

ASIA PACIFIC DEFENSE

VOLUME 38, ISSUE 4, 2013

# FORUM



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Cooperating to Preserve Shared Domains

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### ABOUT THE COVER:

Japanese Aerospace Exploration Agency astronaut Aki Hoshide participates in a six-hour, 28-minute space walk outside the International Space Station. He and fellow flight engineer, NASA astronaut Sunita Williams, installed a camera on the station's robotic arm during the joint mission in September 2012.

REUTERS



U.S. PACIFIC COMMAND

Dear Readers,

Welcome to the latest edition of *Asia Pacific Defense FORUM*, which focuses on common security challenges. The Indo Asia Pacific continues to grow at an unprecedented rate, both economically and demographically, bringing great promise for the future. With that promise comes new challenges and opportunities. Fortunately, understanding is becoming increasingly widespread that there is more that unites the region than divides it.

By identifying and facing shared threats and developing mutually supporting solutions, Indo-Asia-Pacific nations can better forge lasting peace, prosperity and security in the region. Common challenges to preserving stability include remaining committed to free and open commerce, establishing a just international order true to the rule of law, and maintaining open access to the shared domains of sea, air, space and cyberspace.

This issue examines innovative approaches to these challenges. Many emerging solutions have not only expanded concepts of partnerships to unify security efforts but also broadened operations to amplify force capabilities. For example, many key lessons can be learned from the study of solidarity in the Solomon Islands during recent turmoil there. Fifteen Pacific nations banded together and provided regional assistance to achieve stability.

Similarly, militaries throughout the Indo Asia Pacific are developing more effective ways to share critical information, whether the communications pertain to monitoring hazardous space debris or time-sensitive disaster operations. The All Partners Access Network (APAN) continues to be a central platform for sharing unclassified information with all stakeholders, including partner militaries, government agencies, aid groups and citizens.

Meanwhile at the local level, reinvigorated community policing programs are creating safer neighborhoods. Women as well are playing expanded roles in security efforts, from training as warriors to helping negotiate peace and reconciliation agreements.

*FORUM* strives to engage readers in discussions about topics that truly matter to their families, communities and nations. The Pacific Ocean connects us; it does not divide us. As the Indo Asia Pacific continues to grow and becomes a leading actor on the world stage, it's important that militaries, law enforcement agencies and other key officials appreciate the region's shared security interests to ensure that nations come together to not only make their partners stronger but better.

I hope this issue stimulates dialogue about how to succeed at managing common security challenges, and we look forward to your feedback.

Please contact us at [contact-apdf@apdforum.com](mailto:contact-apdf@apdforum.com) with your thoughts.

All the best,

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## APD FORUM

### Common Security Challenges

Volume 38, Issue 4, 2013

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MELANIE WHITMARSH

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Featured on Page 42



OFFICE OF PRESIDENCY/MALDIVES

#### INDIAN DEFENCE MINISTER SHRI A.K. ANTONY

shared his insights on “Emerging Trends in West Asia: Regional and Global Implications” during his inaugural address at the 15th Asian Security Conference held February 13-15, 2013, in New Delhi. This issue’s Voice department showcases an excerpt of his speech. *The Indian Express* newspaper ranked Antony among the top 10 “Most Powerful Indians” in 2012. Featured on Page 58



COURTESY MAJ. G. SCOTT DEWITT

**MAJ. G. SCOTT DEWITT** is a U.S. Army foreign area officer focusing on Southeast Asia. A former infantry and special forces officer serving in the Office of Defense Cooperation in Jakarta, Indonesia, he has been engaged in the security cooperation and security assistance arena for more than a decade. He and co-author Justin Pummell write about disaster preparedness in this issue.

Featured on Page 54



COURTESY JUSTIN PUMMELL

**JUSTIN PUMMELL** is a geographer with the U.S. Army Corps of Engineers, Institute for Water Resources. He works with U.S. Army Pacific, U.S. Pacific Command, U.S. embassies and partner nations to develop and execute humanitarian assistance and disaster management projects and exercises that enhance readiness and response to hazards. He and co-author Maj. G. Scott DeWitt write about disaster preparedness in this issue. Featured on Page 54

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

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## Curbing Illegal Logging

**G**overnments moved in March 2013 to step up efforts to protect threatened tree species from illegal loggers amid warnings that criminal gangs are plundering the world's forests. The 178-member Convention on International Trade in Endangered Species (CITES) agreed at a major wildlife conference in Bangkok to restrict cross-border trade in ebony from Madagascar as well as rosewoods from the same island, Southeast Asia and Central America.

