

FORUM



Weapons of Mass Misinformation

Chinese Communist Party's Influence Campaigns

features

10 Money for the Mekong

Japan plays prominent financing role in region's development, preservation.

16 Political Warfare

The People's Republic of China tries to influence foreign governments to achieve political-military objectives.

22 Propaganda Proliferator

The Confucius Institutes, under the aegis of the Chinese government, infiltrate nations worldwide in increasingly insidious and imperious ways.

28 Indoctrinating the Chinese Military

China's People's Liberation Army turns toward propagandist roots, party ideology.

32 Terrorist Rehab

Social and cultural approaches provide a second chance for terrorists in Indonesia.

40 Deep-Water Dialogue

India could extend maritime reach by developing Indonesian port.

44 A New Day for Japanese Defense

Japan strengthens its national defense architecture amid a changing security environment.

48 A Symbol of Freedom

U.S. Army Japan's commander shares how his family's rescue from Saigon fuels his desire to serve.

50 Sonic Boom

The United States, China and Russia vie to outpace competition in hypersonic weaponry.

54 Australia's Role in the Indo-Pacific

Building foundations for success across the region.



58

departments

4 Indo-Pacific View

5 Contributors

6 Across the Region

News from the Indo-Pacific.

8 Terrorist Update

Southeast Asia boosts fight against militant threat.

58 Voice

Japanese Prime Minister Shinzo Abe on the Japan Self-Defense Force's contributions to peace.

62 Culture and Custom

Cambodian man runs school where children pay for their education with recycled waste materials.

64 World Horizons

United Kingdom moves to ban membership in Hezbollah; Egypt reveals tomb of Fifth Dynasty official; epidemic prevention group invests in vaccine printer technology.

65 Contemplations

Scientists document underwater changes in Seychelles waters.

66 Parting Shots

A Singapore Armed Forces Soldier and an Indonesian anti-terror commando participate in their respective military exercises.



ABOUT THE COVER:

This illustration captures the Chinese Communist Party's weaponization of everything from words and numbers to politics and technology to manipulate minds, governments and nations.



Dear Readers,

Welcome to
*Indo-Pacific
Defense*

FORUM's edition on
power projection.

Power projection is the ability of a nation to use some or all of its instruments of national power to influence others to act or behave in a certain way.

This issue of *FORUM* examines power projection from many perspectives. Dr.

Clive Hamilton, an Australian author and professor of public ethics at Canberra's Charles Sturt University, looks at how the People's Republic of China (PRC) wages political warfare against foreign nations to advance its agenda of expansionism and to pursue global domination. Related articles address specific tactics the PRC uses to influence both China's soldiers and foreign citizens.

To counter such aggression and discourage challenges to shared interests, allies and partner nations must cooperate on security endeavors. A staff-written article shows how Japan is offering a reliable investment alternative to the PRC's One Belt, One Road (OBOR) infrastructure plan for Mekong development.

Also in this issue, Ambassador Jane M. Hardy, consul general of the Australian Consulate General, Honolulu, shares Australia's approach to ensuring a free and open Indo-Pacific. Australia is strengthening bilateral and multilateral engagement and forging critical relationships to enhance interoperability and counter aggressor nations and nontraditional security threats.

Allies and partner nations in the Indo-Pacific use various combinations of diplomatic, military, economic, and information instruments to promote regional security and ensure a free and open Indo-Pacific. We must continue to work together to strengthen response capabilities and security cooperation to discourage challenges to our collective shared interests and maintain the rules-based international order that has led to the past 70 years of regional prosperity.

I hope this edition energizes the regional conversation and advances security solutions. I welcome your comments. Please contact the *FORUM* staff at ipdf@ipdefenseforum.com with your perspectives.

All the best,

P. S. DAVIDSON
Admiral, U.S. Navy
Commander, U.S. Indo-Pacific Command

IPD FORUM

Power Projection

Volume 44, Issue 3, 2019

USINDOPACOM LEADERSHIP

PHILIP S. DAVIDSON
Admiral, USN
Commander

BRYAN P. FENTON
Lieutenant General, USA
Deputy Commander

MICHAEL A. MINIHAN
Major General, USAF
Chief of Staff

STEPHEN T. KOEHLER
Rear Admiral, USN
Director of Operations

PROGRAM OFFICER

CHRISTIAN C. NICOLAS
Major, USA
IPD FORUM Manager

CONTACT US

IPD FORUM

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

ipdefenseforum.com

email:

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. CLIVE HAMILTON is an Australian author and professor of public ethics at Charles Sturt University in Canberra. Prior to beginning his professorship in 2008, Hamilton served for 14 years as executive director of The Australia Institute, a progressive think tank that he founded. He has written about a range of topics, and in 2018,

Hamilton published his most recent book, *Silent Invasion: China's Influence in Australia*. **Featured on Page 16**



ZI YANG is a senior analyst with the China Programme, S. Rajaratnam School of International Studies (RSIS), Nanyang Technological University, Singapore. He holds a Master of Arts in Asian studies from Georgetown University and a Bachelor of Arts in global affairs and history from George Mason University. Prior to joining RSIS,

he worked at the United States Institute of Peace and Georgetown University's Center for Security Studies.

Featured on Page 28



NOOR HUDA ISMAIL is the founder of the Institute for International Peace Building, Indonesia. He is now a visiting fellow at the S. Rajaratnam School of International Studies, Nanyang Technological University, Singapore. He directed and produced documentary films such as *Jihad Selfie* (2017), *The Bride* (2018) and

Seeking the Imam (2019). For this issue of *FORUM*, he writes about approaches to rehabilitating former terrorists.

Featured on Page 32



AMBASSADOR JANE M. HARDY is consul general of the Australian Consulate General, Honolulu. She previously served as assistant secretary of the Arms Control and Counter-Proliferation Branch in the International Security Division of the Department of Foreign Affairs and Trade, Canberra. Prior to this role, she served as Australia's ambassador to

Spain, Andorra and Equatorial Guinea. She also has authored books and journal articles on Australian indigenous art and analysis of overseas aid programs. **Featured on Page 54**

Join the Discussion

We want to hear from YOU!

Indo-Pacific Defense FORUM caters to 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 topics that impact security efforts across the region — from counterterrorism to international cooperation and natural disasters.

FORUM provokes thoughtful discussions and encourages a healthy exchange of ideas. Submit articles, pictures, topics for discussion or other comments to us **ONLINE** or at:

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

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

Visitors can:

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

FORUM

Exploring the issues that impact so many lives



Join us on
Facebook
and Twitter.



INDONESIA

REUTERS

— COFFEE — SANCTUARY

In January 2019, Starbucks opened its largest store in Southeast Asia, known as the Starbucks Dewata Coffee Sanctuary.

A worker sorts coffee beans at a village farm on Sumatra island, Indonesia.

The one-of-a-kind sanctuary pays tribute to the important role that Indonesia plays in bringing customers quality coffees, including the popular Sumatra coffee, the company said in a news release. Indonesia is the fourth largest Arabica coffee-growing region in the world.

The more than 20,000-square-foot coffee sanctuary in Bali features a working coffee tree farm and tasting room. Customers can embark on a seed-to-cup journey during which they can try washing, drying and raking green coffee beans, among other activities.

“We began sourcing Indonesian coffees more than four decades ago and have always been struck by the sense of community and care for the coffee journey at every step,” said Kevin Johnson, Starbucks CEO. Business Wire

SINGAPORE

FACEBOOK TO BUILD BILLION-DOLLAR DATA CENTER

Facebook plans to invest more than U.S. \$1 billion to create a data center in Singapore, powered by renewable energy and adapted to the city-state's tropical climate.

The center, to be operational around 2022, will host Facebook servers and centralize its information technology operations, Thomas Furlong, Facebook vice president of infrastructure data centers, said in September 2018.

The 170,000-square-meter site in the land-scarce city-state will be over 11 stories and will come with custom features to cope with the steamy temperatures, which rarely drop below 25 degrees Celsius.

These include a new state-of-the-art cooling system, which uses water rather than air and will work better in the humidity, as well as a building facade made of perforated, lightweight material to allow for better air flow.

The U.S. \$1.02 billion, custom-built facility will be Facebook's 15th data center worldwide. Furlong said Facebook, which had 2.23 billion monthly active users as of the end of June 2018, chose Singapore because of its robust infrastructure, availability of skilled labor and ease of doing business with the government.

Google, which has built two data centers in the city-state, announced in September 2018 it was starting work on a third, bringing its investment in the sites to U.S. \$850 million. Agence France-Presse



A Facebook “like” button is illuminated at the company's France headquarters in Paris. REUTERS



MALAYSIA

THE ASSOCIATED PRESS

LABOR REFORM

Malaysia is moving to eliminate middlemen who charge millions of foreign workers exorbitant recruitment fees, leaving them saddled with debt and vulnerable to exploitation.

From factories to construction sites and plantations, the Southeast Asian nation relies heavily on foreign workers for jobs usually shunned by locals.

Many arrive having borrowed huge sums to pay recruitment agents, meaning they have to work for years earning virtually nothing — a form of modern-day slavery known as debt bondage.

To address this, Malaysia struck a deal with Nepal to directly recruit

workers there without going through agents. The agreement came after Nepal temporarily suspended sending workers due to concerns about their treatment.

“This is aimed at curbing human trafficking and exploitation of workers,” said Malaysian Human Resources Minister M. Kulasegaran.

“They must not be in a bondage situation in this country and caught in a vicious cycle of earning to pay back money.”

Under the agreement, which went into effect in late October 2018, Nepali workers will be hired on a government-to-government basis. Malaysian employers will have to bear all the recruitment costs, including airfare, and visa and medical checkup fees.

Kulasegaran said Malaysia is negotiating similar agreements with Bangladesh, Indonesia and Vietnam.

Bangladesh, Indonesia and Nepal are the top providers of Malaysia’s nearly 2 million registered migrant

A Qatari man shows his passport with a work permit at the Department of Foreign Employment in Kathmandu, Nepal.

workers, government figures show. There are millions more without work permits.

The world’s largest glove maker, the Malaysian firm Top Glove, said in December 2018 that it would cut ties with unethical recruitment agents, after some of its migrant workers were found to have clocked excessive overtime to clear debts.

For years campaigners have asked Malaysia to eliminate the middlemen who charge migrants up to 20,000 Malaysian ringgit (U.S. \$4,790), a debt they often toil for years to pay off.

Debt bondage is one of the most prevalent forms of modern slavery, which affects more than 40 million people worldwide, according to the United Nations’ International Labor Organization. Reuters



A Philippine Soldier guards a road leading to a destroyed mosque in the main battle area in Marawi City, on the southern island of Mindanao, in April 2018.

Southeast Asia boosts fight against ‘real and present’ **MILITANT THREAT**

AGENCE FRANCE-PRESSE | PHOTOS BY AFP/GETTY IMAGES

Southeast Asian nations seeking to combat the threat of militancy have agreed to share intelligence, Singapore’s defense minister said, as he warned of a “real and present” danger to the region.

More than a year after Islamic State-linked fighters seized the southern Philippine city of Marawi, the terrorist threat is as potent as ever, said Ng Eng Hen after hosting a meeting of defense ministers in late 2018.

“Unfortunately, even as the situation in Iraq and Syria improves, we are expecting more foreign fighters to come this way,” he added.

Ng said all 18 ministers at the gathering in October 2018 in Singapore, from Southeast Asia and key partners outside the region, viewed “terrorism as a real and present threat.”

The Southeast Asian delegates adopted an information-sharing platform called “Our Eyes” that will be used to share real-time intelligence that can immediately be acted upon, the minister added.

This came after the countries realized they had underestimated the threat before the attack on Marawi City, where the rebuilding effort could cost about U.S. \$1 billion, he said.

Proposed by Indonesia, the platform is based on an intelligence-sharing alliance set up by the United States, Britain and three other countries after World War II to monitor the former Soviet Union.

Representatives of the 10-member Association of Southeast Asian Nations (ASEAN) attended the security meeting, as well as then-U.S. Defense Secretary Jim Mattis and officials from countries including Australia,

China, India and Russia.

During the 2017 assault on Marawi, hundreds of armed militants backed by foreign Islamic State fighters attacked and took control of the largely Muslim city in a bid to establish a base in Southeast Asia.



Singaporean Defence Minister Ng Eng Hen delivers his opening address at the Association of Southeast Asian Nations security summit in Singapore in October 2018.

Philippine troops, supported by sophisticated surveillance planes from the United States, dislodged the militants after five months of heavy fighting that left more than 1,000 people dead and the city in ruins.

Militants from other Southeast Asian countries, including Indonesia and Malaysia, were involved in the fighting.

Those at the meeting “felt that this must never happen again to any city within ASEAN,” Ng said.

Money for the Mekong

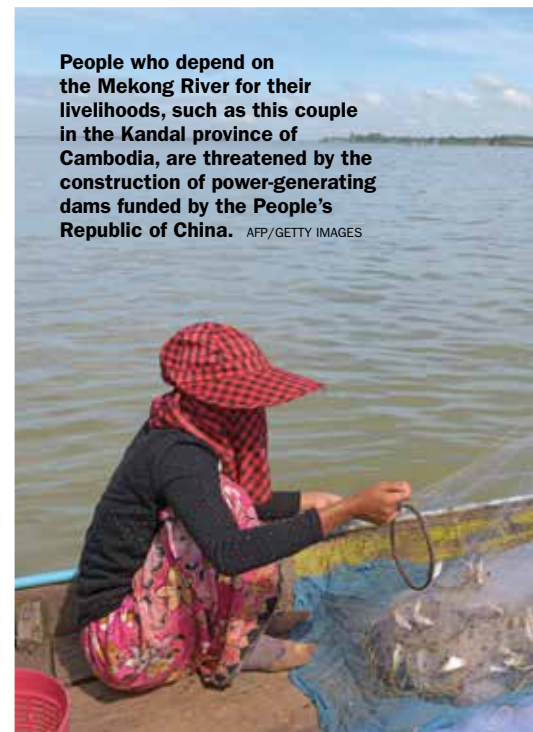
Japan plays prominent financing role in region's development, preservation

FORUM STAFF

The magnificent Mekong River, which at more than 4,800 kilometers long stretches from China through the five Mekong countries of Burma, Cambodia, Laos, Thailand and Vietnam before emptying into the South China Sea, provides food, water and transportation for more than 60 million people while posing some of the Indo-Pacific's most difficult environmental challenges. With cascading waterfalls and foreboding rapids, the Mekong offers a picturesque landscape for investment and serves as a new kind of battleground in a fight for influence.

The Mekong region is awash in investment from the People's Republic of China's (PRC's) One Belt, One Road (OBOR) infrastructure program. For years, however, Japan has been a prominent investor in Burma, Cambodia, Laos, Thailand and Vietnam.

"There is indeed a competitive aspect in Japan's Mekong investments vis-a-vis China," Dr. Yee-Kuang Heng, a professor at the Graduate School of Public Policy at the University of Tokyo, told *FORUM*. "Japan often uses the term 'quality infrastructure,' widely seen as a means to distinguish Japanese projects from Chinese megaprojects perceived to be of lower quality and less sustainable fiscally and environmentally. Given growing concerns in recipient countries over debt-trap



People who depend on the Mekong River for their livelihoods, such as this couple in the Kandal province of Cambodia, are threatened by the construction of power-generating dams funded by the People's Republic of China. AFP/GETTY IMAGES



The Mekong River snakes through the mountains of Luang Prabang in northern Laos. The city's name means "Royal Buddha image." ISTOCK

FLOW OF THE MEKONG RIVER



diplomacy” in the PRC’s OBOR program, “Japan could be seen as a viable alternative player.”

Japan is making significant contributions of public money to back up its private-sector loans and reinforce its image as a reliable financial partner. During the past three years alone, Japanese companies have invested the equivalent of about U.S. \$18 billion in the Mekong region, according to *The Straits Times* newspaper, an English-language daily based in Singapore. Now, as part of its Tokyo Strategy 2018 for Japan-Mekong Cooperation, Japan is expanding its economic footprint. In 2018 meetings with Mekong leaders, Japan pledged to finance 150 more projects over the next three years to improve connectivity in the region and preserve the environment.

“Following the track record of such support, in order to realize private investment more than before, Japan will utilize public funds including overseas loans, investments and ODA [official development assistance],” Japanese Prime Minister Shinzo Abe said during the 10th Mekong-Japan Summit held in Tokyo in October 2018.

Japan’s investment in the Mekong predates China’s OBOR initiative, although its investments now are explicitly tied to Abe’s free and open Indo-Pacific strategy and are more purposefully tailored to counter the PRC’s influence, Heng said.

Alternate Vision

Prior to the Mekong-Japan Summit, Abe held individual meetings with the leaders of Cambodia, Laos, Thailand and Vietnam. In those meetings, he made proposals that were in stark contrast to PRC projects, which, in the case of power-generating dams, have been blamed for the environmental degradation of the region.

Abe pledged to provide Laos with an aid package of up to U.S. \$8 million to accelerate the clearing and disposal of unexploded ordnance. In Laos, millions of explosive remnants left over from the Vietnam conflict pose risks to farming and infrastructure development because they have not been removed.

“We highly evaluate Japan’s official development assistance,” said Lao Prime Minister Thongloun Sisoulith, according to the Nikkei Asian Review website. “It is contributing to Lao’s economic development.”

Tokyo also offered to loan Cambodia up to U.S. \$31.6 million to build irrigation facilities in the Lake

A Vietnamese woman sells fruit and vegetables from a floating market on the Mekong River. The Mekong is famous for its floating markets that allow farmers to sell their goods to local dealers. ISTOCK

Tonle Sap area. Tonle Sap is the largest inland fishery in the world, producing 3.9 million tons of fish annually with a value of more than U.S. \$3 billion. The flooding cycle produces arable land for farming when the water

Japanese Prime Minister Shinzo Abe welcomes Burmese leader Aung San Suu Kyi as she arrives at the 10th Mekong-Japan Summit in Tokyo in October 2018. REUTERS



Japanese Prime Minister Shinzo Abe, right, looks on as Vietnamese Prime Minister Nguyen Xuan Phuc hugs Cambodian Prime Minister Hun Sen during the Tokyo summit. REUTERS

were rejected by an international tribunal, the PRC has staked territorial claims to reefs and man-made features in the South China Sea in areas also claimed by Vietnam, one of the Mekong countries. While those leaders didn't single out a country by name, they alluded to the PRC in their joint statement at the Tokyo summit by saying that land reclamation projects and other

recedes, and the lake expands fivefold during flooding season. Irrigation facilities are expected to boost the productivity of rice farming by threefold.

The 150 projects Japan plans for the region fall into three focus areas: building connectivity, such as expanding airport facilities in Laos and building new roads in Burma; constructing people-focused societies, such as using technology to improve health care; and environment and disaster management, such as the irrigation projects in Cambodia. Japan has not placed a monetary value on the 150 projects.

Although they often do business with the PRC, the Mekong leaders voiced support for Abe's free and open Indo-Pacific strategy, which promotes freedom of navigation in the South China Sea and the construction of quality infrastructure projects. Although its assertions

activities "have eroded trust and confidence, increased tensions and may undermine peace, security and stability in the region."

Long-term Mekong Investor

While the PRC's far-reaching OBOR program has recently generated international attention, Japan has been investing in Mekong countries for many years.

