also key. A worldwide move to cleaner energy could increase demand for certain minerals by nearly 500% in less than three decades, estimates the World Bank's Climate Smart Mining Initiative.



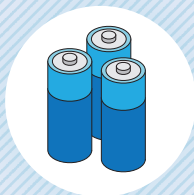
# Minerals Considered Critical for a Clean Energy Transition

## Minerals/Elements and End-Use Examples



### Cobalt and Nickel

Rechargeable batteries, heat-resistant alloys



### Graphite

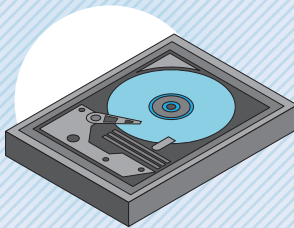
Batteries, fuel cells



### Lithium

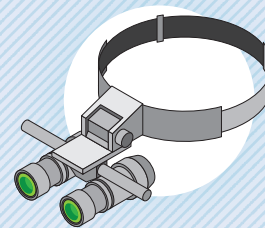
Rechargeable vehicles, computer and smartphone batteries

## Rare-Earth Elements and Some Common Uses



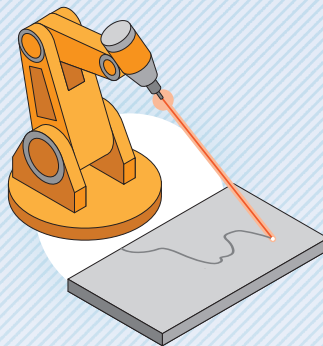
### Dysprosium

Permanent magnets, data storage devices, lasers



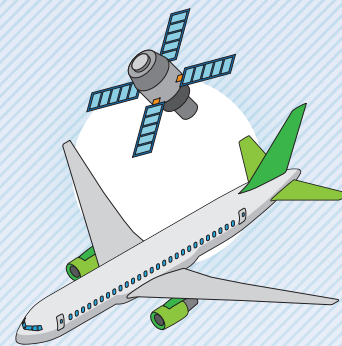
### Lanthanum

Rechargeable batteries, night-vision goggles



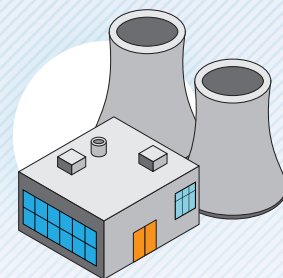
### Neodymium

Permanent magnets, medical and industrial lasers



### Praseodymium

Permanent magnets, batteries, aerospace alloys



### Samarium

Permanent magnets, nuclear reactor components, cancer treatments



Powerful magnets made from rare-earth elements are vital for technologies including satellite communications. AFP/GETTY IMAGES

Sources: International Energy Agency, U.S. Geological Survey, U.S. Army FORUM ILLUSTRATION



The PRC largely controls processing markets for key minerals, refining more of the world's cobalt, lithium, nickel and REEs than any other country, even in cases when it is not a top producer of the raw mineral. Analysts say the PRC created a lowest-cost option by offering its companies inexpensive land and energy, in addition to lax environmental regulations. The result: Most technology-grade minerals are refined in the PRC regardless of where the ore was mined.

Other nations, however, hold larger supplies of the critical minerals. The world's largest cobalt reserves are in the Democratic Republic of the Congo (DRC), Australia and Indonesia, respectively. Australia and Indonesia claim the largest nickel reserves, followed by Brazil. Turkey has the largest graphite reserves, followed by Brazil and the PRC. Chile, followed by Australia, boasts the world's largest reserves of lithium with the PRC a distant third.

The PRC is home to the world's largest REE reserves, although Australia, India, Japan, the U.S. and others are increasing extraction and refining activities. A strong, lightweight class of metallic materials, REEs are vital for powerful magnets that power wind turbines, EV motors, satellite communications, missile guidance systems and myriad other technologies. Many of the elements, despite

## Most technology-grade minerals are refined in the PRC regardless of where the ore was mined.

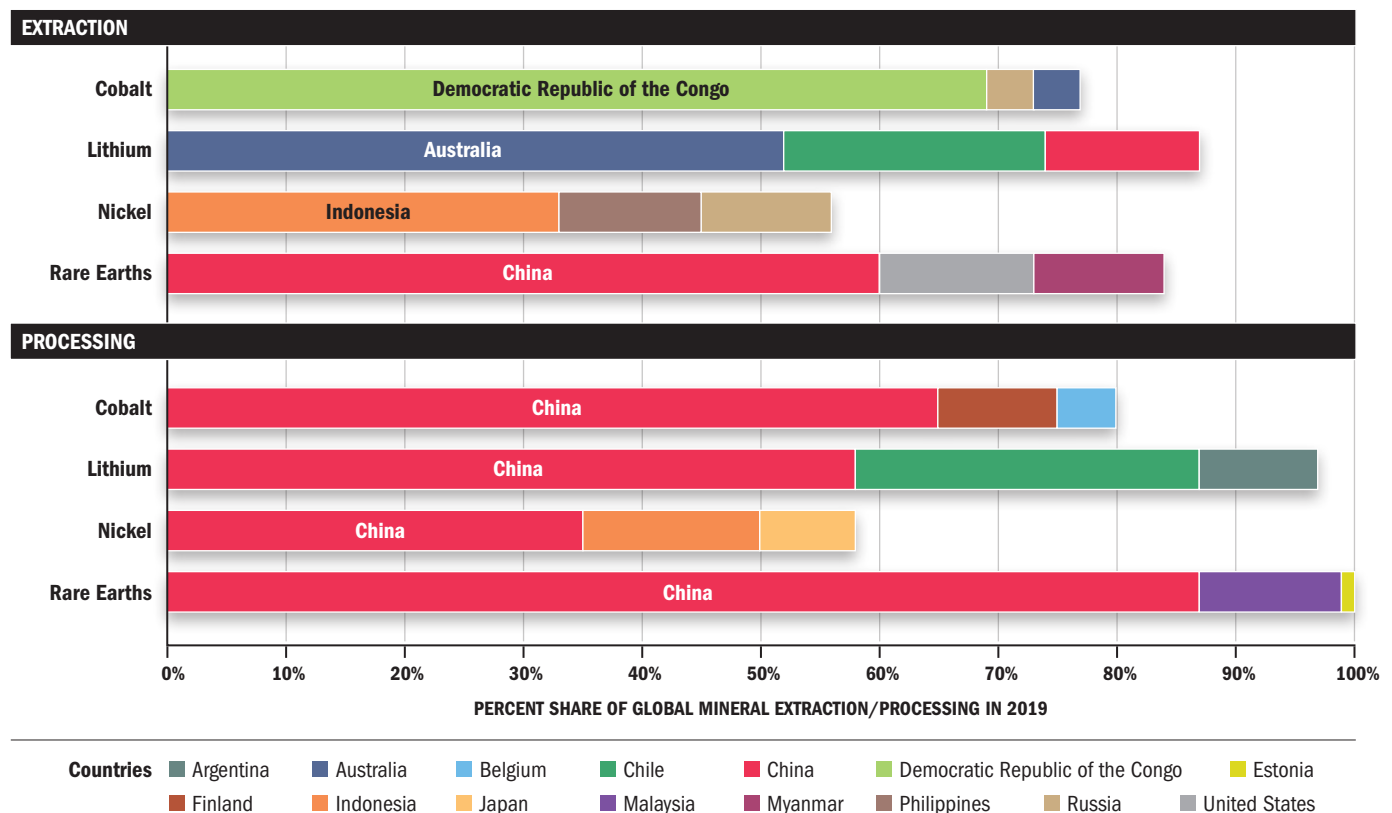
their classification, are “relatively abundant” in Earth's crust, according to the U.S. Geological Survey, but are rarely found in a pure form and require processing to be separated. REEs are also linked to environmental destruction that can result from recklessly mining and processing the materials.

### ‘Cannot Undo the Harm’

The PRC's Bayan Obo mine in the Inner Mongolia region is the world's largest REE mine and, coupled with the nearby Baotou processing facility, the most notorious. In her 2019 book, “Rare Earth Frontiers: From Terrestrial Subsoils to Lunar Landscapes,” Julie Klinger, an assistant professor of geography at the University of Delaware in the U.S., describes the forms of cancer associated with exposure to radioactive and other contaminants

## PRC Largely Controls the Processing Market for Critical Minerals

The share of key minerals extraction and processing in top-producing countries



Source: International Energy Agency, “The Role of Critical Minerals in Clean Energy Transitions”



A worker shovels mining waste from underneath a pipeline transporting crushed mineral ore to a dam on the outskirts of Baotou in China's Inner Mongolia region. REUTERS

from REE extraction and refining in the remote mining district, once populated by nomadic Mongolian pastoralists. She also cites the debilitating conditions that result from other REE extraction- and processing-related toxins collecting on soil, being absorbed by crops or ingested by livestock, and concentrating in drinking water. “It is, heartbreakingly enough, often possible to distinguish true natives from migrants by the skin lesions caused by arsenic poisoning and by the malformed bones and decaying teeth which are symptoms of chronic fluorosis,” Klinger wrote.

The mining produces dust laden with heavy metals and radioactive material that occur in rare-earth reserves. Separating the elements from rock involves a toxic cocktail of chemical compounds. By some estimates, refining less than 1 metric ton of REEs can leave behind more than 1,800 metric tons of toxic waste. In the PRC, the byproducts include poisoned soil and crucial water supplies threatened by the resulting waste, such as the unlined artificial lake in Baotou filled with an estimated 180 million metric tons of “radioactive slurry” 10 kilometers north of the Yellow River, an important water source for more than 100 million people.

While Klinger says satellite evidence suggests that the PRC has remediated some of the land destroyed by decades of mining and processing across China, there is less available research to show an investment in public health burdens. Many chemicals released by irresponsible mining can stay in the body and cause multigenerational health defects, Klinger said. “When it comes to mining and exposure to industrial waste, you cannot undo the harm that is done,” she told FORUM.

The PRC has traditionally applied lax environmental

standards to its mining, inside and outside the country, Sharon Burke, a global fellow with the Environmental Change and Security Program at the U.S.-based Wilson Center, said in a February 2023 webcast on critical minerals. “Now, to be fair, the entire mining sector doesn’t have a sterling history here,” she said. “There’s a long history of there being problems on all fronts. Increasingly though, in recent years you’ve seen that a lot of mining companies are trying to do much better and develop a better social license to operate. And that has included their environmental conduct.” However, the PRC has not “tried all that hard to do better on sort of rule of law and regulatory fidelity around mining issues,” she said.

### Overseas Exploitation

The PRC’s vast overseas mining investments have also come under scrutiny. Among the examples:

- Between 2013 and 2020, The Business & Human Rights Resource Centre, a global nongovernmental organization (NGO), recorded more than 230 human rights complaints in Chinese-owned mining and metals industries. Mining companies in the PRC responded to those complaints in less than a quarter of cases, according to the NGO. “Chinese companies appear reluctant to engage with civil society openly and transparently,” Golda S. Benjamin, the group’s program director, said in the report.
- PRC investments in Indonesia have sometimes created minimal profits for local miners that won’t



**Toxic waste from the processing of rare-earth elements fills an artificial lake in Baotou, the largest industrial city in China's Inner Mongolia region.**

AFP/GETTY IMAGES



be sufficient to manage environmental damage caused by extraction, reported the U.S.-based Center for International Private Enterprise (CIPE). Indonesia's Corruption Eradication Commission also warned that Chinese investors create a scenario in which officials could be bribed to relax environmental regulations. In Indonesia and elsewhere in Southeast Asia, CIPE reported, investments from the PRC have been linked with corruption, importing illegal workers, undermining regulations and evading taxes.

- Africa's mining sector is largely controlled by Chinese firms, which have come under fire for worker mistreatment and unsafe practices. In the DRC, President Felix Tshisekedi has criticized a minerals-for-infrastructure deal his nation struck with the PRC in 2008, saying the PRC profited from African minerals without releasing the promised U.S. \$6.2 billion, the Bloomberg news agency reported. "There's nothing tangible, no positive impact, I'd say, for our population," Tshisekedi said in January 2023.
- Across Latin America, Chinese mining concerns have been accused of ignoring basic obligations for workers and surrounding communities. The abuses range from refusals to share required environmental studies and damage to ecosystems to the illegal evictions of Indigenous families, according to the International Federation for Human Rights.



## The Paris Agreement

The United Nations' 2015 climate conference in Paris produced an international accord now endorsed by 195 nations. The agreement, operating on a 5-year cycle of increasingly ambitious climate actions, aims to address and curb the effects of climate change. Among the key points:



### Temperature

- Working to limit this century's average global temperature increase to 1.5 degrees Celsius.



### Reducing Emissions

- Committing to publicly released national plans for curbing greenhouse gas emissions.
- Aiming for emissions to peak "as soon as possible" and to achieve net zero emissions by 2050.



### Transparency

- Reporting progress toward emissions-reduction targets and allowing outside experts to evaluate success.



### Burden Sharing

- Providing financial resources to help developing nations cut emissions.
- Creating a fund to provide financial assistance for nations affected by climate-fueled extreme weather.



## Partnering for Change

The Minerals Security Partnership has identified 16 mining, recycling and refining projects to support, which include efforts in East Asia and the Pacific region, Jose Fernandez, the U.S. undersecretary of state for economic growth, energy and the environment, told the Politico news outlet in January 2023. The extraction and refining projects must comply with a host of environmental regulations to secure support from the partnership, he said. Fernandez added that reputable mining concerns see environmental stewardship as a necessity. “They won’t make investments in projects that destroy precious rainforests, that are not committed to remediation of mine sites or that require payoffs to government officials,” he said during the 2023 Investing in African Mining Indaba, a Cape Town, South Africa, conference. “They won’t do it. Their shareholders won’t allow it, their customers will reject them and our laws will punish such conduct.”

Particularly in Australia, Europe and North America, Klinger says, industry leaders are adamant about complying with environmental regulations. She warns that those rules need to be tailored to the specific type of mineral being extracted, stored and processed. “There’s room for a great deal of precision and sophistication as we work to build up these industries as quickly as possible,” she said, adding that continued government support could help ensure mining companies act sustainably. “We’re effectively demanding that this has to be clean and green but on the other hand saying you have to survive in a cutthroat economy.”

Klinger also insists now is the time to focus on recycling in the critical minerals race even though there’s currently limited waste, such as used EV batteries.

“What if, 20 or 30 years from now, we still haven’t invested in the infrastructure?” she asked. “We do need to build out our recycling infrastructure in parallel with mining facilities.”

Expanding recycling opportunities is among the projects the MSP has agreed to support, according to Fernandez, who pointed to electronic scrap and other waste as a potential source of needed minerals. For instance, by 2040, 10% of EV battery minerals could come from recycled copper, lithium, nickel and cobalt. With EVs on track to make up half the global market before then, the amount could be significant, he said.

## Risky Supply Chains

The PRC controls more than half the production of graphite and REEs, according to the Paris-based International Energy Agency (IEA). It also is the leading importer of raw materials mined elsewhere and has invested heavily in foreign mining, such as in cobalt from the DRC, nickel from Indonesia, and lithium from Argentina, Australia, Chile and other nations. Subsequently, Beijing dominates processing for minerals such as nickel, copper, lithium and cobalt, and manufactures or assembles 75% of the globe’s solar panels and EV batteries. (See “PRC Largely Controls the Processing Market for Critical Minerals,” Page 19.) “The risk of supply chain disruptions and volatile prices is exacerbated by the fact that clean energy technology supply chains are highly concentrated,” the IEA said in its 2022 World Energy Outlook.

Nations committed to addressing climate change are responding to vulnerabilities by securing supply chains. Australia, one of the world’s largest critical mineral suppliers, agreed in early 2023 to expand its mineral

Indonesia’s nickel reserves are among the world’s largest. The metal is extracted at mines such as this one in Sulawesi.

AFP/GETTY IMAGES





trade with India and has signed critical mineral deals with Japan, South Korea and the U.S., the Reuters news agency reported. Japan and the U.S. agreed in March 2023 to promote mineral trade, share information and support efficient approaches to sourcing raw materials. MP Materials, a U.S.-based REE producer, also committed to supply a Japanese magnet maker with key materials, which will be refined in the Philippines and Vietnam.

