ASIA PACIFIC DEFENSE

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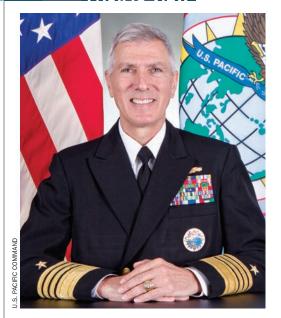
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# **ABOUT THE COVER:**

An anthology of historic covers in four languages celebrates the 40th anniversary of *Asia Pacific Defense FORUM*.



Dear Readers,

elcome to the 40th Anniversary Edition of Asia Pacific Defense FORUM. For the past four decades, this periodical has provided a living record of the military, political and socio-economic transitions across the Indo Asia Pacific that have changed the regional and global security landscape.

When reflecting on the first edition of *FORUM* published in 1975, readers

can see the extraordinary evolution of regional military forces, the increase in economic development and interdependency throughout the region, and the strengthening of relationships between the United States and Indo-Asia-Pacific nations.

Readers of *FORUM* can also see that U.S. Pacific Command has had an enduring presence in the region and a consistent strategy for our allies and partners. In fact, the first edition of *FORUM* included the Pacific Doctrine of U.S. President Gerald Ford, who served from 1974 to 1977. The doctrine's first premise stated: "American strength is basic to any stable balance of power in the Pacific. We must reach beyond our concern for security; but without security, there can be neither peace nor progress. The preservation of the sovereignty and the independence of our Asian friends and allies remains a paramount objective of American policy. ... [W]e owe it to ourselves and to those whose independence depends upon our continued support to preserve a flexible and balanced position of strength throughout the Pacific."

Forty years later, the United States remains committed to this premise and is continuing our rebalance to the Pacific — a visible and enduring demonstration of the U.S. commitment to the region. Additionally, our allies and partners continue to work together through forums and partnerships — such as the Association of Southeast Asian Nations, Asia-Pacific Economic Cooperation, Pacific Island Forum and Trans-Pacific Partnership — toward increasing stability and security and unleashing the economic potential of the region.

We hope the past 40 years have proven that *FORUM* aims to cover issues that matter to our readers, and we look forward to continuing to tell stories that spark conversation and cooperation for years to come.

All the best,

SAMUEL J. LOCKLEAR, III Admiral, USN Commander, U.S. Pacific Command

# APD FORUM

# **Pacific Progress**

Volume 40, Issue 1, 2015

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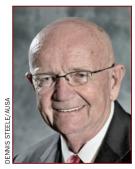
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Sylvanus Thayer Award and a member of the Sergeants Major Academy's Hall of Honor. Featured on Page 26



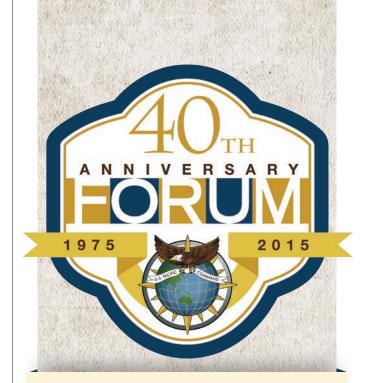
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# **JOIN THE DISCUSSION**

WE WANT TO HEAR FROM YOU!

Asia Pacific Defense FORUM caters to military and security personnel in the Asia-Pacific region. A product of U.S. 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 encourages you to submit articles, pictures and topics of discussion for publication in the magazine along with other comments to EDITOR@APDF-MAGAZINE.com or at:

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# **JAPAN**

hile a digitalized Hollywood reboot stomped its way to box office success around the world, the original Godzilla — a man in a rubber suit —hit screens in Japan again, as relevant as ever.

The 1954 classic, which spawned more than two-dozen follow-ups, had been cleaned up for a two-week run in Tokyo to mark the 60th anniversary of the monster from the deep.

Despite the shaky sets and the all-too-obvious latex costumes, a new generation of moviegoers declared themselves impressed.

"I was really surprised to see a Tokyo that isn't the current, neat Tokyo, but was just some 10 years after war, trampled again," said Kenichi Takagi, 44, who took along his 10-year-old son.

Visuals and audio have been given a scrub to remove some of the speckles and pops that modern viewers are now unused to experiencing, although there is no hiding the fact that the creature is really a heavily sweating actor in a suit.

The movie's enduring

popularity six decades on is testament to the continuing resonance of its themes of human helplessness in the face of forces that cannot be controlled.

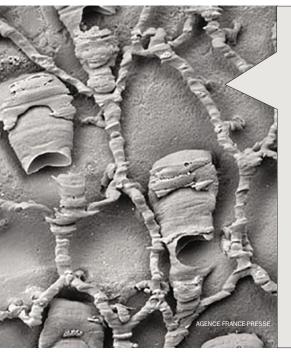
Film studio Toho released *Gojira* — a Japanese portmanteau of "gorilla" and "kujira" (whale) — directed by Ishiro Honda in November 1954, a few months after Akira Kurosawa's classic *Seven Samurai*. The monster movie was a megahit, drawing 9.6 million viewers in the days before television sets were commonplace in Japanese households.

In the fictional world, the creature was awakened by a hydrogen bomb test, rising out of a roiling sea and swimming to Japan where it crushes Tokyo, a walking, radiation-breathing analogy for nuclear disaster.

"We grow up thinking since our childhood that there are typhoons, earthquakes and other things that humans cannot control. It's the same with Gojira," said artist Yuji Kaida on the sidelines of a Tokyo exhibition of his paintings on Godzilla. Agence France-Presse



# **NEW ZEALAND**



# TINY 'LIVING FOSSIL' FOUND IN WATERS

microscopic marine creature believed to have been extinct for 4 million years has been found alive and well in New Zealand waters, researchers said in May 2014.

The animal, a tentacled polyp called protulophila, forms colonies inside sea worms and first appeared in the fossil record about 170 million years ago in Europe and the Middle East, New Zealand's National Institute of Water and Atmospheric Research (NIWA) said.

The last trace of the organism was in rocks that were 4 million years old, until scientists found it in samples from New Zealand, half a world away from its regular habitat, which were formed just 1 million years ago.

That sent researchers scrambling to check more recent samples and, sure enough, the polyp turned up in sea worms collected by NIWA in 2008 near Picton, on New Zealand's South Island.

NIWA marine biologist Dennis Gordon said scientific "detective work" by researchers from NIWA, Britain's Natural History Museum and the University of Oslo was responsible for the discovery.

"Finding living protulophila is a rare example of how knowledge of fossils has led to the discovery of living biodiversity," he said.

He added that the next stage of research into the creature, which is related to corals and sea anemones, is to find fresh samples for gene sequencing. Agence France-Presse

# **PHILIPPINES**

HUB TO

# Energize Asia

The Asian Development Bank (ADB) and two United Nations agencies launched an energy hub in Manila in June 2014. The goal is to mobilize investments and innovation to bring clean energy to the Indo-Asia-Pacific region, where more than 600 million people lack electricity and 1.8 billion use firewood and charcoal at home.

Energy demand is soaring in the region on the back of economic and population growth. By 2035, the ADB said, the region's developing countries will account for 56 percent of global energy use, up from 34 percent in 2010. They will need more than U.S. \$200 billion in energy investments by 2030.

ADB will host and manage the Asia-Pacific Sustainable Energy for All hub, which will gather governments, investors, innovators and experts to support new energy sources for the region. The hub will be one of three such regional centers under an initiative of U.N. Secretary-General Ban Ki-moon. The U.N. Development Programme and the U.N. Economic and Social Commission for Asia and the Pacific are ADB's partners.

"We can overcome energy poverty through sustainable, low-carbon energy means, and through this new hub we are gathering together investors, innovators and experts to make this happen," said ADB Vice President Bindu Lohani.

The Associated Press





AFP/GETTY IMAGES

# MEDICAL TOURISM BOOM

ne of the multitudes of Indian emigrant doctors, Paul Ramesh moved to Britain in the 1990s, keen to get the best surgical training and earn a generous income.

Today he is still treating Westerners — but in hospital beds back in Chennai, his south Indian hometown in Tamil Nadu. "When I came back, it was quite exceptional to return. Now it's the rule," the 46-year-old surgeon said at the city's Apollo Hospital.

In Chennai, known as India's health care capital, medical workers describe a "reverse brain drain" as homegrown doctors return from the U.S. and Europe — as the city develops as a top budget destination for medical tourists.

While the number of Indian doctors abroad remains substantial, Apollo staffers say their national hospital chain now gets 300 applications annually from those working in Britain alone, encouraged by improved living standards and better medical technology at home.

Traditionally drawn to the West to boost their expertise and earnings, doctors also cited tightening salaries under Britain's National Health Service and increasingly tough U.S. health care regulations as factors luring them back.

"The trend is reversing," said M. Balasubramanian, president of the Indian Medical Association in Tamil Nadu.

"More corporate hospitals are coming up, especially in Chennai. Now [doctors] have an opportunity to use their expertise in their own place ... and pull the patients from abroad also," he said.

Patients Beyond Borders, a U.S. medical travel resource, says the cost of certain Indian medical procedures can be up to 90 percent lower than that in the U.S., making India among the least expensive places for treatment. Agence France-Presse



# Australia Toughens TERROR LAWS

AGENCE FRANCE-PRESSE

ustralia will toughen laws to target homegrown terrorists and those who fight overseas to quell fears that violent jihadist citizens in Syria and Iraq will return home, officials announced in August 2014.

Prime Minister Tony Abbott said the terror threat to Australia had not subsided since the September 11, 2001, attacks and remained at the highest level it had ever been.

Officials have said up to 150 Australians are fighting alongside militants overseas, with warrants issued a week before the announcement for two Sydney men suspected of fighting in Iraq, including one who posed for photos with severed heads.

"We've all seen the truly shocking images of Australians born and bred doing absolutely horrific things to surrendering Iraqi police and military personnel," Abbott told reporters in Canberra. "What we are now acutely conscious of is the danger posed back here in Australia by people returning to this country who have been radicalized and militarized by the experience of working with terrorist organizations overseas."

Counterterror legislation under preparation would make it easier to identify, charge and prosecute people who have been engaged in terrorist activities overseas, and prevent extremists from departing, Abbott said.

It will also make it an offense to travel without a valid reason to a so-called designated area, as nominated by intelligence agencies. The laws will also attempt to ensure officials are better able to monitor potential terror activity in Australia while including "the usual range of safeguards and warrants," the prime minister said.

In making the announcement, Abbott revealed that the legislature had shelved proposed changes to a law banning racial slights, which ethnic minorities had warned could give license to bigotry.



The government had planned to repeal a section of the Racial Discrimination Act that makes it illegal to "offend, insult or humiliate another" because of his or her race, saying the law should not be used to stifle free speech.

Abbott said he had made a "captain's call" to dump the proposals. "I don't want to do anything that puts our national unity at risk at this time, so those proposals are off the table," Abbott said.

The prime minister said U.S. \$588 million would be spent over four years to boost counterterrorism via security and intelligence agencies.

The government also plans legislation to improve the collection and admissibility of evidence abroad, and update Australia's telecommunications interception law, which predates the Internet era.

# EXPANDING DATA COLLECTION

The prime minister defended the tougher new terror laws, denying they are an invasion of privacy. The government has substantially increased resources to security and intelligence agencies and wants telecommunications companies to retain metadata for up to two years.

"They're not invading privacy," Abbott told the Australian Broadcasting Corp.

"The metadata that we're talking about is information which is already kept. And all we're saying is that the telecommunications providers should continue to keep this.

"We're not asking anyone to do what they don't already do. We're simply asking that they continue to do it as technology changes, because this is an important weapon in the fight against crime more generally."

His office later clarified that Internet browsing information would not be retained, saying metadata did not include this. Capturing this data would still require a warrant, the prime minister's office said.

Abbott said he had no doubt that the "civil libertarian brigade" would do its best to stop the laws, but said it was his responsibility to keep the nation safe.

"And all of the expert advice from every single counterterrorist agency is that this information is absolutely essential if we are to maintain our vigilance against terrorist activity," he said.

Abbott said an instructive metaphor was to think of metadata as the information written on the front of an envelope — the recipient, address, sender and the time and place it was sent from — not its contents.

# A SCHEME OF MASS SURVEILLANCE

The data would include such things as telephone numbers, the time and length of phone calls, where the calls were made, email addresses, and the Internet protocol addresses of computers from which messages are received or sent, his office said.

However, Civil Liberties Australia Director Tim Vines said Internet providers currently collect billing and subscriber information but had no incentive to retain other data long term.

He said government agencies already had extensive powers to request metadata and warrants to intercept communications between people of interest to authorities.

"Why do we need a scheme of mass surveillance?" he asked. Jon Lawrence from digital rights group Electronic Frontiers Australia also criticized the planned laws, saying they were "completely unnecessary and a wholesale invasion of privacy."

He said they would create "massive honeypots" of valuable data vulnerable to being exploited by rogue employees, hackers or others

"The number of ways that this information could be compromised is enormous and probably the only thing that would be certain in that context is that that information would be compromised at some point in some way," he said.

"Because really the only secure data is data that doesn't exist." Katina Michael, vice chairwoman of the Australian Privacy Foundation, a privacy rights organization, said the mass collection of data makes people's private information vulnerable to being accessed by hackers or others.

"We are very opposed to any metadata being retained by the government," she said. "What's that going to solve, save for additional surveillance powers?"

# The RISE ASIA

A MARITIME RETROSPECTIVE

**KERRY LYNN S. NANKIVELL** 

FORUM ILLUSTRATION

Members of Chinese paramilitary forces stand near the U.S. 7th Fleet flagship USS Blue Ridge berths at a port in Qingdao, Shandong province, in August 2014.

THE RESERVE OF THE PERSON OF T



he story of the past four decades in East Asia is one of a continent's maritime reawakening. This first took on a purely commercial form, eventually evolving into a military one. This is a story of historic successes, ones that have led to a broad, deep and sustained increase in human economic development on both sides of the Pacific. The economic rise of Asia, based on exportled development and directed investment in commercial sea power, has been a net positive regional stability. True, managing a stronger, more active maritime Asia has already presented new challenges, but that fact often overshadows the historical antecedents of today's maritime Asia. On this occasion of FORUM's 40th anniversary, it's appropriate to revisit the story of Asia's evolution. Doing so reminds us that the current state of maritime affairs in the region is the logical outcome of the most impressive growth of commercial sea power in human history — and that translating this success into more, not less, regional stability, will be a leading challenge in the decades to come.

# EAST ASIA: 1974

In 1974, Asia was on the verge of an economic revolution founded on sea power, though this was

hard to recognize at the time. China was limping out of the twin social disasters of the Great Leap Forward, a campaign intended to transform China from an agrarian to a modern society, and the Cultural Revolution, a radical movement led by Mao Zedong in the mid-1960s to early 1970s. Vietnam remained strangled by a deadly civil war wrapped in regional Cold War dynamics. Singapore, newly separated from Malaysia, struggled against corruption in its quest for development. South Korea had started to pull out of the condition of national poverty that the civil war had engendered, but it retained an economy about the size of New Zealand's to support a population several times larger.

Amid these challenges, an innovation had already been introduced to East Asia that would change its economic trajectory and eventually transform its societies. The origin of this transformation was a simple box of corrugated steel, 6 meters long and 2.4 meters wide. The proliferation of the standardized shipping container and, more specifically, the early and large capital investments made in the port facilities required to service them, catapulted key Asian countries into the global economy. This process would take several decades, the implications of which were largely unforeseen.



REUTERS

Today, East Asia is the global leader in the container shipping industry. The latest report from the United Nations Commission on Trade and Development confirms that East Asia has nearly cornered the market in container port operation: Eight of the world's 10 largest container ports rose in East Asia, six of them in mainland China alone. In 1974, however, only a handful of actors were involved in container shipping in Asia. First among them, the U.S. Department of Defense (DOD) had begun to use shipping containers to support its operations in Vietnam. At that time, the DOD contracted with Sealand Shipping to capitalize on the savings that modular shipping offered for large scale movement of goods. Buoyed by large contracts (and Asian access) courtesy of the DOD, by the early 1970s Sealand Shipping regularly moved these new "trailerships" from Oakland and Los Angeles in California to Cam Ranh Bay and Da Nang in Vietnam, via Yokohama,

Asia's maritime revolution had begun. The market that Sealand Shipping opened in Asia was soon exploited and expanded by several port operators and shipping lines. The International Standards Organization (ISO) established a universal container size in 1970. With a standard length and width set for "the box," a system of truly

Japan, or Hong Kong.

Container ships dock at the Brani container terminal near Singapore's financial district.

intermodal, globally interoperable containerized shipping quickly took shape. A standard container size acted as a powerful incentive for port operators to supply loading and offloading services to any and all vessels calling at port, minimizing cargo handling and thereby maximizing profit margins for any entrepreneurs manufacturing goods in Asia for sale in developed markets. Within 15 years, what had been introduced to Asia as a foreign technology facilitating a foreign war had become an exciting new industry in which Asia would eventually thrive.

# WHY CONTAINERIZATION?

The lowly container is not always recognized as a game-changing technology. Compared to the Internet, satellites, iPads or 3-D printing, the box doesn't seem to compare. Containerization, however, changed the way that all of the world's economies source and trade goods internationally because it made long-distance trade economical.

Container shippers recognize that it is not distance that determines the profitability of trade, but logistics. Prior to containerization, goods traveling from one side of the Pacific to the other often visited almost two-dozen ports in a single journey. Each port call required loading and unloading by hundreds of longshoremen working tediously by hand. The process meant that a ship traveling from Shanghai to Los Angeles might spend twice as much time in port than it did at sea. In an industry where time is money, this method of transport put firm limits on the benefits of long-distance trade by sea.

Containerized shipping has changed this scenario by shrinking the logistical footprint of longdistance trade and correspondingly boosting the bottom lines of shipping firms. The increase in profitability has meant a boom in the volume of seaborne cargo in recent decades and in the overall volume of international trade. A recent study conducted by economists at Lund University in Sweden estimates that, controlling for other factors, containerization alone has increased international trade by 700 percent since the 1970s — far outstripping the effects of any free trade agreement or multilateral regulatory organization.

Even as the benefits of containerization have spread globally, Asia has benefited disproportionately. Singapore is a case in point. In 1974, Singapore was a poor, underdeveloped country with a gross domestic product per capita equivalent to roughly U.S. \$6,000 in today's currency. Despite its strategic location and trading history, its adjacent waterways saw little in the way of trading traffic at that time. In the 1980s, under Lee Kwan Yew's stewardship, Singapore invested heavily in port services while having little to export itself. Lack of its own natural or human resources didn't prevent Singapore from eventually becoming the region's cargo handling hub, a position it reached in the mid-1990s alongside Hong Kong. By becoming the world's largest cargo handler by 2014, Singapore grew its economy by a factor of seven and catapulted its overall global strategic value.

Of course, Singapore's success was dependent on the concurrent growth of "Factory Asia." These early container hubs in Hong Kong; Taiwan; Singapore; and Busan, South Korea, were catalysts of economic growth that connected Asian manufacturing in many East Asian countries with Western customers, not just the areas in which they were located. For the first time, the reduced costs of shipping connected cheap Asian labor with developed markets in a way that made economic sense. As evidence of the advanced globalization that containerization made possible, the "Made in Taiwan" label proliferated in the United States and Europe. Eventually, the trend expanded to include "Made in China," and later, "Bangladesh," "Indonesia," "Thailand" and others.