"Never before have so many positive proposals to list tree species been adopted by CITES nations," said Juan Carlos Cantu of Defenders of Wildlife. "Without the protection of CITES to regulate international trade, the unsustainable illegal harvest will bring these species to the brink of extinction in 10 to 20 years," he warned.

The proposals, adopted by consensus at the meeting in Bangkok, aim to help countries better regulate and monitor trade in the tropical hardwoods, making it harder for illegal loggers to sell their timber overseas.

Agence France-Presse

GETTY IMAGES

### MALAYSIA



## ASIA'S TOP INVESTOR IN AFRICA

Malaysia is ahead of China in its direct foreign investment into Africa, and the gap is widening, according to United Nations data published in March 2013. A survey of foreign investment into and out of the five BRICS countries (Brazil, Russia, India, China and South Africa) revealed that Beijing's financial march into Africa has lagged behind that of the flow of cash from Kuala Lumpur. Direct foreign investment can give clues about economic confidence and future trade flows. Malaysia was the third-biggest investor in Africa in 2011, the latest year for which data are available, behind France and the United States. China and India fell into fourth and fifth place, respectively. Reuters



JAPAN

# Miracle TREE

A “miracle pine tree” that survived Japan’s devastating March 2011 tsunami now stands as a symbol of hope in Rikuzentakata, Iwate prefecture. The tree was the only one in a forest of nearly 70,000 to bear the tsunami’s surge. It later died and was cut down in September 2012 to be later treated with preservatives and decorated with replica branches. Workers have since returned the tree to its original site.

In March 2013, Japan marked the second anniversary of the Great East Japan Earthquake, in which nearly 16,000 people died and about 2,600 remain missing. *The Yomiuri Shimbun/AFP*



THE YOMIURI SHIMBUN/AFP



## CRACKING DOWN ON *Organized Crime*

AUSTRALIA



AFP/GETTY IMAGES

Australia will set up an anti-gang task force based on a U.S. Federal Bureau of Investigation model to combat “the gangs and guns on our streets,” Prime Minister Julia Gillard said in March 2013. Gillard said the AUD \$64 million (U.S. \$65.3 million) task force will be made up of 70 police from national

and state forces and will include officers from the Australian Crime Commission, customs, and the tax department. The task force will investigate gang members and provide state and federal law enforcement agencies with intelligence on gangs across Australian states and overseas, she said.

Home Affairs Minister Jason Clare also announced that a new national border targeting center would be established to crack down on “high-risk international passengers and cargo.”

“Money creates power in the criminal underworld, and the more we do to help police seize the cash, seize the houses, seize the cars of these criminals, the more we can shift the balance of power on the street,” he said. *Agence France-Presse*

# Protecting Nuclear Plants from **TERRORISTS**



Members of the Fukushima Prefectural Police and their dog apprehend a mock terrorist during a drill at the Fukushima No. 2 nuclear power plant in May 2013.





AFP/GETTY IMAGES



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THE ASSOCIATED PRESS



3

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**J**apanese nuclear plants need to increase anti-terrorism measures, a major weak spot found in the wake of the Fukushima disasters, Japanese Prime Minister Shinzo Abe said in March 2013.

He acknowledged at a parliamentary session that an investigation into the tsunami-hit Fukushima Daiichi nuclear plant revealed an overall lack of security. Abe said the government has instructed nuclear operators to upgrade security measures to match international standards, and police have since replaced private security guards to provide 24-hour watches around nuclear facilities.

During a lower house budget committee meeting in March 2013, Abe said security measures around Japanese nuclear plants were thin and limited to reactor areas. Until recently, Japanese nuclear power plants were guarded by unarmed private security guards, who had to call police in case of a security threat. Even now, defense troops are expected only when there is a missile attack or other serious threat, and their emergency drill with the Coast Guard was held for the first time in October 2012, said Defense Minister Itsunori Onodera.

Abe said more protections are needed.

"In order to ensure safety at nuclear power plants, it is extremely important to acquire an ability to respond to risks such as terrorist attacks," he said. "We are aware of the problems and will do our utmost to improve the security around nuclear plants in the meantime."

Abe also reiterated his plans to resume reactors that are approved by regulators under new safety standards. Abe, however, has said he was scrapping the previous government's plan to phase out nuclear by

the 2030s. He said the government will compile Japan's best energy mix within 10 years and delay a decision on nuclear energy until then.