### Flexing Mineral Muscle

The PRC's investment in minerals, particularly in REEs, dates almost to its founding in 1949 and was rooted in a goal of self-sufficiency, Klinger says. Beijing's national strategy on rare-earths and other critical minerals solidified in recent decades, according to analysts. It included low labor costs, a willingness to sustain environmental impacts and generous state subsidies. In 2018, the U.S. Department of Defense (DOD) wrote that the PRC had "strategically flooded the global market with rare earths at subsidized prices, driven out competitors and deterred new market entrants."

The report also pointed to a 2010 dispute in which Beijing blocked REE exports to Japan after Tokyo's detention of a Chinese trawler captain whose boat collided with Japan Coast Guard vessels as it tried to fish near the Japanese-controlled Senkaku Islands in the East China Sea. "When China needs to flex its soft power muscles by embargoing rare-earths, it does not hesitate," the DOD reported.

More recently, Beijing has repeatedly threatened to cut off REE exports to the U.S. Beijing's state-run People's Daily newspaper reported in 2019 that the country could play the "rare-earths card." A year later, the PRC responded to a U.S.-Taiwan defense deal with a warning that it could halt REE supplies to defense manufacturers. In July 2023, the PRC said it would restrict international exports on two rare metals, gallium and germanium, used in products including computer chips and solar panels. Both are considered critical minerals.

### A Chance to Get it Right

Nations with robust mining industries and commitments to ethical extraction, such as Australia, are positioned to become suppliers of choice for the components that will build a clean energy future, U.S. Counselor for Economic Affairs Michael Sullivan said at a March 2023 battery minerals conference in Perth, Australia. "The United States cannot develop, resource and manufacture all the technology to meet global climate goals. Neither can Canada, Australia, Europe, Japan, China or any other one country," Sullivan said, according to Mining Weekly magazine.

Australia supplies about half of the world's lithium and is a top producer of cobalt. The nation is a significant producer of rare-earths, copper, graphite and other minerals crucial to cleaner energy. It has also



A worker walks past bags of rare earth concentrate at the Mount Weld mine, northeast of Perth, Australia. REUTERS

adopted the "Towards Sustainable Mining" framework to help companies improve relationships with Indigenous and other communities, as well as manage and advance environmental stewardship.

Protections for certain Indigenous communities include a requirement for mining consent. Australia's Organisation for Economic Co-operation and Development recommends community engagement throughout the life span of mining projects. In Western Australia, resource contracts must be made public, and numerous states require closed mines to be rehabilitated until they are "safe, stable, nonpolluting and allow a sustainable new land use." Such environmental, social and governance (ESG) standards protect investments because global consumers demand transparency and environmental stewardship, analysts say. Developing a stronger rule of law and an approach to mining that respects Indigenous rights, along with environmental issues and other aspects of fair governance, can create an advantage for companies that put in the effort, said Burke, the Wilson Center fellow. "There's always a price to pay when you do things wrong, and the United States has the opportunity to get it right with our allies and our partners. And I think that becomes for us a really strong benefit in strategic competition" she said in the center's "Report on Critical Minerals" webcast.

Fernandez, of the U.S. State Department, has said that MSP support, which can include guarantees or financing from member export credit agencies, development institutions and the private sector, will require projects to adopt ESG principles. "Through our work on responsible mining, the MSP partners seek to move away from unsustainable development toward a framework that prioritizes transparency, community welfare, and environmental protection," he said in Cape Town. Partners in the MSP, he said, are betting on the belief that ethical principles across the critical minerals industry can improve outcomes for nations, their populations and the planet. □



UNIFYING EFFORTS  
**AGAINST**  
THE MILITARY JUNTA





# Myanmar's pro-democracy forces seek tipping point against military rule

LT. COL. (RET.) DR. MIEMIE WINN BYRD/DANIEL K. INOUE ASIA-PACIFIC CENTER FOR SECURITY STUDIES

**T**wo years after seizing power in a coup, the Myanmar military is on the verge of collapse. Coup plotters have failed to gain control of the country since they overthrew its democratically elected government and detained its leader, Daw Aung San Suu Kyi, and other high-ranking officials on February 1, 2021.

The coup was initially met with widespread peaceful protests and civil disobedience. However, the military junta's relentless, brutal crackdown transformed the nonviolent protests into armed resistance. The military's oppression across the country has caused a humanitarian crisis, instability and security challenges that have spread beyond Myanmar's borders.

The resistance coalition, led by the National Unity Government (NUG), has mobilized more than 90% of the population, including many women, established the People's Defense Force (PDF) and is tactically cooperating with battle-hardened ethnic revolutionary organizations (ERO). These efforts reveal how the resilience of the population has empowered a movement to put tremendous pressure on the junta. Burdened by its own endemic corruption, cronyism and conceit, the military has lost its combat effectiveness and professionalism. It has devolved into an armed crime syndicate. As such, it is unable to battle on the ground against even a loose coalition of eclectic forces: poorly trained civilians, organized and resourced PDF personnel, and experienced EROs. The junta relies on airstrikes against towns and villages to cut the people's support for the NUG, PDF and EROs.

While the junta crumbles under its own ineptitude, the resistance coalition must have a unified command system and tangible support from the international community to consolidate its successes and to reach a tipping point against the military.

## History of Instability

Myanmar, also known as Burma, has a long history of political instability, primarily under the rule of brutal military dictators from 1962 to 2011. The military, which claimed to be the guardian of the country's stability, oppressed ethnic minority groups, leading to the world's longest-running ethnic insurgencies. In 2011, the junta attempted to transition to a civilian government to diversify away from the People's Republic of China (PRC) and reengage with the West. However, the military's attempts to secure its power by reserving 25% of Parliament seats for active-duty military members and

requiring 75% of Parliament to amend the Constitution were unsuccessful in suppressing the people's will.

In 2015, Myanmar's civilian political party, the National League for Democracy (NLD), led by Daw Aung San Suu Kyi, won the general elections and came into power. The NLD won another landslide victory in the 2020 elections. However, the military, led by Gen. Min Aung Hlaing, alleged fraud and seized power in a coup. The coup was widely seen as illegitimate internationally and domestically and sparked protests and civil disobedience from citizens demanding the restoration of democracy. The junta responded with force, using live ammunition, tear gas and water cannons to disperse crowds. The junta then declared itself the State Administrative Council, and security forces began arbitrarily arresting, torturing and killing protesters and their families, transforming the people's peaceful movement into an armed resistance.

The crisis deepened as assaults on civilians forced many to flee to neighboring countries, and airstrikes and the burning of villages increased the flow of internally displaced people and refugees. As of March 2023, over 1.6 million people had been displaced since the coup, and nearly 18 million people needed assistance accessing food, water and medical care, according to the United Nations. The junta has imposed internet blackouts and blocked access, making it difficult for relief organizations to reach those in need. The humanitarian crisis in Myanmar continues to worsen, and the international community has condemned the junta's actions and called for the restoration of democracy.

## A Military Junta Teetering on the Edge

Despite support from the PRC and Russia, the junta's forces continue to lose ground to resistance coalition forces. The military's control has particularly eroded in the Sagaing and Magway regions, where the PDF has driven most of the junta's administrators from their posts. The junta has also lost border areas to local EROs. By mid-April 2023, the junta controlled less than half of the country, or roughly 72 of the 330 townships, according to independent experts.

Junta forces have sustained significant losses as they fight on multiple fronts. At the same time, the military's capacity to recruit and train troops has vanished, "triggering the desperate step of dismantling key police functions across the country and sending police officers to the front lines," the U.S. Institute of Peace (USIP) reported in July 2022. After the coup, the Myanmar



**Protesters hold portraits of deposed Myanmar leader Daw Aung San Suu Kyi during a demonstration against the military junta in March 2021.**

THE ASSOCIATED PRESS

Defense Services Academy, for the first time in its 67-year history, was unable to fill its freshman class, The New York Times newspaper reported in November 2021.

Most personnel are afraid and ashamed to publicly acknowledge their military affiliation. According to ex-combatants who defected, 70% of soldiers no longer have the will to fight. The defectors said they felt compelled to leave the military after being ordered to shoot civilians. Many couldn't leave, however, because the junta has moved military families into compounds and restricted their movement, effectively holding them hostage. One defector, an air force pilot, said armed guards surround a pilot's home when he enters the cockpit and leave only after he completes his bombing run. Many military family members are forced to serve in the conflict and provide base security without pay.

Defections and desertions have triggered a morale crisis within the ranks. A battalion commander who defected in mid-2022 said his unit dwindled to 150 personnel from its full contingent of about 800. Many commanders pocket the salaries of soldiers who defected or were killed in action, leaving the junta leadership with a poor grasp of personnel strength. Over 10,000 security personnel, including 3,000 military and 7,000 police, have defected, according to Australian National University.

The ground losses resulting from low morale and broken logistics are not surprising. The junta primarily relies on air

power to oppress the population and the coup plotters continue to miscalculate the people's resolve against military rule. The junta's disregard for public welfare extends to its treatment of its own troops. The military leaders increasingly are isolated and focused solely on self-preservation and self-interest. They believe the country can only be controlled through mass human suffering. Given that mindset — and barring the possibility of resistance forces using overwhelming force — deploying more strategic, nonlethal tactics may be the only way to force the junta to negotiate.

### **Moving Toward Unity**

While the military disintegrates under its own mismanagement and corruption, the resistance coalition must cooperate to consolidate and maintain its gains. Although ethnic armed organizations (EAO), the armed wings of the EROs, have been cooperating with the NUG in training, supporting and equipping the PDF since the coup, a more coherent unity of command is needed to unify efforts across all groups.

The EAOs have featured prominently in Myanmar's political landscape for decades, fighting for greater autonomy and control over their territories in response to the central military government's oppression and discrimination against ethnic minorities, which account for about 30% of the population. The nearly two dozen EAOs represent different ethnic groups, each with distinct territories, histories and grievances.



To achieve unity of command, the EROs need guarantees of a federal democracy where they have autonomy and equality within the political system. The trust required to enable such unity has been elusive because of historical misunderstanding and broken promises by the Burman majority, which is now represented by the NLD. Although the NUG has given verbal assurances, the EROs remain concerned about how such guarantees will be enforced once democracy is restored. In March 2023, the Federal Political Negotiation and Consultative Committee, a bloc of seven powerful EAOs, stated that although they have agreed to cooperate with the Burman majority, they have to rely on themselves to gain their rights and establish a federal democracy. The NUG needs to provide the EROs with greater assurances to strengthen the resistance coalition.

### International Response

The international community has called for the restoration of democracy in Myanmar, the release of all political prisoners and a global arms embargo on the nation. In December 2022, 12 of the U.N. Security Council's 15 members voted to denounce the military's human rights violations, but India, the PRC and Russia abstained.

The European Union, United Kingdom and United States have imposed sanctions on the military junta and its leaders, including freezing assets and banning travel. The U.S. Congress passed the Burma Act in December 2022, authorizing

nonlethal technical support to the NUG, PDF, EAOs and ex-members of the Myanmar military.

From the beginning of the coup, the PRC and Russia have generally favored the junta but provided support to both sides, likely an attempt to protect their significant investments in Myanmar. Under its One Belt, One Road infrastructure scheme, for example, the PRC has major investments at stake in projects to build railroads, highways, oil and gas pipelines, and at least one seaport in Kyaukpyu on the Indian Ocean, as part of the China-Myanmar Economic Corridor. The construction of a hydropower dam on the Irrawaddy River in Kachin State also hangs in the balance. Ninety percent of the electricity produced by the dam would be exported to the PRC, according to an October 2022 report by the USIP.

The PRC also has become increasingly involved in Myanmar's internal affairs, despite Beijing's claim to be following a policy of noninterference. It has maintained its close relationship with the military but also attempted to placate ethnic armed groups. Beijing's continued economic and diplomatic support for Myanmar, and its refusal to condemn the junta, has raised concerns about its motives and drawn widespread criticism.

While calling for a peaceful resolution to the conflict, the PRC has continued to supply both sides with weapons, in part to maintain leverage over each, according to analysts. However, most of the arms and munitions have gone to the junta, which is accused of war crimes and crimes against

**The U.N. Security Council meets in New York in November 2022, a month before approving a resolution demanding an immediate end to violence in Myanmar and the release of political prisoners.**

THE ASSOCIATED PRESS



humanity. All the while, the PRC has sought to deter Western nations from seeking a resolution in Myanmar.

### ASEAN'S Stance

Meanwhile, the Association of Southeast Asian Nations (ASEAN) must do more to pressure the military to restore democracy. ASEAN's Five-Point Consensus approved in April 2021 calls for: an immediate cessation of violence; constructive dialogue among all parties; appointment of a special envoy; provision of humanitarian assistance; and a visit by the special envoy to Myanmar. Junta leader Min Aung Hlaing agreed to the deal that month, but the military's campaign of violence has continued.

Critics note that the consensus lacks mechanisms to hold the junta accountable and that it was largely a way for ASEAN to maintain its principle of noninterference in member states' domestic affairs.

Further, a lack of unity within ASEAN on how to address the crisis has hindered the organization's efforts, with some member states criticizing the junta while others hesitate to speak up.

### Critical Role of Women

Unlike in previous uprisings against the military, about 60% of current pro-democracy participants are women. The Karenni Nationalities Defense Force (KNDF) Battalion 5 was the first EAO to form a female combat force after the coup. Since then, many EAOs and PDF units have had female combatants within their ranks. Myaung Women Warriors

(M2W) are known for their land mine attacks against junta troops in the Sagaing Region. While some women participate in lethal combat missions, more women than men appear to be involved in nonlethal resistance. The women focus on mobilizing and organizing the local population to support and sustain the resistance. The women's nonlethal efforts are infusing resiliency for the people and sustaining an unprecedented level of countrywide rejection of the junta. However, despite their majority, women still lack proportionate representation in leadership positions within the NUG, PDF, EROs, EAOs and other organizations to increase operational effectiveness.

### National Unity Government's Role

Overall, the most encouraging opposition to the coup has come from the Myanmar people. The country's permanent representative ambassador to the U.N., Kyaw Moe Tun, took an unprecedented and historic stance at the U.N. General Assembly by denouncing the coup and requesting international aid to restore democracy. He was the first Myanmar diplomat to speak out against the military's actions on a global stage.

In the aftermath of his appearance, the NUG emerged as a coalition of NLD lawmakers, ethnic minority groups and civil society leaders who had escaped the military's grasp. The NUG's declaration that it was the legitimate government representing the will of the people was a momentous development on the country's political

Myanmar forces guard a checkpoint leading to the nation's Parliament in Naypyitaw after the military seized power in February 2021.

THE ASSOCIATED PRESS







landscape, providing a platform for restoring democracy and posing a significant challenge to the military's legitimacy.

One of the most remarkable aspects of the NUG's formation was that it united diverse political and ethnic groups that had often been at odds. The NUG's formation held the promise of a future where cooperation and collaboration could pave the way for a more inclusive and democratic society.

However, the NUG's impact has been hindered by numerous challenges, including a lack of formal recognition from other countries. This has limited the NUG's access to resources and support at the same time that the military crackdown on pro-democracy forces has made it difficult for the NUG to operate effectively.

The NUG's ability to lead the resistance coalition to success will depend on overcoming such challenges — including deep mistrust among ethnic majority and minority groups — while garnering meaningful international support.

## Road to Victory

The pro-democracy resistance coalition has been surprisingly successful. However, it

needs some adjustments to tip the scales in its favor. From this moment on, its road to victory depends less on lethal actions and more on nonlethal measures, such as:

- Implementing a coherent communication strategy to maintain public support, increase worldwide pressure and expand military defections.
- Optimizing human resources and talents, including deploying women, empowering Gen Z and leveraging ex-combatants.
- Focusing on understanding the enemy by prioritizing intelligence operations and systematic debriefings of defectors.
- Providing political guarantees for EAOs to enable unity of command and effort.