Today, the dominance of the Asia Pacific in containerized trade is deep and broad. Not only are the world's largest containerized cargo handlers overwhelmingly concentrated in East Asia but also increasingly, those that aren't located in Asia are run by Asian companies. As industry leaders, firms in China and Singapore have picked up large port contracts all around the world, including Panama, Egypt, Iceland, Greece, Nigeria, Bangladesh, Tanzania and Sri Lanka. Moreover, China controls 20 percent of the world's container fleet by tonnage, and in 2009, overtook South Korea as the world's busiest ship builder (though South Korea and to a lesser extent, Japan, retain the high-end market). China and South Korea are also leading the industry in new management techniques based on "coopetition," in which port operators work together (sometimes across borders) to create a single "logistics hub" to further streamline shipping. These trends suggest the overall continued domination of East Asia in global trade, not just as a source of cheaply manufactured goods but also as the primary handlers of manufactured goods worldwide.



Workers load shipping containers onto trucks at the international cargo terminal in Tokyo.

# THE FLAG FOLLOWS TRADE

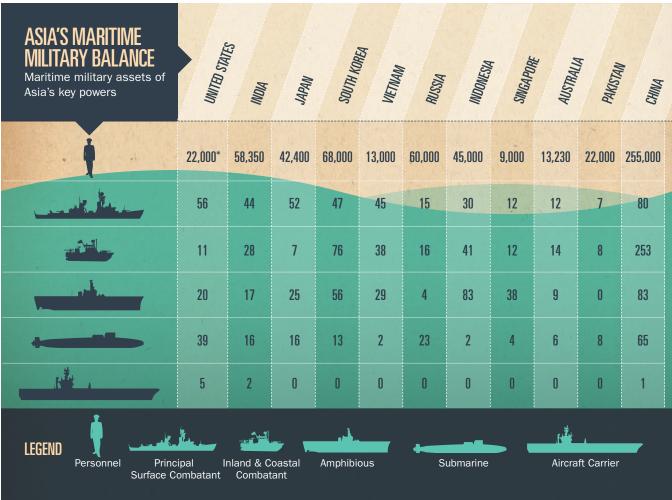
In the colonial world, it was often said that trade followed the flag. Naval vessels opened up opportunities for trade through campaigns of submission. In the modern world, it appears that the opposite is true: The flag follows trade. That is, once national economies surpass a critical dependence on sea lanes, naval strategy becomes focused on facilitating stability if not exercising some control of those routes. Such a trend is already clearly evident in the Gulf of Aden, where naval vessels from a range of states operating far from home, including South Korea and Canada, are engaged in anti-piracy operations to safeguard international trade. Today, seaborne trade is the lifeblood of national economies, container hubs are the new strategic choke points, and shipping routes concentrated in the Indo Asia Pacific are the new economic arteries. This economic revolution centered on commercial sea power has given natural rise to a change in strategic dynamics in the region.

In 1974, Asian powers were based on powerful armies, not competent navies. With the obvious exception

of Japan, in 1974, there was hardly an Asian country that was capable of, or interested in, deploying sea power at any distance from shore. But with an increasing stake in the security of Asia's sea lanes, it shouldn't be any wonder that the first decade of this century has seen a concurrent and complementary rise in naval budgets and an overall widening and deepening of regional capabilities. Seeking to safeguard the economic gains of the sea lanes, countries including South Korea, China, Singapore, Russia, Malaysia, and Vietnam now all place a premium on the development of credible sea

The situation today has evolved a long way since even 2004, when U.S. Pacific Command (PACOM) Commander Adm. Thomas Fargo suggested that extraregional powers might be needed to ensure security for global trade in the Malacca Strait. Indeed, Fargo briefed the U.S. Congress in March 2004 that, in the context of the War on Terror, the U.S. Navy was needed to "gain an awareness of the maritime domain" in Malacca and "build and synchronize interagency and international capacity." At the time, most U.S. analysts queried the region's curious lack of interest in sea lane security and naval modernization, especially in archipelagic Southeast Asia.

Flash forward 10 years and the picture is quite the opposite. Private consultancy AMI International projects that U.S. \$62 billion will be spent in Asia on submarine development and acquisition alone by 2031. Japan's Maritime Self Defense Force and navies in Australia, South Korea, China and India are all moving up-market, putting to sea the largest vessels ever operated by their respective services, armed with all the concurrent capabilities that such vessels imply. Complementary assets in other domains, from shore to space, are being developed, providing powerful new surveillance, communication, deterrence and sea denial capabilities to navies across the region. Today,



\*Forward-deployed Soldiers in Asia and the Pacific; figure excludes U.S.-based troops who support the region.

Source: "The Military Balance," International Institute for Strategic Studies 2014 and the U.S. Pacific Command

FORUM ILLUSTRATION

the worry in Asia is not a lack of capacity, but the increased risk of accidents that such densely deployed advanced capabilities statistically carry. The ungoverned spaces that Fargo worried about in 2004 are no longer of primary concern.

# NEW WORLD ORDER AT SEA?

In many ways, the current state of naval affairs in the Indo Asia Pacific shows a picture of success. No doubt, most strategists in 1974 would judge the world of 2015 favorably: Today's trading, investing and integrating Asia is the clear and explicit improvement that much of post-World War II U.S. foreign policy in Asia strives to achieve. In the space of a single generation, almost a dozen regional countries have successfully

gone from being underdeveloped, underequipped and underexposed to global norms to being heavily invested stakeholders in the global maritime system. Many more are firmly headed down that path. Indeed, this is a good news story.

The contemporary context, however, presents new policy challenges for the United States, its allies and partner nations and their maritime services. In the past 40 years, PACOM's role has been to fill the void wherever necessary in maritime East Asia. Today, that void has shrunk considerably, and in some places has disappeared altogether. While ungoverned spaces in the maritime domain are of less concern, spaces that are claimed (and defended) by too many operationally credible Asian powers at the same

time will bring new concerns.

The current situation in the East and Yellow seas, where a group of uninhabited islands is the focus of a territorial dispute, illustrates this point. The U.S. Navy and Marine Corps have worked to help develop the capacity of the Japanese Maritime Self Defense Forces and the Republic of Korea Navy in particular, while the U.S.-facilitated post-World War II political order in Northeast Asia has arguably given the People's Liberation Army Navy the umbrella of regional stability necessary to allow Beijing to focus on long-term investments for its maritime services. Both have paid off immensely for all three Asian nations.

Capacity-building efforts have also succeeded in their support to the region's maritime and related

law enforcement agencies. At ports, programs such as the Container Security Initiative in 2005 and the Department of Energy's Megaports Initiative in 2006 continue to be implemented and to decrease the threat of illegally trafficked weapons of mass destruction in the region's ports and beyond. At sea, the North Pacific Coast Guards Forum (NPCGF), which pulls together coast guards from the United States, Japan, South Korea, China, Russia and Canada every year for discussions and table-top exercises, is one of the most operationally successful organizations of its kind. All told, piracy in Northeast Asia is no longer a major worry, and regional fisheries protection arrangements stand in good stead.

The same capabilities that protect these seas against threats arising from ungoverned spaces, however, are increasingly employed in state-on-state encounters in ways that are destabilizing to the region. With ongoing and entrenched maritime and territorial disputes in various combinations around the East and Yellow seas (including Japan-China, Japan-South Korea, Japan-Russia, South Korea-North Korea, South Korea-China, not to mention Taiwan's claims and the status of Taiwan itself), these assets that are so useful in good management of the seas are also cause for concern when they are employed to unilaterally change the prevailing status quo between neighbors.

The Chinese Coast Guard, for example, made incursions into the territorial seas of the Senkaku Islands more than four dozen times in the first half of 2014, sailing close to these Japanese-administered islands every time. Beijing's prolific use of its Coast Guard to advance its maritime and territorial claims is not puzzling and might have been anticipated as the logical outcome of an overall regional increase in coastal security capabilities. By the same logic, it is only a matter of time before Japan will press its

own maritime power into service to robustly defend its challenged authority.

This brings us to our second conclusion, one that is perhaps more challenging: The mature capabilities now found across the region, from the North Pacific to the South China Sea in particular, are set within a new and untested regional maritime environment. Strong unilateral enforcement operations, whether legally justified or not, undercut traditional diplomacy in territorial and maritime disputes in the region, as well as the force of the rule of law in these cases. Instead, we seem to be facing, time and again, operational confrontations that put a premium on using crisis diplomacy and finding nonescalatory opportunities for operational demonstrations of resolve against unilateral changes to the status quo.

But this growing strength masks the region's weak and untested political-legal infrastructure for responding to moderate operational confrontations. The Philippines and China, for example, despite the longstanding nature of their overlapping claims in the South China Sea, have no incidentsat-sea arrangement or standard agreement about how to proceed in unintended encounters in disputed waters. The Association of Southeast Asian Nations, the sponsor of the Declaration of the Code of Conduct, has no institutional mechanism to immediately constrain the parties. The United States and other interested extraregional players too often find themselves uncertain of how to respond in a way that will neither escalate tensions nor underplay legitimate concerns about sea lane security and the rule of law.

This state of affairs, in which increasingly capable maritime forces are overlaid on a regional maritime architecture that is newly created and in many places paper-thin, runs counter to the fundamentals of U.S. maritime interests. This dynamic appears in the South China Sea, as well as in the East and Yellow Seas, and the same situation could emerge in the Indian Ocean, too. In this sense, the present condition of maritime Asia is not a stable end-state, but only a promising point along an overall upward trajectory.

The work that is left undone toward a truly mature maritime Asia presents big questions for U.S. policy and like-minded friends and allies. At its broadest and most basic level, the rule set for the oceans that the U.S. has used for decades is not as firmly entrenched in Asia as is required to maintain stability. The U.N. Convention on the Law of the Sea mostly protects the freedom of navigation for all states over the security interests of a particular coastal authority. Maintaining this rule set is important for the United States and for all nations that enjoy and exploit the mobility of the oceans. Some work will be required to shore up that rule set in Asia for the future. Moreover, much of American foreign and defense policy assumes that open, integrated markets and responsive governments guided by public opinion are the best insurance against major power war. Nor should any inhabitant of this new maritime Asia assume easy partnership with any foreign navy. In a more crowded, capable maritime Asia, all partnerships will require work.

Whether Asia's maritime awakening during the past four decades represents a change for the better in international affairs, it is beyond doubt that Asia has changed irrevocably. A new and strong maritime Asia is an assured fact of modern life and a net success for the region and the United States. The U.S., its allies and partner nations and their maritime services, however, have their work cut out for them in managing the logical results.

# SEVEN STRATEGIC TRENDS IN THE INDO ASIA PACIFIC

As China and India continue to rise, the region confronts new challenges, opportunities and uncertainties

MOHAN MALIK, PH.D.

At the beginning of the 21st century, the Indo Asia Pacific stands at a crossroads. Home to several rising, industrializing, contending powers and some fragile states, this region is where geopolitics meets geoeconomics and traditional security issues intersect and merge with nontraditional transnational security issues. The region also stands on the threshold of change — the known and unknown are constantly shifting; challenges, opportunities and uncertainties abound.

The Obama administration's efforts to "rebalance" the U.S. role in the Indo Asia Pacific are influenced by rapidly changing

geopolitical equations. At the heart of these equations is a major power shift: The region's center of gravity is moving toward Asia's giants — China and India. This has significant ramifications for the regional balance of power, alliance networks, international institutions and emerging world order in the early 21st century.

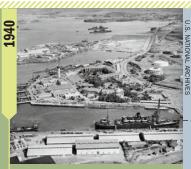
China is an important piece of the geopolitical puzzle.

This article outlines seven major strategic trends — each of which represents a challenge and an opportunity — and examines the impact of China's rise on the Indo-Asia Pacific's geopolitical landscape.

# Timeline of the U.S. Pacific Command

RANA LYNN KENNEDY, COMMAND HISTORIAN

Since its establishment in 1947, the U.S. Pacific Command has maintained an enduring presence in the Indo Asia Pacific and a consistent strategy for U.S. allies and partners. This timeline chronicles the Unified Combatant Command's response to the region's changing security landscape over more than half a century of commitment. The chronology reveals how relationships between the U.S. and Indo-Asia-Pacific nations have been built and strengthened over time by not only managing conflicts and responding to disasters but also through joint exercises, partnerships and cooperation.



Aerial view of the submarine base at Pearl Harbor in October 1941

# 1 JAN 194

Pacific Command (PACOM) is established with headquarters in Makalapa Crater at Pearl Harbor, Hawaii. The Far East Command (FECOM) and the Alaskan Command (ALCOM) are also established. The original PACOM Area of Responsibility (AOR) includes more than 10 sovereign nations and many colonial possessions. The Commander-in-Chief, PACOM (CINCPAC) also commands the U.S. Pacific Fleet (PACFLT).

# 1 JUN 1949

Aiea Naval Hospital is deactivated. Built in 1942 to serve World War II wounded, the building would later become the shared headquarters for U.S. Fleet Marine Forces Pacific, later designated as U.S. Marine Forces Pacific, and PACOM.



# 25 JUN 1950

Korean War begins; northern communist Democratic People's Republic of Korea forces invade southern Republic of Korea (ROK). U.S. forces assigned to FECOM initially respond, and then are assigned to the newly created United Nations Command on July 10, 1950.

U.S. Military Assistance and Advisory Group arrive in Vietnam to screen French military aid requests, advise on strategy and train Vietnamese Soldiers.

# 30 AUG 1951

The Philippines and the U.S. sign mutual defense treaty agreeing to support each other if attacked by an external power.

# 1 SEP 1951

Australia, New Zealand and the U.S. sign the Australia, New Zealand, **United States Security** Treaty to protect the

security of the Pacific.

coalition and North Korea forces sign Korean War ceasefire armistice at Panmunjom.

Leaders of the U.N.

27 JUL 1953

# **JAN 1955**

Direct U.S. aid arrives in Saigon, South Vietnam. U.S. offers to train South Vietnamese military forces.

# 27 SEP 1950

PACOM AOR expands to include Marianas-Bonin and Volcano Islands, both transferred from FECOM. Joint Chiefs of Staff later transfers the Philippines, Pescadores Islands and Taiwan from FECOM to PACOM.

9 APR 1951

# 1 OCT 1951

ROK and the U.S. sign a mutual defense treaty to strengthen efforts toward collective defense and security.

# 8 SEP 1954

Australia, France, New Zealand, Pakistan, the Philippines, Thailand, the United Kingdom and the U.S. sign the Collective Defense Treaty. The treaty becomes the basis for the Southeast Asia Treaty Organization, created later that month.

# 1 NOV 1955

U.S.-Taiwan Defense Command established to provide planning support in the defense of Taiwan and nearby Pescadores Islands.

# 1

# Europe's retiring powers versus Asia's rising powers

"nlike Europe's retiring powers, Asia is home to some rising powers — China, India and Japan — and some failing and fragile states. Strategic concerns loom large as China's growing ambition, power and reach run against the interests of other powers. The post-World War II international order has depended on three factors: U.S. alliances: uncontested American maritime power and access; and a stable, undisturbed balance of power. China's growing power and purpose challenges all of these. China — the biggest beneficiary of the post-World War II order — no longer sees U.S. primacy as serving its interests. As one senior People's Liberation Army officer put it: "American presence constrains China's future growth and policy options." Not surprisingly, Beijing dubs U.S. alliances "relics of the Cold War" that must be dismantled to restore "natural power balance in the region." (Translation: a Sino-centric hierarchical regional order as existed in pre-modern Asia). China's Asia strategy is aimed at undermining U.S. credibility as regional security anchor or security guarantor.

The global impact of China's success will be immense. If China can sustain its growth, the country's gross domestic product, military, and research and development spending could rival or surpass those of the United States, albeit not in terms of quality but quantity. China has the potential to emerge as a peer competitor far more powerful than the former Soviet Union. It is not in China's DNA to come in second to any other power, which Moscow learned the hard way in the 1960s. Power is, by nature, expansionist. Post-2008 financial crisis, China has transitioned from a "hide and bide" policy

to "seizing opportunities, taking the lead and showing off capabilities to shape others' choices in China's favor."

Rising powers tend to be both risk takers and highly insecure, paranoid powers. They flex their muscles and test the resolve of old, established powers. China is behaving just as other rising powers have behaved in history: It is laying down new markers, drawing new lines in the land, air, and water and seeking to expand its territorial and maritime frontiers, forming institutions and coercing others to fall in line.

However, China is not rising in a vacuum. India is also rising. In Japan, under Prime Minister Shinzo Abe's leadership, the country is keen to become a "normal nation." Meanwhile, Russia is using its vast energy resources to stage a comeback on the world stage. These rising powers are today where Germany, France, Britain and Italy were at the beginning of the 20th century. They are looking outward globally in search of markets, resources and bases, jockeying for power and influence, outmaneuvering and outbidding each other in different parts of the world. Small and middle powers are also maneuvering for advantage. It is a crowded geopolitical space.

The new regional geopolitics means that each has the potential to spoil China's "coming out" party this century if China becomes too ambitious. The major power competition is between China and the United States, but in the maritime and continental domains, it is between China and Japan and between China and India, respectively. If China's Navy is going south to the Indian Ocean, the Indian Navy is going east to the Pacific Ocean. The emerging

# 1 JUL 1957

U.S. secretary of defense disestablishes FECOM and redistributes responsibilities for Japan, the Philippines and Korean Peninsula to CINCPAC. U.S. Forces Korea and U.S. Forces Japan are established as subordinate unified commands under CINCPAC. Both the U.S. Army and U.S. Air Force elements in Hawaii are established as component commands to PACOM.

# 096

# **19 JAN 1960**

Japan and the U.S. sign the Treaty of Mutual Cooperation and Security, agreeing to jointly maintain and develop their capacities to resist armed attack.

# 8 FEB 1962

U.S. Military Assistance Command Vietnam (USMACV) is established as a subordinate command to CINCPAC. USMACV expands U.S. advice and support programs to South Vietnamese military forces.

# 15 MAY 1962

U.S. Military Assistance Command Thailand is established as a subordinate command to CINCPAC, providing advice and support programs to Thai military forces.

# **OCT 1957**

CINCPAC moves PACOM headquarters from Makalapa, Pearl Harbor, to the former Aiea Naval Hospital at Camp Smith, sharing office space with U.S. Fleet Marine Force Pacific.

# 13 JAN 1958

Commander in Chief, Pacific Fleet (CINCPACFLT), established as a separate component command. CINCPAC is no longer dual-hatted as CINCPAC and CINCPACFLT.

# 1963

Foal Eagle, an annual ROK-U.S. combined field maneuver exercise, is conducted to demonstrate Republic of Korea and U.S. military resolve to deter war on the Korean Peninsula. In 2001, Foal Eagle combined reception, staging, onward movement, and integration (RSOI) exercises. In 2008, the RSOI portion was renamed Key Resolve.

# 16 JAN 1964

People's Republic of China conducts first nuclear weapon test.

# India-Japan defense relationship will be a major challenge to China and will intensify Beijing's strategic competition with Tokyo and New Delhi. Put simply, the Indo Asia Pacific of the early 21st century bears more

Qin Shi Huang Di, the first emperor to unify China under a single dynasty, reigned from 221 to 210 B.C. He built the first portion of the Great Wall and an army of life-size terra cotta soldiers that were rediscovered in Xian in recent decades. Many of the artifacts now tour the museum circuit and remind viewers of the power and potential downfalls of empires.

resemblance to the Europe of the late 19th

and early 20th centuries than the Europe of

the old, retiring powers of the 21st century.



# China's 'geopolitical discomfort': territorial disputes and the 'Middle Kingdom syndrome'

hina's unresolved land and maritime disputes with neighboring countries and the Middle Kingdom syndrome work to China's disadvantage and to the United States' advantage. Among regional countries, China arouses unease because of its size, history, proximity, potential power, and, more important, because memories of the Middle Kingdom syndrome and tributary state system have not faded.

Historically, there has never been a time when China has coexisted on equal terms with another power of similar or lesser stature. Beijing's noninterference in internal affairs policy does not mean that China will not demand obeisance from other countries. The growing economic ties between China and its Asian neighbors have created a sense of dependency and despondency.