Regulators are working to strengthen anti-terrorism measures at the plants as they try to finalize new, stricter safety requirements for operators and emergency measures for nearby communities.

Plant operators have boasted that their plants can survive a plane crashing into them and that their facilities are guarded by high-tech monitoring cameras. However, officials say the only nuclear facility with reinforced concrete walls that can withstand a missile attack is a fuel reprocessing plant under construction at Rokkasho in northern Japan.

Japan also faced criticism for lax identification for nuclear plant workers. During the height of nuclear crisis, Fukushima Daiichi's operator Tokyo Electric Power Co. revealed that it failed to track down several workers to warn them that they needed to take health checks.

After the 9/11 attacks, the U.S. Nuclear Regulatory Commission (NRC) issued a number of directives to the domestic nuclear industry based on a review of what might happen if an airliner hijacked by terrorists was crashed into an atomic plant. On the basis of the Fukushima disasters, the NRC has also upgraded its measures to take into account a wider variety of challenges.

**1. Members of the Japan Coast Guard's antiterrorism squad board a vessel to apprehend mock terrorists during a drill at the Fukushima No. 2 nuclear power plant in May 2013.**

**2. Tokyo Electric Power Co. employees work on wastewater tanks at Japan's Fukushima Daiichi nuclear plant in June 2013.**

**3. Japanese Prime Minister Shinzo Abe wants better security around nuclear power plants.**



THE ASSOCIATED PRESS

# A FRIENDLY ASSIST

THE SOLOMON ISLANDS FINDS PEACE WITH HELP FROM PACIFIC PARTNERS

FORUM STAFF



RAMSI PUBLIC AFFAIRS



### NIGHTMARES OF LAWLESSNESS

still haunt the people of the Solomon Islands. A decade ago, the nation was in shambles. Warring ethnic factions had devastated communities, corruption ran rampant in government offices and police stations, and the

economy was crumbling under the weight of the chaos.

Desperate for help, the Solomon Islands government turned to its neighbors in the Pacific. In a swift show of solidarity, Australia, the Cook Islands, Fiji, Kiribati, Nauru, New

Zealand, Papua New Guinea, Samoa, Tonga and Vanuatu banded together in 2003 to form the Regional Assistance Mission to Solomon Islands (RAMSI). Five more countries joined during the next three years: the Federated States of Micronesia,



Police from across the Pacific region stand with their countries' flags at the headquarters of the Regional Assistance Mission to Solomon Islands.



**Melanesian boys flash peace signs as they drift past an Australian patrol boat just before RAMSI arrived to restore law and order in July 2003.** AFP/GETTY IMAGES

Niue, Palau, the Republic of the Marshall Islands and Tuvalu. These 15 countries sent Soldiers, police and civilians to help stabilize the country.

Now seen as a shining example of regional cooperation, the mission transitioned to a new phase in 2013 as the military component left. Islanders remain optimistic the progress will persist.

“We Solomon Islanders must start to look after ourselves,” Derek Manu’ari, the government’s assistant secretary responsible for RAMSI, said in January 2013 at a community outreach meeting to discuss the transition. “It is an opportunity to take leadership of our country. RAMSI was never meant to stay forever.”

Although many islanders are sad to see RAMSI’s troops head home, the departure reflects the strides security forces have made in easing the tensions that almost caused the country to break. “The change is a

clear statement of the progress that has been made,” Nicholas Coppel, special coordinator for RAMSI, explained at the International Lessons Learned Conference hosted by the Australia Civil-Military Centre in Sydney in December 2012. “It helps build the nation’s confidence in itself, and it signals to foreign investors and visitors that Solomon Islands is a safe place in which to do business and visit.”

#### **BUILDING TRUST**

The smooth end to RAMSI’s military presence harkens back to its friendly beginnings. Since its start, RAMSI has positioned itself as a cadre of concerned neighbors rather than as an occupying force. For example, as security personnel and aid workers stepped off the plane upon their arrival in July 2003, they waved to those islanders who had gathered to greet them at the airport, Russell W. Glenn reported





**A Tongan Soldier snacks on a coconut near Honiara, the Solomon Islands. Military, police and civilian personnel from 15 Pacific nations work together as part of RAMSI.**

AFP/GETTY IMAGES



**The first Soldiers from an Australian-led intervention force come ashore at Red Beach in the Solomon Islands on July 24, 2003. A decade later, peace has been restored, and the military component of the mission is leaving.**

AFP/GETTY IMAGES

in his analysis, “Counterinsurgency in a Test Tube,” for the Rand Corporation.