As the conflict moves toward the three-year mark, the people of Myanmar are battle-weary and want stability in their country. However, over 90% of the population believes that the military rule will never bring long-term stability. Therefore, the resistance coalition forces must come together to realize significant progress to reach a tipping point. □

**Thousands of people gather in Mandalay, Myanmar, in February 2021 to protest the military coup.**

THE ASSOCIATED PRESS





Republic of Korea Marines participate in an amphibious assault exercise at a military base in Sattahip, Thailand, during Cobra Gold 2023.

REUTERS



# COBRA GOLD 2023

## Deepening shared purposes and regional cooperation

GUSTY DA COSTA



More than 500 Thai and United States paratroopers dropped into fields of tall tropical grasses near Fort Thanarat in Prachuap Khiri Khan in western Thailand in early March 2023. Soon, MV-22 Osprey and CH-53E Super Stallion helicopters loaded with Republic of Korea (ROK), Thai and U.S. Marines secured an airstrip to allow follow-on forces to maneuver freely.

In the days after, Cobra Gold 2023 participants engaged in live-fire drills and mock amphibious attacks as well as cyber defense and space operations to encompass all battlespace domains. Training included civil engineering projects, jungle survival courses and lessons in traditional Thai boxing, known as Muay Thai.

More than 10,000 military personnel from 27 countries deployed to Thailand from February 28 to March 10 for the 42nd iteration of the exercise, which is sponsored by Thailand and the U.S. Drills also were staged in Chanthaburi, Chonburi, Lopburi, Rayong and Sa Kaeo provinces.

Indonesia, Japan, Malaysia, Singapore and South Korea attended as full participants in the multilateral military exercise, which is one of the world's largest and longest running. Delegations from 20 other nations took part as limited participants or observers. Cobra Gold's wide-ranging program reflects the varied contemporary challenges facing the region's militaries.

"The scope of military operations that enhance our regional stability are virtually expanded to handle the full spectrum of threats in all domains, including land, sea, air, cyber and space. Additionally, peacekeeping operations, maritime security, humanitarian assistance and disaster relief are also included," Gen. Chalermopol Srisawasdi, Royal Thai Armed Forces Chief of Defense, said in his opening ceremony address. "All of these help us maintain our regional security and be ready to provide necessary assistance

and disaster relief as we have successfully shown in the past."

"Through Cobra Gold, we demonstrate our resolve to respond together to future challenges, preserving a Free and Open Indo-Pacific where all nations can prosper," Adm. John Aquilino, Commander of U.S. Indo-Pacific Command, said at the ceremony.

Cobra Gold 2023 showcased combat and humanitarian relief operations, but information and technology sharing, readiness and seamless interoperability are at the heart of the exercise.

"It is very important to train together. ... If there are tensions in the region, we know each other," said Chongchai Chomchongngat, commander in chief of the Royal Thai Navy, The Defense Post, a security and defense publication, reported.

"While we all speak different languages, we come together with common bonds in pursuit of a Free and Open Indo-Pacific, which is what Cobra Gold is all about," said U.S. Marine Corps Capt. Jonathan Coronel, according to The Defense Post.

More than 8,400 U.S. personnel deployed to the exercise, along with 4,000 Thai personnel, 420 from South Korea, 146 from Japan and 54 from Singapore, with varying numbers from other participants — a testament to the strength of regional partnerships and cooperation.

### Preparing for Combat

Under blue skies, amphibious landing vehicles moved across a stretch of sea to a remote beach. Weapons drawn, ROK Marines, along with their Thai and U.S. counterparts, proceeded across the beach as a helicopter swooped overhead. Other troops dropped to the ground to cover their advancing comrades.

The landing team rehearsed denying an enemy's firepower with base camp fire supported by ship cannons and close air support. The land regiment then arrived on



the beach and penetrated the enemy's territory while also establishing beach security.

The drill's fluid display of interoperability was the result of thoughtful coordination and perseverance by planners, leaders, Soldiers, Sailors, Marines, Airmen and other personnel.

Along with Marine ground commanders, the Royal Thai Navy sent its biggest amphibious ship, the HTMS Angthong, and a landing craft utility ship, the Royal Ravi. South Korea deployed an F-16 jet fighter and an amphibious assault vehicle, while the U.S. sent the USS Makin Island, a Wasp-class amphibious assault ship, F-35 jet fighters and other military assets.

### Working Together to Strengthen Communities

While combat drills demonstrated cooperative resolve at Cobra Gold 2023, civic activities also highlighted fortitude and resilience. Soldiers from India and Indonesia joined Royal Thai Air Force personnel and U.S. Airmen from Joint Base Elmendorf-Richardson, Alaska, to assemble a multifunctional building at the Ban Khao Talat School in Rayong province. The project reflected the exercise's focus on community service and humanitarian aid to improve regional cooperation, according to U.S. Pacific Air Forces.

"My team has been working with the Thai Mobile Development Unit 14 and the Indonesian Army," said U.S. Air Force 1st Lt. Andrew Morgenstern. "We mesh well as a team and have learned quite a bit from one another. Particularly, I've been impressed by the efficiency of the Thais and the expertise of the Indonesians."

An Indonesian Army officer emphasized the importance of exercises such as Cobra Gold. "This joint exercise also gives room and opportunity for respective militaries

to interact, build friendships, and provide a mutual understanding of the culture, customs and traditions, and characters of every country involved," the officer told FORUM. "This direct and profound understanding can effectively narrow down miscommunication ... by understanding the character of each nation."

### Partner Contributions

Singapore Armed Forces personnel participated in a cyber defense drill and a civil engineering project with Thai and U.S. troops to construct a multipurpose building at Ban Mor Mui School, also in Rayong, according to Singapore's Ministry of Defence.

Meanwhile, members of the Japan Self-Defense Forces joined Thai and U.S. service members in a noncombat evacuation drill at U-Tapao International Airport in Rayong. They conducted searches, identity and baggage checks, and chemical substance tests as displaced passengers arrived at the airport during the simulation.

"Skills and proficiency that are required for complex combined operations can be obtained during such activities, which will contribute to whatever role Korea is required to play," retired ROK Army Lt. Gen. Chun In-Bum told FORUM. "In order to be effective during an international crisis, training is vital and therefore Korea uses every opportunity to train with international organizations and militaries, as well as opportunities like Cobra Gold."

South Korea has participated in Cobra Gold since 2002, becoming a full participant in 2010. Along with the amphibious landing drills with Thai and U.S. troops, ROK service members took part in activities including special operator training in a jungle environment.

**Service members from Singapore and the U.S. construct a multipurpose building at Ban Mor Mui School in Rayong, Thailand, in February 2023.**

CPL. ANGELINA SARA/U.S. MARINE CORPS







Martial arts champion Sombat Banchamek, known as Buakaw, instructs U.S. military personnel in traditional Thai boxing during Cobra Gold 2023.

REUTERS

Countries including Canada, Fiji, France, Mongolia, Nepal, the Philippines and the United Kingdom deployed smaller teams to the staff exercise.

Australian Defence Force (ADF) personnel, meanwhile, participated in the staff and cyber exercises to prepare for shared regional security challenges. “Australia is committed to deepening its defense partnerships in the Indo-Pacific region,” an ADF spokesperson told FORUM. “Multilateral defense exercises, such as exercise Cobra Gold, help the Australian Defence Force further develop cooperation and deepen interoperability between militaries to support a stable, prosperous and resilient Indo-Pacific region.”

### Valuing Ancient Combat Techniques

Thai martial arts champion Sombat Banchamek trained U.S. service members in Muay Thai, an ancient combat sport characterized by the use of fists, elbows, knees and shins. The champion is better known by his stage name Buakaw, which in Thai means “white lotus.” “For every U.S. Soldier who came to train in Cobra Gold, they also want to exchange and study our culture regarding Muay Thai, which is our national art,” Buakaw told Reuters.

U.S. Army Spc. Adam Castle praised the benefits of the training and the rare opportunity to study the technique with one of its top practitioners. “It’s been really great to learn some skills that we can take back and use in the future,” Castle said.

### Lasting Impact

Skills acquisition, improved interoperability, and familiarity with new systems and techniques were among the benefits for Cobra Gold 2023 participants, according to Dave Laksono, a lawmaker from Indonesia’s House of Representatives Commission 1, which oversees defense and foreign affairs.

However, the opportunity to build relationships with counterparts from around the region will have an even deeper, more lasting impact. “With a vast network, young officers can connect with officers of the same rank from other countries,” he said. “Today, they may be only a commander of a battalion or a platoon. In the future, they can be Army chiefs of staff in their respective countries or future policymakers.” □

Gusty Da Costa is a FORUM contributor based in Jakarta, Indonesia.





# TRANSNATIONAL REPRESSION

CCP'S COVERT, OFTEN ILLEGAL  
OVERSEAS POLICING DRAWS  
INTERNATIONAL CONDEMNATION



FORUM ILLUSTRATION



**T**he People's Republic of China (PRC) continues to face international criticism for violating the sovereignty of nations across the globe with its “overseas police service stations,” clandestine offices established in many cases without the approval or knowledge of countries that become their unsuspecting hosts. Rights advocates say the stations are bases from which the Chinese Communist Party (CCP) tracks and harasses dissidents living abroad. Those findings have sparked investigations from Europe to the Indo-Pacific to North America, where discoveries warranted criminal charges.

Safeguard Defenders, a nongovernmental organization (NGO) based in Spain, revealed 102 of the police outposts in 53 countries. The human rights group's research highlights open-source Chinese reports touting the stations' existence on every continent except Antarctica, and the NGO says similar international facilities, often referred to as “service centers” in Chinese reporting, are also linked to police in the PRC. While the PRC appears to have policing arrangements with a handful of the countries, media reports from more than a dozen nations indicate the offices opened covertly and that law enforcement and



government officials in unwitting host nations consider them illegal.

The CCP insists the offices provide Chinese citizens overseas with administrative services, such as driver's license renewal, that were disrupted by the COVID-19 pandemic. Reports from CCP authorities and state and party media, however, suggest they predate the pandemic, with “public security bureaus” in the PRC beginning work on the outposts as early as 2016, according to Safeguard Defenders.

Furthermore, CCP officials have said that 230,000



**Safeguard Defenders campaign director Laura Harth says the CCP uses intimidation, entrapment and kidnapping to repatriate Chinese nationals.** THE ASSOCIATED PRESS

Chinese nationals were “persuaded to return” to face criminal fraud charges in the PRC from April 2021 to July 2022 alone. To understand those campaigns, the human rights group analyzed CCP tactics, which is how researchers first found evidence of the secret police stations, Laura Harth, a campaign director for Safeguard Defenders, told a Canadian House of Commons committee in March 2023. The group says most of the “returns” lauded by the PRC are “non-traditional, often illegal means of forcing someone to return to China against their will, most often to face certain imprisonment.” Experts say Chinese courts have a conviction rate of more than 99%.

The CCP's overseas policing is problematic partly because it does not adhere to widely held standards such as judicial fairness. The authoritarian nation's brand of persuasion includes threatening, intimidating, and harassing overseas targets and imprisoning their relatives in the PRC, according to Safeguard Defenders' report, titled “110 Overseas: Chinese Transnational Policing Gone Wild,” on overseas Chinese police “service stations,” sometimes called “110 Overseas” after the national police emergency phone number. The same methods, the NGO says, are integral parts of the CCP's widely documented Fox Hunt and Sky Net operations, global programs to apprehend purported Chinese fugitives — and known for violating the laws of sovereign countries and abusing human rights.

# Countries with CCP-Linked Police Stations

The targets are public officials and businesspeople accused of corruption. “But some of these people didn’t do what they are charged with having done,” John Demers, the former head of the United States Justice Department’s national security division, told the ProPublica news organization in 2021. “And we also know that the Chinese government has used the anti-corruption campaign more broadly within the country with a political purpose.” Fox Hunt has overlapped with the CCP’s illegal overseas police stations, researchers wrote.

## ‘EDUCATE’ AND ‘PERSUADE’

Safeguard Defenders uncovered reports of numerous “persuasion to return” operations connected to Chinese police stations:

- One suspect returned to the PRC after being “educated” by the staff at a station in Madrid, Spain, who were working directly with police in Qingtian in China’s Zhejiang province, according to Chinese media reports.
- Officials at a station in Belgrade, Serbia, run by Qingtian police contacted a Chinese national accused of theft and used the WeChat social media platform for “persuasion,” the Zhejiang Internet Radio and Television Station reported in 2019.
- The head of a police station in Paris founded by Zhejiang authorities told Chinese media in 2021 that he was “entrusted by the domestic public security organs to help persuade a criminal who had been absconding in France for many years to return to China through many visits.”
- Police in China’s Jiangsu province said in July 2022 that their “police and overseas linkage stations” assisted in the capture or persuasion of 80 “criminal suspects” returned to the PRC, although the report does not specify where those operations took place.

Not all of the CCP’s transnational harassment is linked to its illegal police outposts. Law enforcement

### CANADA

The Royal Canadian Mounted Police (RCMP) has investigated reported criminal activity related to suspected Chinese police stations. The RCMP created a hotline and urged Chinese Canadians to report harassment linked to overseas policing.

### UNITED STATES

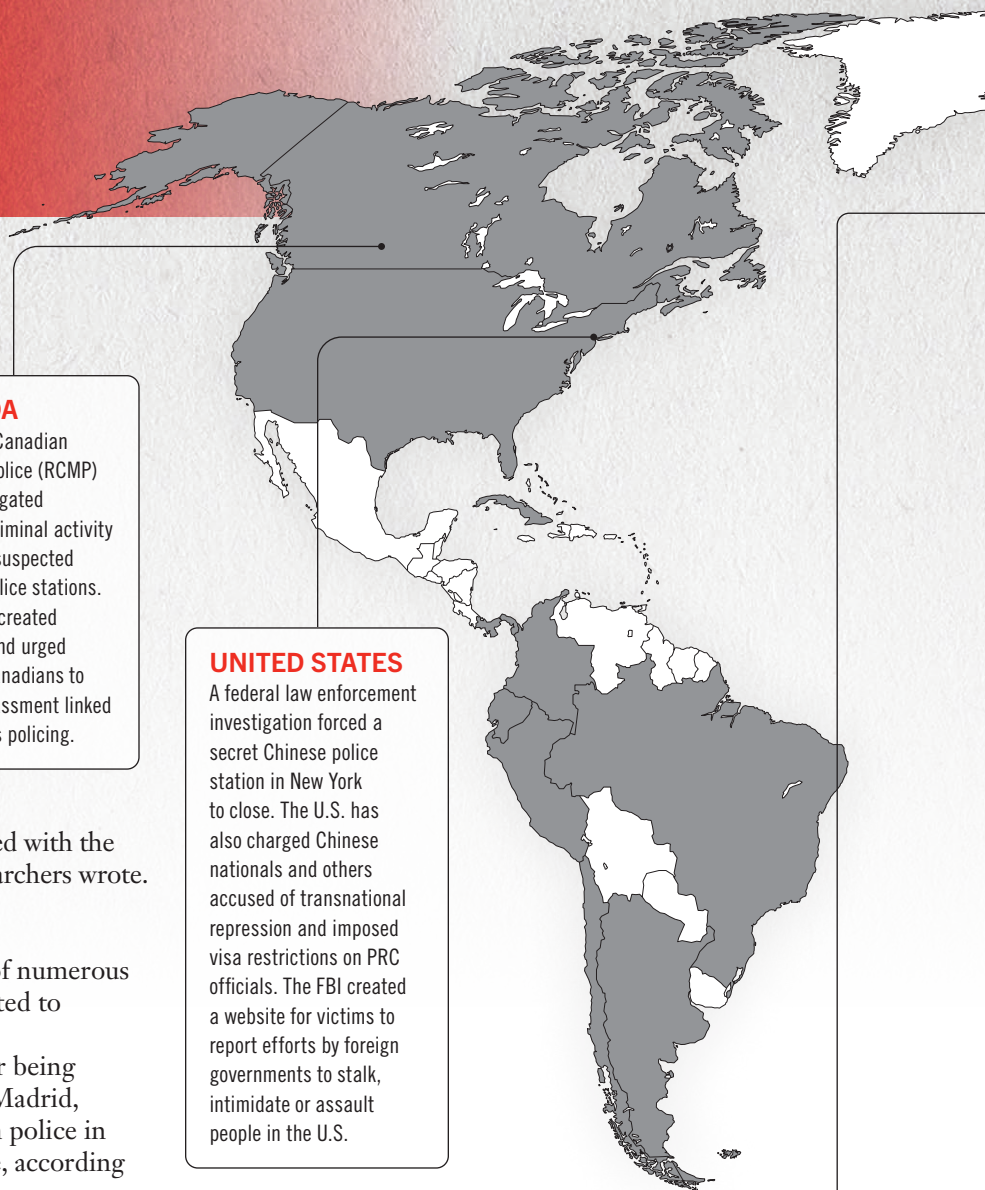
A federal law enforcement investigation forced a secret Chinese police station in New York to close. The U.S. has also charged Chinese nationals and others accused of transnational repression and imposed visa restrictions on PRC officials. The FBI created a website for victims to report efforts by foreign governments to stalk, intimidate or assault people in the U.S.