Although China's neighbors do not oppose China's power and prosperity, they do not welcome their own loss of relative standing and strategic autonomy in foreign policymaking. Neither belligerence nor deference is seen as a prudent policy option with respect to China. Given China's centrality in Asian geopolitics, "hedging," or old-fashioned "balancing" vis-à-vis China is becoming the most preferred option, without relinquishing the many benefits of engaging Beijing.

With the exception of a few (notably Pakistan), most Asian countries (including North Korea) show little or no desire to live in a China-led or China-dominated Asia. Instead, they seek to preserve existing security alliances and pursue sophisticated diplomatic and hedging strategies designed to give them more freedom of action while avoiding overt alignment with major powers. Consequently, Asian countries now spend more on their militaries than European countries. Being a distant hegemon, the United States still remains the balancing power of choice for many countries on China's periphery.

Therein lies the paradox: Despite its relative decline, the United States has become the most sought-after power in



An American Soldier in South Vietnam during the Vietnam War in 1965

# 8 MAR 1965

U.S. deploys 3,500 Marines to South Vietnam to protect air bases from the growing insurgency of the North Vietnamese forces.

8 AUG 1967

Indonesia, Malaysia, the Philippines,

Association of Southeast Asian Nations

include Brunei, Burma, Cambodia, Laos

(ASEAN) Declaration. ASEAN grows to

Singapore and Thailand sign the

and Vietnam by 1997.

# 197

First biennial naval exercise Rim of the Pacific (RIMPAC) is conducted. To date, participants have included Australia, Brunei, Canada, Chile, Colombia, France, Indonesia, Japan, Malaysia, Mexico, Netherlands, New Zealand, Norway, Peru, the Philippines, ROK, Thailand, Tonga and the United Kingdom. India and the People's Republic of China participate for the first time in 2014.

# **′**

Australia, Fiji, Nauru, New Zealand, Samoa and Tonga establish the South Pacific Forum, later becoming the Pacific Islands Forum. Membership grows to include the Cook Islands, Micronesia, Kiribati, Niue, Palau, Papua New Guinea, the Marshall Islands, Solomon Islands, Tuvalu and Vanuatu.

# 1 JAN 1972

CINCPAC AOR expands to include Afghanistan, India and Pakistan, much of the Indian Ocean, Aleutian Islands and portions of the Arctic Ocean.

# 15 AUG 1972

CINCPAC deploys air, naval and marine support for Operation Saklolo to assist the Philippines after rains cause extensive flooding. Left: U.S. President Barack Obama, left, and Japan's Prime Minister Shinzo Abe meet for dinner in Tokyo in April 2014.

Right: Customers shop at an outdoor market in Ahmedabad in June 2014. India continues to rise as an economic power in the 21st century.



THE ASSOCIATED PRESS

the region. All want to benefit from economic ties with China, but none wants the region dominated by Beijing or their nation's policy options constrained by China. Put simply, there is no desire to replace the fading American hegemony with a Chinese hegemony.

Historically, the rise of a continental power has always led to the formation of a coalition of maritime powers to counter it. This is particularly so if that continental power happens to have an authoritarian regime nursing historical grievances with active territorial disputes. China is no exception to this rule. Countries on a rising power's periphery mostly tend to counterbalance

its rise or join the bandwagon. Some, of course, try to do both. Even as they become increasingly dependent on the Chinese market for growth and prosperity, most Asian countries are strengthening their security ties with the United States as part of a dual hedging and balancing strategy.

Managing China's rise and molding its behavior is the biggest diplomatic challenge facing the region and the world in the coming years. Changes in regional geopolitics during the past 200 years rule out a return to the Sino-centric tributary state system of the past. Geography defines a country's role and power. A major reason the United States is a global superpower is its



Henry Kissinger, center, then President Richard Nixon's advisor on national security affairs, signs a cease-fire agreement June 13, 1973, in Paris ending the Vietnam War.

# 12 FEB 1973

After the Paris Peace Accords are signed on January 23, 1973, to end the war in Vietnam, Operation Homecoming begins with the release of 591 American POWs held in Hanoi.

29 MAR 1973

Assistance Command

disestablished as a

**PACOM** subordinate

unified command.

U.S. Military

Vietnam is

# **1**976

1 JUL 1975

ALCOM is disestablished with

responsibilities for the defense of Alaska

Readiness Command for ground defense,

disaster relief and emergency evacuation.

divided between Aerospace Defense

Command for air defense and U.S.

First annual Republic of Korea-U.S. Ulchi Freedom Lens (UFL) is conducted on the Korean peninsula, centered on the readiness, deterrence and defense of the ROK. In 2008, the name is changed to Ulchi Freedom Guardian (UFG). To date, participants have included Australia, Canada, Denmark, France, New Zealand, Norway, United Kingdom and United States.

# 20 FEB 1976 1 MA

Southeast CINCPAC A
Asia Treaty cover the
Organization is Ocean to A
disestablished. including
Gulf of On

# 1 MAY 1976

CINCPAC AOR expands to cover the entire Indian Ocean to Africa's east coast, including Gulf of Aden, Gulf of Oman, Seychelles, Maldives and Mauritius.

# 1976

Hong Kong SAREX becomes an annual search-and-air-rescue exercise with the Hong Kong Civil Aviation Department.



unique geography. China, unfortunately, does not have Canada and Mexico on its borders, but large powerful states — Russia, Japan, South Korea, Vietnam, Indonesia and India — that will do everything to counterbalance China's power for historical, civilizational, geopolitical and geoeconomic reasons. This could be defined as China's geopolitical discomfort. Just as children cannot choose their parents, countries cannot choose their neighbors, as much as they would like to. Just ask Afghanistan, Mongolia, South Korea or India.

# Power shifts shaped by the nexus between geopolitics and geoeconomics, traditional and transnational security issues

oday's world is very complex. Geopolitics or military balance of power alone cannot explain everything. To grasp the implications of power shifts that are underway, security and military professionals need to understand the nexus between geopolitics and geoeconomics and how traditional security issues now intersect with nontraditional transnational security issues. For instance, climate change or the water issue between China and South Asia and China and Indochina is both a geopolitical tool and a transnational issue. Moreover, China's and India's rise touches on all the key issues of the day energy, economy, resources, climate change, nuclear proliferation, cyberspace and maritime security.

# Resources, markets and bases: The ol' 'new' great game

The "new" so-called great game is all about "RMB": resources, markets and bases. Interestingly, RMB is also the name of Chinese currency. It is certainly all about wealth, power and security. What was it that led to the colonization of Asia, Africa and Latin America by industrializing European powers in the 18th and 19th centuries? It was the search for resources to fuel industrial growth, markets to dump manufactured goods and bases to protect both. These three — resources, markets and bases — always go together. That is exactly what is driving China's foreign policy, and to some extent, India's. The new kids on the block are actually playing a very old game of world politics.

# 1 OCT 1976 U.S. Military Assistance

Command Thailand is disestablished.

# 30 APR 1979

Based on U.S. presidential directives and agreements stated in the Taiwan Relations Act, the U.S. Taiwan Defense Command is disestablished and all command military personnel withdraw from Taiwan.

# 23 NOV 1978

**CINCPAC** deploys for the first time a Disaster Area Survey Team in response to a tropical cyclone in Sri Lanka.

Singapore hosts Tiger Balm, an annual, bilateral exercise designed to promote regional security and interoperability between the U.S. Army Pacific and Singapore Armed Forces.

First annual Thailand-U.S. Cobra Gold is conducted in Thailand. To date, participants have included Australia, Bangladesh. Cambodia, France, Indonesia, Italy, Japan, Nepal, the Philippines, ROK, Singapore, the United Kingdom and Vietnam.

# 1982

The annual bilateral command post exercise Yama Sakura begins in Japan. It simulates Japan-U.S. military operations necessary to defend Japan while strengthening ties between the U.S. Army and Japan Ground Self Defense Force.

# 23 NOV 1982

Hurricane Iwa strikes the Hawaiian Islands. and PACOM responds with disaster relief.

# 1 NOV 1983

**Special Operations Command** Pacific activates as a subordinate unified command to support USPACOM commander's Theater Security Cooperation program.

# 3 OCT 1983

Pacific Command is redesignated U.S. Pacific Command (USPACOM). Its AOR expands to include the Aleutian Islands, North Korea, Mongolia, Madagascar and the People's Republic of China.

# 1986

Japan begins hosting the alternating annual exercises Keen Sword and Keen Edge.





The Military Sealift Command hospital ship provides disaster relief efforts after Typhoon Haiyan in the Philippines in November 2013.

# 27 FEB 1987

USNS Mercy conducts its first operational mission in support of an exercise in the Philippines.

# 10 FEB 1989

Joint Task Force-Five (JTF-5) is activated in Alameda, California. Reporting directly to USCINCPAC, JTF-5's mission is to detect and monitor drug trafficking in the Eastern Pacific directed toward the U.S.

# 9 FEB 1989

Joint Chiefs of Staff reassigns responsibilities for Gulf of Oman and Gulf of Aden from USPACOM to U.S. Central Command (USCENTCOM).

# 7 JUL 1989

Alaska Command (ALCOM) is activated as a subordinate unified command to USPACOM with responsibilities for land, maritime and non-air defense aviation support in Alaska.

# 1990

Singapore and the United States begin Exercise Commando Sling, which tests long-range mobilization ability of deploying U.S. forces and combined interoperability with the Singapore Air Force.

# 1991

The Philippines hosts Balikatan, a command post and field training exercise aimed at improving Philippines-U.S. combined planning, combat readiness and interoperability.

# Global dominance by a single power is passé

is a thing of the past. What kind of a power a country is matters more than how powerful the country is. The acquisition of "comprehensive national power" alone will not make China a global superpower. Major powers become great powers with the support of small and middle powers. Their support, or lack of it, makes all the difference between great power dominance and defeat. In other words, a country cannot be a leader

— a country cannot be great — if it doesn't have followers. That's why middle powers are called "pivotal states" or "swing states." During the Cold War, China and Egypt were two middle powers and swing states. When China and Egypt shifted their support from the then-Soviet Union to the United States, they became pivotal players in the Asian and Middle Eastern balance of power, respectively. That tilted the scales against the Soviet Union and what followed is common knowledge.

# Geopolitics matters: Mackinder matters as much as Mahan

sia's geopolitical center of gravity is shifting inland, with major implications for the maritime powers. To understand the great power games of the 21st century requires a look back to the classics on geopolitics by scholars such as geographer Halford Mackinder and Adm. Alfred Thayer Mahan, a geostrategist. Mahan advanced the notion that sea power was key for foreign policy; Mackinder introduced the theory that control of a key pivot area, which he dubbed the heartland, meant eventual control of the world.

During the Cold War, much of the economic growth took place within the U.S. hub-and-spokes alliance network in maritime Pacific Asia. Post-Cold War, the reverse has occurred: The land powers in China, India and continental Southeast Asia, outside the U.S. Pacific alliance

network, have risen economically. Much like Britain and Russia in the past, China is now employing modern transportation technology, high-speed railways, expressways and pipeline networks to redraw the map and change the geopolitics of Eurasia. China is spending billions to create its economic hub-and-spokes system in continental Asia via pipelines, highways and railway networks linking China with Central, Southwest and Southeast Asia.

These spokes, or arteries, will bring in raw materials and energy resources and export Chinese manufactured goods to those regions and beyond. Not enough attention is being paid, however, to Eurasia because the three centuries of Anglo-American maritime dominance have caused a certain degree of "land-blindness" among policymakers.



Philippine residents flee their homes after Mount Pinatubo erupted in June 1991.

# 29 APR 1991

Tropical Cyclone Marion strikes Bangladesh, causing massive flooding. USPACOM conducts Operation Sea Angel to provide humanitarian assistance.

# 31 JUL 1992

Marine Corps Forces Pacific (MARFORPAC) is established at Camp Smith as the U.S. Marine Corps service component under USPACOM. Commander MARFORPAC retains operational responsibilities for Fleet Marine Forces Pacific.

# 12 JUN 1991

Mount Pinatubo in the Philippines erupts, causing the evacuation of USPACOM elements as part of Operation Fiery Vigil.

# 1 OCT 1994

JTF-5 is redesignated as Joint Interagency Task Force-West, a standing joint task force created to stop illegal drug trade from Southeast and Southwest Asia.

# 4 SEP 1995

The Asia-Pacific Center for Security Studies (APCSS) is established to build strong relationships among Indo-Asia-Pacific military and civilian representatives.

# 23 OCT 1995

Chairman of the Joint Chiefs of Staff reassigns responsibilities for the Arabian Sea and portions of the Indian Ocean from USPACOM to USCENTCOM.

# Technology is the great equalizer (Internet, shale gas, 3-D printing/manufacturing)

echnology is the wild card. It is a game changer. No one could foresee in 1990 how the Internet would change everything. In war and peace, technology shapes relations among nations. Technology determines hierarchy in international relations. New types of manufacturing based on 3-D printing, for example, could be a game changer. What would that mean for "made in China"? Unlike in the past, technology diffusion is rapid and instantaneous in today's world.

Furthermore, geology (energy security) and geopolitics (national security) are closely interlinked. Historically, every international order is based on an energy resource. We moved from the age of sail to that of coal and steam. Coal and steam was the basis of Pax Britannica. When the British ran out of steam, literally, the U.S.-led Pax Americana came into being based on oil, gas and

A woman inspects a 3-D printed handgun at an October 2013 exhibition at London's Science Museum.



nuclear energy. The Chinese have been investing heavily in alternative energy resources to usher in the age of Pax Sinica, or "Chinese Peace."

Just when China and the rest of the world were writing off America as a declining power, the country finds itself on the cusp of achieving energy self-sufficiency and a technological breakthrough in manufacturing. The shale revolution could help the U.S. rejuvenate itself and prolong American dominance. To paraphrase Mahan: "Whoever has the technological edge will dominate the world. In the 21st century, the destiny of the world would be decided not in the battlefield, but in the science and technology field."

The doom and gloom on the energy front five years ago that preceded the global financial meltdown in 2008 has given way to an energy boom five years later. The energy boom in the U.S., Canada and Australia, if exploited fully, has the potential to change the power dynamics among great powers, revitalize U.S. alliances and redefine relationships between the traditional suppliers and consumers. It could turn yesterday's winners into tomorrow's losers. Just as the "old" Middle East is moving east to forge closer energy ties with China and India, the "new" Middle East (Canada and the United States) should be looking west to sell tight oil and gas to the energy-hungry economies of Japan, China, India, South Korea and various Southeast Asian nations. The oil and gas bonanza would enhance American diplomatic leverage through consumers and producers. The world oil market that includes the United States and Canada would be more diversified, more stable for oil prices and reduce consumers' overdependence on the volatile Middle East, the Organization of Petroleum Exporting Countries cartel and Putin's Russia.

# **15 SEP 1996**

JTF-Pacific Haven is established at Anderson Air Force Base on Guam to assist in resettling more than 6,500 Kurds from Iraq.

# 11 FEB 2002

The U.S. president assigns responsibilities for Antarctica to USPACOM and specifies that USPACOM support U.S. European Command (USEUCOM) for the Russian Far East and begin support for Operation Deep Freeze, the National Science Foundation mission.

# 29 OCT 2002

Commander-in-Chief, U.S. Pacific
Command (CINCUSPACOM) is designated
as Commander, U.S. Pacific Command
(CDRUSPACOM). The U.S. defense secretary
directs that only the U.S. president will be
referred to as Commander-in-Chief (CINC).

# 4 NOV 2002

Governments of the Member States of ASEAN and the government of the People's Republic of China signed the "Declaration on the Conduct of Parties in the South China Sea."

# 14 APR 2004

The Nimitz-MacArthur Pacific Command Center officially opens its doors as the new headquarters for USPACOM.

# 1 JAN 2001

The Center for Excellence in Disaster Management and Human Assistance (COE-DMHA) becomes a direct reporting unit to USPACOM. Originally established in 1994 by U.S. Congress, COE-DMHA coordinates pre-crisis humanitarian assistance/disaster relief (HADR).

# 1 OCT 2002

U.S. Northern Command (USNORTHCOM) is established to conduct homeland defense of North America, including Alaska. Forces assigned to ALCOM remain under USPACOM.

# 27 AUG 2003

The Six-Party Talks begin in Beijing, China, in response to North Korea's withdrawal from the Nuclear Non-Proliferation Treaty. The Six-Party Talks include Japan, ROK, People's Republic of China, U.S., Russia and North Korea.



AFP/GETTY IMAGES

# The Future of Asian Geopolitics

ower in the international system is always relative and ever-shifting. States rise and fall primarily due to their uneven rates of economic growth, wars, domestic disorder and imperial overstretch. Some states grow more rapidly than others due to domestic policies and institutions, technological breakthroughs and political leadership's ability to mobilize national resources that place them at an advantage over others. During the past three decades, China has demonstrated tremendous ability to plan and mobilize national resources to implement goal-oriented, timely action strategies in economic, diplomatic and military arenas. Economic expansion fuels grandiose geopolitical ambitions and inevitably leads to military expansion to protect access to overseas resources, markets and bases. Notwithstanding the focus on maritime rivalries and naval expansion, new economic hubs, institutions, transport corridors, highspeed railways, expressways and pipeline networks are changing the geopolitics of Eurasia and beyond.

The future of Indo-Asia-Pacific geopolitics is going to be shaped by the interactions among the United States, China, India, Japan and Russia. Power asymmetry among major powers means that each will

form flexible ad hoc partnerships with the others where their interests converge; mobilize the support of one against the others when their interests collide and prevent the others from forming alignments against it when they compete; and coalesce and collude with each other when their objectives coincide. Cooperation or selective partnerships on transnational issues of mutual interest and geopolitical competition between China and other major powers will continue to be the constant underlying conditions in the era of weak unipolarity both at global and regional levels. Peace and stability will prevail if major powers work for a multipolar Asia with inclusive multilateral institutions and dispute resolution mechanisms.

Nothing is inevitable in life and in politics — domestically or internationally. The history of the Soviet Union and Japan show that nothing is inevitable about the rise or fall of great powers. Contrary to what international relations textbooks teach, foreign policy is not a cold calculation of costs and benefits or pros and cons alone. It's a mix of "5 Ps": passion, power, profit, pride and prejudice. That is what makes the task of predicting the future so difficult. □

# 2005

Exercise Talisman Saber is conducted to train Australian and U.S. forces in planning and conducting combined task force operations. Tandem Thrust, Kingfisher and Crocodile merged into one biennial exercise.

# 1 MAR 2005

Responsibility for Seychelles is reassigned from USPACOM to USCENTCOM.

# 26 DEC 2004

A magnitude-9.0 earthquake strikes northwest of Sumatra, Indonesia, in the Indian Ocean. The resulting tsunami impacts coastlines throughout the region, killing more than 300,000 people. USPACOM deploys relief forces two days later as part of Operation Unified Assistance, providing disaster relief and assistance through February 2005 and delivering more than 2.8 million tons of disaster relief supplies and helping more than 70,000 people.



Malaysian Armed Forces relief teams provide medical supplies to earthquake victims in Pakistan in October 2005.

# 1 JAN 2006

The Joint Intelligence Operations Center reaches initial operational capability to provide integrated, operational focused intelligence information to support CDRUSPACOM decision making.

# 8 OCT 2005

USPACOM begins Operation Lifeline in response to a magnitude-7.5 earthquake in northeast Pakistan. Although Pakistan and Afghanistan shifted to USCENTCOM AOR in 1983, USPACOM supports the operation to transport some 1,900 passengers to medical care, treat 14,000 patients and restore key infrastructure.



# 17 FEB 2006

USPACOM begins Operation Hope Renewal after heavy rains cause a landslide to engulf a village on Leyte Island, Philippines. U.S. Marine forces were diverted from Exercise Balikatan to assist Philippine search and rescue teams.