"It should be noted that Japan has long been supporting and developing several connectivity corridors, for instance, in the Mekong region, way before the emergence of China's BRI [Belt and Road Initiative]," Heng said. "Tokyo is not a new player on the block, and with its long history of ODA projects post-1945, it has abundant experience and skills."

Japan has contributed to the East-West Economic

Corridor, an integrated system of roads, rails and ports that connect Mekong countries. The East-West Economic Corridor focuses on the construction of bridges and national roads that connect Burma, Laos, Thailand and Vietnam. The projects include the upgrading of the Danang seaport in Vietnam. Japan also has financed connectivity projects in the Southern Economic Corridor that link Cambodia, Thailand and Vietnam, Heng said.

Japan's motivations to invest, according to Heng, are broader than merely competing with China. "Japan's desire to play a larger regional role, however, is also driven by domestic considerations that are important in their own right," Heng said. "Prime Minister Abe, for instance, has long claimed that 'Japan is back' and will never be a second-rate power. ODA and long-standing connectivity initiatives and multilateral frameworks in the region and beyond have emerged as key instruments that Abe has utilized to raise Japan's international profile."

In addition to its Mekong investments, Tokyo mobilized the Tokyo International Conference on African Development and the Pacific Island Leaders Meeting to drum up support for its connectivity

initiatives and its overarching free and open Indo-Pacific strategy, Heng said.

Fierce Competition

Japan is facing stiff Chinese competition in attracting business partners in the Mekong. As part of its OBOR program, the PRC has doled out concessional loans and investments worth billions. Through its Lancang-Mekong Cooperation (LMC) initiative, the PRC promised the Mekong countries of Burma, Cambodia, Laos, Thailand and Vietnam about U.S. \$1.6 billion in loans and U.S. \$10 billion in credit in 2016 alone. The following year, the LMC promised government concessional loans worth U.S. \$1.1 billion and U.S. \$5 billion in credit for 45 projects, according to a report written by Nguyen Khac Giang, a researcher at the Vietnam Institute for Economic and Policy Research at the Vietnam National University in Hanoi. The name of the joint China-Mekong effort originates from the name of the river, which is called Lancang in China and Mekong downstream.

Although its investments are hard to track due to a lack of transparency, the PRC is one of the larger contributors of ODA in the Mekong, according to the Organisation for Economic Co-operation and Development (OECD), an

Environmentalists have criticized power-generating dams funded by China, such as this one in the Stung Treng province of Cambodia, as disastrous to the freshwater fish populations that feed the region.

AFP/GETTY IMAGES



organization of 36 countries geared toward stimulating economic progress. ODA is a term coined by the organization to indicate international aid flow. It includes loans and grants.

As for the countries that meet OECD transparency standards, Japan is the largest contributor of ODA in the Mekong, and South Korea is in the top five. South Korea has focused its development assistance on Vietnam, where it just surpassed Japan in 2018 as the largest foreign investor.

The competition for financing and trade, however, has some Mekong countries voicing concern that they will be forced to choose between competing powers. Regional leaders voiced these concerns at a Japan-Mekong forum in Phnom Penh, Cambodia, in March 2018, according to the *Nikkei Asian Review*.

At the forum, Kentaro Sonoura, special advisor to Abe, responded that Tokyo's new strategy is geared toward supporting the Association of Southeast Asian Nations (ASEAN) on a broader Indo-Pacific strategy. Japan wants to combine two continents and oceans through transport and infrastructure linkages and to promote additional connectivity through free trade, rule of law and enhanced security. "We think it is possible to cooperate with any country that upholds the principles of that strategy," he said.

Scientific studies abound that conclude the PRC's desire to harness hydropower and control flooding along the Mekong River basin is undermining the region's food security and damaging the environment.

ASEAN ministers, along similar lines, have adopted what they call an ASEAN-centric regional architecture that is "open, transparent, inclusive and rules-based."

A Green Mekong

One of the pillars of Tokyo's strategy to partner with the Southeast Asian countries is what it calls the "realization of a Green Mekong." The strategy includes countermeasures against climate change and marine pollution, water resources management and disaster risk reduction. It's a subject area where Japan has the upper hand.

When it comes to the PRC's investment in the region, protectors of the environment are some of its loudest

critics. Scientific studies abound that conclude the PRC's desire to harness hydropower and control flooding along the Mekong River basin is undermining the region's food security and damaging the environment.

A recent study, "Potential Disruption of Flood Dynamics in the Lower Mekong River Basin Due to Upstream Flow Regulation," said the scores of dams being built by the PRC in the region deprive downstream ecosystems of much-needed nutrients to keep fish populations healthy. Michigan State University researchers published the study in December 2018 in *Nature*, an international science journal.

"Any major alterations of the seasonal pulses could easily change the area's floodplain dynamics," said lead author Yadu Pokhrel, assistant professor of civil and environmental engineering at Michigan State University. "This could severely affect a wide range of ecosystems and undermine regional food security."

The largest dam planned for the Mekong is a Chinese-backed project in Cambodia to build a 620-square-kilometer reservoir. Designed by the China Southern Power Grid Co., the dam would increase power generation "but at the probable cost of the destruction of the Mekong fishery, and the certain enmity of Vietnam," said a report written by experts at the National Heritage Institute on behalf of the Cambodian government.

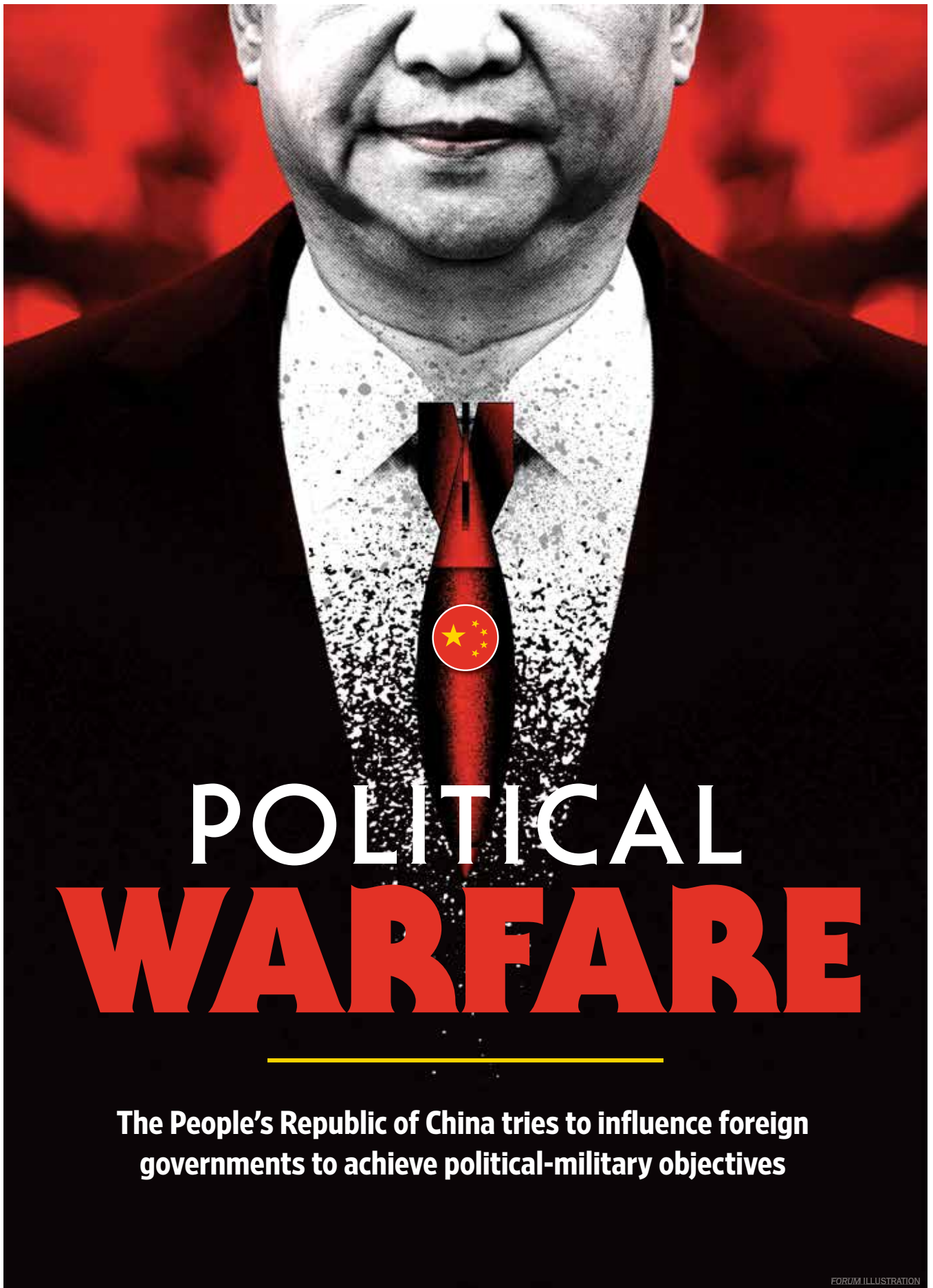
The proposed dam would block a migration path traveled by thousands of fish per hour before heading to upstream tributaries to spawn or downstream to nursery and fishery habitats in Tonle Sap Lake and the Mekong delta. The fish eventually reach the Vietnam delta, which is already fraught with flooding and land loss due to rising sea levels.

Strategic Interest

Japan views the Mekong region, which had a combined population of 238 million and an aggregate gross domestic product of U.S. \$781 billion in 2017, as a promising market and an important destination for its companies' infrastructure exports. Japanese officials also consider the Mekong vital from a military and geopolitical standpoint because it is located between China and India and faces vital shipping lanes in the South China Sea, according to an October 2018 report by Kyodo News.

Many Mekong leaders at the Tokyo summit said Japan's cooperation brings positive benefits — not just for economic gain, but for peace. Aung San Suu Kyi, Burma's leader, said her country has benefited greatly from Japanese investment, and so has the region.

"All in all, I think everybody was agreed that the Japan-Mekong cooperation has been a success story," she said, according to media reports. "And we're confident that we will go on to use this cooperation, not just for the sake of prosperity but also to contribute toward regional peace and security." □



FORUM ILLUSTRATION

Under the constant spur of Chinese Communist Party (CCP) propaganda, the patriotic yearnings of many Chinese people have been turned into the ambition to avenge their historical humiliation. The People's Republic of China's (PRC's) aggression in the South China Sea, aggressive language on Taiwan, stage-managed anti-Japanese rallies and more keep patriotic feelings hot. According to the party narrative, the Hundred-Year Marathon will by 2049 see China surpass the United States as the world's pre-eminent economic, military and political power.

President Xi Jinping's "China dream" aims to see the PRC displace the United States as the world's No. 1 power. In the words of former Singapore strongman Lee Kuan Yew: "It is China's intention to be the greatest power in the world."

Publicly, CCP leaders say they expect China to be one pole in a multipolar world. Strategic analyst Michael Pillsbury, now with the Hudson Institute, is closer to the truth, however, when he writes: "They see a multipolar world as merely a waypoint en route to a new global hierarchy in which China is alone at the top."

The PRC's leaders believe that a politically and morally exhausted West is in unstoppable decline. They say the 2008 financial crisis was brought on by institutional decay in the United States and marked the turning point beyond which a PRC-led world order became irresistible.

A party at war

Steeped in Marxist-Leninist theory, CCP leaders believe that they are engaged in a perpetual struggle. A 2018 paper by Thomas Mahnken, Ross Babbage and Toshi Yoshihara, titled "Countering Comprehensive Coercion: Competitive Strategies Against Authoritarian Political Warfare," put it this way: "It is abundantly clear that the Party sees itself at war with the West. [Its] books portray a life-and-death struggle against dangerous ideological forces that could topple the regime."

The PRC's leadership is paranoid. It sees the external world, and especially the West, as a hostile force bent on undermining it at every opportunity. It must therefore be constantly vigilant. It must implement countermeasures and go on the offensive. This state of mind contrasts sharply with the traditional Western conception in which the normal state of history is peace, periodically disrupted by war.

The peace mentality of countries challenged to balance the PRC's power projections puts them at a disadvantage when faced with an adversary such as China that behaves as if it is engaged in war. As long as countries view their relationship with the PRC as a normal diplomatic one, they are losing the war, because the PRC has mobilized its forces while others are still waiting for something to happen.

Essential to the PRC's strategy has been to reconfigure the role of its military forces, the People's Liberation Army, to make them expert in information, cyber and psychological warfare, and to integrate these forms into conventional kinds of military pressure.

If speaking of "war" seems too strong, then countries must recognize that is how the CCP leadership sees itself — at war. It's not a metaphor but a different understanding of war as a means to subdue adversaries. To come to grips with it and work out how to respond, countries need to rethink the idea of war and how they engage in it because that is what the PRC has done.

Essential to the PRC's strategy has been to reconfigure the role of its military forces, the People's Liberation Army (PLA), to make them expert in information, cyber and psychological

warfare, and to integrate these forms into conventional kinds of military pressure. These, in turn, are coordinated with other forms of power projection conducted by various arms of government, including United Front Work Department efforts, propaganda work, economic statecraft, normal diplomacy and the increasingly coercive forms of diplomacy practiced by Beijing.



After being elected to a second term, Chinese President Xi Jinping is sworn in at the Great Hall of the People in Beijing on March 17, 2018. AFP/GETTY IMAGES

Whether accepted, Australia and the United States are engaged in a new kind of warfare with the PRC — political warfare. Its nature is not, and is unlikely to become kinetic, but the objective of their adversary is the same — to subdue them so that Australia and the U.S. do not offer any resistance to the PRC's continued expansion and geopolitical dominance.

If the PRC's political war continues unchallenged, in 10 to 20 years, Australia will no longer retain its alliance with the United States, at least in anything other than a formal sense. The CCP's subsidiary goals include ensuring uninhibited access for Chinese companies to Australia's natural resources and free flow of capital and labor.

Political warfare defined

The most useful definition of political warfare is provided by Mark Stokes and Russell Hsiao of the security think tank the Project 2049 Institute. "Political warfare seeks to influence emotions, motives, objective reasoning and behavior of foreign governments, organizations, groups and individuals in a manner favorable to one's own political-military objectives."

It can also be thought of as "the art of heartening friends and disheartening enemies."

Since the 1920s, the CCP has developed a range of nonmilitary means to achieve its objectives — measures that the West doesn't use and doesn't understand. The nonmilitary means to alter behavior are persuasive and coercive in nature, although the line between the two is blurred.

The CCP, and so the PLA, does not draw the line between military and nonmilitary (diplomatic and political) means the way the West does.

Psychological operations can be weapons, and their targeting is by no means limited to commanding officers on the other side. After all, politicians make all the important military decisions (think freedom-of-navigation operations, for example). The influences on the thinking and feelings of politicians are diverse — military advisors, political advisors, party colleagues, academic experts, media, lobbyists, businessmen, allies, wives and husbands, and the public, duly segmented into more and less influential components.

In Australia, as elsewhere, all of these are targets for the PRC's political warfare, including the PLA's psychological operations, implemented by the Liaison Department of the Political Work Department of the Central Military Commission, its general political department. It can

To appreciate how economic power is weaponized, governments need to understand the vast, complex and highly sophisticated apparatus of persuasion, interference and coercion that the CCP has developed.

call on a wider array of resources than are available in liberal democracies. Unlike in China, democratic governments don't have the ability to weaponize economic power for political ends by instructing economic actors to serve the interests of the state.

To appreciate how economic power is weaponized, governments need to understand the vast, complex and highly sophisticated apparatus of persuasion, interference and coercion that the CCP has developed. While conventional military power applies pressure from without, the CCP deploys



Australian Foreign Minister Marise Payne, left, speaks at a news conference with Chinese Foreign Minister Wang Yi in Beijing in November 2018. REUTERS

its array of political and psychological weaponry to erode the willingness of its adversaries to resist from within.

So, governments and militaries need to redefine their understanding of conflict to make it consistent with the way the PRC (and to some extent Russia) thinks of warfare today. In short, warfare in the 21st century is less concerned with countering an adversary's ability to fight than with weakening its willingness to fight. Sophisticated nonkinetic operations, aided by new technologies, are weakening the link between the ability and the willingness to fight, the more so as the capacity to project influence into an adversary's political system grows and is refined.

The most important vector of influence is through elites. The targets of political warfare are, first and foremost, influential individuals. That's why in my book, *Silent Invasion: China's Influence in Australia*, I tried to identify the individuals who, wittingly or unwittingly, have been persuaded to argue Beijing's case. (Doing so risks falling foul of the libel laws.)

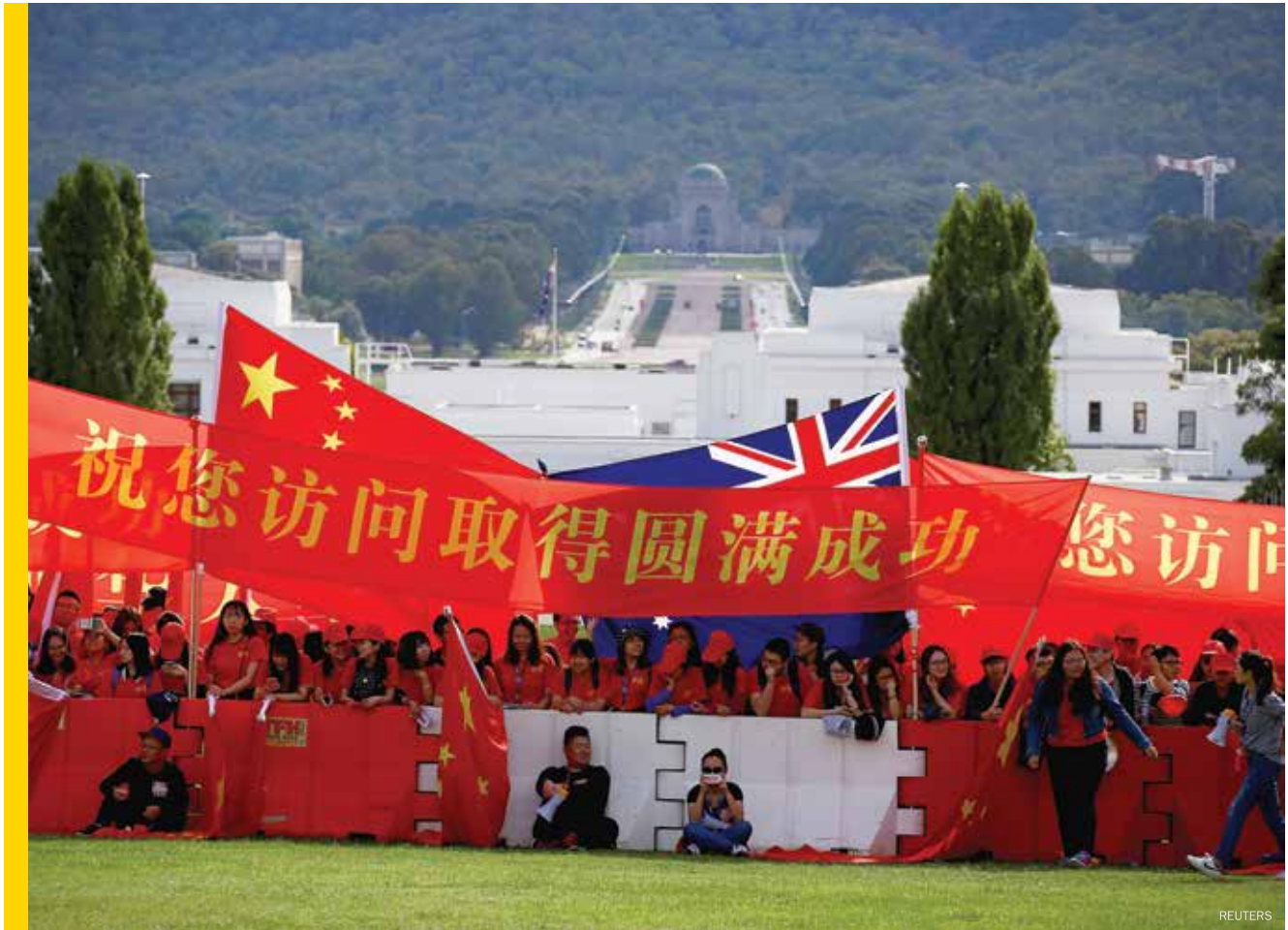
The methods used are diverse and subtle. An incomplete list would include:

- Using wealthy proxies to buy off politicians so

that they echo Beijing's position.