### UNITED KINGDOM

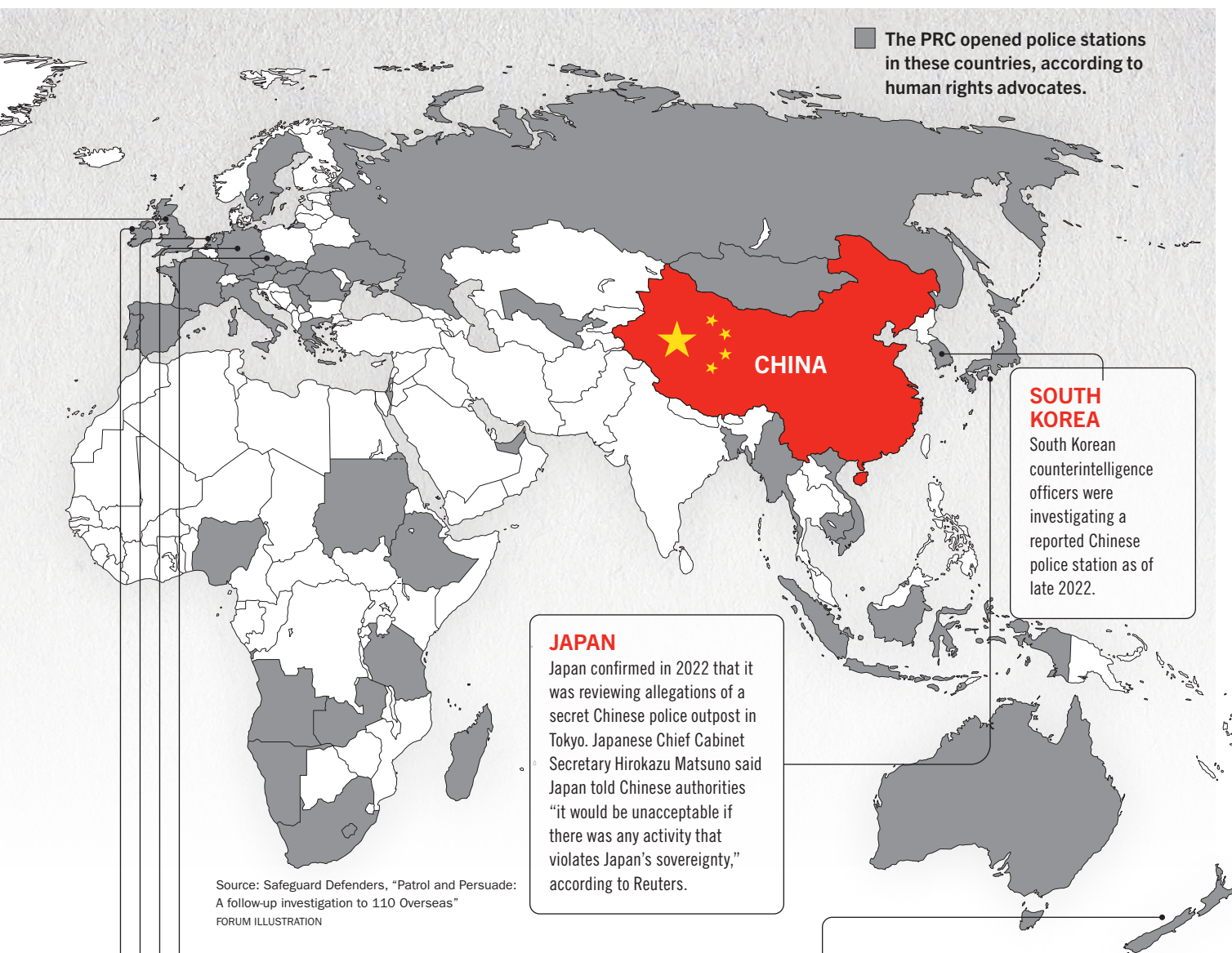
After an investigation by British police and warnings from the U.K. government, the Chinese embassy said CCP-linked police stations in Britain had closed.

agents and human rights advocates have documented other examples of coercion on foreign soil. Safeguard Defenders’ 2022 “Involuntary Returns” report detailed instances in Australia, Canada, Southeast Asia, the U.S. and elsewhere. The group told the Canadian Broadcasting Corp. that it found seven cases of people living in Canada who were targeted by CCP agents. They included a former Chinese judge accused of corruption after criticizing the PRC’s criminal system. The NGO’s report said police in the PRC tried to force his return by arresting his sister and son.

Since 2020, the U.S. Justice Department has criminally charged at least 51 Chinese citizens and a







**NEW ZEALAND**  
New Zealand authorities in late 2022 launched a multi-agency investigation into alleged Chinese police stations.

dozen PRC-linked suspects after investigators found

evidence of forced repatriation schemes, surveillance, harassment and attempts to coerce Chinese residents of the U.S. The accused include 40 officers with the PRC’s National Police, at least one other police officer and a court official in the PRC. Among the victims are a naturalized U.S. citizen who helped lead the 1989 pro-democracy demonstrations in Beijing, an artist and Chinese national who criticized the CCP, and a Chinese-born U.S. resident accused of financial crimes in the PRC.

Elsewhere, the CCP has kidnapped targets. Laws relating to the PRC’s supposed anti-corruption operations explicitly allow for “unconventional measures” such as abduction and entrapment. “They may use luring or entrapment of individuals,” Harth



told news broadcaster CNN. “So, they might try to get a person to a country where it’s easier to ... bring them back to China because the judicial safeguards are less in that particular place. But they may even use kidnapping. ... Chinese authorities expressly say that kidnapping is a legitimate means to retrieve a person.”

### EXPANDING REACH

The CCP admits that it wants more power over global security norms and believes its Ministry of Public Security has a part to play in gaining influence, the Center for American Progress, a U.S.-based policy institute, said in a 2022 report on “The Expanding International Reach of China’s Police.” It cited a CCP conference at which police and legal officials were encouraged to “grasp the new characteristics of the internationalization of public security work” and a former police official who called for a “new system of public security international cooperation work” to achieve the CCP’s overseas goals.

Beijing has formal policing agreements with various nations and participates in police operations outside the PRC. Its clandestine operations, however, seem aimed at sidestepping democratic laws and norms as it seeks to export the PRC’s “social management” regime. The strategy conflicts with the PRC’s refrain about its own sovereignty. “The PRC is very big on claiming territorial sovereignty,” Harth told CNN, “claiming sovereignty when it comes to, you know, criticizing people that call out their human rights record.”

### REBUFFING THE CCP

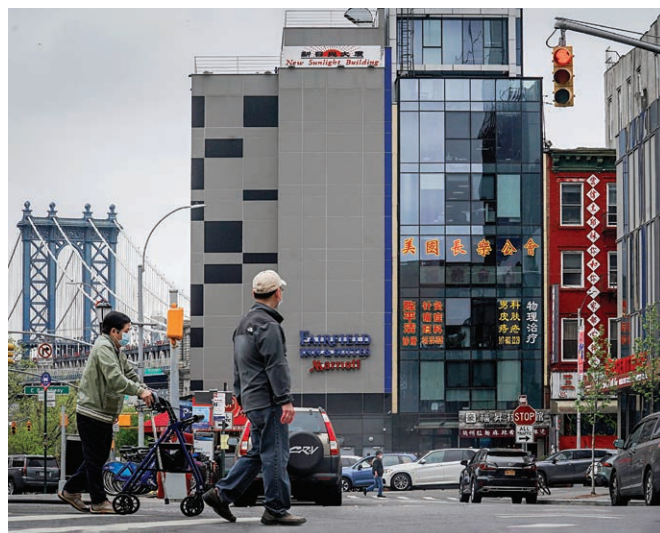
Meanwhile, the PRC has been spurned by nations where it openly proposed expanding its law enforcement role, with one Pacific Island Country (PIC) reconsidering a policing pact. Fijian Prime Minister Sitiveni Rabuka in June 2023 publicly questioned the logic of working with PRC security personnel. The Fiji Police Force and the CCP’s Ministry of Public Security agreed in 2011 that Fijian officers would train in China, which would send its police officers to Fiji for three- to six-month programs. The CCP also appointed a police liaison officer to be based in Fiji. “There’s no need for us to continue,” Rabuka told The Fiji Times newspaper in early 2023. “Our system of democracy and justice systems are different, so we will go back to those that have similar systems with us.” Officers from countries including Australia and New Zealand will stay in Fiji, he said. The U.S. has also committed to expanding training and capacity-building programs in the PIC, the Fiji Police Force said in February 2023.

Soon after inking a controversial and secretive security agreement with the Solomon Islands in 2022, Beijing failed to persuade a larger contingent of PICs to sign a regional deal that would have covered policing, security and other cooperation. Two of the PICs that rejected Beijing’s proposal have since looked to expand security arrangements with Australia. Vanuatu will cooperate with Canberra in policing, disaster relief, defense and cybersecurity, the nations announced in December 2022.





**Safeguard Defenders researchers said in late 2022 that Chinese police were operating a covert station in Glasgow, Scotland. It has since closed, U.K. authorities said.** GETTY IMAGES



**U.S. Justice Department officials say an illegal Chinese police station operated in New York City's Chinatown until an investigation forced it to close in late 2022.** THE ASSOCIATED PRESS

A proposed Australia-Papua New Guinea (PNG) pact would help build PNG's capacity in areas such as policing, health security and biosecurity, according to officials. PNG and the U.S. also struck security and defense agreements in mid-2023 to protect PNG's economy from illegal fishing, provide protective equipment and tackle transnational crime, Reuters reported.

## INTERNATIONAL OUTCRY

Safeguard Defenders' Harth told the Canadian House of Commons in March 2023 that the CCP's transnational repression should be publicly denounced by nations where it is discovered. Her organization calls for governments to investigate CCP-linked overseas police activities, set up reporting and protection mechanisms for at-risk communities, and coordinate information sharing among like-minded countries. Safeguard Defenders has also called on governments to "urgently review — and possibly suspend" police cooperation agreements with the PRC. Authorities worldwide have taken action:

- The Royal Canadian Mounted Police confirmed in March 2023 that it was investigating five Chinese-run police stations across the country, according to Le Journal de Montreal newspaper, and that Chinese nationals living in Canada had been victims of activities possibly linked to the centers.
- Japan's Chief Cabinet Secretary Hirokazu Matsuno said in December 2022 that the nation "will take all necessary steps to clarify the situation" after allegations surfaced of a Chinese police outpost in Tokyo. Matsuno said Japan informed Chinese authorities that any activity violating its sovereignty would be "unacceptable," according to Reuters news agency.
- New Zealand authorities investigated allegations of an illicit Chinese police station. A Green Party spokeswoman told the New Zealand Herald

newspaper in December 2022 that Chinese-born Kiwis have warned that Beijing is conducting surveillance at clandestine police outposts.

- Police and military personnel in South Korea, as well as foreign ministry officials, probed reports of an alleged covert Chinese police station in Seoul, the Yonhap News Agency reported.
- The United Kingdom "told the Chinese embassy that any functions related to 'police service stations' in the U.K. are unacceptable and that they must not operate in any form," U.K. Security Minister Tom Tugendhat said in a June 2023 statement. China's embassy has told officials the stations are closed, according to Tugendhat.
- In the U.S., FBI agents seized material from a suspected Chinese police station in New York City and in April 2023 charged two men with conspiring to act as agents of Beijing in connection with opening and operating the illegal station. The office closed in late 2022 after its operators learned of the investigation, according to the U.S. Justice Department.

Additionally, authorities in Austria, Chile, the Czech Republic, Germany, Ireland, the Netherlands, Portugal, Spain and Sweden have investigated suspected Chinese police stations in their nations. Safeguard Defenders' Harth says those measures are a positive first step. "The first thing is really call out the Chinese authorities on what they're doing. ... Make it very clear that we think this is clandestine, this is illegal, this is a brazen violation of national sovereignty and international law," she told CNN. "The second is, building on that coalition, really share best practices, share information, share intelligence. So, we need democratic countries to actually work together, law enforcement to work together and come together on this." □



# JAPAN'S DEFENSE TECHNOLOGY STRATEGY

NATION  
HAS PLAN  
TO ACQUIRE,  
INCORPORATE  
INNOVATIVE  
TECHNOLOGIES

DR. SHIGENORI MISHIMA

Dr. Shigenori Mishima, vice commissioner and chief technology officer of Japan's Acquisition, Technology & Logistics Agency (ATLA), delivered this keynote address at the Pacific Operational Science & Technology conference in Honolulu, Hawaii, in March 2023. Mishima discussed ATLA's role and security and defense strategies announced by Japan in December 2022. His comments have been edited to fit FORUM's format.



**ATLA** is an external organization of the Japan Ministry of Defense (JMOD). It was established in 2015 and has about 1,800 employees. The missions of ATLA are broadly divided into four categories. First, to ensure technological superiority and to respond smoothly and quickly to operational needs. Second, to acquire defense equipment efficiently. This is the project management function from the cradle to the grave, from concept studies, research and development [R&D], procurement and operational sustainment, to disposal. Third, to strengthen defense equipment and technology cooperation. This includes cooperation with domestic industry, government and academia, and with international partners. And fourth, to maintain and strengthen defense production and technology bases.

Defense production and technology bases are integral parts of defense capabilities, and their reinforcement is essential.

ATLA has five systems development divisions, plus the Naval Ship Design Division. In addition, it has four research centers for ground, air, naval and next-generation systems, and three test centers.

The security environment surrounding Japan is growing increasingly severe and at an unprecedented pace, with neighboring countries strengthening their military capabilities. Unilateral changes to the status quo by force represent significant challenges to the free and open international order. Russia's aggression against Ukraine has revealed this in a most blatant way. The international community is facing its greatest post-war [World War II] trial yet and has entered a new era of crisis. Meanwhile, rapid advances in science and technology are fundamentally changing the paradigm of security.

With these factors in mind, Japan published three strategy documents on December 16, 2022. These included the first revision of the National Security Strategy, initially released in 2013. Under this top-level document, the National Defense Strategy and Defense Buildup Program specify the objectives and means of defense.

## STRATEGIC FINE POINTS

While the titles of these documents are new, they were formulated to replace the National Defense Program Guidelines and the Mid-Term Defense Program that was published in 2018.

The National Security Strategy sets out Japan's security strategies over a 10-year time frame. Its revision marks the most significant shift in Japanese security policy since World War II. Future measures include conducting diplomacy under the vision of a Free and Open Indo-Pacific, fundamentally reinforcing defense capabilities such as counterstrike capacities and promoting economic security policies. To implement the fundamental reinforcement of defense capabilities and complementary initiatives, Japan will take necessary measures to make the level of Japan's defense budget reach 2% of the current gross domestic product by fiscal year 2027.

The National Defense Strategy sets out defense objectives over 10 years and presents methods and means to achieve them. Specifically, it establishes policies to reinforce defense capabilities, including seven key defense measures, to bolster the defense posture of the entire country in conjunction with its allies and partners.