# 5 MAY 2006 9

Responsibility for the Aleutian Islands is reassigned from USPACOM to USNORTHCOM.

# 0 ULT 2006

North Korea conducts its first underground nuclear test. As a result, the United Nations passes Security Council Resolution 1718 on October 14, 2006, requiring North Korea to refrain from nuclear weapons testing and return to the Six-Party Talks.

30 SEP 2007

facilities.

The sixth round of

Six-Party Talks fails to

reach consensus for

verification inspections

of North Korea nuclear

# 15 NOV 2007

A Category 5 cyclone strikes Bangladesh, affecting more than 3 million people. USPACOM responds with Operation Sea Angel II, providing more than 53,000 liters of fresh water, 112,000 kilograms of relief supplies, and medical and dental treatment for more than 4,000 residents.

# 2008

ROK hosts Max Thunder, a biannual aerial exercise that focuses on increasing interoperability between Korean and U.S. air forces.



The USS Lake Erie launches a Standard Missile-3 at a moving target over the Pacific Ocean in 2008. THE ASSOCIATED PRESS

By the end of the Vietnam War in 1975, the U.S. Army gave every indication of retreating from the Indo-Asia-Pacific region. Forces withdrew from Vietnam and the Republic of Korea, an infantry brigade in Alaska deactivated, and the Eighth Army in Korea and U.S. Army Japan became independent major commands reporting directly to Army headquarters in the Pentagon with the inactivation of U.S. Army Pacific.

The reality was different. The U.S. Army never fully left Asia and the Pacific, as world events including the Cold War and continued unrest in North Korea delayed and eventually halted what could have been the almost complete withdrawal of U.S. Soldiers from the region. Looking forward another 40 years, there is every reason to believe the U.S. footprint of formal military bases could remain small in the region. Yet the Army will remain

heavily engaged in humanitarian and confidence-building missions with a widening group of allies and partners, holding joint exercises and other partnership-forming exercises.

Some of the world's most politically stable countries form the backbone of the region. Most also belong to multilateral organizations, providing even greater stability. There also are serious pockets of instability, however, including the notoriously volatile North Korea,



# 2 MAY 2008

A Category 4 cyclone strikes southern Burma. By May 12, Burma allows daily C-130 relief flights from Thailand. CDRUSPACOM with other senior officials accompanies the first flight to deliver aid and negotiate for additional assistance from U.S. Navy ships waiting offshore. Although USPACOM transports more than 1.45 million metric tons of relief supplies from Thailand, Burma's government denies entry for additional humanitarian assistance from the expeditionary strike group attached to USS Essex.

# 2009

ASEAN Regional Forum Voluntary Demonstration of Response (ARF-VDR), a biannual, civilian-led, military-supported humanitarian aid and disaster relief exercise for ASEAN nations, is conducted with more than 20 countries participating. Areas of demonstration include land, air and maritime search and rescue; medical assistance and evacuation; and engineering reconstruction projects.

# 21 FEB 2008

USS Lake Erie destroys a failing U.S. satellite by launching an SM-3, successfully concluding Operation Burnt Frost. Working closely with U.S. Strategic Command, Missile Defense Agency, and other U.S. government agencies, USPACOM facilitates the operation that vaporizes the satellite's debris upon re-entry without damage to orbiting space vehicles, populations on the ground or the environment.

# 12 MAY 2008

A magnitude-7.9 earthquake strikes Sichuan province in central People's Republic of China. By May 16, China requests U.S. assistance. USPACOM immediately dispatches two C-17 cargo planes with more than 91,000 kilograms of tents, generators, tools and other emergency relief material. USPACOM also transports Los Angeles Fire Department personnel and equipment to search for survivors and train Chinese emergency response personnel.

pockets of violent extremism in India, Bangladesh, Indonesia and the Philippines, and the presence of transnational extremist groups. The military coup in Thailand in May 2014 and continuing unrest in Burma, which left 100,000 people living in confinement for what the government said was their own safety, show that elections do not always resolve deep political divisions.

Planners built the post-Vietnam War withdrawal around a strategy to keep enough Soldiers in the region to evacuate U.S. citizens in a crisis but to leave warfighting to other nations, which might be offered financial aid and the ability to purchase U.S.-made weapons. The end of conscription, which left the U.S. Army with fewer but more professional active-duty Soldiers, helped fuel the changes. Withdrawal of British forces from Malaysia and Singapore — leaving only a garrison in Hong Kong — made the U.S. movement seem less dramatic. The U.S. transitioned toward a total withdrawal from South Korea but for various reasons decided at the last moment to leave behind elements of the 2nd Infantry Division, which remain there today to fight, if necessary, alongside the Republic of Korea and the sister services of U.S. Armed Forces.

Things did not go completely as planned. As the U.S. and Britain withdrew, the People's Republic of China increased its influence and the then-Soviet Union established

a base in Vietnam, with opposing forces facing off. Economies in Hong Kong, Japan, South Korea and Taiwan experienced rapid growth (the countries became known as the Four Asian Tigers). However, a coup in South Korea in 1979; the attempted assassination in Burma of the South Korean president in 1983, which killed four members of his cabinet and 13 others; and the 1987 bombing of Korean Airline 858, which left 115 dead, fueled instability.

The U.S. also took a greater interest in South Asia and the Indian Ocean after the 1971 Indo-Pakistani War, with the U.S. Army pre-positioning war stock for an armored brigade off Diego Garcia atoll, with additional stockpiles in Korea and Japan. Army units in Hawaii and Alaska were expanded and the 1st Special Forces Group was reactivated, with two battalions at Fort Lewis, Washington, and one battalion in Okinawa. By the early 1980s, the U.S. Army was involved in bilateral training exercises in Asia, such as the Cobra Gold series in Thailand, which was launched in 1982 and has five or more participants as well as observers from nine other nations.

During the 1991 Gulf War, the Army used units dedicated to Asia-Pacific contingencies for other duties and in 2003, when the U.S. launched Operation Iraqi Freedom, one brigade of the 2nd Infantry Division in South Korea was redeployed to the U.S. While attention had shifted,

there were still concerns. During the first Gulf War, the U.S. deployed attack helicopters and surface-to-air missiles to the Korean Peninsula to provide extra combat power even as it withdrew nuclear weapons from the region. Ballistic missile interceptors were installed in Alaska in 2004, operated by the Alaska National Guard. In 2005, air defense brigades were assigned to South Korea and Okinawa.

During the initial phases of the post-Cold War period, reductions were made to the size of the Army and reductions throughout the U.S. Department of Defense. Accordingly, the Army executed a carefully designed transformation of itself that ensured specific crucial capabilities remained. Prepositioned stocks were placed afloat in the Indian Ocean, at Camp Carroll in South Korea and at Sagami Army Depot in Japan, with full equipment sets for heavy and light combat teams and for specialized missions. Also protected were command and control headquarters, training facilities and a robust partnership program.

The renewed focus on Asia and the Pacific has been building. In 2009, U.S. President Barack Obama said in a speech in Japan that the U.S. was looking to "strengthen old alliances and build new partnerships," and to look at alliances in Asia and the Pacific as "not historical documents from a bygone era, but abiding commitments to each other that are fundamental to our shared security." After all,

# MATTHEW BRADLEY/U.S. NAVY

Misawa residents clean up after a March 2011 9.0-magnitude earthquake in Japan.

# 11 MAR 2011

A magnitude-9.0 earthquake strikes, causing a devastating tsunami and immense destruction along Japan's northeastern coast. USPACOM deploys personnel and equipment and supports HADR efforts through Operation Tomodachi. USPACOM provides more than 245 metric tons of relief supplies and 7.5 million liters of water to aid reactor cooling while deploying 24 ships and 189 aircraft to assist the Japanese government.

# 11 JAN 2010

The Pacific Warfighting Center (PWC) opens on Ford Island in Pearl Harbor. As the lead training facility for the USPACOM AOR, PWC supports the Commander's joint training program and provides joint context to exercises, training and battle simulations.

# 6 APR 2011

Responsibility for the Arctic is divided between USNORTHCOM and USEUCOM. USPACOM retains command and control of forces within Alaska and the Aleutian Islands.



President Obama said, "We have a stake in the future of this region, because what happens here has a direct effect on our lives at home."

The U.S. set the course for several generations by increasing its presence through regular and extended deployments, increasing resources by building capacity for pre-positioned fuel, ammunition, bridging equipment and war stocks, and by building stronger relationships with other nations. This has involved joint exercises, multinational forums and leadership seminars and helping allies develop specific military capabilities.

The U.S. and U.S. Army commitment to Asia and the Pacific, which survived the post-Vietnam and post-Cold War

drawdowns, seems unlikely to diminish in the next 40 years. While the U.S. footprint of permanent installations is smaller than 40 years ago, dramatic improvements in technology, transportation and tactics make it possible for the U.S. and its Pacific partners to remain a formidable force for peace and stability throughout the Pacific basin. □

# 17 NOV 2011

The U.S. president announces the U.S. shift in national security priorities to give greater emphasis to the Indo-Asia-Pacific region. The change, or "pivot," declares a multidimensional strategy, including strengthening alliances, deepening partnerships with emerging powers, and building regional economic architectures that can sustain shared prosperity.

# **16 NOV 2011**

U.S. and Australia expand existing military coordination with deployment of a company-size U.S. Marines element to Darwin, northern Australia. U.S. Marines will deploy on a sixmonth rotation to conduct training with Australian Defense Forces. The agreement allows for greater access by U.S. military aircraft to Royal Australian Air Force facilities.



A Philippine Airman helps offload civilians from a U.S. Marine C-130 Hercules aircraft at Villamor Air Base in November 2013.

# 28 APR 2014

U.S. and the Philippines sign the Agreement on Enhanced Defense Cooperation, allowing for more training and interoperability of U.S. forces within the Philippines. The agreement allows for greater ability to jointly respond to humanitarian crises that impact the Philippines.

# 8 NOV 2013

Typhoon Haiyan, or Yolanda in the Philippines, hits Leyte Island, causing immense damage and impacting more than 12 million people. USPACOM forces join nongovernmental and government agencies to conduct Operation Damayan, providing more than U.S. \$31 million in medical aid, relief supplies and disaster assistance.



# Saving time saves lives

STORY BY **CLOTHILDE LE COZ** PHOTOS BY REUTERS

On November 8, 2013, Typhoon Haiyan one of the fiercest storms ever recorded - ripped through the Philippine archipelago. Wind gusts up to 312 kilometers per hour plundered the island landscape, upsetting the lives of nearly 13 million people across the Visavas region and leaving more than 6,000 dead in the Philippines alone. An instant later, the storm sent waves throughout social media, generating 5.6 million tweets on Twitter in the two weeks that followed. Almost 60 percent of those were posted by people trying to share information about the

situation to readers all over the world.

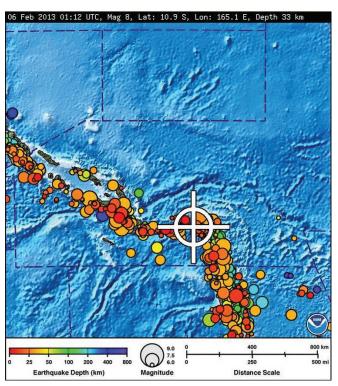
In a region that braves nearly half the world's natural disasters and holds more than half the world's mobile phone users, such prompt and extensive responses by social media to disasters in the Indo Asia Pacific have become the norm. Harnessing this instant crowd response, called "nowcasting" by its advocates, to mitigate and even prevent damage is, however, a challenge just starting to be addressed.

In a typical year this past decade, the region endured more than 100 major disasters, costing tens of billions of dollars in damage and thousands of lives, according to the U.N. Environmental Program. Yet in the response to Typhoon Haiyan, also known as Yolanda in the Philippines, and in other instances of disaster response, nowcasting has set precedents in assisting relief efforts. Mobile innovations and applications have surged in response to the need for instant and accurate information.

A man uses his mobile phone against a backdrop of Namsan Tower in Seoul, South Korea, in May 2014.

# Real-Time Mapping

In the days following Typhoon Haiyan's assault, more than 1,600 volunteers armed with smartphones and personal computers helped the OpenStreetMap initiative enable a live, online topographic visualization of blocked roads and debris, helping emergency responders save lives and clear rubble. Thanks to the volunteers' efforts, the map was updated more than 5 million times, improving its accuracy and reliability, according to its initiators at the Humanitarian OpenStreetMap Team (HOT). Its efforts continue elsewhere in the Indo Asia Pacific and around the world.



The Pacific Tsunami Warning Center released this bulletin to show areas affected by a tsunami warning after a magnitude-8.0 earthquake occurred off the Solomon Islands in 2013.

In Indonesia, HOT has employed crowdsourcing software that produces realistic natural-hazard impact scenarios for better planning, preparedness and response activities, according to HOT Director Kate Chapman. "Through partnerships with international organizations involved with disaster risk reduction," Chapman explained, "HOT has concentrated on enabling communities and governments to collect exposure information, which in turn feeds into the impact modeling software."

In such cases, crowdsourcing delivers quicker information than governments and industry on their own, according to John Marinos, an information management officer at the U.N. Office for the Coordination of Humanitarian

Affairs, which employed HOT to work on Typhoon Haiyan.

"Thanks to the crowd," said Marinos,
"something that would have been incredibly labor
intensive for people on the ground was actually
done, and done very well. Now, the ball is on our
side to make sure the information can be useful to
our work on the ground."

Researchers have also developed ways to enable communication in areas with scant reception or to supplant networks when conventional networks are knocked offline, which commonly occurs during a disaster. Japanese

researchers, for example, created a system called Aerial 3D that uses laser beams to project emergency response information in local spaces and enables rescuers to use mobile devices to pinpoint citizens' locations, *The New York Times* newspaper reported.

# Managing Disaster Data

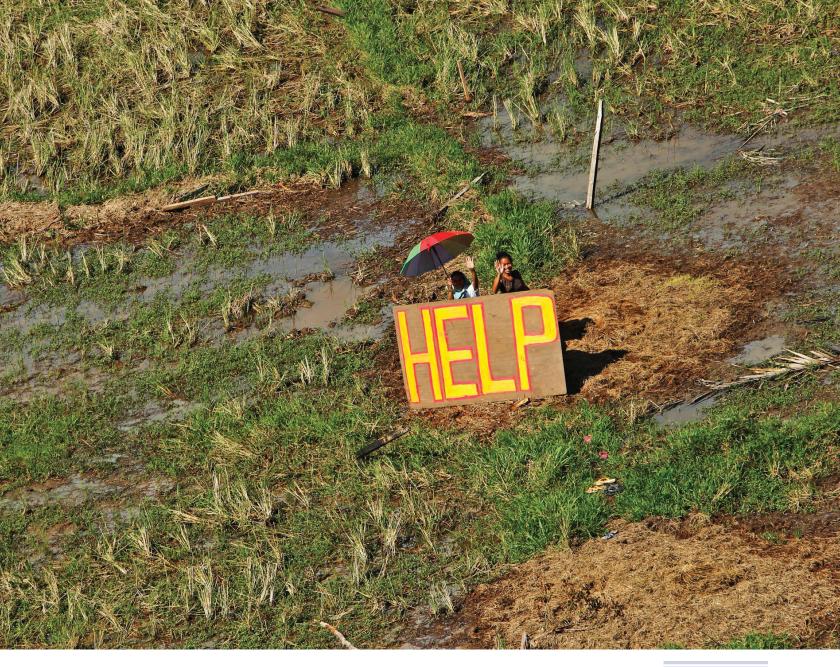
Although nowcasting has begun making an impact on disaster response and risk reduction, sifting through the mass of data from social media and user-generated content to generate actionable information is no small endeavor. Such is the focus of Dr. Patrick Meier, the director of Social Innovation at the Qatar Computing Research Institute (QCRI). Meier and his team have found that simple keyword searches can miss more than 50 percent of relevant content posted on Twitter. As a remedy, they've developed two platforms, Micro-mappers and Artificial Intelligence for Disaster Response, to identify tweets of interest on a large scale during the response to a disaster or a man-made event.

"A lot of what we do here is try to identify the signals," Meier told *FORUM*. "It is like looking for a needle in a haystack."

Gathering these needles of disaster data and presenting them in comprehensible images is the task of the Pacific Disaster Center in Hawaii, which specializes in visualization of disasters and the geolocation of social media content. It is one of the few centers working with scientists to develop algorithms to perfect visualization, taking into account social media profiles, server locations and geographical data. The information is triangulated with real-time hazard monitoring and impact models to deliver more detailed, accurate and timely information to international organizations and governments.

Augmenting software and crowdsourcing, military hardware and expertise also proved a vital component of nowcasting in Haiyan's aftermath. Assembled from a group of U.S. Marine veterans,





Team Rubicon "bridges the gap between military and civilian life" by working with traditional aid organizations when disasters strike. In coordination with Team Rubicon, international aid organization Direct Relief deployed a civil drone aircraft, Huginn X1, to determine the operational status of the Carigara District Hospital, located northwest of the city of Tacloban. A live stream video identified damages and gave timely information about access to the areas. With this, relief teams identified the most affected areas to allocate resources more efficiently.

"The Huginn X1 was not only valuable in terms of structural assessment but also as a way to scout locations in advance to determine the best possible routes of approach and assistance," reported Andrew Schroeder, director of research

and analysis for Direct Relief. Such mapping technology, Schroeder explained, provides a common reference point to all actors involved in the recovery and contributes to the nearest representation of communities and geographical areas that has ever been possible.

While the various components of nowcasting cannot prevent typhoons, earthquakes and tsunamis, practitioners are optimistic about the progress being made in advancing the pace and efficacy of response and cleanup. According to QCRI's Meier, the best is yet to come.

"The more valuable data is not the one allowing you to forecast, but rather to nowcast an event," said Meier. "If we could move to a real-time world when managing a disaster or a conflict, it would take us years from where we are right now."

Survivors wave at a Philippine Air Force helicopter after receiving aid supplies near Tacloban in the aftermath of Typhoon Haiyan in November 2013. People posted more than 5.6 million tweets on Twitter about the storm in the two weeks that followed.

# LOOKING EAST

RUSSIA IS SHIFTING PRIORITIES TO THE PACIFIC AND FORGING NEW ALLIANCES, BUT WILL THEY LAST?

FORUM STAFF

erched at the southeastern tip of Russia is Vladivostok — a city of spectacular hills and peninsulas. It serves as a crossroad between Europe and Asia and houses Russia's Pacific Navy fleet as the country's largest port. It's also the hub of Russia's latest special economic zone, a designation in a series of recent moves by President Vladimir Putin to shift focus and resources to the Indo Asia Pacific.

Vladivostok's strategic location (it neighbors China, Japan and the Korean Peninsula) positions it as a key place from which Putin can project his Asia-focused programs.

Moscow

EUROPE

"The city is closer to Seoul, Tokyo, Beijing, Shanghai and Pyongyang than it is to Moscow, which makes it an ideal entry point for Asian businesses interested in Russia," Vladivostok's Far Eastern Federal University notes on its website.

Such concentrated efforts to deepen economic, military and other resource ties with Asia have accelerated during the past year as Russia's relationship with the West has diminished because of the crisis in Ukraine. To hear Russian officials explain their ramped-up Pacific presence, they're merely solidifying agreements that have long been on Putin's to-do list or were inevitable, given the country's proximity to the region.