- Cultivating warm personal relations with political advisors and senior bureaucrats.
- Recruiting business leaders to argue that "China is our friend," and we should not upset it.
- Recruiting former senior politicians and senior military officers as agents of influence by various means, including well-paid board memberships and access to top leaders.
- Cultivating academics through invitations to conferences and research collaborations.
- Cultivating editors, journalists and media commentators through social occasions and sponsored visits to China.
- Using wealthy proxies to support think tanks and ingratiate themselves with university executives and their elite associates in business and politics.

Psychological work on elites complements Beijing's most powerful weapon of political warfare, economic persuasion and coercion. We have seen



REUTERS

it applied recently with real but deniable restrictions on imports from Australia, leading business groups to pressure the government to be friendlier to Beijing, a tactic that in Taiwan has a name, *yi shang bi zheng* (political coercion through economy).

As Beijing sees it, the Chinese diaspora in Australia is one of the party's most effective means of projecting influence. President Xi Jinping has talked up United Front Work Department efforts and boosted its resources. It has therefore been the subject of an intense campaign by the United Front to promote those sympathetic to Beijing as the legitimate representatives of the community and encourage them to engage politically. Chinese-Australians opposed to the party have been silenced and marginalized.

Psychological operations: a new kind of warfare

Is a nation at war when it believes it is at war or when an adversary has launched hostilities against it? In the past, there was no difference. Now, weapons to subdue an adversary can be deployed while remaining under the radar. In this deniable warfare, the adversary works to convince us that it is doing nothing hostile but is committed to peace or, according to the CCP slogans, only

Pro-China supporters hold banners wishing Chinese Premier Li Keqiang a successful visit before an official welcoming ceremony at Parliament House in Canberra, Australia, in March 2017.

wants a "harmonious world order" and "win-win cooperation."

In the canonical text *The Art of War*, Sun-Tzu says it's always preferable to defeat an enemy without joining battle. If political leaders can be convinced that there is no point mobilizing its military forces, then its capitulation is just as total as a military defeat. In short, persuasion is preferred to coercion. This is well-understood.

What is new is the diversity and power of the methods the PRC is now using to shape others' understanding of the situation. In the words of Mahnken, Babbage and Yoshihara, the CCP has "developed and refined a wide range of coercive instruments that can be applied to mislead, distract, confuse and undermine the coherence of Western and other democratic state decision-making."

So effective have these instruments proven that many senior influencers and decision-makers in Australia's political, bureaucratic, business and academic elites now echo Beijing's messages without realizing that their perceptions have been shaped by

Beijing's subtle influence operations.

Some commentators, such as Australian National University (ANU) economist Peter Drysdale, are convinced that China's continued rise can only be a good thing for Australia and that it's a mistake to "to buy into a false dichotomy of liberal democracy and totalitarianism." Others believe that resistance is futile or (even better for Beijing) seek to persuade Australians that there may be nothing to resist. (Hugh White, ANU strategic studies professor, for example, has argued that perhaps "China's values" might be good for Australia.)

The ultimate achievement of the CCP's political warfare is to persuade Australians to welcome PRC hegemony. Some on the political left claim that there is nothing unique about PRC influence operations in Australia. For them, taking a hard look at the CCP's political warfare activities is a scare campaign that plays into Asian invasion fantasies when Australia really should be condemning U.S. imperialism in Asia.

Psychological operations can be seen working in the critical domain of the disputed South China Sea. There's a widespread view that the South China Sea is lost and it is now part of the PRC's sphere of influence. After watching the PRC's island-building and militarization, Beijing's denunciation of some international law, its divide-and-rule tactics in the Association of Southeast Asian Nations, and now its aggressive challenge to Australian and U.S. ships in international waters, influential voices in government, universities and the media have concluded that it's too late to prevent the PRC from annexing everything within the "nine-dash line" scrawled on a map by the Nationalist government in 1947.

But has it been lost, or has the region been persuaded to give it up? Has the PRC's strategy in the South China Sea been, at heart, a military operation or a psychological one?

Those who have been persuaded that China's control of the South China Sea is a fait accompli typically need an excuse to cede it to the PRC, because it's uncomfortable to admit that it has illegally seized territory. The rationalizations include the following.

- The South China Sea is historically China's anyway, and China is merely regaining the dominant position it once held in the region (Paul Keating, who was Australia's prime minister in the 1990s, articulates this official Chinese Communist Party position).

- The PRC may control the South China Sea, but it doesn't really matter because there is no way it will interrupt commercial shipping, which is all that really matters to Australia (popular among business analysts).
- It's in Australia's economic interests to placate China; Australia is vulnerable to retaliation (the default position of Australia's Department of Foreign Affairs and Trade).
- The United States has effectively withdrawn or is not going to come to the aid of any party in a conflict with China, so what's the point? (ANU's Hugh White)

Beijing has, of course, been propagating these arguments as a way of weakening resistance, and many influential Australians have succumbed to a kind of "learned helplessness" in the face of this new assertive power.



More than 1,000 Chinese cadres and workers gather in June 2018 to sing the Yellow River Cantata as they mark the 97th anniversary of the founding of the Chinese Communist Party.

A few years ago, the Hudson Institute's Michael Pillsbury wrote of the PRC: "We don't know we are losing the game. In fact, we don't even know that the game has begun."

Now, however, a small but growing number of analysts and observers are beginning to understand the CCP's game and accept that Australia has been losing. They realize that now Australia and its allies and partners need to begin to play and have begun working on how to respond to this new, disruptive power. □


Dr. Clive Hamilton delivered this lecture to the Naval War College in Newport, Rhode Island, U.S., in October 2018. It has been edited to fit FORUM's format.



PROPAGANDA PROLIFERATOR

The Confucius Institutes, under the aegis
of the Chinese government, infiltrate
nations worldwide in increasingly
insidious and imperious ways

FORUM STAFF



The People's Republic of China (PRC) has installed more than 530 so-called Confucius Institutes and 1,100 Confucius classrooms in 149 countries since the organization's start in Seoul, South Korea, in 2004, according to the latest available tally released in 2017 by Xinhua, the PRC's official state-run news agency.

The practice of exporting a Chinese brand of cultural learning centers may seem innocuous on the surface. However, the PRC-funded institutes, which are named for the ancient Chinese philosopher, are part of the PRC's larger coercive scheme, experts say. The institutes claim to belong to a nonprofit, international public education organization established to teach Chinese language and culture abroad, akin to France's Alliance Francaise or Germany's Goethe Institute. However, a growing number of experts contend the Confucius Institutes are instead part of an expansive campaign on which the Chinese Communist Party (CCP) spends an estimated U.S. \$10 billion internationally to manipulate the political and information environments of targeted countries.

Located in countries from Argentina to Zimbabwe, the institutes are overseen by an agency of the PRC's Ministry of Education, known as the Hanban, which includes high-ranking members of the CCP's propaganda and ideology branches. The structure enables "the realization of Politburo policies in the operations of Confucius Institutes. Insofar as Confucius Institutes and classrooms are installed in colleges and K-12 schools the world around, these educational institutions function as peripheral propaganda branches of the Chinese party-state," Dr. Marshall Sahlins, a University of Chicago professor, explained in a July 2018 article on the Inside Higher Ed website. The PRC's central Politburo, which has 25 members, oversees the CCP. In turn, The CCP orchestrates influence operations through its United Front Work Department (UFW) to co-opt sources of potential challenges to its authority. The Confucius Institutes are part of the UFW's overseas efforts. The PRC has said it aspires to establish up to 1,000 such institutes by 2020.

COERCIVE ARCHITECTURE

In recent years, the PRC has worked to obfuscate the institutes' mission by focusing promotional messaging on their proliferation and self-professed success in providing Chinese language skills. However, PRC leaders explicitly described their intentions during the launch and expansion of the institutes and their extensive messaging campaign. In 2010, for example, China's then-minister of propaganda, Liu Yunshan, told *People's Daily* newspaper that the PRC's overseas propaganda should be "comprehensive, multilevel and wide-ranging. ... With regard to key issues that influence our sovereignty and safety, we should actively carry out propaganda battles against issues such as Tibet, Xinjiang, Taiwan, human rights and Falun Gong. Our strategy is to proactively take our culture abroad. ... We should do well in establishing overseas cultural centers and Confucius Institutes."

The Hanban established many of the institutes in proximity to projects that are part of the PRC's controversial One Belt, One

Road (OBOR) infrastructure plan. China's Xinhua news service reported in October 2017 that "135 Confucius Institutes were set up in 51 countries along the Belt and Road." OBOR aims to build a trade and infrastructure network to connect Asia with Europe and Africa, but its projects typically come with heavy debt burdens and political strings attached. Host nations ranging from Djibouti and Tajikistan to Sri Lanka and Maldives have learned that OBOR terms mainly benefit Chinese government interests.

Xinhua's announcement that the Confucius Institutes are being geographically aligned with OBOR projects supports the notion that the institutes are designed as part of an aggressive strategy to control host nations' political will and undermine their sovereignty. Moreover, activities tied to the supposed cultural centers are increasingly moving beyond mere influence operations to interfere in host countries, a growing number of critics have charged.

"Communist China is infiltrating American universities to meddle with our curricula, silence criticism of their regime and steal intellectual property including sensitive dual-use research," U.S. Sen. Ted Cruz of Texas told *The Washington Post* newspaper in May 2018. "The Confucius Institutes are the velvet glove around the iron fist of their campaigns on our campuses. The American government needs new tools to protect the integrity of our universities and research and to block academic espionage."

UNIVERSITY INFILTRATION

Roughly 110 Confucius Institutes are embedded in U.S. colleges and universities, and more than 500 Confucius classrooms have been established in the U.S., according to a Hoover Institution report issued in late November 2018 and titled "Chinese Influence & American Interests: Promoting Constructive Vigilance." There are 160 such institutes spread across Europe, including 29 in the United Kingdom and 20 in Germany, the report said.

In February 2018 Senate testimony, FBI Director Christopher A. Wray fueled Cruz's allegations that the institutes were tied to PRC espionage efforts and theft of intellectual property. He testified that Confucius Institutes number among the avenues the PRC uses to gather intelligence from U.S. universities nationally.

"It's across basically every discipline," said Wray. "And I think the level of naivete on the part of the academic sector about this creates its own issues. They're [the PRC is] exploiting the very open research and development environment that we have, which we all revere."

PRC efforts to steal research and technology from universities worldwide have been widely reported in

the news media. Outright thievery, however, is not always necessary. The PRC preys upon the openness of foreign academic environments. China's People's Liberation Army (PLA), for example, has been collaborating with universities in Australia, Canada, Germany, the Netherlands, New Zealand, Singapore, the U.K. and the U.S. to advance its military technologies and capabilities, a November 2018 study titled, "Picking Flowers, Making Honey," by the Australian Strategic Policy Institute revealed. In the past decade or so, the PLA has supported more than 2,500 military scientists and engineers to study abroad and develop relationships with researchers and institutions worldwide, the report's author, Alex Joske, found. Chinese President Xi Jinping aims to expand this method of extracting intelligence from foreign universities as part of so-called civilian-military fusion efforts, according to media reports.

DODGING OVERSIGHT

The PRC has largely circumvented scrutiny of its Confucius Institutes in the U.S. by skirting laws and customary academic supervision by creating carefully structured partnerships. The Hanban sets up its centers jointly with a host U.S. university, providing a U.S. \$150,000 grant in seed money, the Hoover report found. Then the PRC provides U.S. \$100,000 to U.S. \$200,000 per year in direct funding to the often cash-strapped U.S. institution. Grants for the Confucius classrooms at secondary schools start with U.S. \$50,000 initially and then U.S. \$15,000 annually, the report said.

Under such arrangements, the Hanban, working through a Chinese university, supplies teachers, textbooks and other materials that promote its cultural standpoint and that are subject to Chinese Communist Party control, the Hoover report said. As a result, institute teachers aren't required to have green cards or pay U.S. taxes. They also are under the thumb of the Hanban.

The Hanban mandates through contracts with the host universities that the institutes' activities must follow Chinese law, and terms of the arrangement must remain confidential, the Hoover report said. The Hanban relies on similar nondisclosure agreements in other countries as well. "Activities benefiting from Chinese funding or commercial ties with China are all the more concerning when Chinese influence is less easy to trace," the Hoover report explained.

Incidents in which the PRC and its Confucius Institutes have interfered with academic freedoms on campuses have garnered headlines from Europe to Latin America to Australia and New Zealand. At a university conference in Portugal in 2014, for example, an administrator from the Confucius Institute censored materials related to Taiwan, confiscating the materials and removing Taiwan-



A woman participates in a demonstration against China during its review by the United Nation's Human Rights Council in Geneva, Switzerland, in November 2018. Chinese Communist Party (CCP) propaganda strives to suppress discussions of Tibet, Xinjiang, Taiwan, human rights and Falun Gong, among other things, CCP officials admit. REUTERS

related pages from the programs, the Inside Higher Ed website reported. In May 2016, administrators at a university in Peru that harbors a Confucius Institute canceled a painting exhibit featuring Falun Gong Chinese artists.

Doris Liu, a Chinese-born Canadian journalist and filmmaker, released a documentary in 2017 titled *In the Name of Confucius* that identified threats the institutes pose to Canada, the U.S. and other countries. Among other things, her film exposed the institutes for banning practitioners of Falun Gong, an exercise and meditation movement that the Chinese government has tried to suppress for two decades. "Our fundamental values are at risk or damaged. The institutes teach propaganda by sneaking it into our campuses," Liu told the *South China Morning Post*

newspaper in a 2018 interview. "First, there is the human rights discrimination. Second, it's academic independence."

Under pressure from the CCP, Chinese students and scholar associations also play a role in reaching and controlling Chinese living around the world as well as host country citizens, according to the November 2018 Hoover report. "Chinese scholars and diplomats have sought to influence on-campus debates in China's favor and have even protested when American universities have exercised their right to invite speakers whom China identifies as unfriendly. Finally, some Chinese students and scholars have exploited the collaborative research environments on U.S. campuses to obtain sensitive American technologies," the report found.



A Beijing wall features a propaganda poster of China's President Xi Jinping.
AFP/GETTY IMAGES



Painted portraits of Chinese President Xi Jinping, left, and late communist leader Mao Zedong hang at a Beijing market.
AFP/GETTY IMAGES

Student cells affiliated with the Chinese Communist Party have emerged on campuses in Australia, Canada, Chile, France, Germany, Greece, Italy, Mexico, the Netherlands, Portugal, South Korea, Spain, Thailand, the U.S. and elsewhere that effectively extend PRC surveillance efforts, according to an April 2018 article in *Foreign Policy* magazine. The cells are “part of a strategy, now expanded under Chinese President Xi Jinping, to extend direct party control globally and to insulate students and scholars abroad from the influence of ‘harmful ideology,’ sometimes by asking members to report on each other’s behaviors and beliefs,” the article said.

Samantha Hoffman, a visiting fellow at the Mercator Institute for China Studies in Berlin, told *Foreign Policy*, “You still know that if you actively protest against [the party], or if you make some kinds of comments, you know that that could harm you later on,” she said. “Information gets around. It’s a way of controlling what you are willing to do.”

The PRC touts the cells among its propaganda successes. “The rising number of overseas party branches is a new phenomenon, showing the growing influence of the [Chinese Communist Party] and China,” according to a November 2017 article in the *Global Times* newspaper, a

party mouthpiece. “Overseas party cells are also responsible for promoting party and government policies.”

INCREASING AWARENESS

On the basis of the prevalence of such improprieties, the U.S. National Association of Scholars (NAS), along with other higher education organizations such as the American Association of University Professors in the U.S. and the Canadian Association of University Teachers in Canada, has advocated for the removal of Confucius Institutes nationwide. A 2017 NAS report, titled, “Outsourced to China: Confucius Institutes and Soft Power in American Higher Education,” found that in accepting such funding “to a large extent, universities have made improper concessions that jeopardize academic freedom and institutional autonomy. Sometimes these concessions are official and in writing; more often they operate as implicit policies.” To keep institute funding flowing and access to Chinese resources entailed in the contracts, many cash-strapped universities censor themselves, experts explain.

As public knowledge of the institutes’ activities has grown and pressure from critics has intensified, various international universities have ended their relationships with the institutes, including Osaka Sangyo University in Japan, McMaster University and the Universite de Sherbrooke in Canada, the University of Lyon in France, Stuttgart Media University and the University of Hohenheim in Germany, and Stockholm University in Sweden.

More than 10 U.S. universities, including Pennsylvania State University, the universities of Chicago, Iowa, Michigan at Ann Arbor, Minnesota at Twin Cities and North, South and West Florida, have also moved to shutter the institutes on their campuses — the majority of them in the past year. A bipartisan effort by Texas Congressmen Michael McCaul and Henry Cuellar, for example, led to the 2018 closure of two Confucius Institutes affiliated with Texas A&M University. In a March 2018 letter to their state’s universities, the representatives called the PRC-backed institutions “a threat to our nation’s security by serving as a platform for China’s intelligence collection and political agenda.” They added, “We have a responsibility to uphold our American values of free expression and to do whatever is necessary to counter any behavior that poses a threat to our democracy.”

Other universities that had been evaluating whether to open Confucius Institutes, including the University of Pennsylvania and Princeton University, have decided against such plans in recent years. A handful of schools, including the University of North Carolina at Charlotte, Southern Utah University and Savannah State University, however, have opened

institutes, holding the number of institutes open in the U.S. at about 100.

GOVERNMENT PROTECTION INITIATIVES

Governments and universities worldwide should keep a vigilant eye on activities related to the Confucius Institutes and related PRC influence and control campaigns that take advantage of the openness of democratic systems abroad. The PRC’s authoritarian influence campaign is not about attraction or persuasion, but instead it focuses on distraction and manipulation, experts contend. Such interference activities erode the foundation of trust that makes open, democratic and multicultural systems work, and they can ultimately erode sovereignty, experts warn.