The Defense Buildup Program indicates the defense level Japan should possess and is a medium- to long-term development plan for achieving that level, describing the structure of Japan's Self-Defense Forces in five to 10 years. The program also indicates the quantity of mission-essential equipment needed and the total cost for the next five years — about 43 trillion yen, or more than U.S. \$320 billion, which is 1.6 times larger than the allocation for the previous five years.



**Japan is leading development of the Mitsubishi F-X stealth fighter with Italy and the United Kingdom as part of the Global Combat Air Program. The sixth-generation fighter jet, seen in this rendering, is slated to deploy in the mid-2030s.** JAPAN MINISTRY OF DEFENSE

In the National Defense Strategy, there are three defense objectives and three approaches to achieve them. The objectives are:

- Create a security environment that does not accept unilateral change of status quo by force.
- Deter and respond to unilateral changes and attempts to change the status quo by force through cooperation with allies and like-minded countries and control the situation at an early stage.
- If an invasion of Japan occurs, disrupt and defeat the assault while taking primary responsibility for dealing with the invasion and attaining support from allies.

The three approaches to achieve Japan's defense objectives are:

- Strengthening Japan's architecture for national defense.
- Reinforcing joint deterrence and response capability of the Japan-United States alliance.
- Reinforcing collaboration with like-minded countries and others with whom Japan cooperates to uphold and reinforce a free and open international order.

The National Defense Strategy identifies seven fields as functions and capabilities needed to respond to new ways of warfare. First, to disrupt invading forces over long distances to deter an invasion with standoff defense capabilities and integrated air and missile defenses. If deterrence fails, ensure asymmetric advantage and gain superiority across domains with unmanned defense capabilities, cross-domain operation capabilities, and command and control and intelligence-related functions. Continuing to operate in a swift and persistent manner to crush an opponent's will to invade calls for mobile deployment capabilities and civil protection, and sustainability and resiliency.

Japan's defense budget is expected to reach 6.8 trillion yen or about U.S. \$50 billion in fiscal year 2023, an increase of 26.3% over fiscal year 2022.

### DEFENSE PRIORITIES

The defense industry faces mounting challenges such as supply chain risks, low profit margins and cybersecurity leaks. Defense production and technology bases are, virtually, defense capabilities themselves. It is necessary to take in-depth initiatives to maintain and strengthen them.

ATLA sets three directions for achieving its ideal

vision. The first is to build a strong and sustainable defense industry by sustaining and strengthening industry's competitiveness and technologies, vitalizing the defense industry and promoting new defense businesses, attracting profitable businesses and dealing with defense companies' withdrawals. The second direction is to cope with various risks by ensuring a resilient supply chain, industrial and cyber security, and management of sensitive technologies. The third direction is to expand cooperation with other countries in the defense industry field. That includes promoting the transfer of equipment that contributes to the expansion of sales channels and streamlining foreign military sales.

It is important to strengthen defense technology bases. Investment in R&D is important both to develop capabilities and to ensure their deployment as soon as possible. Seven key defense capability areas were identified previously. To achieve them, ATLA will accelerate R&D, and maintain and improve existing technologies. ATLA also will aim to ensure medium- and long-term technological superiority by making best use of advanced commercial technologies, cooperating with relevant domestic ministries and agencies, and creating a new research institution within ATLA.



Japan is developing railgun technology and in 2016 tested a prototype that launched a projectile at 7,193 kilometers per hour.

JAPAN MINISTRY OF DEFENSE



ATLA now is identifying focused technology areas. Throughout the process, it will strive to cooperate with allies and partners.

Japan plans to invest heavily in equipment and technology essential to warfare. R&D spending in the next five years is forecast to be about U.S. \$26 billion, or about 4½ times the amount spent during the previous five years. Japan will spend intensively on technology in areas such as standoff defense, response to hypersonic glide vehicles, response to drones and swarm attacks, unmanned assets, next-generation fighter aircraft, and other capabilities.

Regarding standoff defense, JMOD aims to obtain capabilities to engage warships and landing forces invading Japan, including its remote islands, from locations outside threat zones. Hypersonic glide vehicles are hard to detect or intercept with conventional assets, so JMOD intends to acquire technology enabling us to respond to them. JMOD hopes quickly to find ways to counter aerial drones and swarm attacks, as well as acquire technologies such as unmanned underwater vehicles.

JMOD will intensively invest in the Global Combat Air Program, an initiative announced by Italy, Japan and the United Kingdom in early December 2022 to develop and deploy a next-generation fighter aircraft. To reinforce deterrence and response capabilities, JMOD will progress a program on a future electromagnetic railgun and other technologies.

### RAPID ACQUISITION

ATLA will use three methods to quickly develop and deploy these systems. First, rapid acquisition of capabilities through deployment of prototype units upon completion of R&D. An example is the Hyper Velocity Gliding Projectile project. Second, a prototype of operational scale is manufactured and deployed on a trial basis. A high-energy laser project is an example. Third, before an R&D project is completed, ATLA will evaluate and manage risks. Production begins in parallel with R&D. An example is the Type 12 surface-to-ship missile project.

Efforts on maintenance and improvement of conventional defense-specific technologies are also necessary. With limited human resources, ATLA aims to maintain and improve the technology base in the field that's unique and essential to defense equipment by conducting research on existing technologies that form the foundation necessary for realizing advanced capabilities efficiently and effectively.

To strengthen incorporation of cutting-edge civil technologies, the budget for relevant initiatives will be significantly expanded in fiscal year 2023. That means more investment to discover and cultivate cutting-edge commercial technologies for defense purposes. Hypersonic weapons and high-precision gyroscope and laser technologies are examples of these funding areas.



Japanese Prime Minister Fumio Kishida discusses the National Security Strategy at a news conference in December 2022. REUTERS

### GOVERNMENTWIDE EFFORT

ATLA funding of basic research, investments of other government agencies and promising cutting-edge commercial technologies will be adopted and modified as needed for defense purposes. This investment will be expanded and more focused in the next defense buildup program.

The new security and defense strategy documents emphasize the importance of utilizing all Japanese science and technology strength, and R&D efforts, to meet defense needs. This is a governmentwide effort. JMOD's allocation for R&D is only 3% to 4% of the Japanese government's science and technology budget.

ATLA makes every effort to incorporate cutting-edge technologies from external entities including startups and academia. The agency plans to establish a new research institute after fiscal year 2024. This organization will focus on R&D leading to the realization of innovative defense equipment and technological research. ATLA will identify technologies that can be directly linked to future warfare. ATLA will design the institution that is best suited to Japan, while referring to good practices as seen in, for example, DARPA [U.S. Defense Advanced Research Projects Agency] and DIU [U.S. Defense Innovation Unit].

JMOD has published three strategic documents: Defense Technology Strategy, Medium- to Long-Term Technology Outlook and R&D Vision. JMOD is reviewing these documents and plans to publish a new document that identifies key technology areas. Publishing JMOD's interests in specific technology fields and in R&D will help increase predictability for industries and promote cooperation with international and domestic partners. Doing so will enable ATLA to identify areas in which to work with international partners and realize win-win cooperation. □

# FRAMEWORK FOR SUCCESS

**ALLIES, PARTNERS PLEDGE RESOURCES, SUPPORT FOR RESILIENT PACIFIC**



An Australian Army CH-47 Chinook helicopter delivers supplies to Futuna, Vanuatu, after two devastating cyclones hit the Pacific Island Country in March 2023.

AUSTRALIAN DEFENCE DEPARTMENT



**W**hen back-to-back cyclones barreled through Vanuatu at 230 kilometers per hour in early March 2023, upending homes and downing power lines, the Pacific family responded swiftly. Even as the Pacific Island Country (PIC) of 319,000 people began surveying the mammoth task of reassembling from the ruins of an unprecedented natural disaster — two vicious storms followed quickly by the rumble of twin earthquakes — assistance was on the way.

A Royal Australian Air Force (RAAF) C-17A Globemaster flew a rapid assessment team, shelters and water purification supplies roughly 2,000 kilometers to Vanuatu, while dozens of Republic of Fiji Military Forces (RFMF) engineers, medical experts and other service members deployed along with civilian emergency response personnel. The French Armed Forces mobilized air and naval assets to deliver water storage tanks and United Nations relief supplies, and French Soldiers cleared roads of uprooted trees and conducted medical evacuations. South Korea approved U.S. \$200,000 in humanitarian aid. “The government hopes this assistance will help Vanuatians affected by the cyclones swiftly return to their daily lives and recover from the damage,” Seoul’s Foreign Ministry said.

The wave of lifesaving support to Vanuatu reflects the renewed vigor with which like-minded nations are engaging in the Pacific Islands to build resilience against challenges such as rising sea levels, public health threats, economic shocks and resource exploitation. It is a multilateral undertaking of immense consequence, as this vast region faces the existential threat of climate change amid a geopolitical tussle for influence and burgeoning

concerns over the People’s Republic of China’s (PRC) intentions. One Pacific leader has even accused Beijing of bribery, spying and other political warfare.

Within a week of the cyclones’ landfall, the Royal Australian Navy’s HMAS Canberra and its contingent of 600 troops, landing craft, helicopters, medical facilities and supplies had arrived in Vanuatu’s capital, Port Vila, joining two RAAF aircraft conducting assessments and surveillance. The Australian government also approved an additional U.S. \$3 million in support, as well as logistics expertise. “This announcement and deployment builds on Australia’s long-standing disaster preparedness and humanitarian assistance activities in Vanuatu and across the region,” Australian Foreign Minister Penny Wong stated. “In times of crisis, the Pacific family can rely on Australia to work with them.”

### ENHANCED RESILIENCE

Two weeks earlier and 1,000 kilometers east of Port Vila, Canberra demonstrated its commitment to the region as Wong announced U.S. \$4.5 million in funding to Fiji to rebuild nine schools damaged by cyclones in 2020 and 2021. “Most importantly, not just only to rebuild them but rebuild them to higher standards so they are Category 5 cyclone-proof, and we will also work to ensure they are sustainable, using renewable energy and local resources,” Wong said, according to The Fiji Times newspaper.

As Fiji’s largest bilateral development assistance partner, Australia has provided more than U.S. \$160 million in direct budget support to the island nation of 950,000 people since 2020, including for “enhanced climate and social resilience,” according to the Australian High Commission.

**Australian Army Soldiers and Vanuatu Mobile Force personnel coordinate cleanup in the capital, Port Vila.**

AUSTRALIAN DEFENCE DEPARTMENT







Such collaborative projects are gathering pace across this region of 30,000 atolls and islands that dot a sweep of ocean representing 15% of the planet's surface and incorporating the Ring of Fire, where shifting tectonic plates subject the populace of 12 million to frequent earthquakes and volcanic eruptions. Climate change, meanwhile, is increasing the severity and regularity of cyclones and flooding, which cost the South Pacific region an estimated U.S. \$500 million a year. Among the host of initiatives announced in early 2023:

- New Zealand is providing U.S. \$4.5 million in funding for Fiji in addition to its earlier pledge of U.S. \$9 million for climate initiatives, The Fiji Times reported. "I want to acknowledge that much of our conversation in relation to the impact of climate change on our communities is an area that we can ensure that partners work alongside Fiji, work alongside New Zealand, to ensure that we can meet the significant challenge that we have," New Zealand Foreign Affairs Minister Nanaia Mahuta said during a news conference with Fijian Prime Minister Sitiveni Rabuka.
- The Seoul-funded Korea International Cooperation Agency (KOICA) will provide up to U.S. \$10 million for a new medical center in Tamavua, north of Fiji's capital Suva. "We wish to place on record our gratitude to the government and people of Korea through KOICA for this very timely project," Rabuka said, according to The Fiji Times.
- In Samoa, the United States Agency for International Development (USAID) awarded U.S. \$1.5 million for community-led initiatives on climate change adaptation, disaster risk preparedness and response, and sanitation and hygiene, the Samoa Observer newspaper reported. "The U.S. government is committed to strengthening the ability of the Pacific Island region's most vulnerable communities to live healthy and secure lives, free from disaster-related disruptions," USAID Deputy Development Advisor Patrick Bowers said.
- Japan provided grants to Samoa for 14 new police vehicles while local officials unveiled two upgraded schools partly funded by Germany, the Samoa Observer reported. "Education is playing a key role in equipping younger generations with the knowledge they need to address the global challenges we face," said Beate Grzeski, Germany's special envoy for the region.
- Taiwan donated dialysis machines, water filtration units and other supplies to establish a blood dialysis center in Labasa in northeast Fiji. Taipei's two decades of support to Fiji includes deploying teams to perform more than 8,000 outpatient services and surgeries. "Taiwan will continue to provide assistance to Fiji in the health care sector, as well as in other areas, to further our friendship and partnership," Joseph Chow, the self-governed island's representative to Fiji, said in a statement.





## BACK ON TRACK

The sharpened focus on fortifying the region against shocks, natural or human-made, is partly rooted in the tremors emanating from the 2022 security pact between the PRC and the Solomon Islands. Although the details remain secret, the deal is believed to permit Chinese warships to replenish in the Solomon Islands and allow Chinese security forces to provide law enforcement assistance in the island nation, which does not have a military. Analysts contend it could be a precursor to a permanent Chinese military presence, which both nations have denied. “We’ve recently seen in the form of the Solomon Islands some actions by the PRC to potentially grab a foothold,” Adm. John Aquilino, Commander of the U.S. Indo-Pacific Command, said in a March 2023 speech at the International Institute for Strategic Studies in Singapore. “I think it woke a number of us up to ensure we spend more time, engage with, [and] provide assistance and support to Pacific Islands. ... We’re back on track, I would say, and we continue to engage in ways that are meaningful and helpful for those nations.”

That includes USAID’s 2022–27 Strategic Framework for the Pacific Islands. The multibillion-dollar, public-private initiative seeks to strengthen community resilience, democratic governance and economic growth in 12 PICs, to “better respond and adapt to climate and disaster impacts, pandemics, and economic shocks, with strong political systems that champion democratic values, good governance, human rights, and promote equity and inclusion for all Pacific Islanders.”

As the U.S. and its allies and partners boost investment in the Pacific, Beijing has decreased its financial assistance. The PRC’s bilateral aid and development financing to PICs fell from a high of U.S. \$334 million in 2016 to U.S. \$188 million in 2020 — lower than its contribution in 2008, The Fiji Times reported in March 2023. Meanwhile, nearly one-fourth of Fiji’s external debt as of 2020, about U.S. \$190 million, was owed to the state-run Export-Import Bank of China, according to Fiji’s central bank.

Lingering concerns about Beijing’s commitment to the region extend beyond finances and won’t be allayed by its belated appointment of a special envoy to the Pacific in early 2023. The previous year, 10 PICs rebuffed an expansive Chinese proposal to deepen economic and security ties. Then-Micronesian President David Panuelo warned that the plan would pull the region “very close into Beijing’s orbit,” and he later urged lawmakers to switch the nation’s diplomatic allegiance from the PRC to Taiwan, The Diplomat magazine reported. Panuelo alleged that Beijing was using gray-zone tactics such as bribery and spying to secure Micronesia’s support, or at least its neutrality, should the PRC invade Taiwan, which it claims as its territory.

“One of the reasons that China’s political warfare is successful in so many arenas is that we are bribed to be complicit, bribed to be silent,” Panuelo wrote in a March 2023 letter. “To be clear: I have had direct threats against my personal safety from PRC officials acting in an official capacity.”

Beijing dismissed the accusations.

Despite the PRC's limited gains in the region, such as the Solomon Islands pact, the "full picture suggests Beijing's attempt to make the Pacific a Chinese lake has stalled and will face strong counter-currents for the foreseeable future," Denny Roy, a senior fellow at the East-West Center, a Hawaii-based independent research institution, wrote in a March 2023 article for the Asia Times website. "Much of the opposition Beijing faces in the Pacific is stimulated by the Chinese government's own actions — a classic characteristic of overreach."