# RUSSIAN FEDERATION KAMCHATKA SHANGHAI VLADIVOSTOK BEIJING PYONGYANG CHINA 7,610 KM

FORUM ILLUSTRATION

746 KM

1,063 KM 1,336 KM 1,610 KM 686 KM 6,422 KM

2,451 KM

TOKYO

KAMCHATKA











ELITERS

- 1. Chinese Soldiers take part in the Joint Sea-2014 naval exercise on the East China Sea in May 2014. China's East Sea Fleet and Russia's Pacific Fleet together sent 14 warships, two submarines, nine warplanes, six helicopters and two special forces to their third joint naval exercise.
- 2. Chinese President Xi Jinping, left, and Russian President Vladimir Putin attend an opening ceremony for the Joint Sea-2014 exercise in Shanghai.
- 3. Russian Defense Minister Sergei Shoigu, left, and his Vietnamese counterpart Phung Quang Thanh attend a news conference after their meeting in Hanoi in March 2013 to work on a ship maintenance agreement.
- 4. Chinese visitors pose for pictures in front of the Russian guided missile cruiser Varyag, the flagship of Russia's Pacific fleet, in Shanghai in May 2014.

TRADE TURNOVER, BILLIONS IN U.S DOLLARS

**EXPORTS** 

**IMPORTS** 

Source: 2013 Russian Foreign Trade Statistical Bulletin

FORUM ILLUSTRATION



AFP/GETTY IMAGES

"The Asia-Pacific region is the center of world economic growth," said Alexei Ulyukaev, Russia's economic development minister, according to an April 2014 *Financial Times* report. "We have not developed cooperation with these regions as actively as we would have liked."

What some analysts have coined "Putin's pivot to Asia" began taking center stage in May 2014 when Russia and China inked a 30-year deal for U.S. \$400 billion of Siberian natural gas to be exported to China. Since then, Russia's extended reach into the region has continued.

"We are looking at nothing less but a complex strategic reorientation," Mikhail Titarenko, director of the Institute of Far Eastern Studies at the Russian Academy of Science, told the *Financial Times* in April 2014. "Our political elite like speaking of Russia as a country that stretches from Europe to Kamchatka, but it has never taken an interest in what is beyond the Urals," a mountainous federal district that separates Russia's western border from Asia.

That is, until now.

"President Vladimir Putin is keenly aware of the shifting global economic balance of power to Asia, and he understands that Russia's integration there is essential for its successful long-term development," Andrew Kuchins, senior fellow of the Russia and Eurasia Program at the Center for Strategic and International Studies in Washington, D.C., said in a 2014 report on Russia's pivot to Asia.

#### **ECONOMIC ENGAGEMENT**

Putin declared in 2012 that Russia's relationship with Japan was "generally on an upswing," though the volume of trade exchanges and economic ties was "still far from meeting its potential."

That may soon change as a group of Japanese lawmakers have expressed an interest in securing a natural gas supply deal with Russia similar to that of the Chinese. The revival of this U.S. \$5.9 billion pipeline from Russia to Japan on the heels of the U.S. \$400 billion Chinese deal demonstrates Russia's

expanding role as an energy supplier for the Indo-Asia-Pacific region. A highlight of the Russia-Japan deal, if it comes to fruition, is cutting energy costs after the Fukushima disaster.

Beyond a potential pipeline, Russia and Japan have agreed to "strengthen the bilateral dialogue in a bid to expand cooperation in the fields of security and defense amid the rapidly changing security environment in the Asia-Pacific region," according to a March 2014 *Asia Pacific Bulletin* report published by the East-West Center and written by Stephen Blank, senior fellow at the American Foreign Policy Council.

As a show of faith and eagerness to work with Japan, Russia has promised not to take sides in the Japan-China dispute over the Senkaku/Diaoyu Islands. In addition, the more diverse Moscow makes its Pacific partnerships, the less it feels beholden to one superpower in the region, say some analysts.

"Putin's greatest foreign policy challenge in the years ahead will likely be managing relations with his rapidly rising neighbor to the East," Kuchins said in his report, though adding that Sino-Russian relations are better now than any time in recent history. "Just as Russia is wary of Chinese encroachment on its most valuable sovereign domain, hydrocarbon supplies, Russia is acutely concerned about becoming overleveraged to China more broadly in regional relations if not global ones. Consequently, we are seeing increasing signs of efforts by Moscow to diversify its portfolio of Asian partners, especially with Japan, South Korea, and, most recently, Vietnam."

Russia and Vietnam have begun discussing a joint venture to provide maintenance for both civilian and military ships.

A Vietnamese ambassador in Moscow has even pledged to give Russia priority access to Vietnam's military port of Cam Ranh Bay, the news website WantChinaTimes.com reported in June 2014. The report called Vietnam's move a measure to elicit Russia's support in Vietnam's ongoing territorial dispute against China in the South China Sea.

- 1. North Korean soldiers march after a ceremony to mark the reopening of a railway link between Russia and North Korea at North Korea's Port of Rajin in September 2013.
- 2. Russian President Vladimir Putin, right, and Russian Defense Minister Sergei Shoigu inspect the country's Army and Navy military exercise in the Pacific Ocean in July 2013.



Speaking with Chinese media, Putin has called China "Russia's reliable friend," according to a May 2014 report by Military.com. "It would be no exaggeration if I said that the cooperation between our two countries is at its highest level in history," Putin said, according to the site.

Preceding the deal on natural gas, the two countries participated in a Joint Sea-2014 military exercise in the East China Sea. China's defense minister told The Diplomat in May 2014 that the drills were regular exercises between the two countries' navies "to deepen practical cooperation between the two militaries, to raise the ability to jointly deal with maritime security threats."

The strong bilateral workings between Russia and China come as little surprise to those who have studied their relationship since President Xi Jinping took over the Chinese Communist Party in November 2012. His first official foreign trip as China's president was to Russia, and he has returned several times since. (In terms of foreign military sales, Russia and India have had a longstanding relationship. India has purchased Russian military equipment since the 1950s).

Skeptics say the geopolitical alliance between Russia and China may not last.

Dmitri Simes, president of the Center for the National



Interest, drew a comparison to predictions before World War II by commentators that the alliance between the communist Soviet Union and Nazi Germany would collapse.

"And they were right. The [Adolf] Hitler-[Joseph] Stalin alliance only lasted a couple years," Simes told the website BreakingDefense.com in June 2014 before adding this warning: "But in that short time, Germany conquered Poland and occupied France and created an entirely different geopolitical reality."

Even a short-term Sino-Russian alliance could cause "huge problems" if mishandled, Simes said.

Russia and China were the second and third largest military spenders after the U.S. and made substantial increases between 2012 and 2013, more than doubling outlays from a decade ago, according to a Stockholm International Peace Research Institute (SIPRI) report published in April 2014. Military spending globally totaled U.S. \$1.75 trillion in 2013, a decrease of

about 2 percent in real dollars from the previous year, according to the report. (The report attributed the drop to U.S. military budget cuts and reductions in U.S. operations in Iraq and Afghanistan.)

Overall, military spending in Asia and Oceania rose by 3.6 percent in 2013, totaling U.S. \$407 billion, according to SIPRI. Territorial disputes with China have driven military spending increases in countries such as the Philippines and Vietnam, the report said.

For its part on the military spending campaign front, Russia plans to expand its permanent military presence outside its borders to include bases in Vietnam and Singapore.

"The talks are underway, and we are close to signing the relevant documents," Russian Defense Minister Sergei Shoigu told Russian news agency Ria Novosti in February 2014.

Negotiations also included visits to ports across Asia and in other regions to discuss opening refueling



AFP/GETTY IMAGES

sites for Russian strategic bombers on patrol, Ria Novosti reported. Domestically, Russia announced plans in 2013 to add 100 defense infrastructure facilities across the country with more than 300 garrison towns to be built by 2016, according to Ria Novosti.

Elsewhere in the Indo-Asia-Pacific region, Russia is looking to collaborate with law enforcement in Malaysia and the Philippines to combat transnational crime and terrorism.

Russian officials announced their desire to work more closely with police forces of the Association of Southeast Asian Nations during the organization's Chiefs of Police Conference in Manila in May 2014. They are negotiating an agreement to also cooperate on cracking down on cyber crime, child pornography, and drug and human trafficking.

#### **JUGGLING ALLIANCES**

Some onlookers may wonder how long Russia can keep up its balancing act between China and Japan. On

one hand, it's forging forward with Chinese agreements. On the other, Russia carefully navigates sensitive issues with Japan where China is concerned.

Ministers of defense and foreign affairs from Japan and Russia met in November 2013 to address maritime security, including counterterrorism and anti-piracy operations. During the "twoplus-two" meeting, the countries also agreed to establish a bilateral conference on cyber security.

"By deepening cooperation in many areas, including security, Japan and Russia will contribute to peace and stability in the region," Japanese Foreign Minister Fumio Kishida told reporters, according to The *7apan Times* newspaper.

The Russian and Japanese ministers said their countermeasures weren't aimed at any specific country, but some experts argue their alliance creates a framework to contain China's growing military presence, The Japan Times reported.

Not to be left out of the conversation, North Korea recently made headlines with the June 2014 announcement to begin bilateral transactions in the Russian ruble with its northern neighbor. The deal hopes to boost trade turnover between Russia and North Korea to U.S. \$1 billion by 2020, according to Ria Novosti. Moscow agreed in May 2014 to forgive U.S. \$10.94 billion of Pyongyang's Soviet debt, with the remaining U.S. \$1.09 billion to be paid in installments over the next two decades, Ria Novosti reported.

Putin's plan at the moment is to "stake an early claim for Russia in a new world order, where the concert of great powers is presumed to be more Asian and less European," according to a July 2013 report in Foreign Affairs titled "Why Russia is Looking East."

Does his plan, however, have staying power? Time will soon tell whether Russia turns out to be a credible player in the region — or if Putin's pivot promises become policy or remain all talk. □











YEB SANO STRUGGLED AS HE SPOKE TO DELEGATES DURING THE WARSAW CLIMATE CHANGE CONFERENCE IN NOVEMBER 2013 — NOT BECAUSE HE LACKED A MESSAGE — BUT BECAUSE THE IMAGES OF A SUPERTYPHOON THAT RIPPED THROUGH HIS HOMETOWN REMAINED FRESH IN HIS HEART.

"I struggle to find words even for the images that we see from the news coverage. I struggle to find words to describe how I feel about the losses and damages we have suffered from this cataclysm," Sano, lead negotiator for the Philippines, said about Typhoon Yolanda (known internationally as Haiyan) during the United Nations talks on climate change.

He called the devastating experience one of "madness" as he made an impassioned plea for countries to allocate resources for mitigating the wrath of increasingly intense weather phenomena.

"To anyone who continues to deny the reality that is climate change, I dare you to get off your ivory tower and away from the comfort of your armchair. I dare you to go to the islands of the Pacific, the islands of the Caribbean and the islands of the Indian Ocean and see the impacts of rising sea levels; to the mountainous regions of the Himalayas and the Andes to see communities confronting glacial floods; to the Arctic where communities grapple with the fast dwindling polar ice caps; to the large deltas of the Mekong, the Ganges, the Amazon and the Nile where lives and livelihoods are drowned; to the hills of Central America that confront similar monstrous hurricanes; to the vast savannas of Africa where climate change has likewise become a matter of life and death as food and water becomes scarce," Sano continued. "Not to forget the massive hurricanes in the Gulf of Mexico and the eastern seaboard of North America. And if that is not enough, you may want to pay a visit to the Philippines right now."

Should such pleas go ignored, rising sea levels could displace 3 million people living along the Ganges-Brahmaputra-Meghna Delta in Bangladesh and another 7 million people fleeing the Mekong Delta in Vietnam by 2050, according to the U.N. Intergovernmental Panel on Climate Change. The panel also predicts that the South Pacific nations of the Solomon Islands, Micronesia, Tuvalu and the Maldives could experience a 1-meter rise in sea level — most of them sit just 2 meters above sea level now.

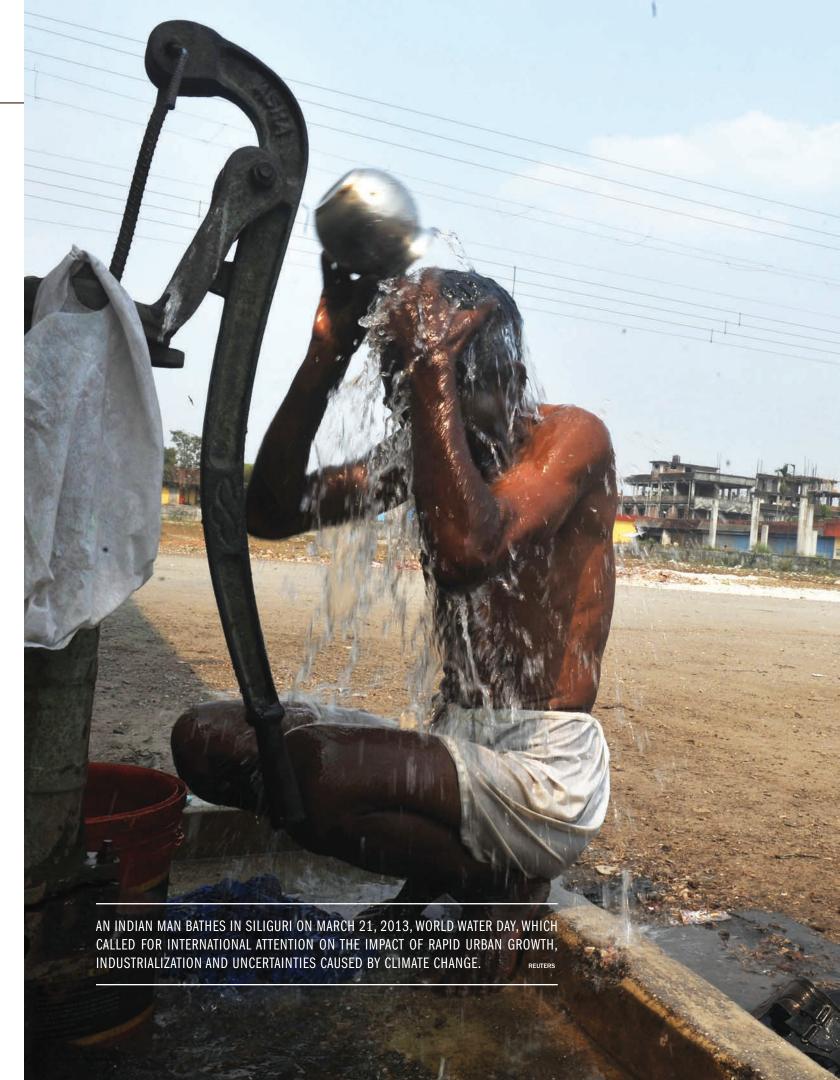
"We are already on the path to climate change and a growing range of related health effects," Bettina Menne, program manager for Climate Change, Sustainable Environment and Green Health at the World Health Organization/ Europe, said in June 2014. "However, we can still decide the future we want for our children — now is the time for action in ... creating a more sustainable and equal world."

Debate continues on whether climate change actually exists. Meanwhile, the calls for action by those who believe in its validity have been heard.

Since 2009, Association of Southeast Asian Nations (ASEAN) member states have worked on a blueprint aimed at addressing climate change impacts. ASEAN's focus has been on conducting regional policy and scientific studies as well as promoting public awareness and advocating human health protection from potential climate change impacts.

International military leaders have also pooled their knowledge on the topic. In 2007, the Center for Naval Analyses (CNA) Military Advisory Board published a study on climate change and national security that shared the insight of retired generals and admirals. The group released an update to that report in May 2014 that included a foreword by former U.S. Secretary of Homeland Security Michael Chertoff and former U.S. Secretary of Defense Leon Panetta.

"Projected climate change is a complex multi-decade challenge. Without action to build resilience, it will increase security risks over much of the planet. It will not only





increase threats to developing nations in resourcechallenged parts of the world, but it will also test the security of nations with robust capability," Chertoff and Panetta wrote in CNA's 2014 report, titled "National Security and the Accelerating Risks of Climate Change."

#### MILITARY RESPONSE

Population booms in coastal regions exacerbate the stresses placed on first responders when disaster strikes. The capacity of emergency services doesn't always keep pace with increased demand resulting from population growth.

Most of the world's population growth in the past decade has occurred in areas already challenged with maintaining sufficient water and food supplies, according to the CNA. Less than adequate critical infrastructure in these communities compounds problems when evacuations are needed or when emergency crews and military personnel need to get into a community to respond to an event.

"The projected impacts of climate change will strain our military forces in the coming decades," according to the CNA report. "More forces will be called on to respond in the wake of extreme weather events at home and abroad, limiting their ability to respond to other contingencies. Projected climate change will make training more difficult, while at the same time, putting at greater risk critical military logistics, transportation systems, and infrastructure, both on and off base."

In some cases, extreme heat is damaging national transportation infrastructure, including roads, railways and airports — all critical

# COLLABORATION KEY TO COPING WITH CLIMATE CHANGE

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FORUM STAFF

ore than 50 percent of residents in the Indo Asia Pacific are expected to live in or near an urban city by 2030 — and an Asian Development Bank (ADB) report predicts they will be among the least prepared to

combat climate change. These pockets of communities may contain high numbers of low-income families living in areas with few public services in regions prone to climate-change effects, such as overflowing riverbanks.

To improve the resiliency of such at-risk communities, the ADB, the government of the United Kingdom and the Rockefeller Foundation have teamed up to help these fast-growing cities protect themselves against potential negative impacts of climate change.

"The region's cities are going through an unprecedented population boom, and their poorest citizens are in the front line of an increase in extreme floods, sea level rises and other climate change-linked events," said Gil-Hong Kim, director of the Sustainable Infrastructure Division in the Department of Regional and Sustainable Development at ADB. "This innovative partnership brings together a private foundation, a bilateral organization and [the] ADB — a multilateral development bank — to leverage and scale up solutions to protect some of the world's most vulnerable urban communities."

Bangladesh, India, Indonesia, Pakistan, the Philippines and Vietnam were among the first six countries announced in November 2013 to be selected to benefit from the program, "Managing Climate Risks for the Urban Poor." The agenda calls for incorporating climate proofing and thinking into city plans, providing technical assistance for preparing climate-resistant infrastructure and exchanging best practices on urban climate change, according to the ADB.

In total, 25 infrastructure projects and other resiliency measures are planned in the target cities by 2021, paid for through U.S. \$1 billion in investments from public, private and government sources.

In addition to this effort, the ADB is actively engaged in other climate-proofing and resiliency programs throughout the Indo Asia Pacific. The following represents a sampling of the bank's recent endeavors.

■ A U.S. \$2 million grant from the ADB will help Cambodia strengthen policies and institutions to enable the government to address disaster risks more effectively. Financed by Japan through the Japan Fund for Poverty Reduction, the grant pays for Cambodia to "develop sound strategies, guidelines, standard operating procedures and training for disaster risk management at the national and subnational level," according to Eric Sidgwick, ADB's

country director for Cambodia. The project, slated to last from July 2014 through June 2016, will integrate disaster response into national plans and create a unified strategy for disaster risk management across government sectors. "Cambodia experiences drought and flooding that affect a significant portion of its poor population every year. In the past five years, such disasters have caused hundreds of human casualties, widespread damage to public infrastructure and millions of dollars in economic losses," according to the ADB.

- Mainstreaming climate change adaptations has gotten a U.S. \$23.1 million boost in Tonga through an ADB Climate Resilience Sector Project grant. The initiative will provide smaller grants for communities to implement climate change adaptation and risk reduction programs to include preparedness education. The government of Tonga also looks to climate-proof infrastructure. The ADB hopes to use Tonga's sustainable financing program of issuing smaller grants for community projects as a model for other Pacific countries.
- The Philippines has been ranked highest in the world for its vulnerability to tropical cyclones and third for its risks for floods and droughts, according to the ADB. In October 2013, the ADB announced a U.S. \$1.8 million technical assistance program paid for through the Japan Fund for Poverty Reduction to help local Philippine governments better manage several watersheds. Three watersheds the Marikina River Basin, Camarines Sur and Davao Oriental will be evaluated for improvements in areas of resiliency to climate change, according to the ADB.
- A U.S. \$23.5 million Strategic Climate Fund grant is helping residents of Nepal maintain their water supply for home and agricultural use during the dry season, the ADB announced in September 2013. "This is the first large-scale intervention by ADB in watershed management in Nepal," said Cindy Malvicini, senior water resources specialist with the ADB's South Asia Department. The project — expected to last through 2020 — focuses on watersheds in six Nepalese districts in the Far-Western Development Region: Achham, Baitaidi, Bajhang, Bajura, Dadeldhura and Doti and targets 45,000 households. It's also pushing education on water conservation, microirrigation methods and maintaining moisture in soil for agricultural development.