In the U.S. Senate, Cruz introduced legislation in May 2018 designed to more closely monitor foreign governments’ co-opting of U.S. educational institutions, such as the PRC’s activities through its Confucius Institutes. His proposed law, called the Stop Higher Education Espionage and Theft Act of 2018, would also make PRC funding of the Confucius Institutes comply with the Foreign Agents Registration Act. In the U.S. House, Rep. Joe Wilson of South Carolina introduced a corresponding proposal called the Foreign Influence Transparency Act of 2018, which also mandates universities disclose donations from foreign sources of U.S. \$50,000 or more. The U.S. National Defense Authorization Act, enacted into law in August 2018, now prohibits the Defense Department from funding Chinese language programs that host Confucius Institutes unless they obtain a waiver. The new terms may lead to closing more institutes, such as the one at the University of Rhode Island, which accepted PRC and Defense Department funds. Given mounting concerns about PRC coercion and espionage, U.S. President Donald Trump’s administration is mulling whether to have more extensive background checks and other restrictions on Chinese students in the U.S., Reuters reported in late November 2018. In June 2018, the U.S. State Department shortened the length of visas to one year for Chinese graduate students studying aviation, robotics and advanced manufacturing to reduce the potential threat to national security. They had been granted for five years previously.

The U.S. is also considering conducting more extensive checks on Chinese students before they attend U.S. schools, Reuters reported.

“Every Chinese student who China sends here has to go through a party and government approval process,” a senior U.S. official told Reuters. “You may not be here for espionage purposes as traditionally defined, but no Chinese student who’s coming here is untethered from the state.” □

INDOCTRINATING THE CHINESE MILITARY



CHINA'S PEOPLE'S LIBERATION ARMY TURNS TOWARD PROPAGANDIST ROOTS, PARTY IDEOLOGY

ZI YANG

China's People's Liberation Army (PLA) is undergoing a significant transformation, the most thorough in its 91 years of existence. Virtually all parts of the PLA are experiencing changes, with the goal of modernizing the force according to world standards. While great strides have been made in technological advancement, a re-emphasis on political and ideological indoctrination of PLA officers and enlistees has also occurred. Such initiatives have profound effects on the minds of individuals who make up the world's largest military. This article seeks to answer the following questions:

- What is the guiding philosophy behind the mass indoctrination of the PLA?
- What are the components of the PLA's "strong military culture?"
- What constitutes a "four haves soldier?"
- What specific steps have been taken to indoctrinate the military?
- What are the pluses and minuses of the refocus on political indoctrination?

Chinese President Xi Jinping has gradually consolidated power since 2012, making him the most powerful Chinese leader since Mao Zedong. Following Chinese communist traditions, Xi Jinping thought has been elevated to the level of official state ideology. Thus, it is unsurprising that his line of thinking on defense, the so-called Xi Jinping thought on strengthening the military, dominates PLA reforms.

In Xi's view, China is facing profound danger, both from internal and external enemies. On the international stage, the rise of China has made the U.S. more alert than ever, and Washington has taken a range of measures to counteract the growing influence of Beijing. In addition, the intensification of regional conflicts poses further challenges to China's territorial integrity, including

the resurgence of Taiwan's Democratic Progressive Party, the menace of domestic terrorism and separatism, as well as corruption within the Chinese military that threatens the very foundation of the PLA.

Under such conditions, Xi has called for a return to the PLA's fundamentals — a highly disciplined army under the Chinese Communist Party's (CCP) absolute leadership that is capable of winning wars — harkening back to the early Red Army led by Mao.

There are three principles to Xi's expectations of the Chinese military — obey the party's commands, prepare to win wars and maintain good conduct. Plastered across all barracks in China, these ideas are simple and straightforward. First, the PLA must obey the party's command because, unlike the military of a Western democracy, the PLA belongs to the CCP, not the state. Its task is to defend the party's interest above all else. The CCP came to power through a prolonged armed struggle, and it understands the critical importance of keeping power with the assistance of the military. Therefore, the

Chinese President Xi Jinping puts his hand on a copy of the constitution before taking the oath of office after being re-elected to a second term by the National People's Congress at the Great Hall of the People in Beijing in March 2018.

THE ASSOCIATED PRESS



party will never relinquish its control of the PLA, and service members must not deviate from the party's absolute command. Chinese political and military leaders believe that conflict between the PLA and the CCP will inevitably lead to the downfall of the state, just like what happened in the Soviet Union. Therefore, the first principle of Xi's thought on the military is for the PLA to obey all orders from the party.

Besides adhering to "correct" politics, the PLA must be prepared to fight and win wars. In a time of great change, the PLA must train hard and stand strong in defending national interests. In the past, the PLA has expanded capabilities in cyber, electronic warfare, space, and conducting joint operations while proclaiming new technological achievements in areas such as artificial intelligence, hypersonic glide vehicles, high-power microwave weapons, laser weapons, satellite navigation, unmanned aerial vehicles and quantum communications. Such progress will be of enormous benefit for the PLA if a conflict does break out in the future.

Third, the PLA must maintain good conduct, strictly following regulations and law. The breakdown of order in any institution is an awful development. While

in the past the PLA was run like a badly managed state-owned enterprise, much has changed since Xi took over. The anti-corruption campaign in the PLA has netted a long list of middle- and high-ranking officials while striking fear into the hearts of many others.

Yet, besides the big stick, the military leadership also seeks to promote revolutionary values to service members, reminding them that the PLA is an army of the people. As a matter of fact, advocating a "strong military culture" is high on Xi's agenda, because culture permeates all levels of a military and has a strong influence on how soldiers behave.

Xi's notion of a strong military culture is a mixture of the so-called red military culture and traditional military ethics. Red military culture stems from the CCP's and PLA's joint revolutionary experience from near extinction at the hands of the Kuomintang forces to conquering the whole of China. "Red values" such as bravery, sacrifice, loyalty, perseverance and fearlessness are often emphasized. Likewise, "red institutions," such as the political commissars' system, and obedience to the party are highlighted.

A mural depicts People's Liberation Army soldiers at a Beijing exhibit touting Chinese President Xi Jinping's achievements.

THE ASSOCIATED PRESS



Traditional military ethics, or *wude*, is a concept that can be traced back to ancient times. There are three core principles when it comes to traditional military ethics — loyalty, bravery and strictness. Loyalty must be dedicated to the country and duty. With regard to bravery, one must sacrifice for the greater good and must be witty, not stubborn, in applying one's braveness. When it comes to being strict, one must be strict to all — one's self, peers and subordinates.

With that being said, Xi specifically outlined his expectations to remolding PLA service members into what he calls "four haves soldiers," meaning they must have spirit, ability, fearlessness and morality. A four haves soldier must have the spirit of a firm believer in communism and the party's leadership and have the will to oppose any inner desire and outside attempts to subvert that commitment. He must have the ability to shift into combat mode at any time, build his capability in fighting so-called informationized warfare, strengthen the mental preparations for warfighting and be a curious lifelong learner. (Informationized warfare refers to the notion that information technologies, such as capabilities related to command, control, communications, computers, intelligence, surveillance and reconnaissance, are key for military effectiveness).

In his speeches, Xi has repeatedly criticized the devastating effects of "peacetime illness" that eroded service members' willingness to make the ultimate sacrifice. As a result, a four haves soldier must be brave and fearless. He must be prepared to sacrifice and die for the cause. Last, a four haves soldier must have morality. He must know right from wrong, maintain excellent conduct, obey the law and have high standards in life.

To promote these values and models, the PLA has adopted two general strategies, the raising of role models and everyday political indoctrination. Selecting role models and propagating their heroic deeds is nothing new. In fact, a nationwide movement to "learn from the PLA" in the 1960s created a number of military heroes. Although some have long been forgotten, some, such as Lei Feng, have survived and remain immensely popular in China. However, PLA propagandists have advised against using the same methods from the past. Today's military heroes should no longer be the stereotype from the 1960s — male, Han Chinese and the embodiment of perfection. More efforts should be expended on finding female, non-Han and imperfect individuals who bettered themselves through struggle and hard work, they argue.



The other indoctrination strategy is that of everyday political education. This encompasses daily activities and initiatives organized to drive home the political message. The PLA Navy's North Sea Fleet, for example, has implemented a series of measures through cultural and fun group activities. There are regular reading club meetings, film viewings, piano concerts, calligraphy and photography lessons, red song karaoke parties, filmmaking competitions, and CCP, PLA and PLA Navy history competitions, all geared toward creating a four haves sailor identity. In addition, commemoration events for revolutionary martyrs have been organized for similar purposes. Through these efforts, the North Sea Fleet hopes to have a new generation of committed sailors living up to the commander in chief's standards.

It is obvious that Xi seeks to return the PLA to its roots, to an era in which soldiers are both "red" and "expert." However, much has changed since the revolutionary war days, and the viability of such a model is doubtful. Taking valuable time away from training for political indoctrination is problematic, especially in a time when more training is needed. Employing hackneyed tactics, albeit powered by traditional and social media, raises questions on the effectiveness of the new propaganda campaign. Yet, the leadership will most likely view indoctrination as necessary, given the importance of keeping the PLA absolutely loyal to the ideology of the new Chinese leader and the CCP. Therefore, it is expected that the PLA will spend more time and effort to produce enlistees and officers equipped with the party's latest ideological pronouncements. □

A Chinese paramilitary police officer guards a portrait of the late Chinese leader Mao Zedong at the Tiananmen Gate in Beijing.

THE ASSOCIATED PRESS



TERRORIST REHAB

SOCIAL AND CULTURAL APPROACHES PROVIDE A SECOND
CHANCE FOR TERRORISTS IN INDONESIA

NOOR HUDA ISMAIL

The Bali bombing in 2002 was a turning point in my life. I was working as a special correspondent for *The Washington Post* newspaper covering the attack that killed more than 200 people, mostly foreigners. I quickly learned from a police news conference that Fadlullah Hasan, my own roommate when I studied in an Islamic boarding school in Solo, Central Java, Indonesia, for six years in the early 1980s, was one of the bombers.

Since that day, the question of why a smart, soft-spoken and polite man like Hasan would get involved in terrorism has been a very personal one for me. In pursuing the answer to this question, I interviewed hundreds of convicted terrorists inside Indonesia's criminal justice system and visited some of their military camps in Ambon and Poso, two areas that were affected by communal conflicts after the collapse of Suharto's regime in 1998.

To enhance my global understanding of terrorism, I applied for a British Chevening scholarship to further my master's degree on international security at St. Andrews University, Scotland, from 2005 to 2006. I conducted field work in Northern Ireland to understand the conflict there. After meeting with a local nongovernmental organization (NGO) that had been trying to integrate former terrorists back into society, I had an epiphany: If this NGO can do it, I can do it in my country when I go back.

That personal quest and historical connection to the network of militant groups in Indonesia has been essential in leading me to establish the Institute for International Peace Building, locally known as Yayasan Prasasti Perdamaian (YPP), in 2008. Through YPP, I embarked on a series of controversial social interventions to help former convicted terrorists, or "formers," to integrate back into society.

NO ONE IS BORN A TERRORIST

The core understanding of YPP is that no one is born a terrorist. To be one requires multiple trajectories, ranging from an individual's political, economic and familial grievances to the importance of peer pressure as well as the role of a specific multigenerational kinship.

Some of those who have been arrested eventually will be released. What should we do as a society to deal with them? Should we lock them in jail and throw away the key? Or should we rehabilitate them so they can go back to being useful members of our community?

According to a 2013 report by the Institute of Policy Analysis of Conflict, Indonesia's judicial system has insufficient funds, infrastructure and resources to handle the successful rehabilitation of former terrorists. The lack of post-detention care leaves terrorist inmates at risk of returning to violence, because they are not being properly assessed. They do not receive sufficient reprogramming to prepare them to return to mainstream society.



Elementary school students hold placards during a small anti-terrorism rally in Central Jakarta, Indonesia. REUTERS

EMBRACE THE FAILURES AND BE FLEXIBLE

The call to give released terrorists a second chance to start a new life isn't easy, especially for someone coming from civil society, like me. I faced some challenges. For those who suffered the pain of terrorism directly, such as the victims and their family, rehabilitation of formers can be controversial and even offensive.

Terrorism also isn't the leading cause of death in Indonesia. Stroke, ischemic heart disease and diabetes are the top killers in the country, according to the World Health Organization. That means eating too many doughnuts and drinking sodas are likely to kill more Indonesians than being attacked by terrorists.

Therefore, as an issue, terrorism in Indonesia is often still viewed by a specific segment of the Muslim community as the West's systematic efforts to corner Islam. Meanwhile, for the public, terrorism is still considered the government's business.

TERRORISTS HAVE SOCIAL LIVES

Farihin Kandai was my first client. He is an Afghan veteran who fought with Osama bin Laden in the mid-1980s and went back to Indonesia in the early 1990s. I got to know Farihin through my work as a journalist for *The Washington Post* in 2002. We made a quick connection once he told me his wife is also a graduate of my boarding school, Al-Mukmin, Ngruki, Solo.

Interviewing him, I learned that due to his personal connections with Hambali, an Afghan veteran from West Java who later joined al-Qaida, Farihin was involved in terrorism activities in the country.



Indonesian women browse at an Islamic bookstore near the Al-Mukmin boarding school, which many Islamic militants have attended. REUTERS

After his release from prison, I helped him start a new life running a cacao farm in Central Sulawesi. It failed because he rarely showed up at the farm. He had a second wife, keeping him too busy to juggle his time between the new and old wife. Perhaps this new relationship prevented him from going back to the world of terrorism.

I learned an important lesson from this intervention: Terrorism is a “part-time job” for most of the Indonesians involved. They have a

TERRORISM IS A “PART-TIME JOB” FOR MOST OF THE INDONESIANS INVOLVED. THEY HAVE A SOCIAL LIFE BESIDES FIGHTING.

social life besides fighting. Even some of them, as demonstrated by Farihin, have the time and energy to have a second wife.

This made me think. Imagine if we can give them meaningful activities besides terrorism (other than encouraging them to become polygamists), perhaps they will no longer pursue careers as terrorists.

In one of my talks with Farihin, he told me what it was like to live inside a violent group such as Jemaah Islamiyah (JI).

“Being part of the [terrorist] group was an adventurous journey,” he said. “I felt that I was part of something bigger than myself, al-Qaida. Hambali always told us that we want to change the corrupt secular system in the world.”

He spoke with confidence and authority. His remark isn't unique among convicted terrorists who I have interviewed. They tend to identify themselves with much larger, vague, frequently transnational and more ideologically constructed communities on whose behalf they claim to commit attacks.

With the background as an Afghanistan veteran in the 1980s, he earned social respect within a specific community of JI.

Stories of supposed heroes who already performed jihad, like Farihin, are an important propaganda tool for the jihadi subculture. The community facilitates, encourages, celebrates, supports and publicizes their actions through artifacts and narratives circulated through global media culture and technology.



Mahmudi Haryono, who is also known by his militant alias Yusuf Adirama, works at his restaurant in Solo, Central Java, Indonesia. Haryono is a leading example of how a former jihadist can be rehabilitated into a productive member of society. THE ASSOCIATED PRESS

Farihin's story was special because he comes from a prominent jihadi family. Through this kinship connection, he was selected to participate in military training in Afghanistan in the 1980s.

He told me that his uncle was involved in the attempt to kill the first Indonesian president in the 1950s. Most of his younger brothers were also involved in terrorism in the country, including the bombing at the Philippine ambassador's house in Jakarta in the late 1990s, the Atrium Mall bombing in the 2000s, and a church burning during communal conflict in Poso, Central Sulawesi, in the 2000s. In a nutshell, terrorism is Farihin's family business.

The good news, according to Farihin, is that living as a terrorist is tough and mundane. It requires constant preparedness, and it isn't an appealing activity for a man in his 50s like Farihin, who wants economic stability to raise his new family. In other words, Farihin's life priorities have changed with his

age. However, his passion and desire to defend Islam is far from evaporating.

"Being a *mujahid* [an Islamic warrior] is my core identity," he explained.

So, Farihin was angry when a group of much younger men gathered in a mosque in Menteng, Central Jakarta, showing their support for the declaration of an Islamic caliphate by Abu Bakr al-Baghdadi, leader of the Islamic State of Iraq and Syria (ISIS) in mid-2014. The mosque is just a stone's throw from the U.S. Embassy in Jakarta.

I sat down with him in early 2015 to ask his reasons for not supporting al-Baghdadi's caliphate project.

He explained that those who supported al-Baghdadi argued that all Muslims were commanded to give their allegiance to him as leader of the caliphate and perform *hijra* (migration) to defend its territory and expand its borders throughout other traditionally Muslim countries.

“That was a nonsense call. Moreover, those ISIS supporters are clueless about jihad, and therefore they don’t respect others who don’t share their understanding of jihad,” he added. “As an Afghan veteran, I experience jihad. We worked closely with other factions that we didn’t share ideological beliefs. Kicking the Russian army out of the Muslim land was what united us.”

Perhaps because of his anti-ISIS stand, the Indonesian authorities used him to stop ISIS’ influence in the country. Media, including TV, also interviewed him.

Watching him talking on TV, I quickly realized that he was candidly eager to educate the public on the danger of ISIS ideology. He bravely said that ISIS doesn’t represent Islam because of its brutality.

Could he be a credible advocate against ISIS’ sophisticated propaganda?

Indeed, his TV appearance wasn’t perfect. For example, he spent much of his time glorifying his heroic past as an Afghan veteran. As a result, he didn’t have enough time to systematically highlight ISIS’ hypocrisies with a succinct argument. These included ISIS’ false narrative on a win-win situation



for recruits: They will become either martyrs in afterlife, having died for the cause, or heroes in the new order. This is something that people like me can help to better articulate. I can leverage formers like Farihin as possible agents of change within their own community.

I believe internal change is more powerful than killing them. It prevents them from becoming martyrs and becoming a memory to inspire others to emulate. Their personal stories of leaving the violent network will help to reveal the hypocrisy of the jihadi movement for prospective recruits to see.

However, I am fully aware there are challenges with the use of formers for countering violent-extremism initiatives. These include maintaining the authenticity of their stories, preventing them from feeling they are celebrities and ensuring they don't come back to militancy. That was the case with Abu Tholut and Abdullah Sunata, who were considered "cooperative" by the Indonesian police but later involved in Aceh military training in 2009 shortly after their release.

With the above considerations, I decided to hold a communication skills workshop for formers to emphasize the humanity messages rather than ideology.

For many jihadis like Farihin, Islamic ideology wasn't their entry point into the world of jihadism. The majority are clueless about religion. They mainly get into terrorism through who they're hanging out with or because they think the military aspects look cool. They use ideological justification once they are inside the terrorist group.

COMMUNICATION WORKSHOP

In August 2018, together with the YPP team, I carried out communications training for 10 formers and 20 *ustadhs*, or teachers — university professors and Muslim scholars, split equally between men and women.

Those formers represented four generations: those who had joined the U.S.-backed *mujahedeen* to fight the Soviets in Afghanistan in the 1980s, two former fighters from a Muslim group that sought to impose Islamic rule on the Philippines in the 1990s, and six veterans from Indonesia's Muslim-Christian disputes. The latest generation was a 19-year-old girl who had gone to Syria with more than two dozen members of her family to join ISIS.

Formers and *ustadhs* were paired in an arrangement in which formers — dubbed "angels" — would oblige their *ustadhs* — dubbed "humans" — with uplifting texts or food deliveries from the restaurant buffet. I deliberately designed this social intervention because I believe change can start from a very small act of kindness.