With the Solomon Islands prime minister’s request for assistance, the mission had government buy-in from the beginning. RAMSI leaders then built upon that through their interactions with the population, spreading information about their mission through local media and personal visits.

“The result was a continually supportive population, one whose faith and confidence in the foreigners and their promises increased as time passed. They did not turn against RAMSI as seeming occupiers. They increasingly became providers of intelligence and a collective mouthpiece that further disseminated RAMSI messages as confidence grew,” Glenn reported.

Part of that trust building came from RAMSI’s approach in supporting Solomon Islanders as

the leaders. Although corruption had festered in government institutions and the police force, those who sought to restore the rule of law partnered with RAMSI to root out the abusers of power. As corruption declined, RAMSI personnel continued to ensure that Solomon Islands officials had the support they needed to guide the nation back to stability.

RAMSI military and police forces took special care to promote the Solomon Islands police as protectors of the population. “Any Solomon Islander approaching a soldier with a formal complaint was rerouted to a member of the Royal Solomon Islands Police (RSIP),” Glenn wrote, “and eventually it was the police to whom the people would once again have to turn in times of need.”

RAMSI officials also emphasized local law enforcement’s everyday role in communities. “We used the police stations to spread messages. Some of

them were police messages, but some were about other events, like sporting events,” Ben McDevitt of the Australian Federal Police told Glenn. “And we bought the local paper [that had] a circulation of about 3,000 just in Honiara [the capital] and posted it up open behind plastic [at the police outposts]. And people would walk tens of kilometers just to read the paper, to find out what was going on.”

#### BUILDING UNDERSTANDING

Community outreach has always been a particularly important part of RAMSI’s strategy. However, the makeup of communities in the Solomon Islands can vary widely from village to village. With various ethnic groups, religions and languages spread across hundreds of tiny islands, cultural understanding is crucial for RAMSI personnel. “Upon arrival in Solomon Islands, all civilian and police personnel have a chance to take part in induction programs that include briefings on Solomon Islands cultural, historical and political context. RAMSI’s military receive their briefings prior to deployment,” the mission’s website explains.

The multinational and multiagency nature of RAMSI also means that peacekeepers themselves come from different backgrounds. The regional connection for the Pacific islands nations provided a foundation on which RAMSI has built, though.

“Many of the leaders of the five participating countries’ armed forces had worked together during previous operations or international exchanges,” Glenn noted. “These personal relationships and related common understanding of doctrine and professional language quickened the maturing of working relationships to the advantage of mission collaboration.”

#### KNOWING WHEN TO GO

Effective collaboration and communication among the various stakeholders participating in RAMSI — including personnel from foreign affairs, aid offices, police and militaries — has helped shape the mission since its start. For instance, continual assessment of the mission and its progress led to the decision to withdraw the military component this year.

“The Solomon Islands security environment has changed dramatically for the better since RAMSI arrived in 2003,” Coppel explained. “Today, the security challenges faced by the Solomon Islands are the same as those faced in other countries in the region. They require a well-run, modern police force capable of a strong policing response.”

The Solomon Islands police will continue to receive support from RAMSI’s Participating Police Force through 2017. In addition, the government will

## TAKING AIM AT WEAPONS



RAMSI PUBLIC AFFAIRS



RAMSI PUBLIC AFFAIRS

#### FORUM STAFF

One of RAMSI’s most effective moves upon its arrival in July 2003 was the immediate collection and destruction of weapons. Within a week, the mission had launched an amnesty program to eradicate guns and ammunition in communities, Russell W. Glenn reported in his analysis, “Counterinsurgency in a Test Tube.” The weapons had to be handed over within 21 days, and the public gathered to celebrate the destruction at festive ceremonies.

“We had learned from [previous experience] never to have weapons turned in and take them away. The people think you are taking them and giving them to their enemies,” Australian Defence Force Lt. Col. John Frewen told Glenn. “So we cut them up in front of them. We let people come out of the crowd and cut them up. It was hugely popular.”

The amnesty program made the Solomon Islands a safer place

for security officials and residents alike. “The removal of weapons from the community is one of RAMSI’s early and most significant achievements,” Nicholas Coppel, special coordinator for RAMSI, explained at the International Lessons Learned Conference in Sydney in December 2012. “During its first year, RAMSI collected and destroyed some 3,700 weapons and over 300,000 ammunition rounds. This represents between 90 and 95 percent of all the weapons stolen from police armories.”