### PROTECTING ASIA'S

# FOOD SUPPLY

**REUTERS** 

sia's governments scrambled in May 2014 to head off the potential impact of a weather phenomenon that in the past has driven food prices to levels that sparked social unrest.

With lessons learned, Indonesia's government is giving farmers calendars with early planting dates. Malaysia and the Philippines are working to manage water supplies, and India has bolstered its food stockpiles.

They are aiming to reduce the impact of the so-called El Niño, a weather pattern that can bring drought to Australia, Southeast Asia and India.

Drought linked to a 2007 El Niño sparked a surge in food prices, tripling the cost of rice to a record of more than U.S. \$1,000 a ton in 2008 that sparked riots in countries as far afield as Egypt, Cameroon and Haiti. The last El Niño in 2009 brought the worst drought in nearly four decades to India, cutting rice output in the world's No. 2 producer by 10 million tons and boosting global sugar prices to the highest in nearly 30 years.



A farmer sells newly harvested corn and fruit on the outskirts of Hanoi, Vietnam. AFP/GETTY IMAGES

A majority of weather forecasting models indicate an El Niño is likely to develop around the middle of 2014, according to the U.N. weather agency.

"Traditionally, the countries that are affected most are Indonesia and the Philippines," said David Dawes, a senior economist at the U.N.'s Food and Agriculture Organization in Bangkok. "Certainly for rice because of a combination of two things: It's their production most likely to be affected, and their importers would have to go onto a world market with potentially rising prices."

A dry spell has already hit the Cagayan Valley in the northern Philippines, the Agriculture Ministry said, with major dams at critical levels in what is one of the biggest riceproducing regions.

The government said it has begun cloud seeding and the release of drought-tolerant varieties of rice. "We are putting in

place policy initiatives, water management and conservation measures, as well as modern and innovative farming and fishery technologies to somehow soften the effects of this dry weather," Agriculture Secretary Proceso Alcala said.

Strong typhoons often follow an El Niño weather event in the Philippines, which could mean further crop losses, said Mary Ann Lucille Sering, secretary of the Philippine Climate Change Commission.

"Rice imports will be an option for us," Sering said. The country is already the region's No. 2 rice importer after China.

In Indonesia, the Agriculture Ministry has instructed farming advisors, paid by the government, to assist farmers with modern techniques, to bring forward planting of certain crops. "Hopefully, with this action, we can still grow crops and minimize the risk of drought," said Tunggul Iman Panudju, director of land development and management at the Agriculture Ministry. He added that El Niño may provide opportunities to plant rice on land previously designated as swamp.

Farmers could expect to receive calendars detailing specific crop planting dates, Deputy Agriculture Minister Rusman Heriawan told The Jakarta Post newspaper, adding that the Public Works Ministry was readying supporting equipment such as water pumps.

Indonesian farmers are being trained in ways to adapt to changing weather patterns, and depending on the province, urged to plant alternative crops to rice that can cope better with dry conditions, the head of Indonesia's weather agency told Reuters.

Malaysia's government has formed a water crisis committee, headed by the deputy prime minister, that will work with various ministries to monitor any El Niño impact. The government is also encouraging industry to use underground or recycled water and increase the capacity of water storage tanks.

A major difference from the last El Niño in 2009 is that food stockpiles have risen, which should help mitigate the impact on prices.

India is sitting on a mound of staple foods such as rice, wheat and sugar, largely thanks to bumper harvests in the last few years, while Thailand is in the process of selling down rice stocks built up during an ill-fated subsidy scheme.

Global rice stockpiles have risen by 15 million tons since 2009 to stand at 109 million tons now, according to the U.S. Department of Agriculture, with the bulk of the increase in India, Thailand and China.

"If the monsoon rains fail to meet expectations, we are prepared to release more rice and wheat from government stocks into the open market to ensure prices do not go up," said an Indian Food Ministry official, who did not want to be identified because he is not authorized to speak to the media.

India's central government will also provide seed varieties that can cope better with dry conditions and funding to state governments when needed, he added.







Continued from page 44

pathways for the delivery of humanitarian aid and disaster relief. Military experts recommend drafting strategic planning documents to expedite response, to include alternate routes and plans when primary infrastructures are inaccessible.

"The world has also become more politically complex and economically and financially interdependent. We believe it is no longer adequate to think of the projected climate impacts to any one region of the world in isolation," the CNA report

stated. "Climate change impacts transcend international borders and geographic areas of responsibility."

Among the destabilizing factors outlined by the CNA that heighten instability and threaten national security:

- Reduced access to fresh water: Changes in rainfall, snowfall, snowmelt and glacial melt have significant effects on freshwater supplies.
- Impaired food production: Increased desertification, rising sea levels infiltrating agricultural land, the salinization of aquifers and drought also will lead to changes in food production. Access to vital resources primarily food and water has caused many conflicts.

Health catastrophes:
 The potential for significant spreading of the conditions ripe for vector-borne diseases, such as dengue fever and malaria, and heat-related deaths in vulnerable populations, remains a major concern.

 Land loss and flooding leading to population displacement: About two-thirds of the world's population lives near coastlines. Most of the economically important major rivers and river deltas in the world — the Niger, the Mekong, the Yangtze, the Ganges, the Nile and the Mississippi — are densely populated along their banks.

Through a rebalancing of force capability across the Indo Asia Pacific, the U.S. military is able to work closer with regional partners to respond to these increased weather-related disasters and in many cases, collaborate on mitigation projects. "When it comes to thinking through long-term global challenges, none are more qualified than our most senior military leaders. Not only do they have decades of experience managing risk and responding to conflict on the battlefield, but they are also experts in geopolitical analysis and long-range strategic planning," Chertoff and Panetta wrote. "Military leaders typically look at challenges with imperfect or conflicting information. Despite not having 100 percent certainty, they weigh the consequences of

various courses of action — including the consequences of no action — and make informed decisions based on their experience and risk forbearance."

"The MAB [Military Advisory Board] believes that concerns over the potential impacts of our changing climate can offer the potential to bring diverse stakeholders and communities together to devise effective solutions," the board wrote in its CNA report summary. "Cooperation will be especially important in an era in which military budgets, like many others across government, will be severely constrained."

Therefore, the report suggested, future military planning must also account for limitations on readiness associated with climate changes and the influx of demands for

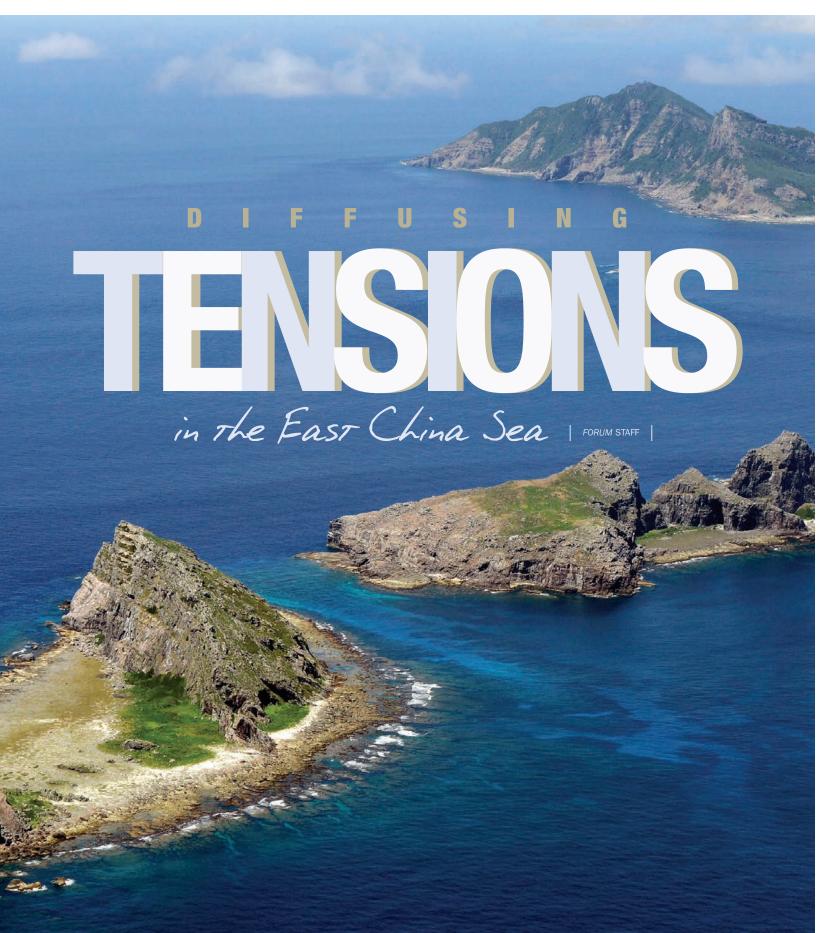
military support due to climate and weather-related conditions and events.

Sano, the Philippine delegate at the U.N. climate change talks in November 2013, urged the international community to rally around the cause by implementing changes now. Though his heart remained heavy and his relatives remained missing as he spoke, Sano ended his remarks with optimism and a spirit to change the course.

"We can take drastic action now to ensure that we prevent a future where supertyphoons are a way of life," Sano said, "because we refuse, as a nation, to accept a future where supertyphoons like Haiyan become a fact of life. We refuse to accept that running away from storms, evacuating our families, suffering the devastation and misery, [and] having to count our dead become a way of life. We simply refuse to." □



Indian Army Soldiers work to repair an embankment that was washed away due to heavy flooding of the Ganges River in Allahabad in August 2013. AFP/GETTY IMAGES



# CHINA AND JAPAN HAVE A LONG HISTORY OF TERRITORIAL DISPUTES IN THE REGION, BUT REOPENING DIALOGUE COULD IMPROVE RELATIONS AND ENCOURAGE COOPERATION

Twice in May 2014 Chinese jet fighters flew within 50 meters of Japanese surveillance planes in disputed territory over the East China Sea. Both nations contend they control the air defense zone where the near collisions occurred above the Senkaku Islands — known as the Diaoyu Islands in China — which lie between Taiwan and Okinawa. In air defense identification zones (ADIZ) that border sovereign airspace, foreign aircraft are required to identify themselves and provide flight plans.

In December 2013, China announced it had extended its ADIZ in the East China Sea to include the islands and overlap with Japan's existing air defense zone, a move that was generally met with defiance by Japan.

The midair incidents in the ADIZ seemed to represent an escalation in the intensity of recent tussles in a long-running maritime dispute between China and Japan. The enmity has roots in the Sino-Japanese War as well as World War II. Sovereignty issues, economic development and national pride also factor in the politics of the East China Sea. For these reasons, the ongoing dispute strains relations with neighboring countries, and impacts the United States' rebalance to the Pacific and its bilateral agreements with its allies, specifically Japan. Experts say it is unlikely China and Japan can reach a treaty-based resolution in the near future, but steps can be taken to forge cooperation and ease tensions.

Both nations have previously reached agreements on marine research and oil drilling in the disputed

Uotsuri Island, top, Minamikojima, bottom, and Kitakojima are three of the five disputed islands that China and Japan both claim. Japan has criticized China for extending its Air Defense Identification Zone over the islands. territories. "This is a story of dispute management and cooperation," James Manicom, author of the book, Bridging Troubled Waters: China, Japan, and Maritime Order in the East China Sea, said at the East-West Center in Washington, D.C., in May 2014. "Over the course of the history, you see these countries manage the tensions in a pretty decent way."

Reaching an accord will be challenging. "It's a dangerous dispute

because both China and Japan seem committed to a high level of activity" near the Senkaku/Diaoyu Islands, Denny Roy, senior fellow with the East-West Center in Honolulu, Hawaii, told *FORUM*.

#### **ROOTS OF THE DISPUTE**

China's maritime claims in the East China Sea date back to the 15th century. "Deep, deep in history, China was the great power of the region and was accustomed to thinking that the East China Sea and surrounding areas were in their sphere of influence," Roy said. Today China believes it remains the dominant power in the region, he added.

Treaties signed in the aftermath of two wars clouded China's and Japan's territorial claims. At the end of the Sino-Japanese War, fought primarily over control of Korea, China ceded territory, including Taiwan, to Japan, but the Sino-Japanese War treaty "does not mention the Diaoyu/Senkaku Islands, which were not discussed during negotiations," according to a December 2013 Council on Foreign Relations report titled "China's Maritime Disputes." Japan claims to have owned the territory since 1895, when it annexed the islands. China backs up its claim to the islands "with documents dating back to the Ming Dynasty (1368 to 1644)," the German Der Spiegel magazine reported in September 2012. After World War II, Japan renounced all claims to Korea, Taiwan and other territories in the East China Sea and South China Sea. The Senkaku/Diaoyu Islands again were not mentioned in the treaty that ended World War II, although the nations reached "a tacit understanding that Japan would administer them as a part of Okinawa Prefecture," the report said. China's interpretation of the treaty is that Japan ceded all territory it gained through war; Japan, however, contends it only ceded territory explicitly identified in the treaty and that the sovereignty of the Senkaku/ Diaoyu Islands was transferred to them.

The dispute flared up in this century in September 2012 when the Japanese government purchased the islands for U.S. \$30 million from a Japanese family that ostensibly owned them. China claimed the sale was invalid and that "the Japanese side stole the islands from China" through the sale, *The New York Times* newspaper reported in September 2012. Since then, both nations' Coast Guards have engaged in similar games of intimidation in waters near the disputed islands, with Chinese military vessels moving into or close to the Japanese territorial claims almost weekly. Other such incidents have occurred in the skies as well.

# CHINA DISPATCHES OIL RIGS TO SOUTH CHINA SEA

AGENCE FRANCE-PRESSE

Relations between China and Vietnam deteriorated in May 2014 when Beijing moved a deep-sea oil rig into disputed waters in the South China Sea, sparking riots and protests in Vietnam and accusations from both sides of ramming by the other's vessels. China withdrew its Haiyang Shiyou 981 oil rig in July 2014.

The energy company behind the project said that it had finished explorations near the Paracel Islands, which are claimed by Vietnam. "The mission has been completed smoothly as planned, and oil and gas has been discovered," the China National Petroleum Corp. posted on its website in July 2014. Beijing and Hanoi are embroiled in a bitter territorial dispute over claims in the area; Brunei, Malaysia, the Philippines and Taiwan also have claims elsewhere in the resource-rich South China Sea.

Anti-Chinese riots sparked by Beijing's dispatch of the deep-sea rig claimed three Chinese lives in Vietnam in May 2014, according to Hanoi. Beijing says four Chinese citizens died. Beijing claimed Vietnamese ships have rammed its vessels more than 1,500 times in May 2014. Vietnam, meanwhile, released footage showing a large Chinese ship near the Haiyang Shiyou 981 rig chasing and ramming one of its fishing boats, which then sank.

China deployed four additional oil rigs in June 2014 to conduct drilling operations for two months, the China Maritime Safety Administration said in a statement. The rigs were sent east of Hong Kong and far from any area claimed by Vietnam. Chinese Foreign Ministry spokeswoman Hua Chunying said that the rigs' operations would occur "in coastal waters of China's Guangdong and Hainan provinces" at the southern tip of the country. "I think if anyone wants to do something at the doorstep of their house, others should not read too much into that," she said, describing the rigs' activities as "normal operations."

Gen. Nguyen Quang Dam of Vietnam's Marine Police told the country's state-run *Thanh Nien* newspaper that one of the new rigs was heading for a position "in the same area where China installed some rigs around five years ago, which are still operating now."

In a report on the dispatch, China's state-run Global Times newspaper noted that about 90 percent of China's foreign trade is conducted by sea. "China must not only have the power to safeguard these waters but also develop the maritime economy," the newspaper said.

Sovereignty issues are largely driving the longterm dispute, but each nation's motivations may be evolving. As China's economy and military expands, the nation also seeks more sources of energy, Roy said. The U.S. Energy Information Administration estimates there are 60 million to 100 million barrels of oil and at least 28 billion cubic meters of natural gas reserves in the East China Sea. China's need for hydrocarbons has also raised tensions with its neighbors in the South China Sea (see sidebar). In all, Brunei, China, Japan, Malaysia, the Philippines, Taiwan and Vietnam have overlapping claims to territory in the East and South China Seas. Each country claims the waters and islands in those regions — where U.S. \$5.3 trillion of global trade flows — fall within its borders, the Council on Foreign Relations said. "Everybody is interested in making territorial claims because there are valuable resources in the seabed," Roy said.

#### **REACHING AN ACCORD**

China acknowledges there is a dispute, but Japan does not, Roy said. "Beijing undoubtedly hopes to stabilize, and if possible, improve ties with Japan, but only on its own terms," Bonnie Glaser of the Center for Strategic and International Studies wrote in a report, "People's Republic of China Maritime Disputes," presented to the U.S. House Armed Services Subcommittee on Seapower and Projection Forces in January 2014. "China continues to demand that Tokyo acknowledge that a territorial dispute exists before the two countries can resume normal political and military ties, including consultations on implementing conflict-avoidance measures."

Japan's stance could be preventing both sides from reaching an agreement, Roy said. "If Japan wanted to



A Vietnamese fishing boat, reportedly sunk by a Chinese ship, is lifted out of the water at a shipyard in Da Nang, Vietnam. Tensions flared between Vietnam and China in May 2014 when China deployed an oil rig near islands in the South China Sea that both countries claim. AFP/GETTY IMAGES



Japanese Prime Minister Shinzo Abe, center, inspects a Japan Coast Guard vessel near the Okinawan island of Ishigaki in the East China Sea in July 2013. The Coast Guard patrols the waters surrounding the Senkaku/Diaoyu Islands, which are claimed by Japan and China.

A Japan Coast Guard vessel sails in front of Uotsuri Island, one of the five disputed Senkaku/Diaoyu Islands in the East China Sea, in August 2013. Japan's and China's dispute over ownership of the islands goes back hundreds of years.

make a concession that there's a dispute, that could bring China to the table," he said. "The aggressive Chinese patrolling [of the East China Sea] is for Japan to make that concession."

In May 2014, U.S. Pacific Commander Adm. Samuel J. Locklear III said dialogue between the countries would "ensure the disputes would not lead to armed conflict," Agence France-Presse news service reported in May 2014.

The dialogue could start with China and Japan establishing Incidents at Sea (INCSEA) agreements. That would "structure their interactions and prevent incidents from escalating to conflict" and create a "maritime communication mechanism to serve as a hotline for better communication between their respective forces," Jeffrey Hornung, associate professor at the Asia-Pacific Center for Security Studies, wrote in a June 2014 report, "The East China Sea Boils: China and Japan's Dangerous Dance."

"An INCSEA would lay out rules of the road for both countries," Hornung said. The agreement could include a set distance for vessels and aircraft to maintain while conducting surveillance, agreedupon signals for ships to use when maneuvering near each other and an outline of communication procedures between the two militaries.

An INCSEA between countries locked in border disputes has a precedent. During the Cold War, Japan and the former Soviet Union had a similar mechanism in place that minimized "the likelihood of mistakes and accidents by ensuring Moscow and Tokyo knew exactly what their pilots were doing in the skies," Sheila Smith, senior fellow at the

Council of Foreign Relations, wrote in a February 2014 report, "An East China Sea Update." "Beijing and Tokyo do not have the benefit of that conversation, and in fact, Beijing claims it is simply not interested in beginning one."