In response to the militants' sophisticated technique of using new media to mobilize recruits from all over the world, digital literacy materials were introduced, too.

ISIS' influence has been diminishing since the collapse of its headquarters in Raqqa, Syria.



Kartini Panggabean, top center, teaches at Al Hidayah Islamic Boarding School in Sei Mencirim, North Sumatra, Indonesia. She and her husband, former radical preacher Khairul Ghazali, established the school for the sons of militants whose fathers died in raids or are in prison for terrorism offenses. THE ASSOCIATED PRESS



A video presentation features former Islamist militant Mukhtar Daeng Lau during a meeting of former militants and victims in Jakarta, Indonesia, in February 2018.

THE ASSOCIATED PRESS

However, other ongoing international humanitarian issues involving Muslims such as the one in Rakhine, Burma, or the fate of Uighurs in China could easily be used by the militants to revive their network in Indonesia.

New media have changed the pattern of recruitment. In the old pattern, recruitment took place purely through offline space, through religious sermons, schools, friendships and kinships. In the new one, recruitment occurs either purely online or using a combination of offline and online.

I asked my Christian friend, Sahala Panjaitan, a public relations and digital branding expert, to share tips on growing a brand online. His session resonates well with the formers since there are a lot of similarities between those formers and businessmen. Like business people, formers are risk-takers, people persons, storytellers, and in their own way, often charismatic.

Gullnaz Baig, a counterextremism specialist from Facebook, flew in from Singapore to talk about the company's content-sharing policies. Meanwhile, to show

formers ways to help others, I invited Hassan Ahmad, a humanitarian aid worker from Singapore, to share his missions to Afghanistan, Yemen and Japan.

Workshop participants were asked to stay connected through a community website called www.ruangobrol.id, an online platform for the participants to share their stories. The alumni of this workshop are still connected through a WhatsApp group.

To ensure the sustainability of the website, I turned it into a social enterprise initiative under a new company called PT Kreasi Prasasti Perdamaian. Through this company, I am focusing on two main activities: film production and publishing books. I deliberately chose a documentary style to provide authenticity to the story. The film is coupled with the publishing of the book with similar topics. Once the film and the book are ready, we can use it for prevention purposes by having a series of film screenings and sharing sessions.

The use of film for a counter-violent-extremism campaign isn't a new approach for me. I already have produced three documentary films:

1. *Prison and Paradise* won Yamagata Film Festival in Japan. The film featured interviews with three first Bali bombers and their family. It has been screened at home and abroad.



Government officials, former militants and terror attack survivors attend a terrorist-victims meeting.

THE ASSOCIATED PRESS

2. *Jihad Selfie* has been screened more than 400 times in Indonesia and abroad. The film follows the life of Akbar Maulana, a prospective ISIS fighter who decided to abandon his intention to fight because of his close connection to his parents. The Indonesian foreign minister uses the film as prevention campaign for Indonesian diaspora.
3. *The Bride* is a film that tells the story of three Indonesian female migrant workers who search for love in social media. It specifically targets the online radicalization among Indonesian migrant workers.

I am producing a documentary film called *Seeking the Imam-Raqqa and Back*. The film follows the life of a 19-year-old girl who traveled to Syria to join ISIS together with her family.

For a 2019 project, I am drafting a proposal for a documentary film called *Cubs of Caliphate*. It will explore the life of children who were recruited to join ISIS.

POLICY RECOMMENDATIONS

1. To implement programs that counter violent extremism, use popular culture, including documentary film, books, comics and community websites, to inoculate youths in online and offline spaces so they will not turn to radicalization. Use of a variety of media will be effective to spark conversation about sensitive issues in a safe environment.
2. Counter violent extremism (CVE) programs must go beyond the delivery of a generic slogan such as “Islam is the religion of peace” or “Terrorism is not Islamic.” Community-level activities, interpersonal communication and the use of interactive media such as YouTube, Facebook, Twitter and Instagram, should support CVE programs.

SECOND CHANCES

Some of convicted terrorists eventually will be released. They need to have futures. Not only is it good for them and their families, especially for their wives and children, but also for society. In this context, the government and society must delicately invest in vocational training for post-release employment and life choices to reduce chances for recidivism. However, formers’ stories can also be used for programs that counter violent extremism (CVE). CVE doesn’t replace a “catch or kill” approach, but it calls for a systematic social intervention to stop the process of radicalization from rebuttal or deterrence to discourage potential recruits from engaging in violent actions and rehabilitation of captured violent actors. In other words, CVE is about prevention.

Preventing violence and changing radical ideology remain guiding principles in rehabilitation programs. These transformations can only occur through a multidimensional approach. To fully achieve the goal of rehabilitation, programs must not only focus on one’s mental and psychological well-being, but social, economical and societal relationships must also be considered.

All these pieces are interconnected. Considering them as a whole for rehabilitation reduces the chance of failure on the road to reintegration. □



= DEEP-WATER = DIALOGUE

*India could extend maritime reach by
developing Indonesian port*

FORUM STAFF

Strategically situated off the northern tip of Sumatra at an entry to the Malacca Strait, Indonesia's Sabang port soon could receive a makeover that might alter the balance of power in the Indian Ocean region (IOR).

Indonesia and India announced in May 2018 that they would set up a task force to "undertake projects for port-related infrastructure in and around" Sabang port. Sabang is a town on Weh Island in northern Sumatra. India pledged to finance infrastructure improvements, and in return, India would gain commercial and potentially military access to the port. Luhut Pandjaitan, Indonesia's coordinating minister for maritime affairs, said the port could dock ships and submarines, according to *Eurasia Review*, an independent journal and think tank.

Although the stated purpose of the partnership is to enhance tourism and address issues of the "blue economy," such as the fishing industry, the partnership has an obvious military benefit, experts contend. Access to the port would give India another way to check the People's Republic of China's (PRC's) growing reach in the IOR, which has increased through multiple partnerships as part of its so-called String of Pearls strategy.

"Unarguably, India and Indonesia share concerns about the uncertain nature of China's rise," retired Indian Navy Commodore Abhay Kumar Singh, told *FORUM*. Singh, a research fellow at the Institute for Defence Studies and Analyses, said both countries believe the partnership enhances regional security.

"Both [India and Indonesia] wish to see the development of a multipolar regional order in which they are recognized internationally as regional powers," he said.

Singh added that a joint statement issued after Indian Prime Minister Narendra Modi's visit to Jakarta in May 2018 emphasized that enhanced maritime cooperation can "be a force of immense stability in the region."

"Both countries consider a bilateral strategic partnership useful in balancing the growth of China's influence in the region," Singh said.

STRATEGIC SIGNIFICANCE

Some experts argue that the port is better suited for military use than commercial development.

"The port, owing to its small size and distance from the core Indonesian hinterland and ASEAN [Association of Southeast Asian Nations] economic powerhouses, is not conducive for long-haul maritime trade," Angshuman Choudhury, a

researcher and coordinator for the Southeast Asia Research Programme, wrote for *Eurasia Review*.

"On the other hand, Sabang's distinct location, merely 90 nautical miles below the southernmost tip of India's Andaman and Nicobar islands, gives it a critical strategic advantage of facilitating broader maritime reconnaissance in and around the Andaman Sea during peace time; preemptive blockading of the Malacca Strait during war time; and as a proximate base for additional strategic maneuvering in the eastern IOR flank." The island already has an operational airport, which could be upgraded to accommodate military aircraft, Choudhury wrote.

Military cooperation is already occurring at Sabang. In June 2018, the INS Sumitra, an Indian Navy patrol vessel, visited the port. The vessel was welcomed by a ceremony involving traditional Indonesian dancers, as well as an appearance by R.K. Rawat, India's ambassador to Indonesia, according to the *Business Standard* newspaper, an English-language daily in India.



The Indonesian military stands guard at Sabang port in the Aceh province of Indonesia. THE ASSOCIATED PRESS

Countering the PRC's naval presence in the Indian Ocean isn't the only benefit of the port partnership, however. Singh pointed out that protecting some of the world's busiest shipping lanes is paramount. The adoption of a shared vision on maritime cooperation in the Indo-Pacific "reflects the progressive strengthening of maritime cooperation," he said.

Sabang "has significant strategic importance due to her location astride Six Degree Channel, also known as Great Channel. Three major sea routes of

the Indian Ocean originating from or destined to the Cape of Good Hope, the Gulf of Aden and Strait of Hormuz converge in the Great Channel,” he said. “As a major feeder and outlet of Malacca Strait, the Great Channel or Six Degree Channel is crucial for usage of the Malacca Strait by maritime shipping.”

He recounted the history of piracy in the seas around the Aceh province where Sabang is located and said that remains a serious concern.

GROWING CHINESE PRESENCE

The PRC’s maritime presence in the IOR has grown rapidly during the past five years with dual-use port agreements with Burma, Djibouti, Maldives, Pakistan and Tanzania, Choudhury wrote. The String of Pearls strategy in which the PRC established a series of nodes of military and economic power throughout the region could be contested if India receives cooperation from other South and Southeast Asian states, including Burma, Malaysia, Sri Lanka and Thailand, he said.

“In this context, New Delhi has made some headway by promoting a nascent framework of strategic convergence in the IOR through interforce coordination, joint maritime patrols, naval exercises and real-time intelligence sharing with littoral states,” he wrote. “Yet, New Delhi must not presume that smaller littoral countries would unconditionally back India in an event of confrontation with Beijing in the IOR.”

In some cases, the PRC used economic pressure to gain access to ports in the region. In Sri Lanka, for example, the government was economically coerced by the PRC to grant the Chinese government a 99-year lease for control of the Hambantota port when Sri Lanka was unable to pay down Chinese loans for its construction.

In Gwadar, Pakistan, the Chinese government provided U.S. \$46 billion in investments and loans to build energy and infrastructure projects as part of its China-Pakistan Economic Corridor. The PRC, in return, assumed ownership of Gwadar Port just northeast of the Strait of Hormuz.

Although Pakistan’s military said the PRC has not asked for naval access to the deep-water port, officials from India and the United States have singled out Gwadar as a possible location for a future Chinese military base, according to media reports. China and Pakistan said they plan to turn Gwadar into a transshipment hub and megaport, Reuters reported. Energy pipelines, rail links and roads will connect Gwadar to the western regions of China.

With its intense interest in the region, the Chinese government paid special notice to the fledgling agreement between Indonesia and India at Sabang. The prospect of military cooperation at the port evoked contentious rhetoric from China’s *Global Times* newspaper.

“China has always kept a positive attitude





Soldiers march during a parade at Sabang port to mark the 73rd anniversary of the founding of the Indonesian military. AFP/GETTY IMAGES

toward India's overseas port investment in Southeast Asian countries, a move that could promote regional economic integration, but that doesn't mean China will turn a blind eye to possible military cooperation between India and Indonesia at Sabang," the newspaper wrote in May 2018. "China's heavy use of the Malacca Strait means its economic and energy security is to some extent tied to trade routes across the strait. If India really seeks military access to the strategic island of Sabang, it might wrongfully entrap itself into a strategic competition with China and eventually burn its own fingers."

LONGTIME PARTNERS

That rhetoric is unlikely to shape the decadeslong partnership between India and Indonesia. As littoral neighbors who share maritime boundaries in the East Indian Ocean, the countries have common interests and security challenges, Singh said. "This provides an ideal environment to enhance the avenues of maritime cooperation between India and Indonesia."

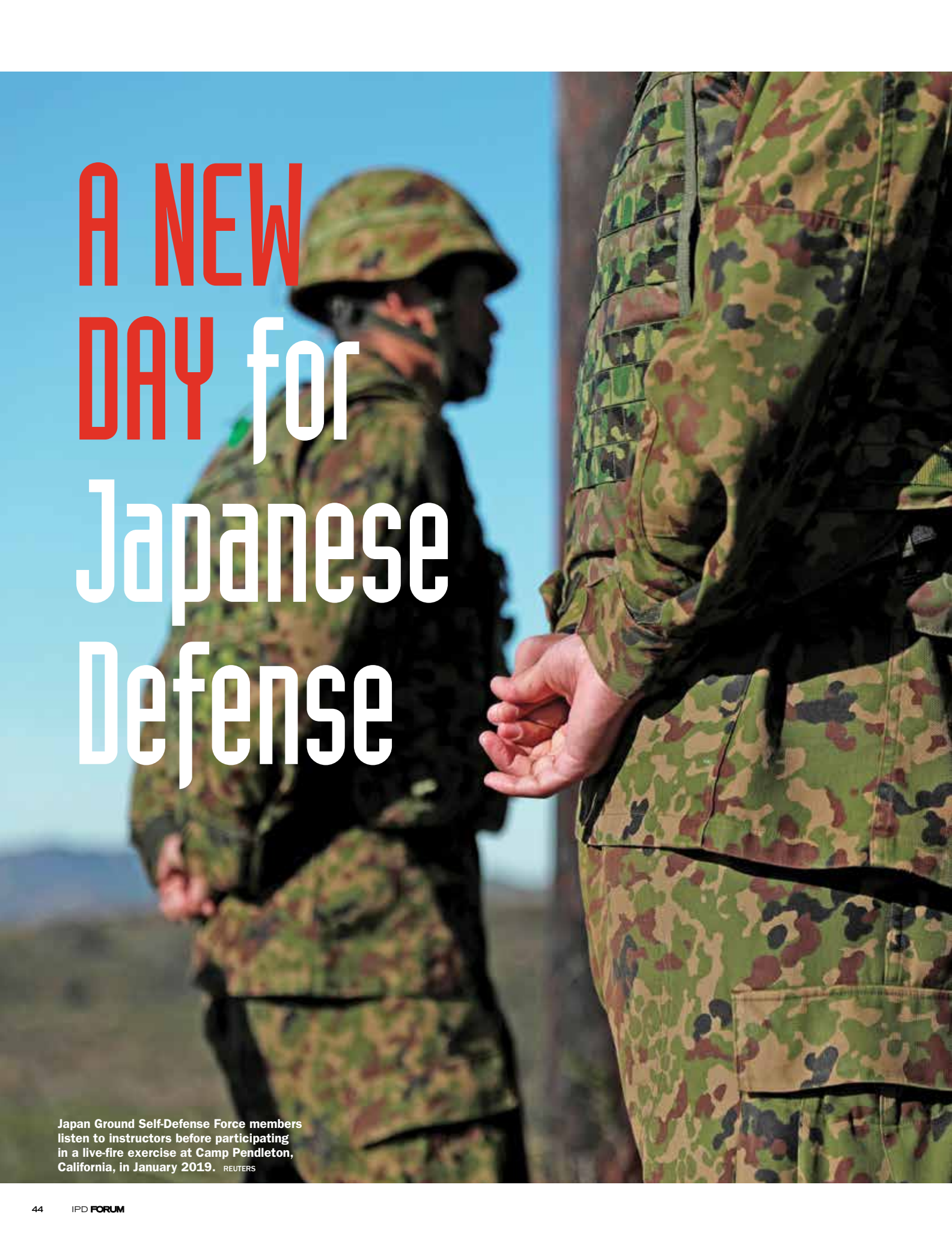
The Indian Navy and Indonesian Navy have a "vibrant cooperation," Singh said, that dates back to the 1950s. Singh, who specialized in missile and gunnery warfare in his 27-year naval career, said the navies signed their first security agreement in 1958 and

conducted their first joint naval exercise in July 1960. Partly due to Cold War dynamics and a divergence in "regional perceptions," the military ties loosened in the 1960s and 1970s, Singh said.

Following the end of the Cold War, however, "there was significant convergence of strategic perceptions of the two countries and resultant enhancement in maritime cooperation, which now includes regular bilateral exercises, coordinated patrols, cooperation on maritime domain awareness and training exchanges between the two navies," he said.

As for the Sabang project, the port would give the Indian Navy a logistics and resupply base to sustain operations in the eastern Indian Ocean and the Malacca Strait. It also could "boost the Indian Navy's ability to respond to humanitarian emergencies, provide disaster relief, and conduct anti-piracy patrols," asserted an article in *The Diplomat*, an online news magazine.

So, whether the mission is humanitarian assistance, anti-piracy patrols or protecting shipping lanes, forging lasting partnerships with neighbors to enhance maritime security makes strategic sense, Singh said. "Indonesia is an important partner for India due to her strategic geography," he said. "A close partnership between the two navies aims to ensure strategic stability in one of the most important areas of the Indo-Pacific." □



A NEW DAY for Japanese Defense

Japan Ground Self-Defense Force members listen to instructors before participating in a live-fire exercise at Camp Pendleton, California, in January 2019. REUTERS

JAPAN STRENGTHENS ITS NATIONAL DEFENSE ARCHITECTURE AMID A CHANGING SECURITY ENVIRONMENT

FORUM STAFF

The dramatically changing security environment in the Indo-Pacific and the rest of the world has prompted Japan to update its national security responsibilities. The peace-loving characteristics Japan has displayed since World War II will remain, according to Japan's National Defense Program Guidelines (NDPG), as the country embarks on a new direction to expand its military capabilities to ensure Japan survives and thrives against any threat and its citizens and sovereignty remain protected.

The guidelines, published December 18, 2018, provide insight into how the government and the Japanese Ministry of Defense intend to accomplish that. "Japan, amid the dramatically changing security environment, needs to fundamentally strengthen its national defense architecture with which to protect, by exerting efforts on its own accord and initiative, life, person and property of its national, territorial land, waters and airspace, and its sovereignty and independence, thereby expanding roles Japan can fulfill," the NDPG said.

Takeshi Iwaya, who became Japan's defense minister in October 2018, spoke about the latest NDPG during a visit to the Center for Strategic and International Studies in Washington, D.C., in January 2019.

Iwaya highlighted three basic principles of the NDPG.

- First, Japan will improve its posture for national defense. "As a sovereign nation, we will continue to make efforts to proactively ensure our security on our own accord. In doing so, we will directly contribute to a stronger Japan-U.S. alliance."
- Second, Japan will further strengthen the Japan-U.S. alliance. "We will accelerate our effort in accordance with the guidelines for Japan-U.S. defense cooperation to boost the ability of the alliance to deter and counter threats."
- Third, under the vision of a free and open Indo-Pacific, Japan will strategically enhance cooperation with countries sharing universal values and security interests. "The Japan-U.S. alliance will be positioned as a cornerstone in promoting such cooperation. In order to improve Japan's defense posture, we have introduced a multi-domain defense force as a concept to further realize our effective defense capability. The key to integrating this multi-domain defense force lies in the development of our cross-domain operations."

Executing these principles remains critical to Japan's deterrence and response to superior threats. Successfully adhering to these NDPG concepts will enable Japan to overcome any deficiency in individual domains, Iwaya added.

"To this end, Japan will emphasize efforts to acquire and strengthen our capabilities in the new domains of space, cyberspace and the electromagnetic spectrum," Iwaya said. "Also, as for capabilities in the traditional domains,

we will strive to establish a maritime and air superiority as well as strengthen our capabilities ... of firepower and comprehensive air and missile defense. Ultimately, our aim is to organically integrate capabilities in all domains, both in new domains and traditional domains, to generate synergy and amplify the overall strengths."