### READY TO RESPOND

As Panuelo was exposing Chinese coercion, the U.S. Coast Guard cutter Oliver Henry had just completed a weeklong deployment to Micronesia to counter illegal fishing and bolster partnerships with communities on remote atolls. As part of Operation Rematau, the cutter's crew delivered more than 2,000 kilograms of supplies donated by residents and businesses in Guam, including food, clothing, educational materials, toys, fishing gear, marine fiberglass repair kits and water pumps. The visit coincided with a search and rescue exercise by the U.S. Coast Guard and local public safety and disaster management officials. "Continuing to build the capacity of our FSM [Federated States of Micronesia] partners, especially in search and rescue, remains a high priority," Capt. Nick Simmons, commander of U.S. Coast Guard Forces Micronesia/Sector Guam, said in a news release.

Elsewhere in the region, about 300 New Zealand

Defence Force (NZDF) personnel deployed to Fiji aboard the sealift vessel HMNZS Canterbury for Operation Mahi Tahī in March 2023, which included humanitarian assistance and disaster relief (HADR) drills, amphibious landings, and delivering books and other supplies to schools. Fijian Sailors also received training in landing craft and helicopter operations aboard the HMNZS Canterbury. "Responding to disasters throughout the Pacific is a key role for the NZDF and we need to train as often as we can in order to deliver this critical capability when it's needed," Col. Mel Childs, commander of the joint task group leading the exercise, said in a news release. "I've been lucky to have trained and worked with the Republic of Fiji Military Forces throughout my career and we enjoy a great relationship with our RFMF friends."

Security agreements among allies and partners illustrate how such endeavors have flourished. In late May 2023, Papua New Guinea (PNG) and the U.S. signed a defense cooperation deal that will enhance the PNG Defence Force's training and infrastructure. It follows an agreement allowing PNG personnel to ride aboard U.S. Coast Guard and Navy vessels patrolling for smuggling, illegal fishing and other illicit activities.

PNG also is negotiating a security treaty with Australia that would "reflect the evolving nature of our shared security interests, recognizing that nontraditional security challenges, such as climate change, cybersecurity, and economic elements of statecraft, affect our strategic environment," the nations said in a January 2023 statement. A month before, Canberra signed a security

**The Royal Australian Navy patrol ship HMAS Broome, left, and the Republic of Fiji Navy patrol vessel RFNS Savenaca conduct a boarding operation during exercise Kakadu off northern Australia in September 2022.** AUSTRALIAN DEFENCE DEPARTMENT







**Maj. Gen. Mark Goina, left, commander of the Papua New Guinea Defence Force (PNGDF), and Gen. Angus Campbell, chief of the Australian Defence Force, sign an agreement in March 2023 for the delivery of two new PAC-750XL utility aircraft to the PNGDF.**

AUSTRALIAN DEFENCE DEPARTMENT

partnership with Vanuatu covering areas ranging from HADR and policing to biosecurity and maritime safety. The agreement “is a practical expression of the family first approach to peace and security in our region,” Australian Defence Minister Richard Marles said in a statement. “It reflects Australia and Vanuatu’s ongoing commitment to working together as members of the Pacific family to address shared security challenges.”

### STRENGTHENED SOLIDARITY

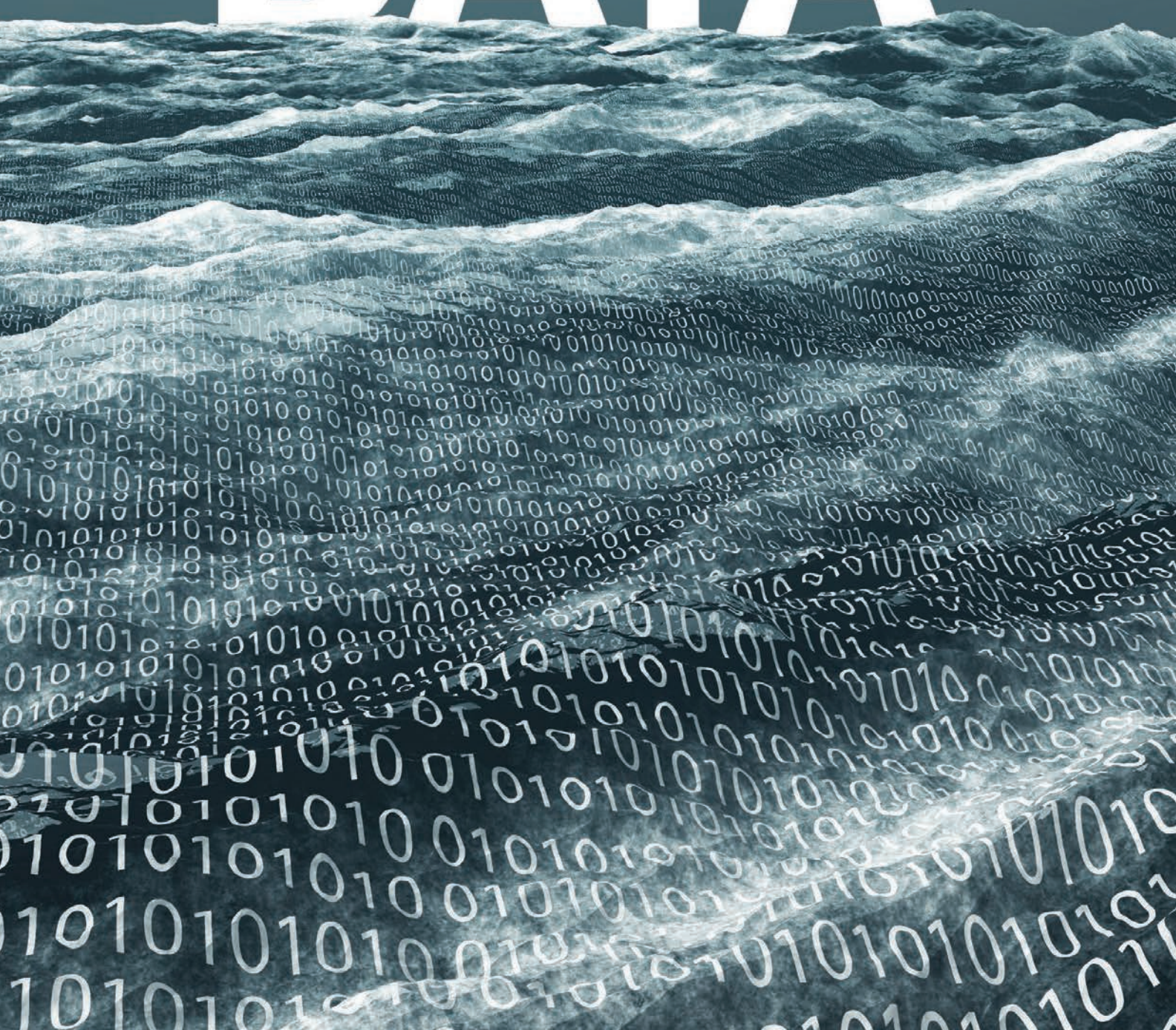
Those challenges include Vanuatu’s long road back from the devastation of the twin cyclones — a disaster that affected more than 80% of the population across the nation’s 80 islands, with an economic wallop exceeding half the gross domestic product of U.S. \$956 million. Allies and partners plan to be there for the duration. Just weeks after the storms, the U.S. State Department announced it would open an embassy in Port Vila to “facilitate areas of potential bilateral cooperation and development assistance, including efforts to tackle the climate crisis.” By early April 2023, the U.N. World Food Programme had spearheaded the delivery of 30 metric tons of food rations and medical supplies, including donations from Fiji, and the installation of emergency communications systems.

Even as recovery efforts gained traction, partners were pledging long-term investment in the region. The United Kingdom launched its Pacific Partnership Facility in Suva to award grants for vulnerable communities to build resilience against climate change, The Fiji Times reported in March 2023. In Samoa, the Asian Development Bank committed U.S. \$10 million for natural disasters and health emergencies, part of the Pacific Disaster Resilience Program that began in 2017 and is set to run through 2026. Japan pledged U.S. \$37 million over two years through the U.N. Development Programme (UNDP) to help four PICs — PNG, Samoa, Timor-Leste and Vanuatu — transition to renewable energy, including solar and hydropower. “Many Pacific nations have developed blueprints to combat multiplying climate crises, despite their negligible role in greenhouse gas emissions,” Kanni Wignaraja, the UNDP’s bureau director for Asia and the Pacific, said in a statement.

Only such a unified and comprehensive response to the region’s challenges will prevail, Fiji’s Rabuka noted. “Set against the backdrop of increasing geopolitical interests in our region, coupled with the real threats posed by climate change,” he said, “solidarity in our Pacific family is ever so critical.” □



# OCEAN OF DATA





## CONSORTIUM IMPROVES ACCESS TO TECHNOLOGY, DATA TO CURB ILLEGAL FISHING, PROTECT ECONOMIES AND ECOSYSTEMS

FORUM STAFF | PHOTOS BY INTERNATIONAL MONITORING, CONTROL AND SURVEILLANCE NETWORK

Illegal, unreported and unregulated (IUU) fishing is a global scourge: 1 in 5 fish sold is illegally caught. The Indo-Pacific, with 65% of the world's oceans and more than half of its population, is rife with fishing operations that damage national economies, push depleted fish stocks toward collapse, harm marine ecosystems, and encourage forced and unsafe labor. Many nations rely on fish as a primary food source, so sustaining the resource is critical.

Helping states gather real-time insights and background data on suspected IUU fishing, and supporting effective responses is the essence of a new group of international nonprofits with expertise in identifying illegal fishing actors. The collaborative initiative, the Joint Analytical Cell (JAC), launched in May 2022 as a free and practical solution to the growing problem.

Authorities have had limited success in curtailing IUU fishing within many national maritime jurisdictions and on the high seas. Meanwhile, IUU fishing has increased in recent years, partly because COVID-19 restrictions pushed more impoverished people into illegal fishing and made monitoring and inspections more difficult. Nations with the capabilities to do so have taken separate enforcement approaches, often with little bilateral or multilateral collaboration.

The JAC serves as an information hub and forum to build capacity for monitoring, control and surveillance of fisheries. The partners help countries tackle IUU fishing with data, innovative technology and partnership

development. Established by Global Fishing Watch, the International Monitoring, Control and Surveillance (IMCS) Network, and TM-Tracking, the JAC provides authorities with fisheries intelligence, analysis, support and training. More nonprofits have signed on, adding depth to the effort. The JAC receives funding from governments and philanthropic organizations.

"We believe that the whole is greater than the sum of its parts," Tony Long, Global Fishing Watch's chief executive officer, said in a news release.

"By combining our different strengths and areas of expertise, as well as our existing initiatives, tools and partnerships, we can amplify their impact."

Some developing nations have limited capacity to monitor fishing and enforce good practices in their waters, let alone in distant oceans. That encourages those eager to exploit the enforcement void. The results can be devastating.

"At the heart of the IUU fishing issue is the potential for millions of people to lose their primary source of food due to the collapse of global fish stocks," the Brookings Institution reported in February 2023. "As marine life knows no borders and IUU fishing perpetrators are highly mobile, often exploiting the vastness of the world's oceans, this is truly a global problem."

The JAC provides intelligence to partner governments, Mark Young, executive director of the IMCS Network, told FORUM. "Those that seek JAC support can do so via one-stop shopping rather than engaging with multiple organizations for services and getting confused by the landscape out there of multiple organizations working in the same space," he said.



# JAC Partners

The Joint Analytical Cell's (JAC) founding nonprofits support collective efforts and welcome others' expertise. The three groups that launched the JAC are:

- Global Fishing Watch analyzes and disseminates information about human activity at sea to promote fair and sustainable use of the oceans. "To make the invisible visible" it uses satellite imagery, machine learning and data visualization to track GPS coordinates from vessels' automatic identification systems and vessel monitoring systems.
- The International Monitoring, Control and Surveillance (IMCS) Network supports "communication, cooperation and coordination" among its members and those responsible for fisheries compliance and enforcement. The IMCS Network also facilitates capacity building for fisheries law enforcement agencies, especially in developing countries.
- TM-Tracking (TMT) provides national fisheries authorities and international organizations with intelligence and analysis to help partner countries improve fisheries enforcement and governance.

Additional organizations have joined the JAC as partners:

- C4ADS, a United States-based research institute, provides data-driven analysis to link fishing boats to those companies or individuals who profit most from their catches. "If you're just pinpointing vessels at sea, you're playing whack-a-mole," Sam Naujokas, a C4ADS lead analyst on the project, told FORUM.
- The Allen Institute for Artificial Intelligence enhances and integrates fishing data with its satellite-based Skylight software, used in conjunction with technology such as Vessel Viewer, developed by Global Fishing Watch and TMT.

## LOW RISK, HIGH VALUE

Fishing is illegal when it occurs in a nation's exclusive economic zone (EEZ) without permission. Catches recorded as smaller than they are, or not recorded at all, are considered unreported. Satellite and radar monitoring have reduced but not eliminated unregulated fishing. For example, squid fisheries on the high seas in the northwest Indian and southwest Atlantic oceans operate without management plans in place and, consequently, lack effective regulation, Young said.

Enforcement is not solely about sustaining fish populations. IUU fishing also is associated with organized crime, according to the United Nations' Food and Agriculture Organization (FAO). The United States Customs and Border Protection in January 2023 announced a renewed commitment to combating illegal fishing "because of its direct convergence with serious crimes like forced labor, drug trafficking, money laundering, and wildlife trafficking." Nations that counter IUU fishing also garner more revenue by sustainably harvesting their resources.

**The JAC serves as an information hub and forum to build capacity for monitoring, control and surveillance of fisheries. The partners help countries tackle IUU fishing with data, innovative technology and partnership development.**

The People's Republic of China (PRC), the world's second-most populated nation, consumes more fish than any other country, the U.S. Naval Institute reported in February 2023. It also consistently ranks among the worst performers on the IUU Fishing Index, which assesses 152 coastal countries "based on their vulnerability to, practice of, and response to harmful fishing practices." The index was developed by Poseidon Aquatic Resource Management, a global fisheries and aquaculture consultant; and the Global Initiative Against Transnational Organized Crime, a Switzerland-based nongovernmental organization.

Chinese fishing vessels often encroach on other nations' maritime EEZs. The PRC's distant-water fleet of 4,600 boats is the world's largest and reaches farther into the high seas each year, the U.S. Naval Institute reported. Many Chinese-flagged fishing vessels and their crews are part of a maritime militia that Beijing describes as "an armed mass organization composed of civilians retaining their regular jobs," U.S. Coast Guard Cmdr. Jennifer Runion reported in February 2023. The fishermen provide surveillance and receive training and funding to support the Chinese Communist Party's military objectives.

IUU fishing is a low-risk, high-value activity because penalties usually are modest fines, the Pacific Forum, a Hawaii-based nonprofit that coordinates with research centers throughout the Pacific Rim, reported in November 2021. Globally, some vessels





**Officers confiscate undersized fish at a market in Suva, Fiji.**



**A Marshall Islands Marine Resources Authority officer monitors a fishing boat in Majuro Lagoon in March 2023.**

damage fragile marine ecosystems by dragging nets across the seafloor. Fleets haul in tuna, squid and other species, offloading their illegal bounty in ports where state regulation is lax at best.

Transshipment, in which catches are delivered to factory or refrigerated cargo ships often far out at sea, can be a weak link in regulating fishing, according to the FAO. It can be used to move fish without the effective oversight that occurs in some ports, enabling IUU catches to enter the supply chain.

Attempts to stop such operations, which also damage the livelihoods of legitimate fishermen, face formidable odds. But technology, including increasingly effective satellites, helps target and deter seafaring scofflaws. The JAC's mission is to help nations, especially developing countries, tap into advanced options for identifying IUU fishing and its benefactors, and more effectively use data analytics for enforcement.

### **COMBINED EXPERTISE**

In Tokyo, in May 2022, leaders of the Quad, which includes Australia, India, Japan and the U.S., vowed to improve maritime domain awareness (MDA) by sharing information and pursuing technologies to protect Indo-Pacific fisheries. Supporters said the agreement is a model for collectively combating IUU fishing.

Australia and Indonesia in 2007 established the Regional Plan of Action to Promote Responsible Fishing Practices Including Combating Illegal, Unreported and Unregulated Fishing. Its 11 member states aim to strengthen fisheries management.