Historically, provocations and heightened tensions between China and Japan have been followed by agreements, said Manicom, now a research fellow at Canada's Centre for International Governance Innovation. In 2008, Japan riled China with plans to drill for oil in the East China Sea. After 11 rounds of talks, both countries reached an agreement on an economic development zone in the disputed territory, Manicom said. "This is a dispute that's been managed, and has been managed since its inception, with an informal understanding of what's appropriate and what's not. These two countries have actually been able to move the issues aside on that basis."

#### **LINGERING TENSIONS**

Although tensions persist and ripple across the Indo-Asia-Pacific region, experts say armed conflict over territory in the East China Sea remains unlikely. "The question of sovereignty over the islands will not be answered any time soon," Hornung wrote in a February 2013 report, "How to Steady the Senkaku Situation." Neither country wants conflict, "nor does any other country, given that the Chinese and Japanese economies stand as the region's two largest," he said. "It is in China's and Japane's shared interest to move quickly toward an agreement that will avoid further escalation."



PATHWAYS

The U.S. Army Pacific's innovative employment of troops in the Indo Asia Pacific bolsters engagement and collaboration with allies while increasing the U.S. Pacific Command's ability to aid in

disaster relief and respond to regional crises FORUM STAFF A Soldier takes a defensive position during a June 2014 training exercise at the Fort Irwin National Training Center in California. STAFF SGT. BRYAN DOMINIQUE/U.S.ARMY



convoy of armored vehicles rumbled across the desert toward a town overtaken by enemy forces. Inside the eight-wheeled Stryker leading the charge, troops steeled themselves for the battle ahead. One Soldier manned the armored vehicle's

.50-caliber machine gun; another monitored communications equipment. Two Soldiers in the back peered through hatches in the roof, rifles ready. Clouds of fine-grain desert sand, suspended in streams of late-afternoon sunlight, poured through the open hatches and covered everything inside the cramped vehicle with a coat of dust.



Members of the 2nd Stryker Brigade Combat Team unload equipment and prepare camp after participating in a simulated battle that lasted 12 hours. The exercise at the Fort Irwin National Training Center in California prepared troops for the Pacific Pathways mission. FORUM STAFF

Suddenly, gunfire burst in the distance. Lt. Col. Jeff Bryson, commander of the 4th Battalion, 23rd Infantry Regiment of the 2nd Stryker Brigade Combat Team, scanned a computer display to discern the position of opposing forces and to see if the gunfire came from the surrounding valley or the mountains beyond. "Between here and there, there are a lot of bad guys," Lt. Col. Bryson told *FORUM* in June 2014 during the force-onforce combat scenario at the Fort Irwin National Training Center (NTC) in California. The drill was part of a two-week exercise in the Mojave Desert to prepare Soldiers for Pacific Pathways, the U.S. Army's initiative to forward-deploy small units in the Indo Asia Pacific to quickly respond to natural disasters and regional threats. The desert training "allows us to push ourselves to complete exhaustion, to push us until we break, and that's fantastic," Lt. Col. Bryson said.

The U.S. Army engages in annual bilateral exercises such as Keris Strike in Malaysia, Orient Shield in Japan and Garuda Shield in Indonesia.

Pacific Pathways will use those exercises to keep a rotating force of about 550 Soldiers in the region, sending them from one exercise to the next, instead of sending them home after the training ends. "Pacific Pathways is a new approach to how we commit ourselves to exercises that already existed," Gen. Vincent Brooks, U.S. Army Pacific commander, said in May 2014 at the Land Forces of the Pacific symposium (LANPAC) in Honolulu, Hawaii. "So it's how we go to those exercises and who we choose to send to those exercises."

The initiative overcomes what Gen. Brooks called "the tyranny of distance," the challenge of deploying Soldiers quickly across the vast Indo-Asia-Pacific region. It is unlikely the U.S. Army will fight a land war anywhere in Asia other than the Korean Peninsula, so Gen. Brooks wants Soldiers to "more quickly and effectively respond to small conflicts, isolated acts of aggression and natural disasters," according to a December 2013 report in *The Washington Post*. "Forces that are already in motion have an advantage in responding," Gen. Brooks told the newspaper.

Forces on the Pacific Pathways mission can be diverted to respond to natural disasters or regional threats and assist other militaries. "If your brigade is on the way to Malaysia and a typhoon hits the Philippines, you can take a left turn and there you are," Lt. Gen. Robert B. Brown, commander of the 1st Corps, told *The Washington Post* in December 2013.

#### PACIFIC REBALANCE

Pacific Pathways ties into the U.S. rebalance to the Indo-Asia-Pacific region, Gen. Brooks said at LANPAC. "Security remains the enabling companion of economy. Economies affect people where they live. Therefore, securing the world's largest populations from external and internal threats calls for increasingly professional land forces," he said. "The bilateral relationships we build with our allies and partners throughout the region are absolutely key to mutual defense."

Battalions from the 2nd Stryker Brigade, stationed at Joint Base Lewis-McChord near Tacoma, Washington, were the first to deploy for Pacific Pathways in late September 2014. Lt. Col. Bryson's battalion — which can deploy anywhere in the world within 96 hours — stayed on U.S. soil to conduct a bilateral military exercise with Japan called Rising Thunder, while the brigade's 2nd Battalion, 1st Infantry Regiment went to Indonesia, the first stop for Pacific Pathways. The mission also includes exercises in Malaysia and Japan. "We took it as an honor to be selected," Lt. Col. Michael J. Trotter, battalion commander, told *FORUM* in July 2014. "We're excited

to participate with the armies in Indonesia and Japan, and we're excited to learn from our partners."

Although the U.S. Army has troops stationed in South Korea and Hawaii, its presence in the past decade was focused on counterinsurgency (COIN) and stability operations in Iraq and Afghanistan, Lt. Col. Joshua Bookout, operations officer for 2nd Stryker Brigade, told FORUM at the NTC in June 2014. Troops are scheduled to leave Afghanistan in 2016, and the Army, which sent hundreds of thousands of Soldiers to Asia during World War II and the Korean and Vietnam wars, has once again focused on the Pacific. The Army's force strength "has grown to 106,000 Soldiers from about 90,000, a nearly 18 percent increase as the service rebalances in the region," The Honolulu Star-Advertiser newspaper reported in April 2014. The increase comes from the reassignment of troops to the U.S. Pacific Command from other combatant commands, Gen. Brooks said. The greatest number of those troops comes from Joint Base Lewis-McChord's 32,500 active duty Soldiers, he said.

Pacific Pathways allows the Army to return to its roots as a worldwide fighting force, Lt. Col. Bookout said. "It's less COIN-focused, and it's back to learning key warfighting skills. We have turned our eyes to the Pacific. We're regionally aligned with the Pacific. It can be for large-scale operations, it can be for COIN, it can be for humanitarian aid and disaster relief."

The new Pacific mission will strengthen relationships with militaries and partners in the Indo-Asia-Pacific region, place Soldiers closer to potential crises and increase the readiness of troops, according to the U.S. Army Pacific's "Pacific Pathways Update" in December 2013. Soldiers spend about four to six weeks in each country during an exercise.

Units "morph to adapt to the particular needs of partner nations and any given exercise," Gen. Brooks told *Stars and Stripes* in June 2014. For example, four Apache Guardian attack helicopters joined the inaugural Pacific Pathways mission after the annual Rim of the Pacific joint exercises

concluded in Hawaii in July 2014. Sending the Apaches deeper into the region "speaks of the reality of Pacific rebalance" and "speaks to the commitment the United States Army has to the joint teams and to our international partners," Gen. Brooks said.

The Army's 25th Infantry also has plans to send small teams of engineers, medical personnel and communications technicians on planes to the Indo Asia Pacific within 24 hours of a natural disaster, *The Washington Post* reported in December 2013. "We're going to be adaptable and scalable," Maj. Gen. Kurt Fuller, the former commander of the Hawaii-based 25th Infantry, told the newspaper. "And fast."

Pacific Pathways also builds rapport and communication between Army commanders in the Indo-Asia-Pacific region and the U.S. Brooks said the initiative strengthens bonds with leaders in a region that has six of the world's 10 largest armies, and a region where most of the militaries are led by Army generals, according to a December 2013 report in *The Washington Post*. "There's a shared understanding as army commanders," Gen. Brooks said.

#### **'WARRIOR STATESMEN'**

The "enemy" the Stryker brigade faced in the Mojave Desert in June 2014 was Fort Irwin's 11th Armored Cavalry Regiment, experienced in portraying opposing forces during training rotations. Familiar with the arid, unforgiving land — all 3,100 square kilometers of it — the regiment positioned tanks to block a mountain pass to the besieged town.

"They're using complex tactics," one Soldier's voice echoed through the Stryker's radio. "I can't spot these tanks," another replied. Staff Sgt. Bryan Dominique, a public affairs officer for the Stryker Brigade, observed the exercise and said the scenarios at NTC are designed to be nearly insurmountable. "Sometimes what Soldiers experience at NTC is tougher than the real world," he said.







A member of the 2nd Stryker Brigade Combat Team cleans his rifle in the back of an armored vehicle during a break in combat exercises at the Fort Irwin National Training Center.

STAFF SGT. BRYAN DOMINIQUE/ U.S.ARMY The Stryker convoy made slow progress and at one point was stalled for hours, as another allied battalion cleared a path for the armored vehicles. Apache helicopters hovered overhead as afternoon turned to evening. Soldiers in the Strykers switched to night-vision scopes, scanning the horizon and nearby

dry river beds for the enemy. Sometime after midnight, gunfire erupted around the convoy as it finally arrived at the captured town.

Dawn revealed the outcome of the prolonged, overnight battle: Allied battalions pushed the enemy back and freed the town, but there were heavy casualties. Bryson's battalion lost three Strykers; other infantry units lost hundreds of Soldiers. Bryson said the experience was invaluable, especially as the U.S. and its Army rebalances to the Pacific. "There's no right, no wrong, no good, no bad. You get to experience a combat opportunity, make mistakes and learn from them. This codifies our readiness, then projects our readiness throughout the world. The projection of that readiness is what Pacific Pathways is all about."

Soldiers selected for the Pacific Pathways mission exchange knowledge and ideas with their partners in the Asia Pacific, and in doing so, become diplomats in strengthening ties and collaboration in the region. "They're warrior statesmen," Lt. Col. Trotter said. "They have the ability to be warriors when they need to be and ambassadors when they need to be."

That skill, among others, was exhorted and honed in the harsh conditions of the NTC. When the town was freed, Soldiers quickly switched from a combat posture to humanitarian assistance. They evacuated civilian role players, administered first aid to the injured and assured "citizens" the enemy was eradicated. Meanwhile, commanders miles away in the Tactical Operations Center collaborated with personnel portraying officials from the "invaded" country to further drive out the opposing forces and secure borders.

The thousands of Soldiers who participated in the training endured daily temperatures of 40 degrees Celsius in a parched expanse with sparse vegetation and shade. They set up temporary camps in the field while strong desert winds lashed them and threatened to rip apart the tarps. They slept without tents, on sand strewn with rocks and crawling with venomous rattlesnakes and scorpions.

Bryson said the experience helped commanders and their Soldiers improve communications, standard operating procedures and supply logistics. "You got to eat. You got to get water. How do you get that out here? You can't just magic that stuff out of the desert. Our comms are stretched as far as they can break. We've stressed our systems. We've put our Soldiers in situations of uncomfortableness. That's what we're doing out here."

The extreme conditions of the Mojave Desert, with an elevation of 1,500 meters above sea level, prepared Soldiers for any climate, whether it's the tropical rain forests of Indonesia or the snow-capped mountains of Japan, said Lt. Col. Trotter, the commander of the battalion that cleared a path for Lt. Col. Bryson's Strykers during the exercise. "Some of our Soldiers were fresh out of high school, fresh out of basic [training]. This might've been the hardest thing they've ever done. Now, it doesn't matter where you put us. We've been through some rigorous environments."

The NTC served as a launching pad for Pacific Pathways, Lt. Col. Trotter said. "It was a waypoint, but an important waypoint. We're in a higher state of readiness for Pacific Pathways. We are better prepared and postured to go into the Pacific Pathways mission. We're ready to train with our partner units and learn from them, and we're more prepared to handle disaster relief. We can take on a myriad of missions."



# JOINT SPECIAL OPERATIONS TASK FORCE PHILIPPINES

# Defeating terrorists and helping communities

CAPT. CASEY A. STAHELI/U.S. ARMY/DIRECTOR OF PUBLIC AFFAIRS, JOINT SPECIAL OPERATIONS TASK FORCE-PHILIPPINES

n 2002, through close coordination with the government of the Philippines, the United States established Joint Special Operations Task Force—Philippines (JSOTF-P). Its mission: Advise and assist local Philippine Security Forces in Mindanao in combating global terrorism.

After learning the reason for incoming U.S. troops, members of the Armed Forces of the Philippines (AFP) welcomed the help and assistance. "I knew there was an earnest effort on the part of Americans to help us address terrorism," said Philippine Lt. Gen. Rustico Guerrero, commander of the Western Mindanao Command. "At the time, ASG [Abu Sayyaf Group] was thriving on Basilan, as well as other islands around Mindanao."

Guerrero first connected with JSOTF-P on the island province of Basilan in 2007, where he was a Marine brigade commander.

"During this time, we were concentrating on civil military operations," Guerrero said. "Eighty percent of our activities were engaging different stakeholders within the community. Combat was only 20 percent because we wanted to win the community through positive actions."

Many of the civil-military operations (CMO) augmented the local government's procedures and strengthened public perception about the AFP, JSOTF-P and civil leaders.





- 2. Members of the chemical, biological, radiological and nuclear explosives unit of the Armed Forces of the Philippines secure a gas mask on a mock victim during an anti-terrorist drill in Quezon City in March 2014. REUTERS
- 3. A Joint Special Operations Task Force— Philippines Soldier distributes relief goods at Guiuan Airfield in Eastern Samar province during Operation Damayan in November 2013. SPC. ANDREW ROBERTSON/U.S. ARMY

"We built several things in several areas, and the people became very appreciative because of what we did and delivered to them."

Guerrero credits much of the appreciation to JSOTF-P's instruction on leveraging information operations during CMOs.

"The use of radios was an idea that JSOTF-P gave us," said Guerrero. "They told us that many people on Sulu didn't have or watch television and that radios were how people got their information. After that, they gave us hand-cranked radios and helped us use them to our advantage."

That was only the beginning, Guerrero said. "Civil affairs teams were very eager to teach us about media engagement, broadcast and photo capabilities, and other public affairs activities."

While JSOTF-P members were working at the tactical level with AFP partners, JSOTF-P leadership was working to improve relationships and perceptions in Zamboanga City.

"Residents remembered the proliferation of prostitution and other problems that surrounded former U.S. Navy stations and military bases in the Philippines, and so many were very apprehensive about American interact with the community, military and local leaders thought opportunities were being missed and decided to bridge community relations through a trade fair."

Food and handcraft vendors were brought to Camp Navarro, giving troops the chance to taste the food, see local crafts and experience the culture, Climaco said.

"It was fun for the troops and a boon to the vendors who really appreciated the number of purchases made," said Climaco.

As the commander of Western Mindanao Command, and with troops from all over the Philippines, Guerrero said the early commanders of JSOTF-P took the right steps to understand the communities they were working in.

"A good commander is one who is culturally well aware of the area, and that's one thing I'd like to impress upon everyone, even our own [Filipino] Soldiers," said Guerrero. "There are many sensitivities in this part of the country. Though many people are Muslim, and that is a uniting factor, there are several practices and idiosyncrasies you should be aware of when dealing with local government leaders. What can be applied in Sulu cannot be applied in Mindanao. Thus, everyone must be aware of the cultural sensitivities in the area."



"In all honesty, I can say that JSOTF-P has done a lot to help our military and police operations in promoting international and global peace. Terrorists enter our locality and kill civilians, and JSOTF-P has given technical support to our troops to stop this."

- Zamboanga City Mayor Beng Climaco

troops in our locality," said Zamboanga City Mayor Beng Climaco. "There were a lot of doubtful people, and so to remove the doubts, we paired Gen. [Donald C.] Wurster together with the women's groups and youth groups of Zamboanga and organized dialogues.

"In all honesty, I can say that JSOTF-P has done a lot to help our military and police operations in promoting international and global peace. Terrorists enter our locality and kill civilians, and JSOTF-P has given technical support to our troops to stop this."

#### **Reaching to the Community**

During this time in 2002, Climaco was a city counselor who helped coordinate community outreach between residents and JSOTF-P. Besides setting up meetings, she conducted cultural sensitivity training for the first JSOTF-P members.

"I spoke about food, religion and other cultural aspects, but because most troops couldn't go out and

These kinds of events have helped the relationship over the years grow to one of mutual understanding and respect, said Climaco.

#### **Improving Lives by Improving Health**

Throughout its history, JSOTF-P has used community outreach to not only improve cultural understanding and public perception but also to enhance the life of locals and improve the skills of the AFP.

"JSOTF-P started setting up Medical Civil Action Programs and coordinating with other foundations," said Climaco. "They made a huge difference by reaching thousands of patients."

When Guerrero mentions interaction with JSOTF-P, he talks about improved medical capabilities that have been built over the years and integrated into the training of Philippine Security Forces.

"When I was commandant of the [Philippine] Marine Corps, we introduced Tactical Combat Casualty Care



[TCCC] and the Combat Life Saver [CLS] course as part of the basic training," Guerrero said. "After that had been in place for a while, we started getting feedback after combat engagements by our medical personnel and the JSOTF-P surgical teams that our personnel did first aid very well. Thus, the TCCC and CLS training we got from JSOTF-P was already bearing fruit and saving lives on the battlefield."

#### **Winning Over Critics**

Then, just as now, not everyone embraced having U.S. forces nearby. According to Climaco, a lot of the criticism comes from people outside Zamboanga. On the other hand, the mayor readily admits that at times she, too, has been a critic of JSOTF-P.

"A U.S. Embassy person once said, 'America is here to protect its own interests,' and that really opened my eyes and changed my perception," said Climaco.

Climaco, who received some of her education in the U.S., said her time in America taught her to be open, critical and to ask questions. "That's the beauty of democracy — you aren't a fence sitter; you question the system. Because of that, at times, I've been outspoken about JSOTF-P," Climaco said.

Even with occasional disagreements, Climaco has maintained a close relationship with JSOTF-P, recognizing it has a lot to offer local citizens and service members.

During a visit to Hawaii with the U.S. military, Climaco toured an Army Family Wellness Center, which promotes healthy lifestyles to improve the well-being of Soldiers and their families. The center left a huge impression on Climaco.

"After returning home I asked the JSOTF-P chaplains if they could do a program for our military chaplains on counseling," said Climaco. "Because of what I saw at the Family Wellness Center in Hawaii, we started a program that teaches crisis counseling to all the sergeants major of our unified commands."

Climaco, who is married to a retired military member, was excited to see Soldiers directly benefit from the program.

"Following the Zamboanga crisis in 2013, I asked a wounded Soldier how he was doing, and he said, 'I'm fine. I've already got counseling."

As JSOTF-P continues to work with the Philippine government and military planners on how best to continue its involvement with Philippine Security Forces, one thing is certain: Strong local relationships and community involvement will be a part of the future, much like the past.  $\square$ 

# CHAOS OF CONFLICT

The role of plans, adaptation and innovation in warfighting

FORUM STAFF



Smoke rises from the battleship USS Arizona as it sinks during the attack on Pearl Harbor in December 1941.