During the next five years, Japan will "significantly upgrade" its defense capability and work to further strengthen the Japan-U.S. alliance based on guidelines for defense cooperation, Iwaya said. "The international security environment our alliance is currently facing is not easy, as you know. But I am confident that the direction of Japan and the United States are more aligned than ever."

The security environment surrounding Japan is changing at "extremely high speeds," the NDPG stated. Changes in the international balance of power are accelerating and becoming more complex, increasing uncertainty over the existing order.

"In addition, rapid expansion in the use of new domains, which are space, cyberspace and electromagnetic spectrum, is poised to fundamentally change the existing paradigm of national security," the NDPG said, "which has prioritized responses in traditional, physical domains, which are land, sea and air."

DEVELOPING A MULTI-DOMAIN FORCE

Japan's target spending on defense during the next five years is estimated at U.S. \$245.3 billion — an 11% increase, or U.S. \$25 billion more than budgeted during the previous midterm defense program, which sets the defense spending on procurement for a five-year period. Iwaya said the record spending is needed to realize capability enhancements outlined in the NDPG.

"This shows our strong determination toward our national defense," he said.

By fiscal year 2022, Japan will establish a space domain mission unit to ensure superiority in the use of space at all stages, from peacetime to contingencies, Iwaya said. By fiscal year 2023, Japan will establish a cyber defense unit under the command of the defense minister.

"This will domestically enhance cyber defense capabilities, including those to disrupt opponents' use of cyberspace in its armed attack against Japan," Iwaya said. "Furthermore, in regard to the strengthening of our capabilities in the traditional domains, we will prioritize its implementation to effectively deal with armed attacks from aircraft, ships and missiles against Japan."

Japan's cabinet agreed in 2018 to increase Japan's order of U.S. F-35 aircraft from 42 to 147, to include 63 F-35As and 42 F-35Bs. The F-35Bs are the U.S. Marine Corps' short takeoff and vertical landing versions of the aircraft. Most of the F-35As will be assembled locally in Nagoya and delivered by the end of fiscal year 2022, the online magazine *The Diplomat* reported.

JAPAN'S MISSILE DEFENSE

Japan is expanding its ballistic missile defense (BMD) capabilities with the U.S.-made Aegis Ashore system to counter the growing threat from North Korean rockets. The land-based version of the Aegis BMD system, to be installed at two Japanese bases, will be operational by 2023. Japan is evaluating purchasing the U.S.-made Terminal High Altitude Area Defense (THAAD).



Radar Stations

A network of ground radars, including robust detection and tracking radars (FPS-3 and FPS-5), support Japan's BMD strategy.



Land-Based BMD

Japan's BMD also includes the Patriot PAC-3 air defense missile system, now deployed at 17 battalions nationwide, for point defense of specific targets, such as cities, by intercepting warheads in the terminal phase.

MIM-104F PAC-3 Missile

73 kilogram fragmentation warhead

Length: 5.2 meters

Range: 15 kilometers

Weight: 312 kilograms

A PAC-3 missile unit deploys at the Defense Ministry in Tokyo against North Korea's missile firing in August 2017. THE ASSOCIATED PRESS



Sea-Based BMD

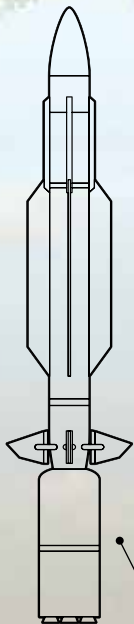
Japan is increasing its fleet of Aegis destroyers that deploy ship-based missiles from six to eight and is acquiring advanced versions of the Standard Missile 3, which intercepts short- and intermediate-range ballistic missiles.

RIM-161 Standard Missile 3

Length: 6.5 meters

Range: 500 kilometers

Weight: 1.5 tons



Kongo-Class Destroyer

Length: 161 meters

Displacement: 9,500 tons

Top speed: 30 knots

Crew: 300

- Four Kongo-class and two Atago-class destroyers with Aegis anti-missile systems:
- Radar with 360-degree coverage
- Able to track 100 targets at 200-kilometer range simultaneously.



The guided-missile destroyer Japanese Defense Ship Kongo, front, sails alongside the guided-missile destroyer USS Stethem in waters south of Japan during an exercise to increase interoperability between Japanese and U.S. forces in air and sea operations.

PETTY OFFICER 2ND CLASS DANIEL JAMES LEWIS/U.S. NAVY

Source: Graphic News, Reuters

The defense minister said Japan will proceed with procurement of standoff missiles to protect threats against ships or landing forces. The government is also conducting research and development into hypervelocity grinding projectiles to defend its remote islands.

“Through these developments, we aim to construct a defense posture sufficient to counter any types of threat in order to defend Japanese territory at all times,” Iwaya said. “We will try to do this under unified command and control, combining all forces.”

Japan developed its first marine unit since World War II, the Japan Ground Self-Defense Force’s (JGSDF) Amphibious Rapid Deployment Brigade, to enhance interdiction capabilities on its remote islands, the NDPG said. JGSDF introduced its own amphibious assault vehicles and certified its amphibious assault force during Iron Fist 2019.

THREATS FROM CHINA, NORTH KOREA AND RUSSIA

The People’s Republic of China (PRC) engages in unilateral, coercive attempts to alter the status quo based on its own assertions that are incompatible with the existing international order, the NDPG said. In the East China Sea, for example, the PRC has expanded and intensified its military activities at sea and in the air. Near the Senkaku Islands, part of Japan’s territory, PRC personnel continue to violate Japanese waters despite protests against Chinese naval ships sailing nearby.

“Such Chinese military and other developments, coupled with the lack of transparency surrounding its defense policy and military power, represent a serious security concern for the region, including Japan, and for the international community,” the NDPG said. “Japan needs to continue to pay utmost attention to these developments. China is eagerly expected to play active roles in a more cooperative manner in the region and the international community.”

Japan is also concerned about North Korea’s launch of ballistic missiles at an unprecedented frequency in recent years. North Korea is believed to possess large-scale cyber units capable of stealing military secrets and developing ways to attack critical infrastructure in foreign countries.

“Such military development of North Korea pose[s] grave and imminent threats to Japan’s security and significantly undermine[s] peace and security of the region and the international community,” the NDPG said. “Through United Nations Security Council resolutions, the international community also has made

it clear that North Korea’s nuclear- and ballistic missile-related activities constitute a clear threat to international peace and security.” The threat continued as North Korea test-fired what appeared to be short-range missiles several times in April and May 2019, the Republic of Korea’s Joint Chief of Staff reported.

Russia is the third country with potential to cause the most regional tension. Russia is modernizing its military and focusing on nuclear forces. “Close attention therefore needs to be paid to these developments,” the NDPG said.

Japan plans to keep a close eye on Russian military activity as it trends toward the Arctic Circle, Europe, areas around the U.S. and Middle East, as well as the Far East — including Japan’s Northern Territories.

“While the probability of large-scale military conflict between major countries, which was of concern during the Cold War era, remains low, Japan’s security environment is becoming more testing and uncertain at a remarkably faster speed than expected,” according to the NDPG.

DIPLOMATIC STRENGTH

Strengthening diplomatic ties is as much a part of the latest defense guidelines as strengthening defense capabilities. A shared vision of a free and open Indo-Pacific is pivotal to Japan’s partnerships.

“As interstate competitions prominently emerge, it has become all the more important for Japan’s national security to further strengthen [its] relationship with the United

States, with whom Japan shares universal values and strategic interests,” the NDPG said.

With the Japan-U.S. alliance as a cornerstone, Japan will strategically promote international security cooperation in close coordination with countries sharing universal values and security interests, such as Australia, India and Southeast Asian countries, the defense minister said.

The NDPG said Japan will work on defense cooperation and exchanges, including joint trainings and exercises, defense equipment and technology cooperation and interchanges among military branches.

“I truly believe our efforts will contribute to supporting the peace and stability not only in Japan,” Iwaya said, “but also in the United States, our ally and most important friend, and ultimately in the Pacific and across the entire world.” □



Members of the Japan Ground Self-Defense Force and U.S. Marines and Sailors participate in an amphibious landing exercise during Iron Fist 2019.

CPL. CUTLER BRICE/U.S. MARINE CORPS

A SYMBOL OF *freedom*



Maj. Gen. Viet Xuan Luong

U.S. ARMY JAPAN'S COMMANDER SHARES HOW HIS FAMILY'S RESCUE FROM SAIGON FUELS HIS DESIRE TO SERVE

FORUM STAFF

The events and images of April 30, 1975, remain fresh in Maj. Gen. Viet Xuan Luong's mind. History books denote the date as the fall of Saigon, the day Communist North Vietnamese and Viet Cong captured the South Vietnamese capital, forcing South Vietnam to surrender and bringing an end to the Vietnam War.

For Luong, commander of U.S. Army Japan, it will forever be known as the day his life and the lives of his family changed forever. It was on that date that a 9-year-old Luong and his family found themselves at Saigon's Tan Son Nhut airport in what appeared to be a dead-end situation. By the time American friends of Luong's father, a Vietnamese Marine infantry officer, had helped secure paperwork for his family to leave, the airport had shut down.

"We thought we were doomed," Luong recalled in December 2018 during an interview with History Channel Japan and *FORUM* at Yama Sakura, an annual bilateral exercise between Japan and the United States. "We were getting bombarded not only with airstrikes and aircraft

bombing but also artillery and mortar fires as well. We thought for sure we were doomed."

Unbeknown to the Luong family, Operation Frequent Wind was underway. The U.S.-led operation is the largest helicopter evacuation in history. In less than 24 hours, 81 helicopters carried more than 1,000 Americans and almost 6,000 Vietnamese to the safety of aircraft carriers offshore, according to History.com.

The Luong family was among those transported to the USS Hancock.

Luong remembers "very clearly" disembarking on the aircraft carrier. Most people thought they had been taken to some island off the coast of Vietnam because the ship was so big, he said.

"I tugged at my dad's shirt, and I said, 'Where are we at?'" Luong recalled, trying to hold back tears as they began to fall down his cheek. "And he said, 'Well, you're on the USS Hancock, a carrier from the 7th Fleet.'"

"And as a kid, I just didn't know what that meant. I asked my dad, 'What does that mean?'" Luong's father looked at his son and replied: "That means that nothing in the world can harm you now."

"It may seem a little far-fetched, but I knew

based on my experience back then that I was going to repay the debt to our nation, and I knew I was going to be in the military to be able to meet that debt,” Luong said. “I love what I’m doing. I continue to serve every day and do the best I can, and I do recognize that I sort of am a symbol of who we are as a nation in terms of the price of freedom, in terms of the duty concept, in terms of having to step up to do what we do.”

He assumed command of U.S. Army Japan (USARJ) in August 2018, after having served as deputy commanding general for operations at Eighth Army in South Korea. As USARJ commander, he is responsible for 2,500 Soldiers, civilians and family members throughout 16 installations in mainland Japan and Okinawa.

be more responsive, more lethal in terms of weapons purchases and retool how they organize.

“It’s all fairly brand new to the Japanese forces, and it’s only going to get better,” Luong said.

Luong drew comparisons between the U.S. and JGSDF. For the U.S., he said, high priority is placed on the quality of people and the way forces operate — with trust and allowing junior leaders to make decisions.

“The Japanese in a lot of ways are similar,” he said. “If they’re not there, they’re getting there, and it’s really a joy to work with them.”

Luong wants Japan to know that U.S. troops are committed to serve alongside them and defend the concepts of a free and open Indo-Pacific.



U.S. Soldiers parade during a ceremony at the Tan Son Nhut airport in Saigon, Vietnam, during the Vietnam War in July 1969.

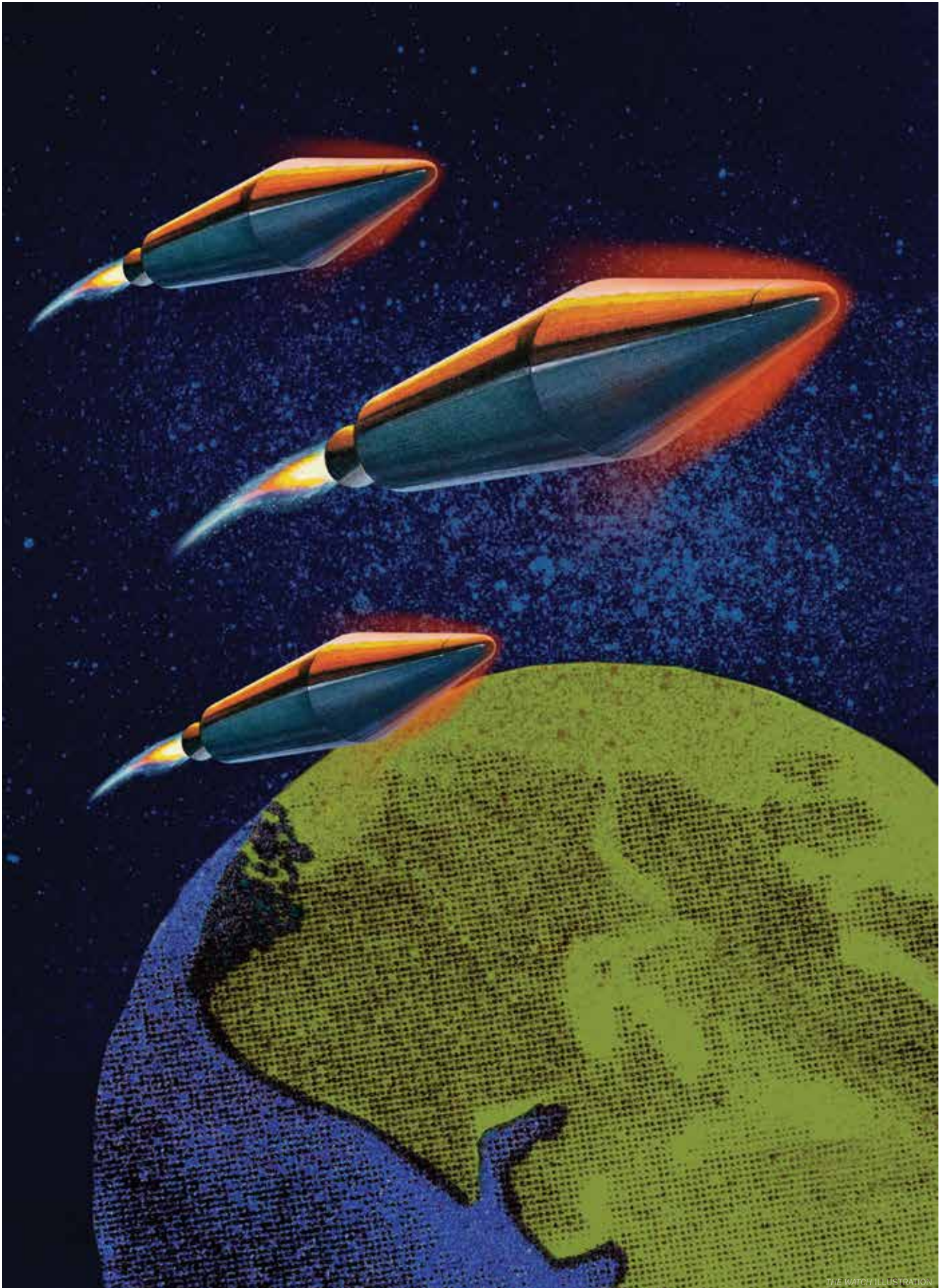
AFF/GETTY IMAGES

Luong commended the Japan Ground Self-Defense Force (JGSDF) for its professionalism and standout Soldiers and equipment. Exercises like Yama Sakura underscore the strength of the close, long-standing relationship the United States has with Japan and the JGSDF.

“We are resolutely committed to the defense of Japan,” Luong said. “Not only are we bound by our treaty, but by our presence here for over 70 years. We have an outstanding relationship military to military, but more importantly, our nations have a great relationship that has gone on for many years.”

Luong acknowledged that Japan’s latest National Defense Program Guidelines will allow the JGSDF to

“Just by being here, we’re waiting to lay our lives on the line to protect Japan against any threat based on the agreements we have with our nations. All we’re asking for is their understanding and their support, because sometimes the way we train, and sometimes the way we fight, and our live fires and our aircraft could be viewed as inconvenient,” Luong said. “But I will tell you, a little inconvenience for the price of freedom is not a whole lot to ask. Unless you’ve had your liberty taken away from you, it’s kind of hard to imagine what that is like. Sometimes, there are things that are worth trading for, there are things that are worth sacrificing for, and certainly there are things that are worth being a little inconvenienced for.” □



THE WATCH ILLUSTRATION

SONIC BOOM

The United States, China and Russia vie to outpace the competition in hypersonic weaponry

THE WATCH STAFF

H

arnessing the capabilities of hypersonic technology has created an accelerating arms race among the United States, China and Russia, with the latter two claiming to have already successfully tested weapons.

Determined to accelerate its program, the United States has prioritized research and development of hypersonic weapons and anticipates fielding missiles by 2028, U.S. Secretary of Defense Mark Esper, then U.S. Army Secretary, said in August 2018, according to Military.com.

“I’m pushing them to go as fast as they can,” Esper said of U.S. military hypersonic developers.

Hypersonic aircraft travel at five times the speed of sound — at minimum — making them fast enough to cross the continental United States at Mach 5 speed or faster in about 30 minutes. The potential to weaponize such power puts at risk any country that lacks similar technology to combat it. By all accounts, hypersonic weapons are difficult to find, track and kill.

“If you think missile defense is easy, think again. You’re shooting a bullet with a bullet, and that’s as good as it gets,” U.S. Air Force Gen. Paul Selva, then vice chairman of the Joint Chiefs of Staff, said in August 2018, according to CNBC. “It gets worse when the bullet is going 13 times the speed of sound and can maneuver, and that is what hypersonics is.”

Hypersonic missiles come in two variations: a cruise missile and a glide vehicle. A hypersonic cruise missile travels faster than Mach 5 and is nonballistic — the opposite of traditional intercontinental ballistic missiles (ICBMs), which use gravitational forces to reach their target. A hypersonic glide vehicle initially launches into space on an arching trajectory where warheads are released and fall toward the atmosphere at hypersonic speeds. Traditional ICBMs leave the payload’s path to gravitational forces. With hypersonic technology, the warheads are attached to a glide vehicle that re-enters the atmosphere, and through its aerodynamic shape, it can ride the shockwaves generated by its own lift as it breaches the speed of sound, giving it enough speed to overcome existing missile defense systems, according to Defence IQ.

During a March 2018 state speech, Russian President Vladimir Putin



“I’m pushing them to go as fast as they can.”

Mark Esper, U.S. Secretary of Defense

boasted about the nuclear capabilities of hypersonic weapons he claimed Russia successfully tested. Putin described Russia's hypersonic glide vehicle, called Avangard, as an "ideal weapon" and called it "invincible" to NATO's missile and air defense systems.

"No anti-missile system — even in the future — has a hope of getting in its way," Putin said.

Putin's remarks came as no surprise to U.S. intelligence authorities, who have been aware of Russia's development of destabilizing weapons systems for more than a decade. U.S. intelligence reports also confirmed the success of Russia's test, which could carry a nuclear warhead, CNBC reported.

To Russia, and any country with nuclear aspirations when it comes to hypersonic missiles, the U.S. issued a stern warning.