**Top: During RAMSI’s firearms amnesty program, communities throughout all nine provinces of the Solomon Islands surrendered weapons, but the majority came from militants on the two islands directly involved in the conflict.**

**Bottom: Solomon Islands schoolchildren celebrate the destruction of weapons during the firearms amnesty.**





The chiefs of Ghaliatu village, who were divided in the Solomon Islands' deadly conflict, hold hands during a ceremony in 2005 to symbolize their reconciliation.

RAMSI PUBLIC AFFAIRS

press on with backing from RAMSI's civilian personnel until mission leaders make the delicate decision to exit.

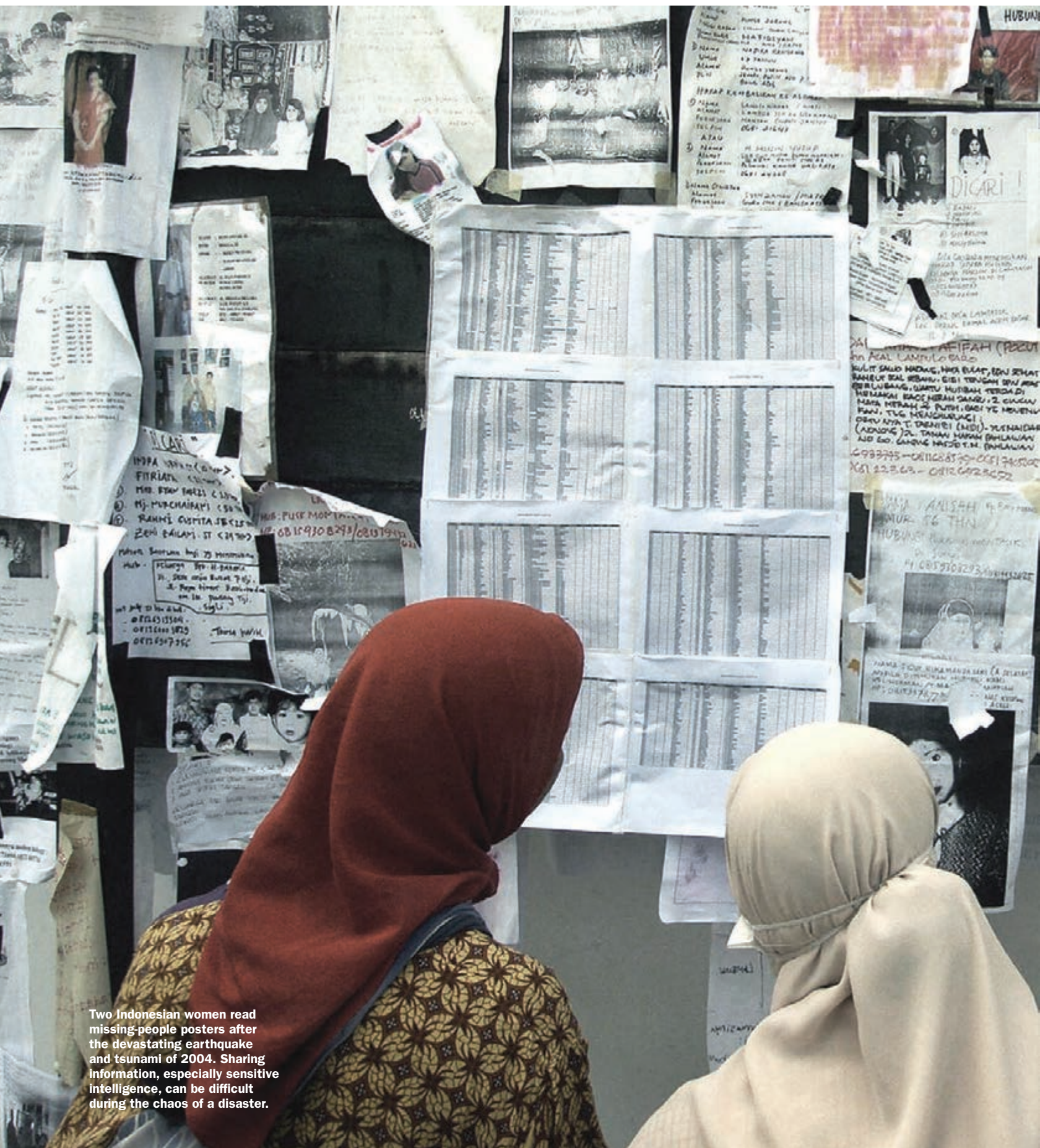
"The two principal risks of transition are leaving too soon and staying too long," Coppel explained at the Lessons Learned Conference. "Too soon would be characterized by a return to violence or at least, in the case of Solomon Islands, to the systematic demanding of compensation with menace. Too late would be characterized by a dependency on donors, a lack of national self-confidence and self-interested political elite operating on the basis that responsibility for the core functions of government — law and justice, economic management and the machinery of