The attack sparked Allied innovations in naval warfare during and after World War II. THE ASSOCIATED PRESS

n warfare, uncertainty remains perhaps the most persistent problem. Every major nation spends vast amounts of resources and man hours addressing this uncertainty through intelligence gathering, analysis and military planning. Military minds tackled this same task millennia ago, with 6th-century B.C. Chinese strategist Sun Tzu admonishing, "Know yourself and know your enemy, and in 100 battles, you will not know defeat." However, how much can planners really know? Information is never perfect. Planners will always remain ignorant of some aspects of their environment. On the battlefield, ignorance can result in not only defeat for an army but also defeat for a nation. Hence, 19th-century German military theorist Helmuth von Moltke wrote, "No plan of operations extends with certainty beyond the first encounter with the enemy's main strength." It's a strong warning against the hubris of military planners and in favor of military flexibility.

Fundamentally, military planners are all futurists, and at the end of the day, the future is simply unknowable. Every plan involves an educated guess of what the future holds based on how the world looks now and how it is expected to look tomorrow. Sometimes, planners just get it wrong. In the dynamic and evolving Indo-Asia-Pacific region, military planners must remain especially cognizant of this uncertainty. As the region continues to rapidly change, uncertainty about the future will only intensify for military planners and political decision-makers.

In the face of such uncertainty, what can nations do? All nations stand well-advised in attempting all measures short of war in pursuit of their national interests. It is generally better not to fight than to fight and lose. However, avoiding conflict is not always possible. In light of this, militaries must accept a degree of uncertainty and seek to remain highly adaptable. Maintaining the comprehensive civil-military capabilities conducive to adaptation, innovation, and implementation of new methods and capabilities powerfully affects the probability of victory and defeat. Although tactical and technological innovations contribute to military success, rapidly fielding applicable new technologies to the contemporary battlefield best assures decisive strategic effects.

History abounds with the successes of adaptable and tactically innovative militaries, even when the balance of forces did not appear to favor them. Before the battle of Ain Jalut (present day Israel) in 1260, no Mongol Army had ever been defeated in direct combat. For 50 years, the Mongols dominated warfare in

Eurasia, using innovative tactics, including fluid battlefronts and hit-and-run methods. They used these methods to draw enemy units out of formation one piece at a time, surround them and annihilate them with overwhelming local force. This allowed the lightly armored and highly mobile Mongol forces to engage and defeat larger, more heavily armored foes. However, Egyptian forces at Ain Jalut used the Mongols' tactics in combination with their Mamluk heavy cavalry, drawing out the Mongol center, surrounding it, and mounting a devastating cavalry charge that shattered the Mongol force.



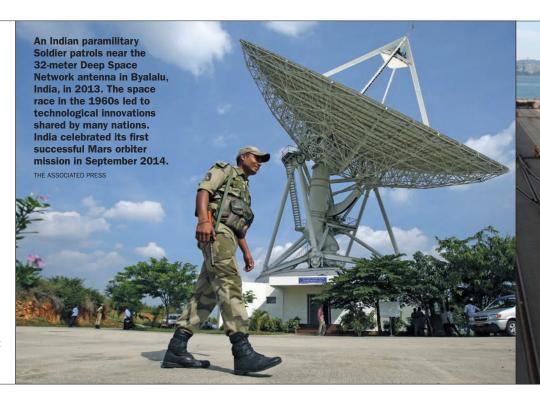
Mao Zedong, founder of the People's Republic of China, from right; Zhu De, a founder of the **Chinese Communist** Party (CCP); Zhou Enlai, the first premier of the People's Republic of China; and Bo Gu, a senior leader of the CCP, are pictured during the Chinese Civil War in the 1930s.

WIKIMEDIA COMMONS

During the Chinese Civil War and World War II, the Kuomintang (KMT) and Japanese conventional forces exceeded Chinese Communist Party (CCP) forces in technology and experience. KMT forces perceived that the conventional balance favored them and launched major attacks against CCP forces, achieving a series of tactical victories that resulted in the Long March, the CCP's nearly 10,000-kilometer retreat. Confronting the conventional weaknesses of the forces of the CCP, Mao Zedong and his advisors crystalized the principles of people's war and guerrilla tactics. This adaptation allowed them to asymmetrically engage superior KMT forces and begin to achieve battlefield victories. The People's Liberation Army (PLA) later used these same innovations to fight the Japanese between 1937 and 1945. Despite their conventional superiority in training and equipment, both the KMT and the Japanese lost their battles with the CCP.

"Know yourself and know your enemy, and in 100 battles, you will not know defeat."

~ Sun Tzu, 6th-century B.C. Chinese strategist



On December 7, 1941, the Japanese launched a surprise attack on U.S. forces in Pearl Harbor. In doing so, Japan destroyed or incapacitated a significant portion of the U.S. Pacific Fleet. Japan's innovative use of overwhelming naval airpower via aircraft carriers led to its success. Japan hoped this major attack would inflict substantial psychological as well as physical damage on the U.S., discouraging the U.S. population and leadership from launching major counteroffensives in the Pacific. This hope soon faded.

Due to high political tensions between the U.S. and Japan before Pearl Harbor, the U.S. had evaluated plans for a potential Japanese attack on Hawaii. However, the U.S. did not anticipate the scale of the eventual Japanese naval assault. In fact, before the Pearl Harbor attack, U.S. planners debated the utility of aircraft carriers in naval warfare. Some favored the battleship and traditional high-firepower capital ships over aircraft carriers. Pearl Harbor ended this debate. The U.S. internalized the lesson taught to them by Japanese naval airpower and embraced the aircraft carrier and carrier-based naval aviation as the centerpiece of modern naval warfare. The U.S. combined this concept with its substantial economic resources to rapidly field a state-of-the-art, carrier-centered fleet to defeat the Japanese naval forces throughout the Pacific.

After World War II, technological adaptation and innovation, along with rapid research and development and acquisition cycles, have provided nations with the greatest military advantage. The space race between the U.S. and the Soviet Union in the 1950s and 1960s offers an example of innovation and implementation of advanced theoretical science and technology providing

a decisive advantage. By the time the U.S. officially announced its intent to launch satellites into Earth's orbit in 1955, U.S. scientists, military and industry had been considering the opportunities of space exploration for almost a decade. The Soviet launch of Sputnik 1 into orbit in October 1957 — beating the U.S. into space — provided the wake-up call. U.S. officials then fully realized the true national security implications of space and space flight.

In response, the U.S. military partnered with the nation's most brilliant academics and most intrepid entrepreneurs to accelerate U.S. research and development efforts, resulting in the formation of the National Aeronautics and Space Administration in 1958. This creative and collaborative process allowed for timely and effective research, development and implementation of decisive technologies. The 1969 Apollo moon landing cemented U.S. pre-eminence in space. The U.S. then shared many of these technologies to develop space into a global commons that all nations could share for commercial and scientific benefit.

This ability to unify scientists, private industry and the military around a single warfighting objective is essential to assuring success on the contemporary battlefield. The wars in Afghanistan and Iraq confronted the U.S. military with a new challenge in the form of enemy deployments of improvised explosive devices (IEDs). Their broad use in Afghanistan and Iraq presented an unforeseen challenge, and many U.S. ground vehicles, especially personnel transport vehicles, were poorly equipped to confront these weapons. The U.S. military rapidly partnered with its British allies to develop Mine-Resistant Ambush-Protected (MRAP) vehicles, in cooperation



with private industry and research institutes. The MRAP offered significantly improved IED countermeasures for coalition forces during counterinsurgency (COIN) and stability operations in Iraq and Afghanistan. The U.S. later shared this technology with its coalition allies, as well as with its allies and partners around the world.

U.S. forces also had to adapt their tactics in Afghanistan and Iraq after contact with insurgent forces. At the time, the U.S. began combat operations in Afghanistan and then Iraq, COIN was underemphasized in training and doctrine, and most U.S. military service personnel possessed little combat experience in COIN operations. After insurgent operations began to achieve limited success in Afghanistan and especially in Iraq, the U.S. military realized it needed to rapidly formulate new COIN operational guidelines and tactics. The U.S. combined its best military minds with experts in combat operations at universities, institutes and think tanks, producing in short order Field Manual 3-24, which outlined new and effective COIN principles and operations. These principles, combined with technology such as the MRAP, allowed coalition commanders time and space to achieve impactful population presence. Without these innovations, coalition forces likely would not have been nearly as effective in achieving their objectives. Without the MRAP and Field Manual 3-24, the Sunni Awakening might have never occurred, and the Iraqi Civil War may have raged on.

The key to success in all of these examples remains the ability to engage, observe, adapt and implement new tactics and capabilities. In the modern era, certain fundamental elements enable these essential abilities. Incorporating the inherent creativity of private industry, research institutes and academia into new projects forms the foundation for successful adaptation and implementation. The military should bring these elements together and allow them to work dynamically and organically, incorporating the unforeseen insights and opportunities this process creates. Tight, centralized control of this process should be avoided; the government and military should help guide efforts, not predetermine them. This dynamic facilitates victory-enabling capabilities, and nations that master it stand best prepared for the uncertainties of war.

However, this weaves a cautionary tale. While military analysts and war planners may excel at calculating the current balance of forces, and while they may create plans that appear to provide military advantages in the present and the foreseeable future, the future remains an unpredictable beast. The chaos and dynamism of armed conflict only amplify this unpredictability. In addressing the inherent unpredictability of war, all planners should consider not only the projected balance of forces but also the unavoidable role of adaptation and innovation in war outcomes. Wars rarely end looking the same as when they started. Upon engaging with and observing an effective tactic, weapon or other ability, a capable opponent will adapt, implementing countermeasures of his own. An opponent may even use a military's own methods against it, sometimes even better than the originating military uses them. Military plans, and the planners who write them, must recognize the dynamic role of adaptation and innovation in armed conflict. Failing to do so encourages miscalculation and spurs imminently avoidable conflicts. The uncertainty of war should frighten all nations, and all nations are better off avoiding it — if they can.  $\Box$ 

# Rear Adm. Ravindra Wijegunaratne,

director-general of the Sri Lanka Coast Guard, shares his insights on the force's evolving security role

#### SERGEL DESILVA-RANASINGHE

Since its founding in 2009, the Sri Lanka Coast Guard has expanded to nearly 1,000 personnel and a fleet of 10 fast patrol boats, eight inshore patrol craft and two harbor vessels. The defeat of the Liberation Tigers of Tamil Eelam has fueled the Coast Guard's growth as more resources become available to secure Sri Lanka's maritime domain. In May 2014, the director-general of the Sri Lanka Coast Guard, Rear Adm. Ravindra Wijegunaratne, spoke to Sergei DeSilva-Ranasinghe in an interview for FORUM about the Coast Guard's developmental benchmarks, its evolving role, the need to modernize its maritime surveillance capabilities, efforts to check smuggling and illegal fishing, and Coast Guard-to-Coast Guard relations with India and other countries in the region.

### What has the Coast Guard achieved since its founding?

Adm. Wijegunaratne: Since its inception in 2009, the Coast Guard has had a number of different achievements across a broad range of areas from border security to environmental conservation. With our border security and law enforcement role, we've established active anti-poaching duties in the northern waters, repatriated foreign fishermen, apprehended 146 illegal immigrants, successfully shared intelligence with key stakeholders, and apprehended drug dealers. In other areas, such as lifesaving and water awareness, we've saved a total of 222 people [including 33 foreigners as of May 5, 2014] through our lifeguard program, established lifesaving posts in main beach areas, founded a dedicated



lifesaving training school at Balapitiya and conducted lifesaving awareness programs for civilians and schoolchildren. I am also very proud of our environmental achievements, especially our fisheries protection programs, action plan to protect maritime archaeological sites, the turtle conservation project at Mirissa, and the green belt project to protect the coast.

A number of Indian Ocean countries have recently founded coast guards. In Sri Lanka, how does the Coast Guard differentiate its role from that of the Navy?

Adm. Wijegunaratne: The prime duties of the Coast Guard, when compared to the Sri Lanka Navy, are focused on the maritime law enforcement aspect. This is a huge area of concern for a Coast Guard. With the right resources and manpower requirement in the future, the Coast Guard will be able to fully engage in the field of maritime law enforcement with the close coordination of other key stakeholders in the country.

We have a wide range of duties that we undertake. Our primary mission is maritime law enforcement. Other areas of concern include preventing illegal fishing and protection of fishermen, assisting customs and other relevant authorities in combating smuggling of illegal migration, preventing and managing piracy at sea, prevention of drug smuggling, and stamping out any remaining terrorist elements at sea. Of course, there is also the maritime safety component, such as search and rescue and disaster warnings, plus an environmental component, which consists of marine pollution prevention, conservation and so on.

Does the Coast Guard use a modern maritime surveillance system to enable proper monitoring of Sri Lanka's coastline?

Adm. Wijegunaratne: The Coast Guard had a couple of private firms explaining their surveillance capabilities in the recent past. I would like to mention here that the Coast Guard to date has no such dedicated surveillance system installed, yet we would be happy to have a sophisticated system similar to what you've just mentioned. I think the system that you are referring to here will be for the Sri Lanka Navy. If such a system is in place, the Coast Guard, too, will benefit, as we could share the common operational picture. As of now, the Sri Lanka Navy has sensors located in strategically important locations that are capable of monitoring large sea areas around the country. While the Navy is continuously looking at the future in order to obtain the best equipment and sensors, the Coast Guard is at a basic stage in acquiring such surveillance capabilities. Despite this fact, the Coast Guard has proposed, as well as requested, assistance from some friendly countries to help us in



establishing a dedicated Maritime Rescue Coordinating Center (MRCC) on the southern coast of Sri Lanka at Kirinda. On information gathered by the Coast Guard, it is estimated that approximately 100 to 120 ships continue to transit through the Dondra Head Traffic Separation Scheme. Most of the ships are oil tankers mainly heading toward the most developed countries in the region. In this context, the Coast Guard can play a significant role with the expected MRCC capabilities. The Coast Guard's focus is on having better surveillance of these ships, especially when they transit through our waters. That's basically to monitor vessels taking passage through our waters. On the other hand, the Coast Guard has a great role to play in conducting effective surveillance along the coast.

How is the Coast Guard rising to the challenges posed by human smuggling, illegal fishing and drug trafficking in Sri Lanka?

Adm. Wijegunaratne: It's obvious that all these issues remind us of one important aspect, and that is that we require constant maritime governance. The three issues differ

from various aspects such as policy involvement, countering methods and finding effective solutions. Yet the three issues originate on land, and then project as a major issue when intercepted out at sea. ... As fleet units are essential to effectively engage in countering the above three aspects, the Coast Guard eagerly looks forward for assistance in this regard. The Sri Lanka Coast Guard has established a separate intelligence unit to collect and analyze information pertaining to human smuggling, and such information has been successfully shared with the Sri Lanka Navy. The solution for the above three areas can be achieved by dedicating the Coast Guard and other key stakeholders toward establishing effective maritime governance. This will enable us to have a united approach to countering our challenges.

Tell us about the liaison and joint training the Coast Guard has conducted with the Indian Navy and also other navies in the region.

**Adm. Wijegunaratne:** We do have a strong relationship with the Indian Coast Guard (ICG). Our officers interact with the ICG almost

Sri Lanka opened a new container terminal, part of a Chinese-funded expansion, in Colombo in August 2013.

REUTERS

on a daily basis, especially in the northern waters. The Coast Guard participated in the Trilateral Coast Guard Exercise, which took place in 2012 in the Maldives with the participation of the Indian and the Maldives Coast Guards. The Sri Lanka Coast Guard also conducted the Trilateral Table Top Exercise last year [2013] with the participation of Naval and Coast Guard officers from India, Maldives and Sri Lanka. As the Coast Guard is in the early stages of development, assistance from foreign countries has been sought mainly in capacity building and training aspects. The U.S. Coast Guard mobile training team has so far conducted three training capsules on advanced boarding skills for the Coast Guard and the Sri Lanka Navy in Trincomalee. Countries such as Australia, China, Japan and South Korea have also extended opportunities for professional training for officers in their respective countries.

### **Koalas Show** It's Cool to Hug Trees

The cuddly koala rarely drinks water and doesn't have any sweat glands, leaving scientists to wonder how it cools off in a heat wave.

A team of zoologists announced in June 2014 they had uncovered the mammal's secret hugging trees, whose trunks can be several degrees cooler than the surroundings.

The team observed 37 koalas in the wild during winter and summer in southeastern Australia in recent years. On hotter days, the animals were more frequently positioned with all their limbs outstretched, so they appeared to be hugging the tree trunk or lower branches, zoologists said.

The warmer it got, the lower the marsupials were found in the trees, and more often in trees other than eucalyptus, their food source. This could be explained by the eucalyptus being only about



1.46-1.87 degrees Celsius cooler than air temperature, compared to about 5.0 C for the acacia.

Koalas have high mortality rates in heat waves. Unable to sweat, they use panting as a way of evaporative cooling, but in the wild, they rarely drink and when they need to, water is often scarce. Agence France-Presse

### Flood Fighter Game **Teaches Kids Survival Tips**

odging electrocution, drowning and even crocodiles, the Thai virtual hero of a new mobile game called Flood Fighter aims to educate children across Asia about the perils posed by natural disasters.



More than 800 people, including dozens of children, were victims of the devastating 2011 floods in Thailand, affecting 65 of 77 provinces. To prevent more deaths, the United Nations Educational, Scientific and Cultural Organization hatched the idea of a free education mobile game app to spread the word.

Just a few weeks after its launch in January 2014, the game topped the charts for educational apps in Thailand, with more than 22,000 downloads. The concept is simple: The house of lead character Sai Fah, whose name means "lightning," has flooded. He must complete missions in 22 episodes before, during and after the rise in the waters, with each one carrying a message of prevention.

The tasks include stocking essential items, putting important belongings high up, avoiding unboiled drinking water, cutting the electricity supply, and avoiding snakes that have been forced from their natural habitat and crocodiles that have escaped from farms.

Agence France-Presse

### CHINA OPENS UPSIDE-DOWN HOUSE $\P$

In a town in the Shanghai suburbs sits a house that has been totally turned upside down, furniture and all.

Hundreds of visitors queued for the chance to pose for photos with upside-down sofas and dining tables in May 2014. As if the world being turned on its head weren't enough, visitors were further disoriented by the sloping floor.

Tourist Sun Mingjiao was amused by a lavatory that hung from the bathroom ceiling. "The little toilet in the bathroom made the biggest impression on me. I think its design is pretty innovative. Normal people may not think about it this way, but when I took a look at it inside, I had the feeling that water might fall out of it. It made me feel really odd," she said.

Designed by a Polish designer and funded by a Polish company, the construction of the house started in November 2013 and took five months to complete. It opened to the public in April 2014. Similar topsy-turvy homes have been built to attract tourists in Russia, Germany and Austria, among other countries. Reuters





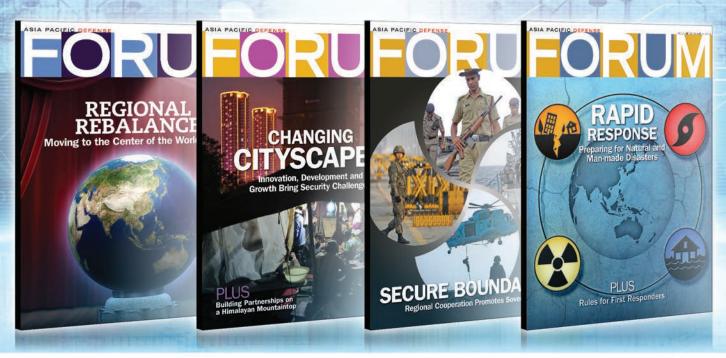
approved the military's annual defense white paper in August 2014 that expresses strong concern about China's military buildup, citing its neighbor's increased airspace and maritime activities. Officials, however, said that Japan's defense budget may be insufficient to achieve the goals set by Prime Minister Shinzo Abe to bolster the country's military. In July 2014, the Cabinet approved a reinterpretation of Japan's war-renouncing Constitution to allow the military to defend foreign countries and play a larger international role. The Associated Press

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