"We ought to say to all of our potential adversaries if that object is a nuclear weapon, we will respond in kind and inflict harm on you commensurate with the harm you inflicted on us, and that is not negotiable," Selva said, according to CNBC. "So, don't do it."

Some experts suggest that Russia and China appear to be focusing on equipping their hypersonic weapons with nuclear warheads. The United States, however, is focused on conventional strike weapons.

During Putin's speech, an animated video showed a missile launching from Russia and striking the U.S.

"It was certainly unfortunate to have watched

the video animation," then-U.S. State Department spokeswoman Heather Nauert said in March 2018, according to the British online newspaper The Independent. "We don't regard that as the behavior of a responsible international player."

The People's Republic of China (PRC), another major power strategically competing with the U.S., publicized its own successful test of a new hypersonic weapon in August 2018.

The China Academy of Aerospace Aerodynamics (CAAA) conducted its first test of the "Starry Sky-2" aircraft, saying that it reached a top speed of Mach 6 — six times the speed of sound, or 7,344 kilometers per hour, CNN reported.

The CAAA didn't reveal its plans for the hypersonic aircraft, only saying it was part of the PRC's ongoing aerospace industry development. "The Starry Sky-2 flight test project was strongly innovative and technically difficult, confronting a number of cutting-edge international technical challenges," a CAAA statement read. "The flight tester is controllable, and the scientific data is valid. The complete recovery of the rocket marks the successful completion of the Star-2 flight test, marking the feat of 'the first Chinese waverider.'" Waverider is a type of hypersonic aircraft that uses its own shock waves as a lifting surface, thereby improving its lift-to-drag ratio.

The United States acknowledges mounting

A U.S. Air Force B-52 prepares to carry the X-51 hypersonic vehicle out to the range for a test launch. REUTERS



HOW MISSILES GO HYPERSONIC

There are two kinds of approaches to solving the hypersonic challenge: scramjet and boost glide. The air-breathing scramjet relies on high speed for its power.

As it accelerates, more air and fuel are pushed into the engine, allowing it to reach hypersonic speeds.

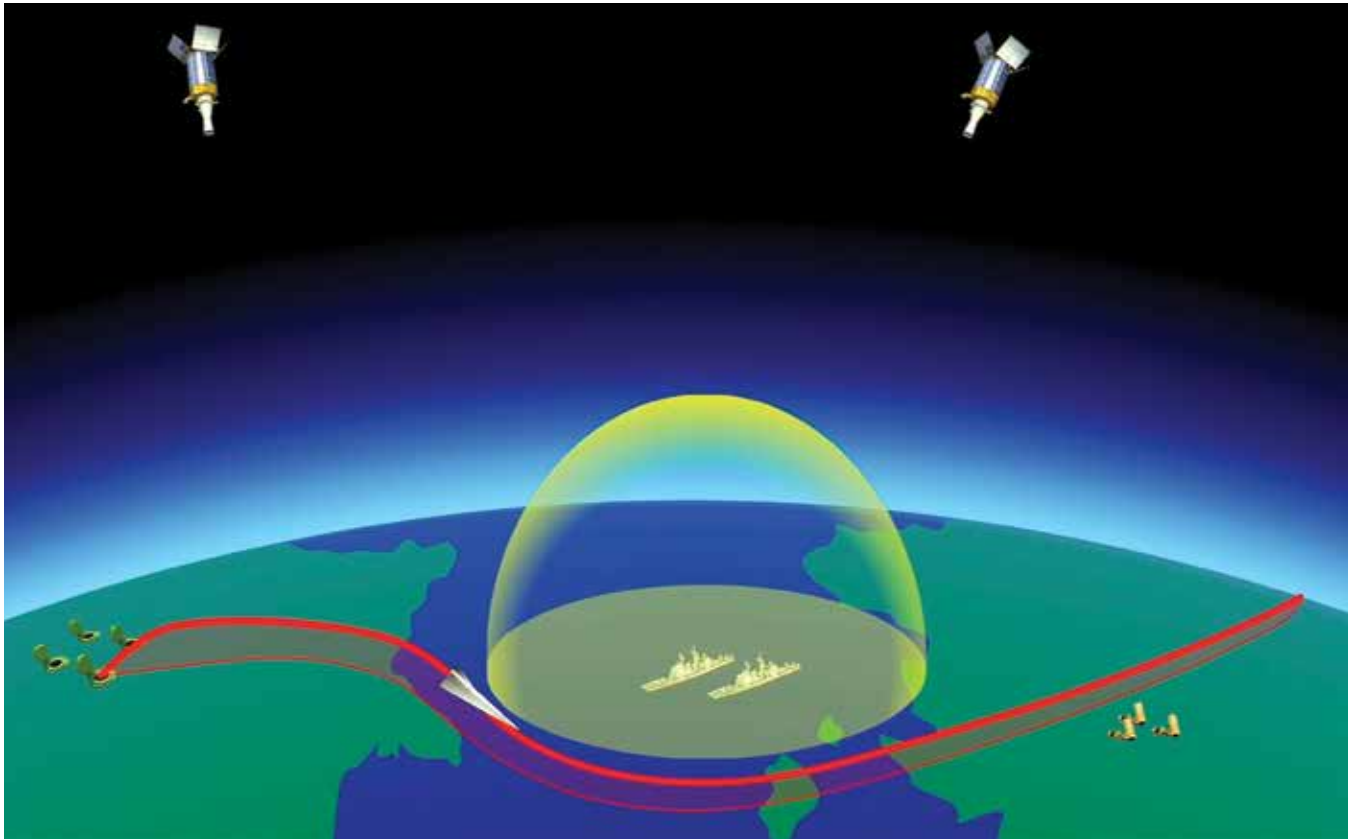
The boost glide model rides a re-entry vehicle to extremely high altitudes, where it skips across the Earth's upper atmosphere.

Traditional ballistic missiles already travel at hypersonic speeds. Built to carry nuclear and conventional warheads, they are capable of reaching outer space in

the course of their flights, but they can't maneuver.

The latest class of hypersonic missiles, however, would be smaller, guided and designed to carry conventional explosives for time-sensitive, rapid response in theater operations.

Source: Daily Mail



A computer simulation depicts the Avangard hypersonic vehicle maneuvering to bypass missile defenses en route to a target. THE ASSOCIATED PRESS

pressure as the PRC and Russia advance their hypersonic arsenals.

“China has tested hypersonic capabilities. Russia has tested. We have as well. Hypersonic capabilities are a significant challenge,” Gen. John Hyten of U.S. Strategic Command told CNN in March 2018. “We are going to need a different set of sensors in order to see the hypersonic threats. Our adversaries know that.”

Some analysts believe the PRC may be further along than it suggests but has largely remained quiet about its hypersonic development. Nonetheless, U.S. military officials have said the PRC’s hypersonic delivery systems could reach out thousands of kilometers from China’s shore “and hold our carrier battle groups or our forward deployed forces ... at risk,” Mike Griffin, U.S. undersecretary of defense and research and engineering, said during a U.S. Senate Armed Services Committee hearing in April 2018.

“We, today, do not have systems which can hold them at risk in a corresponding manner, and we don’t have defenses against those systems,” Griffin said during the hearing, according to Business Insider, adding that “should they choose to deploy them we would be, today, at a disadvantage.”

With urgency mounting, U.S. Air Force officials say the way forward will consist of learning as development evolves.

“Hypersonics is a program where I would expect

us to get out and learn a lot as we test. So, rather than taking time to ensure that your tests are checking the box of something you’re confident you can do, you compress the schedule to go out and make the test focused on learning something,” Dr. Will Roper, assistant secretary of the U.S. Air Force for acquisition, technology and logistics, told *Defense News* magazine in July 2018. “Just that difference in mindset takes years out of our hypersonics program. We’re hoping to [get to initial operational capability] within three to four years, and all of that is due to doing it as an experimental test program vice a long compliance period.”

Former U.S. Deputy Secretary of Defense Robert Work noted in June 2018 that Chinese President Xi Jinping has prioritized heavy investment in modernizing the PRC’s armed forces and investing in next-generation military technology. Xi has set a marker to be the world’s leader in artificial intelligence by 2030.

However, the PRC’s drive to be first in all things associated with military modernization cannot overpower the United States’ need to maintain a solid strategic presence and upper hand, especially where hypersonic technology is concerned.

“This race,” Work said, according to CNN, “is one we have to win.” □

The Watch magazine is a publication of U.S. Northern Command.



AUSTRALIA'S ROLE *in the Indo-Pacific* BUILDING FOUNDATIONS FOR SUCCESS ACROSS THE REGION

Australia's 2017 Foreign Policy White Paper, in tandem with the 2016 Defence White Paper, made clear how Australia sees its future. The 2017 white paper emphasized building "foundations for success" — strong domestic, diplomatic, defense and national capabilities and the provision of assistance abroad to ensure a stable and prosperous world.

It mapped a framework for opportunity — to "promote an open, inclusive and prosperous Indo-Pacific region in which the rights of all states are respected."

The white paper reaffirmed that our alliance with the United States remains fundamental to Australia's future. Moreover, it stated that without strong U.S. engagement in this region, power may shift, and Australia will find it more difficult to achieve the levels of security and stability we seek.

To our region, the U.S. Indo-Pacific Command is a potent symbol of what U.S. Vice President Mike Pence said in November 2018: "Our message is simple: The United States' commitment to the Indo-Pacific is steadfast and enduring."

Our region is far from simple or benign. It is characterized by fast-paced change and shifts in geoeconomic weight and power. By some measures, China now produces more than the U.S. India is the world's fastest-growing major economy. Indonesia looks set to become a top 5 global economic power by 2030. Many countries — China, Japan, India and others — are building increasingly powerful military forces. They are positioning within the global architecture to match their economic power. Competition is intensifying over maritime and land borders, sea and airspace and over regional economic integration. The international order built since World War II is being contested.

Enduring Core Values

In the midst of such change, Australia's values are enduring. We are one of the oldest democracies and the most successful of multicultural societies in the world. Our commitment to those values and the institutions that uphold them gives us confidence and credibility.

Australia seeks to shape an Indo-Pacific region free of coercion, abounding with opportunities for all and based on clear and fair rules. Based on these values, Australia is ramping up practical, long-term activities with our regional partners.

The new Australian initiatives outlined below are based on decades of engagement in our

neighborhood. They cover multiple areas — from patrol boats to infrastructure to strategic dialogues, sports, education and cyber. They involve partnerships through many channels, including bilateral, multilateral, governmental, nongovernmental and communities of shared interests.

In November 2018, world attention was on our closest geographical neighbor, Papua New Guinea. Port Moresby was host to the 21-member economies of the Asia-Pacific Economic Cooperation (APEC) forum. APEC was an idea that was stood up in 1989 by Australia's prime minister, with South Korea and Singapore. Since then APEC has doubled — it now represents countries that produce more than half of the global gross domestic product.

Over 30 years, with the Association of Southeast Asian Nations (ASEAN) and partners, we have built other planks of the regional architecture, such as the East Asia Summit, the ASEAN Regional Forum, the ASEAN Defense Ministers Meeting-Plus and major trade pacts encompassing the Pacific Rim and India. This architecture reflects the unique history, geography and diversity of our region. So, too, do the myriad new initiatives we are developing across the Indo-Pacific.

Engagement Across the Indo-Pacific

The Australian government has long recognized the rising economic power of India and recently released a blueprint to transform bilateral economic engagement. India and Australia hold regular 2+2 foreign and defense meetings, a maritime dialogue and other security-related consultations.

We have established a dialogue with India, the U.S. and Japan that is becoming an important part of our regional diplomacy. In 2019, Australia's major annual maritime activity Indo-Pacific Endeavour (IPE) focuses on the Indian Ocean. IPE is a joint service activity that promotes Australia's defense priorities, including our support for regional architecture, and to reinforce our commitment to enhancing maritime security cooperation with regional partners.

Since our involvement in the Korean War and aftermath, Australia has forged a close economic and strategic partnership with South Korea. Australia continues to diplomatically and materially contribute to efforts to manage the threat posed by North Korea's development of nuclear weapons and delivery systems. Ensuring stability and security in northeast Asia remains a key aim in Australia's Indo-Pacific strategy.

With Japan, Australia has a special strategic partnership and multiple other bilateral, trilateral (with the U.S.) and other multilateral initiatives.

A Royal Australian Air Force C-130 J Hercules flies with a U.S. Air Force MC-130J Commando II over Queensland, Australia, during Talisman Saber 2017 to improve interoperability between the two forces. CAPT. JESSICA TATE/U.S. AIR FORCE

Quite clearly, the role of China will be a key determinant of stability and prosperity in the Indo-Pacific and will shape the future strategic contours of our region. Australia's bilateral relationship with China is one of our most consequential.

Notwithstanding our distinct perspectives on some issues, we are clear-eyed about the opportunities as well as the challenges. We seek to cooperate with China on initiatives that serve to uphold the rules-based order and contribute to regional stability.

Australia has a key interest in a positive defense relationship with China that enhances mutual understanding, fosters transparency and builds trust. To that end, China — along with other partners — participates in bilateral and multilateral Australian military exercises.

Relations across Southeast Asia

In the 1940s, Australia opened diplomatic missions across Southeast Asia. We now have formal strategic partnerships that underpin our relationships with Malaysia, the Philippines, Singapore and Vietnam. We have dialogues with Burma, Cambodia, Laos, Thailand and Timor-Leste.

Australia and Indonesia recently elevated our bilateral relationship to a comprehensive strategic partnership — the highest level of nonaligned relations. Australia and Indonesia are working closely to combat terrorism and violent extremism. Our security cooperation extends across law enforcement, intelligence, law and justice.

After pro-Islamic State of Iraq and Syria (ISIS) militants attacked Marawi City in the Philippines in 2017, the Australian Defence Force (ADF) AP-3C

Orion surveillance supported the Armed Forces of the Philippines' (AFP) operation to liberate Marawi. Since liberation, ADF Joint Task Group 629 has undertaken a counterterrorism cooperation program with the AFP. To date, we have engaged over 7,000 AFP personnel, sharing ADF experiences and approaches to complex terrorist tactics that have transferred from the Middle East to our region.

Australia has supported the Philippines' recovery and long-term peace-building efforts with Australian Partnerships for Peace, an AUS \$12 million program is being implemented through international and local nongovernmental organizations.

Australia has memoranda of understanding on counterterrorism with most of our Southeast Asian neighbors and with other Indo-Pacific partners, including Fiji, India, Pakistan and Papua New Guinea.

Australia is proud to be ASEAN's longest-standing dialogue partner. The 2018 ASEAN-Australia Special Summit announced that Australia and ASEAN will implement a package of initiatives to strengthen civil maritime and border protection, maritime domain awareness, maritime law and its applications, and the protection of regional fish stocks.

In November 2018, Australia announced a Southeast Asia Economic Governance and Infrastructure Initiative to help unlock our region's next phase of growth. Australia's Greater Mekong Water Resources Program will support more equitable and effective water resource management. And we will deepen creative and educational links with a program aimed at young people across all 10 ASEAN countries.



An Australian Soldier demonstrates jungle survival skills to Australian employers during Exercise Boss Lift 2019 at the Army Combat Training Centre in Malaysia. CPL. KYLE GENNER/AUSTRALIAN DEPARTMENT OF DEFENCE



Papua New Guinea Chief of Defence Force Maj. Gen. Gilbert Toropo and Australian Chief of Defence Force Gen. Angus Campbell attend the ceremony to transfer a Guardian-class patrol boat to the Papua New Guinea Defence Force at Austal Australia Shipyard at Henderson in Western Australia. ABLE SEAMAN CHRISTOPHER SZUMLANSKI/ROYAL AUSTRALIAN NAVY

Pacific Initiatives

Australia recently announced a package of initiatives in the Southwest Pacific to take our engagement to a new level. The Southwest Pacific is at the front and center of our foreign policy and strategic outlook. The ADF already plays a pivotal role in our Pacific engagement, and it will play an even greater role in coming years.

Under Australia's Pacific Maritime Security Program (PMSP), we will deliver more capable patrol boats and aerial surveillance to enhance information sharing to track drug trafficking, people smuggling and illegal fishing. The PMSP is a commitment of AUS \$2 billion over 30 years and includes 21 Guardian-class patrol boats — 19 to Pacific island countries and two to Timor-Leste.

We have a bilateral security treaty with the Solomon Islands, and security memoranda of understanding with Tuvalu and Nauru. Australia and Vanuatu recently announced enhanced engagement on security, including Australian training for new recruits to the Vanuatu Police Force and negotiations on a bilateral security treaty.

With Fiji, Australia is turning the Blackrock Peacekeeping Humanitarian Assistance and Disaster Relief Camp into a regional hub for police and peacekeeping training.

Australia and Papua New Guinea (PNG) have announced a major joint initiative at PNG's Lombrum Naval Base in Manus province. U.S. Vice President Mike Pence announced during APEC that the U.S. will also be a partner in this. Development of Lombrum will further enhance our interoperability, deepen our maritime security cooperation and complement Australia's PMSP.

Continuing momentum generated during preparations for APEC, Australian and PNG police will work together to improve the delivery of policing services to the PNG community.

Australia will establish an enduring rotational ADF Pacific Mobile Training Team. Based in Australia, it will travel across the Pacific when invited to train and engage with other forces.

The Royal Australian Navy will undertake more deployments to the Pacific to conduct maritime training and exercises with our neighbors — including with the new Guardian-class patrol boats.

Enhancing Partnership

Through these initiatives, the ADF will work closely with our partners, building interoperability in engineering, medical services, communications, surveillance, logistics, maritime support and planning.

Australia plans to open five new full diplomatic missions in the Cook Islands, French Polynesia, the Marshall Islands, Niue and Palau — making Australia the first country to have resident diplomats in all 18 Pacific Islands Forum (PIF) member countries.

We are deepening our support for economic development in a way that addresses the unique infrastructure challenges of the Southwest Pacific.

The Australian Infrastructure Financing Facility for the Pacific will mobilize AUS \$2 billion in grant funding and loans for projects in sectors such as telecommunications, energy, transport and water. This will be complemented by a proposal to provide Australia's export financing agency, known as Efic, with an additional AUS \$1 billion in callable capital and a more flexible power to support investments.

Our personal ties extend to deeply shared obsessions. Anyone who visits the South Pacific will witness the passion for sport. A new Australia-Pacific sports program will extend our sports cooperation and deepen our people-to-people relationships.

A new church partnerships program will enhance links between Pacific and Australian churches.

Understanding the importance of quality education in improving economic prospects, we will fund a new secondary scholarships package to support Pacific students to attend Australian schools.

We are also ramping up the Pacific labor scheme and seasonal worker programs to ensure flows of people and economic opportunity.

In support of the PIF Boe Regional Security Declaration of September 2018, Australia announced a new Pacific Fusion Centre to complement existing regional security architecture including the Pacific Transnational Crime Coordination Centre in Samoa and Forum Fisheries Agency Regional Fisheries Surveillance Centre in the Solomon Islands.

We are also developing the Australia Pacific Security College to strengthen capability and networks among senior officials in the Southwest Pacific.

Fostering Cooperation

Australia and New Zealand will work with regional partners to enhance cyber resilience. Australia is investing AUS \$38.4 million to 2022 through our regionwide Cyber Cooperation Program, a cyber cooperation partnership with PNG, and other projects. These will strengthen cyber crime prevention, prosecution and cooperation and enhance cyber incident response capability.