Tuvalu's government hired a New Zealand company in 2022 to conduct satellite surveillance of unauthorized or nonreporting fishing vessels in the Pacific Island nation's EEZ, according to Seafood Source, an online resource for seafood industry professionals. A shiprider agreement among the U.S. and 13 Pacific Island Countries,

meanwhile, authorizes U.S. military vessels to help local authorities enforce laws in their maritime EEZs.

"I think this idea of collaborative relationships will continue to foster interest, especially as we see it develop and foster into more mutually beneficial public-private partnerships," Young said.

"Our engagement with the JAC is in the early stages," Viv Fernandes, senior manager of International Compliance Policy for the Australian Fisheries Management Authority, told FORUM. "However, we support the initiative and continue to engage with our international partners to share relevant information and analyses to cooperatively address IUU fishing."

New Zealand officials also are optimistic. "Fisheries is a data-rich environment with multiple information streams now available to fisheries enforcement personnel," Andrew Wright, team leader of New Zealand's International Fisheries Compliance, told FORUM. "The JAC will help member countries make best use of this information, so it is able to be used by frontline officers."

One of the JAC's attributes is that it is not a commercial entity. Instead, member organizations provide access to technology and data analysis, especially to developing countries without the capacity to take advantage of emerging technologies, and greater access to data that can counter IUU fishing. Ideally, the services will enhance worldwide MDA, Young said.

"The new Joint Analytical Cell is a phenomenal example of how different groups can come together to harness existing technologies to amplify fisheries intelligence, data analysis and capacity building," Monica Medina, then U.S. assistant secretary of state for oceans and international environmental and scientific affairs, said at the U.N. Ocean Conference in Lisbon, Portugal, in late June 2022. "Most importantly, the information we generate together needs to quickly get into the hands of those that can effectively act on it." □





# *Unified* **RESOLVE**

ALLIES, PARTNERS CONVERGE IN AUSTRALIA FOR  
AN UNPRECEDENTED **EXERCISE TALISMAN SABRE**

Australian and U.S. personnel  
with the Combined Joint Theater  
Medical Component coordinated  
health care services during  
exercise Talisman Sabre 2023.

AUSTRALIAN DEFENCE DEPARTMENT





FORUM STAFF

**W**ith the practiced steps of a choreographer, Australian Army Col. Ben McLennan traversed northeast Queensland, careful not to crush the enemy at his heels. Striding across an 8-by-16-meter map dotted with red and blue plastic models of tanks, warships, aircraft and troops, McLennan outlined the unfolding maneuvers of Talisman Sabre to Warrant Officer Ken Robertson, the senior enlisted advisor to the Australian Defence Force (ADF) chief. It was late July 2023, midpoint of the “Olympics of war games,” a watershed exercise that drew 34,500 troops from more than a dozen nations to Australia for live and simulated drills across warfighting domains.

“Like any military activity, we are treating this as a rehearsal,” McLennan

told Robertson, who leaned forward in one of the chairs arrayed along the mock conflict zone’s perimeter. “We are rehearsing key aspects of what it would take to operate and fight as a coalition. This is a demonstration of collective commitment, of collective resolve, of collective collaboration to train together, to be better together and, if required, to act together to ensure the peace and stability of our region.”

Unrivalled in scale and complexity, the 10th iteration of the biennial Australia-United States exercise largely reflected geopolitical realities in the Indo-Pacific, where Beijing’s rapid military buildup, Pyongyang’s destabilizing missile launches and Moscow’s unprovoked assault on Ukraine have stoked tensions, while reinvigorating a focus on fortifying

partnerships among like-minded nations. That was evident in the roster of first-time Talisman Sabre participants — Fiji, France, Germany, Indonesia, Papua New Guinea and Tonga — as well as in the inaugural observer status of India, the Philippines, Singapore and Thailand.

For a developing nation such as Tonga, the two-week exercise was an invaluable opportunity to be “part of the regional security arrangements,” said Lt. Col. Tau Aholelei, commander of the Pacific Island Country’s 40-member contingent in Australia, which represented about 7% of its Armed Forces. “We all have our various respective security interests. At the same time, we also have common security interests,” Aholelei told FORUM at the ADF’s Townsville Field Training Area in Queensland, a 2,300-square-kilometer facility that is three times larger than Tonga. As “one of the smallest participants, we also want to show our security partners that we can contribute, and not only contribute but contribute so we add value to operations, we add value to the partnership, and that we are a reliable and trustworthy partner when it comes to security operations.”

The incorporation of Tongan and other forces into Talisman Sabre was “remarkably smooth,” said McLennan, commander of the ADF’s Combat Training Centre and a veteran of the first exercise in 2005. “The fact that in less than 20 years we’ve gone from two nations through to 13, and likely 17 next time, is really incredible,” he told FORUM. “The integration is across people, process and platform. I think our people, coming from like-minded countries, integrate pretty well. There’s an earnestness there, and there’s a real desire to cooperate, to collaborate, to team together ... and so these types of activities are fantastic to help develop common processes that work for people from multiple nations.”

## SHARPENING SKILLS

In tents and trailers a few dozen strides from McLennan’s map at Townsville Field, military and civilian analysts sat at banks of computer monitors below screens busy with video feeds and digitized renderings of troop movements. The mission: evaluate operational performance in real time, down to the individual level. Did the coalition forces’ feint at a river crossing elicit the expected enemy countermove? How could the gleaned data inform subsequent moves that keep the adversary off balance while concealing the true target?

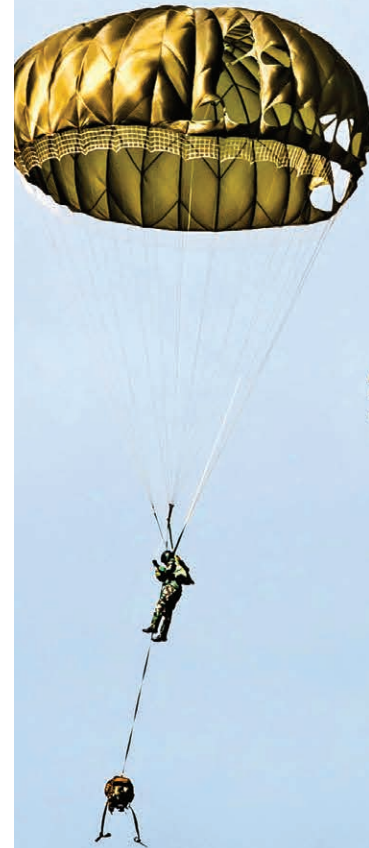
The customized assessment incorporated GPS trackers, mobile devices and embedded coaches. Think professional sports, McLennan said. “Instead of waiting until the end of the activity to give people feedback, we provide feedback during the game; so, it’s for the next play, not for the next game next week,” he told the Stars and Stripes newspaper. “It’s all about learning and thriving through feedback, through our coaching network with feedback that this fusion cell provides.”

The melding of high-tech and human analysis played out elsewhere, too, as U.S. service members tested the Health Readiness and Performance System, which includes a cellphone-connected device worn over the heart to monitor pulse oxygen level, heart rate and other physiological metrics. Using a predictive algorithm, the technology can alert medics and squad leaders to signs of heat stress, which can cause injury, hinder decision-making and diminish performance.

Military health professionals also worked in multinational teams to care for Talisman Sabre participants across the Australian continent, while enhancing their own operational readiness. “Our goal is to have interoperability, to be capable to deploy together,” Australian Army Capt. Jonathan Polasek, a pulmonologist with the 3rd Health Battalion, told FORUM at Rockhampton Army Reserve Depot, or “Camp Rocky,” about 520 kilometers north of Queensland’s capital, Brisbane. “Australia and America have been long-term partners in [dealing with] multiple problems in the world, and we find that we all share a perspective and a similar type of practice of medicine and nursing, and we can very quickly relate to how each of us operates and very quickly fit in with each other to provide that type of capability.”

“Just being able to be adaptable and collaborate and communicate has been great,” added Capt. Anndrea Boyer, a physician assistant with the Utah National Guard’s 144th Area Medical Support Company, which had nearly 50 members at the exercise. “We have been able to work together and run through different trauma scenarios, go through different equipment and medical supplies, and really become a seamless machine. ... We’ve learned so much with each other.”

Such collaboration and innovation permeated Talisman Sabre, which also included nearly 30 ships and submarines, and more than 50 aircraft conducting over 500 missions. Among the accomplishments:







Indonesian Armed Forces paratroops conduct a tactical insertion at Shoalwater Bay Training Area during Talisman Sabre 2023.

AUSTRALIAN DEFENCE DEPARTMENT

- The ADF and U.S. military employed the Army Tactical Missile System, which has a range of 300 kilometers, to strike a target as part of a multidomain strike capability.
- The Japan Ground Self-Defense Force conducted the first live-fires of its Type 12 surface-to-ship and Type 3 Chu-SAM surface-to-air missiles in Australia.
- The Republic of Korea (ROK) Armed Forces deployed K239 Chunmoo self-propelled, multiple-launch rocket systems and K9 Thunder self-propelled howitzers to Australia for the first time.
- The U.S. Army and Navy established a 3-kilometer, ship-to-shore petroleum pipeline in north Queensland to demonstrate force sustainment in remote locations.
- The ADF and U.S. military erected a 540-meter-long floating pier at Bowen, Queensland.
- Royal Australian Air Force KC-30A multirole aircraft and U.S. Air Force KC-46A Pegasus tankers provided coordinated air-to-air refueling operations for the first time.

Exercise goals extended beyond interoperability among multiple forces. “Where we’re really trying to progress to is interchangeability, which is kind of the next step, [so] that any one of us, regardless of the flag that we fly, can perform a mission for the other partner,” U.S. Navy Rear Adm. Chris Stone, commander of Expeditionary Strike Group 7, Task Force 76 and Amphibious Force 7th Fleet, told U.S. Naval Institute News. “We’re really trying to progress to where we can plug and play with each other, where we have similar tactics, techniques, procedures, doctrine, understanding, training, proficiency.”

### DEEPENING TIES

At the terminus of a 25-kilometer gravel track through cattle country — a tortuous washboard that is the bane of shock absorbers and lidless drinks — Australian Army Lt. Gen. Greg Bilton watched from atop the dunes as U.S. Navy hovercraft landed German, Japanese and U.S. forces on Langham Beach. The sweep of golden sand fronts Stanage Bay, about 725 kilometers southeast of Townsville at the head of a peninsula that juts north into the Coral Sea like a cassowary’s casque. On a horizon made hazy by scudding storm clouds, a warship was barely visible in silhouette as it steamed east. The roar of U.S. Marine Corps MV-22B Ospreys rose to a crescendo as the tiltrotors shadowed the

Republic of Korea Marines  
conduct an amphibious  
landing at Shoalwater Bay  
Training Area in Queensland  
during Talisman Sabre.

AUSTRALIAN DEFENCE DEPARTMENT



shoreline. At Shoalwater Bay to the southeast, Indonesian and U.S. paratroops conducted tactical insertions from C-130s, and ROK Marines secured another beachhead.

The amphibious assault drill encapsulated Talisman Sabre's multinational nature. "There's evidence of that today with the Japanese," Bilton, the ADF's chief of joint operations, told reporters. "There is [also] strong European interest in the region. They see these exercises as an opportunity for their militaries to operate in this environment." German Navy Sea Battalion Capt. Jonas Linke was on his first deployment to the Indo-Pacific with more than 200 German airborne and infantry troops who had traveled up to 15,000 kilometers. Cultural differences were erased by a shared mission and mutual trust, he said at a Stanage Bay staging area. "Participating with U.S. Marines and Japanese forces has been a great training opportunity. We each speak a different language, but we all speak the same military language and make it all work out, achieving the same goals and objectives."

Indonesian Army Lt. Col. Arief Widyanto led a raid with more than 30 paratroopers during the amphibious assault as part of the Southeast Asian nation's inaugural deployment of more than 100 personnel to Talisman Sabre. "We already learned so much from the beginning of the exercise, even from the planning of the exercise," Arief, commander of the 501st Airborne Battalion, told FORUM. "This is a great experience for Indonesian troops to be able to join such a large exercise outside our country. ... It brings much benefit for us, not only for the staff who work side by side with other staff so they can build good relationships, but also for the troops on the ground to be able to know the capabilities of the allied

forces and to learn so much more about them."

Lessons were learned and shared in the bush and at the barracks. "We discuss concepts about what the future looks like, especially in organizing each respective military, looking at various areas we can help each other in," Aholelei said, sitting with Arief at a folding table near the Townsville Field mess tent and field kitchen, where the aroma of grilled lamb and steak tempted as a midwinter dusk descended. "It's about partnership and fostering those relationships. It's one thing sitting in a conference room being formal and saying the right things, but person-to-person there's a natural connection and, from there, that's where trust and respect builds."

### **'UNIFIED RESOLVE'**

Water splashed to window level, darkening the ochre that dusted the white Toyota Land Cruiser, as U.S. Army Col. Bryan Martin maneuvered through a gully at Townsville Field, his command of the 4x4 outranking its disputatious transmission. Martin, commander of the Hawaii-based Joint Pacific Multinational Readiness Center (JPMRC) and a Talisman Sabre deputy exercise director, was surveying the immense battlefield, confirming his position via map and handheld radio as he analyzed operations. Leaving the Land Cruiser to navigate the unforgiving terrain on foot, he noted the spacing among a handful of vehicles camouflaged amid heavy brush and trees. "You don't want to be in the burst radius of a 155 mm round," he told FORUM. "It's pretty good dispersion; still a little tight over here."

In another Talisman Sabre first, the JPMRC and the ADF's Combat Training Centre merged capabilities for





**An Australian Army Soldier uses a termite mound for cover during Talisman Sabre 2023 at Derby, Western Australia.**

AUSTRALIAN DEFENCE DEPARTMENT



**Australian Army Lt. Gen. Greg Bilton, chief of joint operations, observed a multinational amphibious assault drill at Stanage Bay, Queensland, during Talisman Sabre in August 2023.**

FORUM STAFF

the 10-day joint forcible entry operation, in which largely overmatched coalition forces protected an island republic against an invading enemy. The adaptive, contest-of-wills scenario allowed planners to “induce the fog and friction of stress,” Martin said. “This is a demonstration of like-minded countries coming together, working toward a common military goal and showcasing what is in the realm of the possible from the aspects of projecting power and conducting decisive land power in the Pacific.”

From planning to execution, the exercise was a potent symbol of the expanding Australia-U.S. military partnership, which dates more than a century to the trenches of the Western Front during World War I and was cemented with a mutual defense treaty signed in 1951. Just months before drills began, Canberra unveiled its Defence Strategic Review, a comprehensive assessment of security challenges facing Australia that calls for the 85,000-member ADF to be able “to hold an adversary at risk further from our shores.” Among its recommendations: develop long-range strike capabilities, such as the High Mobility Artillery Rocket System (HIMARS); integrate long-range antiship missiles on fighter aircraft; enhance military planning with the U.S.; and increase rotations of U.S. forces to Australia.

As Talisman Sabre entered its second week, the defense and foreign ministers of Australia and the U.S. met in Brisbane, agreeing to deepen cooperation, including longer and more regular visits of U.S. Navy submarines, and rotations of U.S. Army watercraft and U.S. Navy maritime patrol and reconnaissance aircraft to Australia. The allies also agreed to establish a combined intelligence center within Australia’s Defence Intelligence

Organisation by 2024 and co-produce a guided multiple-launch rocket system in Australia by 2025, while saying they would enhance collaboration with partners including India, Indonesia, Japan, the Philippines and South Korea to bolster regional security and stability.

“I was never in combat when I didn’t turn to my right or left and see Australian Soldiers, Sailors, Airmen, as well as many of the allies and partners that are represented here today,” U.S. Defense Secretary Lloyd Austin, who served 41 years in the U.S. Army, told exercise participants during a visit to Lavarack Barracks in Townsville with Australian Defence Minister Richard Marles. “This is what we’re about. We’re about interoperability. We’re about working together. We’re about promoting a common vision of a Free and Open Indo-Pacific.”

The gritty dust kicked up at Townsville Field by tank tracks, aircraft propellers and boots on the ground will barely settle before McLennan, Martin and their counterparts begin planning for the next Talisman Sabre in 2025. It’s an almost continuous endeavor that an Australian might liken to “painting the Sydney Harbour Bridge,” but one that promises yet another major stride forward for multinational partnerships.

“Overall, I think it’s been a remarkable achievement,” McLennan said, the battlefield map at his feet a manifestation of the scale and scope of a historic mission. “And I think it’s testament to that common, unified resolve and commitment to operate together, to train together and to be better together to potentially fight together. ... When everyone’s pulling in the same direction, success takes care of itself. As we all know, it’s relationships that will keep us together in a crisis.” □



# *Stronger* TOGETHER





## *Special Operations Forces build partner capacity, collective strength*



**Col. Ranulfo A. Sevilla, left, of the Armed Forces of the Philippines, and U.S. Lt. Col. Vincent Enriquez, Commander of 3rd Battalion, 1st Special Forces Group (Airborne), speak during the Balikatan 2023 exercise at Fort Magsaysay, the Philippines.** STAFF SGT. SAMUEL KIM/U.S. ARMY

FORUM STAFF

**A**rmed Forces of the Philippines (AFP) Col. Ranulfo A. Sevilla, deputy commander of the Special Operations Command AFP (SOCOM AFP), and his United States counterpart, Lt. Col. Vincent Enriquez, Commander of 3rd Battalion, 1st Special Forces Group (Airborne), spoke with FORUM during the Balikatan 2023 exercise in the Philippines in April. Sevilla also served as executive director for the Balikatan 2023 Special Operations Forces (SOF or SOFOR) Field Training Exercise (FTX) and as commander of the Special Operations Forces in the Balikatan Command Post Exercise (CPX). He and Enriquez discussed SOCOM AFP and U.S. Special Operations Command Pacific's roles in enhancing the Philippine-U.S. partnership, given that enduring face-to-face interactions with allies and partners are the foundation of bilateral relationships.

---

**Philippine Sailors assigned to Naval Special Operations Units and U.S. Naval Special Warfare operators approach their target during a Balikatan drill in Palawan province.**

PETTY OFFICER 1ST CLASS DANIEL GAITHER/U.S. NAVY



Philippine and U.S. Soldiers prepare a weapon during exercise Balikatan.

REUTERS

**FORUM: Tell us about your roles at Balikatan 2023.**

**Col. Sevilla:** I am the deputy commander of the SOCOM AFP. For Balikatan, I am the exercise director for SOFOR FTX events. When the Balikatan exercise was conceptually planned two years ago, we realized that SOCOM needs to create an exercise directorate to supervise the players of SOCOM. So last year [2022], we created this exercise directorate and now I am the exercise director. Aside from being the exercise director for SOCOM SOFOR events, I am also the SOFOR commander for the Command Post Exercise [CPX], so I am wearing two hats for SOFOR events as the exercise director and, at the same time, the commander for the CPX for SOFOR. It will be very challenging joining the planning for the CPX as well as the tabletop exercises. I also supervise the events that my counterpart here will do in the actual scenario.

**Lt. Col. Enriquez:** I welcome the supervision! I am based out of Joint Base Lewis-McChord [in the U.S. state of Washington], and I am here in the capacity of a special operations task force with elements spread across Palawan, Northern Luzon, as well as on Fort Magsaysay, to help build up our interoperability, our ability to work with our long-term partners — the AFP SOCOM — as well as to ensure that my forces are training effectively in the field. We're very excited for this opportunity. It's been too long since we've been able to exercise at this scale, and it's important that we continue to invest in the partnership. We are demonstrating to the world how strong our partnership is and how well we fight together.

**FORUM: Have you been involved in previous Balikatan exercises?**

**Col. Sevilla:** I was involved in Balikatan exercises when I was still a captain. I was the

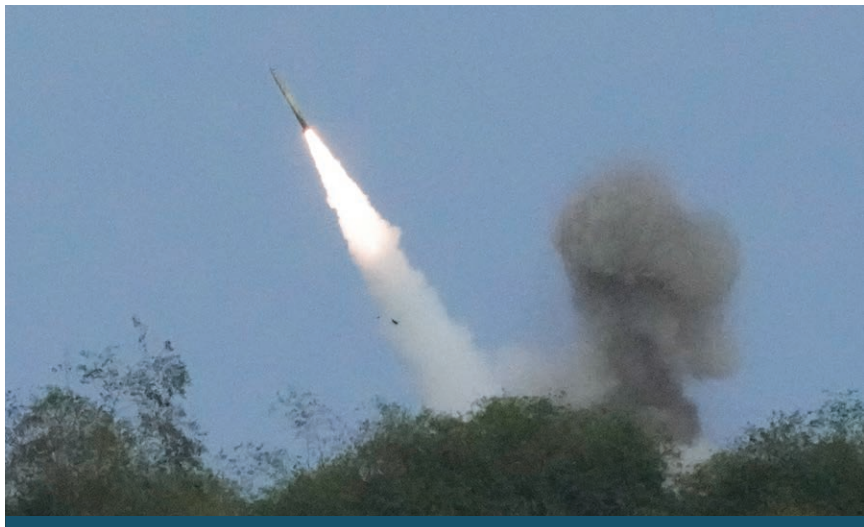


assistant chief of staff for education and training, G8 of the Special Forces Regiment (Airborne) in 2000, and that was my first participation in Balikatan. Aside from being the training officer of the special forces, I joined the tactical level with the ODA 186 (operational detachment alpha or operational unit of special forces). I joined in the small unit tactics training. Barely seven years after that, I again participated in Balikatan and at the time, I was with the AFP Joint Special Operations Group (AFP JSOG). JSOG, at the time, was directly under the AFP, not SOCOM. I was the intel officer, and I was also given the task to participate in Balikatan on two occasions. I have seen the evolution of Balikatan, and I have seen a lot of changes. Previously, the Balikatan exercises were more focused on small unit tactics and training exchanges of TTPs [tactics, techniques and procedures]. Now the focus is shifting to operational concepts and expanding to a wider scope and wider perspective. I'm so glad that there are other special operations-type missions being introduced in this exercise, and we are now focusing on territorial defense, not just on posting on hybrid threats, but defending our sovereignty, our territory. So, I'm so happy for that.

**Lt. Col. Enriquez:** I have participated in many exercises in the Philippines, but oddly enough, this is my first time that I've participated in Balikatan. What is significant about this year's event is that the scale is unprecedented. This is a unique opportunity we need to take advantage of to train at higher levels, like Col. Sevilla mentioned, looking at the operational level and maybe even the strategic. In previous exercises, the tactical training was beneficial for building the relationships. But that training did not necessarily provide an opportunity to ensure we can work together in a real combat situation. We must sustain the fight and communicate with each other to coordinate multiple operations. At smaller scales in previous exercises with units across the country, everybody could operate independently, and it was still good training. But we weren't able to achieve combined, joint effects. This is a unique opportunity now that we have so many different partners here from the Philippines and our side, as well as the international partners — with the Australian SOF we can work together at scale. That's really the main difference for this year.

## FORUM: What is significant about Balikatan 2023?

**Col. Sevilla:** We have trainings with Australia, but this is the first time that they have participated in Balikatan. I think it's not just about interoperability, but now it's more of integration of systems as well, and it's a very good thing, because we know for a fact that our systems are way behind those from the U.S. We have to be able to integrate their system into our system so that we can work together to fight the common enemy, if there is one.



**Lt. Col. Enriquez:** I think we can't ignore the backdrop. There are concerns regarding the territorial sovereignty of the Philippines. We want to ensure that our partnership deters any kind of aggression that could threaten that sovereignty. It's important that we show that we can work together, defend ourselves and that we have a very capable partner in the Philippines. My ethnic background is Filipino, and it's very exciting to come back and work with the culture and partners and friendships that we've had for so long. That's a real excitement for me. And so is, in the course of my professional career, seeing the development of the relationship with our SOF partners and AFP SOCOM, and how the expansion of their headquarters and their capabilities have grown. What began almost as a company-size partner element has grown to the division and general officer combatant command and, throughout, we at 1st Special Forces Group have maintained a longstanding relationship. In a way, we've grown up together.

**Col. Sevilla:** What makes me excited about this Balikatan is what I mentioned this morning at our simple opening ceremony for the SOFOR events. I mentioned that it was in mid-2021 when

**A U.S. M142 High Mobility Artillery Rocket System fires a missile during Balikatan 2023 in Zambales province.**

THE ASSOCIATED PRESS



**Philippine and U.S. Soldiers participate in weapons training during Balikatan 2023.**

GETTY IMAGES

U.S. planners came to my office and I was telling them: “Why not come up with different scenarios or training concepts for Balikatan? We should not just focus on small unit tactics. Perhaps we can incorporate unconventional warfare (UW) in the exercise, but on a limited scale. Instead of following the seven phases of UW, we can skip some of its phases since we have a limited time in the exercise.” It was good that they adopted the idea. It was last year’s Balikatan when UW was incorporated into the training, and it was so timely because a few weeks before the start of Balikatan, the Ukraine crisis erupted. The scenario that I was discussing with the U.S. planners during their visit to my office was almost the same with what is happening now in Ukraine. Now I am excited because of how we are going to practice that and rehearse that and come up with concepts that would help not only our Soldiers but also the Filipino community to become resilient and resistant

if there is an invasion. So Balikatan would be a test case and perhaps by next year [2024], we would want it to expand more and not just focus on unilateral UW, but it should be a joint, combined type of UW.

**Lt. Col. Enriquez:** Oh, absolutely! The SOF presence here particularly is persistent. There is always an Army Special Forces Operational Detachment here alongside other SOF partners with emergent options to scale up over the next several months to a battalion headquarters. It’s indicative of a bigger investment in the partnership. On the special operations side, we don’t use the label “first to respond,” because “we’re already there.” We’re always ready to resist aggression alongside our partners.

**FORUM:** How would you enhance Balikatan and other bilateral training? And what advice would you give to future exercise directors and participants?



**Col. Sevilla:** I am an advocate of the national crisis management policy of our country. It was part of my job when I was with the Philippine government National Security Council Secretariat. In fact, I am one of the authors of the National Crisis Management Manual with its accompanying Executive Order No. 82, s. 2012, signed by former President Benigno Aquino. That said, I always encourage our security sector to come up with contingency plans for imminent threats and evolving crises, and for contingency plans to be validated through rehearsals and exercises. People who are involved in the contingency planning should also be included in the rehearsals and exercises. That's why I am supporting what would be the next training that the U.S. and the Philippines would agree to in the near future to follow up on what we have started now. That's what I have been telling them during our conferences and meetings: to take advantage of this opportunity to learn from the experience and try to observe what our counterparts are doing, so that once they go back to our units, they can also share that with us. I might be participating at the higher level, but I could not see what they were doing at the lower level. After this training, as the exercise director for SOFOR, surely there will be an after-action review, and we will gather what we have learned, what we have observed, and what we have experienced, so that it will be cascaded to our two other units who have not been involved here. I really emphasize to them to take advantage of this opportunity and try to also study the systems that we have, not just the technology, but also how the processes are being made.

**Lt. Col. Enriquez:** I tell my Soldiers, "Build your team now and invest in your team because the next time you're on this ground with a partner, it may be for a fight." So, use this opportunity to get ready. We talk about the interoperability; we talk about their capabilities development. However, I have a very strong appreciation for the human aspect and relationships. Who do I trust, and do they trust me? This is an opportunity to build those relationships because you know if a crisis happens, you don't necessarily have the time to build trust, and you will have to work together and in the spirit of Balikatan, shoulder to shoulder [Balikatan is Tagalog for shoulder to shoulder]. We need to act decisively together quickly because time is of the essence in a crisis.

So, we're training now to have that ability. By building these capabilities and trust now, we deter aggression, because nobody will want to mess with our team. We're in this together.

**FORUM: Is there anything else you'd like to emphasize about Balikatan or the Philippine-U.S. partnership?**

**Col. Sevilla:** I just want to express our appreciation to our counterparts. We're looking forward to working again with them in the future and at exercises even larger than this. We would really appreciate that, especially since [the AFP's] SOCOM is still experiencing growing pains as we have just celebrated its fifth founding anniversary. We still need a lot of training and studying of how they operate SOCOM in the U.S. We are looking forward to working with U.S. SOCOM directly, not just in the U.S. Indo-Pacific Command.



**Lt. Col. Enriquez:** I just want to say thank you so much to our AFP SOCOM comrades for the hospitality and for the partnership, the brotherhood, the camaraderie. All of my Soldiers are always so excited to be able to work in the Philippines. From the tactical level all the way up to the national level, we always feel welcome. It's like we're long-lost family friends, and it's just a great opportunity to be able to train at scale. I hope that we continue to build the team. We have the Australians here who also can participate with us. Let's continue to make this the biggest event we can. □

**Philippine troops operate a truck-mounted howitzer system at Capas in the northern Philippines during Balikatan 2023.**

THE ASSOCIATED PRESS

# DEEPEST-EVER FISH CAUGHT, Filmed Off Japan by Scientists



REUTERS

**A**n Australian-Japanese scientific expedition caught fish more than 8 kilometers below the ocean surface for the first time — and filmed them even deeper.

Professor Alan Jamieson, the expedition's chief scientist, said in April 2023 that traps caught two snailfish 8,022 meters underwater in the Japan Trench in the North Pacific Ocean during a two-month voyage by a team from the University of Western Australia (UWA) and the Tokyo University of Marine Science.

The snailfish, of the *Pseudoliparis belyaevi* species, are the first to be caught below 8,000 meters, the expedition said. The species has been recorded as reaching lengths of nearly 11 centimeters.

Remote cameras lowered from the research vessel DSSV Pressure Drop by the joint expedition, part of a 10-year study into the deepest fish population on the planet, also recorded an unknown snailfish species swimming at a depth of 8,336 meters in the Izu-Ogasawara Trench off southern Japan.

"The Japanese trenches were incredible places to explore; they are so rich in life, even all the



way at the bottom," said Jamieson, founder of the Minderoo-UWA Deep-Sea Research Centre. "We tell people from the very early ages, as young as 2 or 3, that the deep sea is a horrible scary place that you shouldn't go and that grows with you with time.

"We don't appreciate the fact that it [the deep sea] is fundamentally most of planet Earth, and resources should be put into understanding ... how we are affecting it and how it works."

---

**Scientists using remote cameras aboard the research vessel DSSV Pressure Drop recorded an unknown snailfish species in the Izu-Ogasawara Trench off southern Japan.** CALADAN OCEANIC

**INSET: An Australian-Japanese scientific expedition filmed and caught snailfish at depths of more than 8,000 meters in waters off Japan.** VIDEOELEPHANT VIA REUTERS





GETTY IMAGES

# *Beach Surroundings*

Republic of Korea and United States Marines participate in exercise Ssang Yong, meaning “twin dragons,” in Pohang, South Korea, in late March 2023. Troops conducted a large-scale amphibious assault drill to strengthen combat readiness and interoperability of the alliance forces, whose bond has endured for more than 70 years.



# RELEVANT. REVEALING. ONLINE.

**[www.ipdefenseforum.com](http://www.ipdefenseforum.com)**

Indo-Pacific Defense FORUM is provided **FREE** to military and security professionals in the Indo-Pacific region.

## FREE MAGAZINE SUBSCRIPTION

### SIGN UP NOW:

[www.ipdefenseforum.com/subscribe](http://www.ipdefenseforum.com/subscribe)

### OR WRITE:

IPD FORUM Program Manager  
HQ USINDOPACOM, Box 64013  
Camp H.M. Smith, HI  
96861-4013 USA

### PLEASE INCLUDE:

- ▶ Name
- ▶ Occupation
- ▶ Title or rank
- ▶ Mailing address
- ▶ Email address

**NOW IN  
11  
LANGUAGES!**

**JOIN US ONLINE AND  
ON SOCIAL MEDIA!**



**NEW  
CONTENT  
POSTED  
DAILY!**