The Boe Declaration highlighted climate change as the greatest security challenge to PIF member countries. Australia remains a steadfast partner in supporting regional responses to a changing climate and disaster resilience and has committed to spending at least AUS \$1 billion over five years on climate change in developing countries, including an AUS \$300 million four-year regional assistance package.

Australia seeks cooperation with all countries that have a stake in the Indo-Pacific. Our challenge is to ensure that our efforts combine to build a secure, stable, open and prosperous region. These are our values. □

Japan's

SELF-DEFENSE FORCES READY TO SAVE LIVES, CONTRIBUTE TO PEACE

PRIME MINISTER SHINZO ABE/COMMANDER IN CHIEF/JAPAN SELF-DEFENSE FORCE

Abe delivered this speech in October 2018 to troops.

I am very pleased to observe the troop review here in Asaka for the third time and have an opportunity to witness the valiant members of the Self-Defense Forces (SDF).

As I begin my remarks, I pray for the repose of those who lost their lives in the series of natural disasters that struck Japan during the summer of 2018. I also express my sincere sympathies to all those affected by these disasters.

No matter what the disaster, you and your colleagues were always there.

Houses were flattened by landslides. You responded to these reports, making your way to the scene tirelessly, despite having to surmount fallen trees and becoming bogged down in mud on the way to the disaster-stricken sites. Almost at the point of exhaustion, you used every last ounce of strength to rescue all of the victims as their families looked on.

"We wouldn't expect anything less from the SDF." These words from people affected by the disaster are yet another testament to your abilities and, above all, your superb determination.

In fact, the SDF has been dispatched for disaster relief missions over 40,000 times.

This is not only for cases of natural disasters. Under such circumstances, that a moment cannot be wasted to save the lives of medical patients on remote islands, the provision of emergency transportation is indeed a lifeline for the people.

It was 11 years ago that Naha Air Base received a telephone call with a report of a woman who had fallen ill and was in a precarious state. Without hesitation, a four-person crew led by Col. Yoshitomo Tatemura boarded a helicopter and flew off into the pitch-black night, headed for Tokunoshima in Kagoshima Prefecture.



Japan Self-Defense Forces troops march past Japanese Prime Minister Shinzo Abe during an annual ceremony at Asaka, north of Tokyo, in October 2018. REUTERS



Once there, they were surrounded by heavy fog and were unable to make out the landing site. The low-hanging clouds were obstructing their approach.

With the woman's condition worsening and no time to lose, Col. Tatemura continued to try to land, harnessing the more than 4,800 hours of flight time he had accumulated and all of his experience as a member of the SDF. Until the very end, he never gave up, asking the ground controller to make landing arrangements for nearby Tokunoshima Airport and continuing to take all possible actions. In response, the SDF personnel on the ground did everything they could as well.

"Thank you."

Those words of gratitude to the ground controller were Col. Tatemura's last. The four-person crew never returned to base. Col. Tatemura is said to have once told junior personnel the following: "If we don't do it, who will?"

Protect and Serve

Japan and its people are protected by the strong sense of duty and responsibility of each of the 250,000 members of the SDF.

"In case of emergency, I would strive to complete duties, which might put myself in danger, as entrusted by the nation." [Part of the Oath of Service taken by newly recruited SDF officials.]

I wish to once again express my sincere respect for your noble determination.

Those SDF personnel, who maintain surveillance on the front lines amid extremely tense circumstances, 24 hours a day, 365 days a year, scrambling jets when necessary to protect the lives of the people and maintain peace are the ones who secure the vast waters and airspace of Japan, even now, at this very moment.

To ensure the peace of Japan and lay the foundation for peace and prosperity in the Indo-Pacific region, and to ensure the complete implementation of the United

Nations Security Council resolutions related to North Korea, those personnel are working closely with like-minded countries such as the United States, the United Kingdom, Australia, Canada and New Zealand and conducting maritime surveillance activities to prevent illegal ship-to-ship transfers.



"As I begin my remarks, I pray for the repose of those who lost their lives in the series of natural disasters that struck Japan during the summer of 2018."

~ Shinzo Abe

You who have chosen to follow this difficult path of your own volition, who devote yourselves to carrying out your duties, all for the sake of your fellow citizens, you are the pride of Japan.

Thoroughly protecting territorial land, sea and air as well as the lives and property of the citizens is the greatest duty of government. Our ceaseless efforts are the foundation of security policy; nowhere is there any possibility to stop and rest.

In just over five years, the security environment surrounding Japan has become increasingly uncertain at a pace far faster than before and has become severe.

At present, the paradigm of security policy is also shifting significantly. Unless we establish competitive advantages in new areas such as space, cyberspace and electromagnetic spectrum capabilities, we will no longer be able

to thoroughly protect our country.

The new National Defense Program Guidelines [published in mid-December 2018] present a new vision of defense capabilities that will not be a mere extension of the status quo but will instead build a foundation lasting several decades into the future.

I ask each of you to keep your eyes on the ever-changing international conditions and technological trends as well as to exert your efforts tirelessly toward the ideal, without settling on conventional methods or ideas.

As the commander in chief of the SDF, I am determined to exert every effort to resolutely protect the lives and peaceful livelihoods of the people and hand them down to the next generation.

Proactive Peace

The peace which Japan enjoys cannot be protected by any single country alone. Hoisting high the banner of "proactive contribution to peace," Japan is determined to contribute more greatly than ever before to the peace and prosperity of the world, in ways that only we are capable of.

In Indonesia, which was struck by an earthquake with a magnitude of 7.4 and subsequent tsunamis, 49 members of the SDF, dispatched by C-130 transport aircraft, worked tirelessly to preserve the lives of people affected by the disaster.

Off the coast of Somalia and in the Gulf of Aden, the SDF is exerting every effort, together with personnel from other countries, to secure sea lanes for the peace and prosperity of the international community.

In scorching-hot Kenya, SDF personnel are working diligently to train units of various African countries for United Nations peacekeeping operations.

One woman who took part in the program is from Sierra Leone. Sierra Leone is now a country actively assisting with nation building of its fellow African countries; until recently, it was ravaged by an intense civil war. Finding herself at the front lines, she



Soldiers from the Japan Ground Self-Defense Force take part in a military review at their training ground in Asaka, Saitama prefecture. GETTY IMAGES

had no choice but to take up arms and fight in the war as a Soldier.

After coming to Kenya, she first trained in literacy skills, learning to read and write under the guidance of the SDF. While educating herself in various subjects, she also mastered the operation of heavy-lift cranes. When it was finally time for her to return to her homeland, she said, “I am truly happy to be able to contribute to peace.”

She, as well as the other participants, will use the skills they learned from Japan to build infrastructure such as roads and bridges. Such infrastructure will surely end up being used by many people and bringing smiles to the faces of children.

The “seeds of peace” that Japan’s SDF have planted in Africa are destined to one day blossom as large flowers. The people the SDF has trained will surely shoulder the peaceful future of Africa and preserve the peace and prosperity of the world.

I ask that you continue to exert

every effort for the peace and stability of the international community with great pride. I have strong faith in you.

Respect and Gratitude

Today, 90 percent of the Japanese people regard the SDF with respect. In its history spanning more than 60 years, however, there was a time when the existence of the SDF was viewed harshly. Nevertheless, the members of the SDF gritted their teeth and devoted themselves wholeheartedly to fulfilling their duties.

You have truly earned the trust of the people through the work of your own hands.

Now it is time for politics to fully play its part as well.

It is the responsibility of politicians of today to create an environment that enables all members of the SDF to fulfill their duties with great pride. I am determined to resolutely fulfill this responsibility.

To the families of the SDF members, it is none other than you who galvanize the courage of the

SDF members and inspire them to carry out their missions with a strong sense of duty, of course in their day-to-day training and also in trying circumstances.

As commander in chief, I wish to express my heartfelt gratitude for letting your precious partners, children, fathers and mothers serve in the SDF.

To the members of the SDF, the Japanese people and I will always stand united with you. Keeping that in mind, please carry out your duties as an SDF member with pride and confidence.

As I conclude my remarks, I would like to extend my sincere hope that you will always stay mindful of the importance of your duties, conduct yourselves with integrity, and work with ever greater diligence to secure the peace and stability of Japan and the world. □

Japanese Prime Minister Shinzo Abe, commander in chief of the Self-Defense Forces, delivered this speech on October 14, 2018, during a troop review for the anniversary of the establishment of the SDF. It has been edited to fit FORUM's format.



Cambodia's 'Rubbish Man'

Students hand Ouk Vanday, Coconut School founder, salvaged plastic water bottle caps to pay for studying at the school in Kirirom National Park, Kampong Speu province.

He runs a school where children pay for their education in recycled waste materials

STORY BY AGENCE FRANCE-PRESSE
PHOTOS BY AFP/GETTY IMAGES

Sitting in a building made from used tires, plastic bottles and other recyclables, Cambodian student Roenun Bunthon jots down notes during an English lesson at the "Rubbish School" where tuition is paid for with trash instead of cash.

In return, needy kids like Bunthon, a former street beggar, can take computer, mathematics and language classes — and learn the value of reducing waste in a notoriously polluted country where

recycling is nearly nonexistent.

"I've stopped begging. ... It's like I have another chance," said Bunthon, who paid for his enrollment with a bag of discarded bottle caps.

Located in a lush national park, the Coconut School is built almost entirely from recycled waste and is the brainchild of Ouk Vanday, nicknamed "the Rubbish Man," a former hotel manager who dreams of a trash-free Cambodia.

About 65 kids are enrolled at the school, where classroom walls are made of painted car tires and the entrance is adorned with a mural of the Cambodian flag made entirely from colorful bottle caps.

Most of that garbage came from students in the form of school fees.

"I use rubbish to educate children by turning garbage into classrooms ... so the children will understand the value of using rubbish in a useful way," the 34-year-old said at the school, which



Coconut School students collect discarded plastic water bottles and other recyclables at the park.

Ouk Vandy teaches students in a classroom with walls made of painted tires.



opened in 2017 about 115 kilometers west of Phnom Penh.

He plans to expand classes in the poor, agricultural province of Kampong Speu to accommodate 200 kids, with a new kindergarten class set to open in 2019 and featuring a wall made from plastic bottles. He is optimistic the young minds are environmental ambassadors in the making.

“We hope they’ll become new activists in Cambodia, understanding the use, management and recycling of waste,” Vandy said.

Vandy was inspired after traveling around Cambodia and seeing tourist sites clogged with garbage. Troubled by this, he set up a pilot project in Phnom Penh in 2013 before expanding it to a second location in the national park.

Vandy’s vision for a trash-conscious Cambodia is ambitious in a Southeast Asian country where plastic bags and bottles are tossed out without a second thought, many ending up in garbage-choked cities or smothering once-idyllic beaches.

Cambodia accumulated 3.6 million tons of waste in 2017, according to the country’s Ministry of Environment.

A mere 11 percent gets recycled, while almost half is burned or thrown into rivers, causing widespread pollution, said ministry spokesman Neth Pheakra.

The rest is trucked to ever-growing landfills and dump sites, where the piles of garbage emitting methane gas can lead to fires, as well as add to climate change.

These grim scenes are what inspired Vandy to found the Coconut School, which is supported by donations and volunteer teachers, for kids who would get little in the way of environmental education at regular state-run schools.

It is also a chance to help kids who would not be able to afford the after-school programs that have become commonplace for most youngsters across Cambodia.

Public education is free by law, but “supplemental” lessons for English or other extracurricular subjects cost extra, ranging from U.S. \$5 a class to hundreds of dollars, depending on the school and its location. This could be a steep investment in a country where the average person earns less than U.S. \$1,400 per year.

For poorer families in remote areas, the children are sent to beg for money to increase their family income, making it difficult for them to justify paying for extra classes. At his school, Vandy wishes to put an end to this practice. It has already worked for some.

“My English teacher doesn’t let me beg for money or gamble,” 10-year-old former beggar Sun Sreydow said. “I’m glad. When I grow up, I want to be a doctor.”



Brits move to ban Hezbollah

UNITED KINGDOM

The British government said in February 2019 that it plans to ban Hezbollah as a terrorist group, accusing the Iran-backed organization of destabilizing the Middle East.

An order delivered to the United Kingdom Parliament bans Hezbollah and two other groups. The order went into effect March 1. It made being a member of or inviting support for Hezbollah a criminal offense, carrying a sentence of up to 10 years in prison. Until now, the military wing of the Lebanon-based group has been outlawed in Britain, but not its political arm.

Hezbollah is a Shiite Muslim movement that emerged during the early 1980s with financial backing from Iran. It made electoral gains in Lebanon last year and now has three ministers in the government. The U.S. and others accuse the group of destabilizing the region through its military intervention in Syria on the side of President Bashar Assad's government.

Home Secretary Sajid Javid said he would take action against groups that threaten safety and security, and he accused Hezbollah of destabilizing the Middle East. "We are no longer able to distinguish between their already banned military wing and the political party," Javid said. "Because of this, I have taken the decision to proscribe the group in its entirety." The Associated Press

MESIR

A Colorful Dynasty

In a major archaeological discovery, Egypt in April 2019 unveiled the tomb of a Fifth Dynasty official adorned with colorful reliefs and well-preserved inscriptions.

The tomb, near Saqqara, a vast necropolis south of Cairo, belongs to a senior official named Khuwy who is believed to have been a nobleman during the Fifth Dynasty, which ruled over Egypt about 4,300 years ago.

"The L-shaped Khuwy tomb starts with a small corridor heading downwards into an antechamber and from there a larger chamber with painted reliefs depicting the tomb owner seated at an offerings table," said Mohamed Megahed, the excavation team's head, in an Antiquities Ministry statement.

Flanked by dozens of ambassadors, Antiquities Minister Khaled al-Enani said the tomb was discovered in March 2019. It is mostly made of white limestone bricks. Ornate paintings boast a special green resin throughout and oils used in the burial process, the ministry said. The tomb's north wall indicates that its design was inspired by the architectural blueprint of the dynasty's royal pyramids, the statement added.

The excavation team has unearthed several tombs related to the Fifth Dynasty. Archaeologists recently found an inscription on a granite column dedicated to Queen Setibhor, who is believed to have been the wife of King Djedkare Isesi, the eighth and penultimate king of the dynasty. Agence France-Presse



AFP/GETTY IMAGES

GERMANY

RAPID PANDEMIC PREVENTION

A coalition seeking to get ahead of the next pandemic has agreed to a U.S. \$34 million deal with German biotech CureVac to develop vaccine "printing" technology that aims to rapidly produce shots to fight multiple diseases.

The Coalition for Epidemic Preparedness Innovations (CEPI) said its backing will help CureVac's work on a prototype of its RNA Printer product — a transportable, automated printing facility for types of a molecule known as messenger RNA.

While traditional vaccines use parts of live or inactivated pathogens to generate an immune response, new technology being developed uses the mRNA molecule to transport genetic information from the DNA into a cell, instructing it to produce a specific protein or antigen to induce an immune response.

Epidemics of infectious diseases such as Ebola, Zika and Lassa can be unpredictable and fast moving, yet developing vaccines against them can currently take 10 years or more.

CEPI, which was set up

at the start of 2017, aims to dramatically speed up the development of vaccines against these pathogens, as well as new and unknown diseases — collectively known as Disease X.

Under the three-year deal with CEPI, CureVac will use its mRNA platform to develop potential vaccines against Lassa fever, rabies and yellow fever.

If preclinical tests for the three diseases are successful, two of the vaccine candidates will be developed through early stage safety trials in people.

Reuters



Exploring the Depths

SCIENTISTS DOCUMENT UNDERWATER CHANGES IN SEYCHELLES WATERS

STORY AND PHOTOS BY THE ASSOCIATED PRESS

An unprecedented mission to explore the Indian Ocean and record changes taking place beneath the waves began its research in March 2019 in Seychelles waters.

The British-led Nekton Mission arrived off the tiny atoll of Alphonse in the early morning hours, after looming bad weather forced a change of plan and of route.

The ambitious expedition will delve into one of the last major unexplored frontiers on the planet, a vast body of water that's already feeling the effects of climate change. Understanding the Indian Ocean's ecosystem is important not just for the species that live in it, but also for an estimated 2.5 billion people at home in the region — from East Africa to the Arabian Peninsula, the Indian subcontinent and Southeast Asia.

Though the mission eventually used high-tech submersibles, research began with more modest equipment: a device

to measure the water's chemistry and a net used to retrieve zooplankton.

"When you actually finally begin doing the science, it's a bit of a relief and a lot of fun," said Louise Allcock, a professor of zoology at the University of Ireland in Galway.

Alphonse is a tiny atoll, the tip of a submerged mountain, 232 nautical miles southwest of Seychelles' capital, Victoria. Within a few kilometers of its shores, the ocean is as deep as 5,000 meters.

Little is known about the biodiversity of Alphonse Atoll because it remains unexplored beyond scuba depth.

Mission member Stephanie Marie, a marine researcher from the Seychelles, recently spent a week on Alphonse working on a study of a fish species called the Giant Trevally, or GT. She said she was excited to find out what's down there.

"When you have amazing weather, you have a lot of things to see, like the

sharks, the GT, the corals also, so it's like a different place, a different scenery every time," she said.

Marie's role is to collect zooplankton to conduct taxonomy identification.

"I'm really excited. It's going to be eye opening because I've never seen so deep," she said. "It's really important. Fish feed on zooplankton, so we need to see its quality, because if the ecosystem changes, it may have an impact on the fish we feed on."

The mission expects to discover new species, as well as document evidence of climate change and of human-driven pollution.

The data will be used to help Seychelles consolidate and expand its policy of protecting almost a third of its national waters by 2020. The sea area to be protected is larger than Germany. The initiative is a key component of Seychelles' "blue economy," which attempts to balance development needs with those of the ocean environment.

A manned submersible rises to the surface following an unsuccessful mission to recover a remotely operated vehicle in the Indian Ocean.



VALIANT MEDITATION

A Singapore Armed Forces Soldier prepares to exit an amphibious assault vehicle during the Valiant Mark exercise at Marine Corps Air Ground Combat Center in Twentynine Palms, California, in the U.S. on September 11, 2018. The Singapore Armed Forces and U.S. Marine Corps conduct Valiant Mark annually to strengthen military-to-military relationships through combined-arms integration training.

Photo By: **LANCE CPL. RHITA DANIEL** | U.S. MARINE CORPS



SURE AIM

An Indonesian anti-terror commando takes part in a joint drill in Jakarta on April 9, 2019. Participants included counterterrorism special operations forces from the Indonesian Air Force, known as Paskhas; the Indonesian Army Special Forces Command, known as Kopassus; and the Indonesian Navy's special forces, known as Denjaka. The drills were part of the Indonesian military's preparations to secure the country for the April 17, 2019, elections.

Photo By: **ADEK BERRY** | AFP/GETTY IMAGES

RELEVANT. REVEALING. ONLINE.

www.ipdefenseforum.com

NEW
CONTENT
POSTED
DAILY!



FREE MAGAZINE SUBSCRIPTION

Indo-Pacific Defense FORUM is a military magazine provided FREE to those associated with security matters in the Indo-Pacific region.

FOR A FREE MAGAZINE SUBSCRIPTION:

www.ipdefenseforum.com/subscribe

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



Join us on
Facebook
and Twitter.