government — had been conveniently subcontracted to outsiders."

Fortunately, self-confidence is slowly building in the Solomon Islands, as community leaders recognize how far the country has come in the past 10 years. During a recent community meeting documented on the RAMSI website, the Rev. Eddie Rubaha outlined his hopes for his nation's future:

"RAMSI can't be here forever, but we the people of this nation should become our own RAMSI. The mission is part of the healing process in this country after the social unrest. The long-lasting healing will come from ourselves." □





Two Indonesian women read missing-people posters after the devastating earthquake and tsunami of 2004. Sharing information, especially sensitive intelligence, can be difficult during the chaos of a disaster.





# The NEED to KNOW

SHARING INFORMATION  
FOR THE BENEFIT OF ALL

FORUM STAFF

When a massive earthquake and tsunami devastated the Indian Ocean region in December 2004, governments, militaries and aid groups rushed to assist obliterated areas of Indonesia, Sri Lanka, India and Thailand. There was little information to go on. Australia immediately deployed a combined joint task force to the Indonesian island of Sumatra. Airborne troops found large swaths of land wiped out and small groups of people in dire need of help but unreachable.



# APAN:

## A TRUSTED PLATFORM FOR SHARING INFORMATION

FORUM STAFF

**T**he All Partners Access Network (APAN) — once known as the Asia-Pacific Area Network — has proven to be a mainstay for sharing unclassified information for more than 15 years. Although the name has changed, the mission remains the same: to provide a platform that fosters information exchange and collaboration between the U.S. Department of Defense (DoD) and non-DoD entities.

An unclassified, non-dot-mil website, APAN's origins date back to 1997, when U.S. Pacific Command began using it to conduct research with public domain materials. Upon creation, APAN's mission included:

- Integrating information to increase multilateral planning effectiveness and interoperability.
- Linking disaster centers and data sources to speed the flow of crisis information.
- Strengthening best practices for cooperative efforts.
- Providing technically simple means for the user to access and share information.
- Finding paths to existing information sources.

Much of those values remain intact with the site's new identity, Jerry Giles, APAN's lead technical manager, and Todd Hall, APAN's program manager, told *FORUM*.

"APAN is able to expose information that owners want to expose and to a different audience. It is available to a wide group that has everybody in there. The reality is sometimes we share information unilaterally and not multinationally," Giles said.

That information is shared online through communities of interest, which Giles calls the "building block" for the site. More than 1,500 communities of interest operate on APAN, from nongovernmental organizations to groups involved in brain research. Some of the interests on APAN include communities of practice, which encompass

military exercises, and communities of response, which allow for developing relationships for additional resources before a disaster happens.

The website also provides resources for team working groups, professional networking, access to experts and conferences.

"The use of APAN runs the gamut. There's an incredible array of different participating organizations," Giles said.

In 2013, APAN was named a *Computerworld* Honors Laureate winner in the collaboration category. Anyone can create an account to join. It only requires a valid email address to sign up. Moderators, however, maintain control of who gains access to certain communities within the website.

Beyond the blogs and chat functions, APAN provides a document library on a multitude of information for military and private-sector use. Account holders get immediate feedback and answers from community members and have the ability to post resources that could assist with a posed question or problem.

New users tend to share information slowly at first, Giles told *FORUM*. Once they gain confidence in the site and trust that information they share isn't being accessed for harm, people participate more, he said.

"We have noticed with the Pacific nations that the longer APAN is around and the longer we use it, the more confident they are that they can share information," Giles said.

Hall acknowledged that most relationship building across the Asia-Pacific region tends to be face to face. That said, many military exercises have an APAN component that not only introduces participants to the site through a practical application but also gives them another tool to take home — where APAN can help those budding personal relationships continue to grow.

To learn more about APAN, log onto [community.apan.org](http://community.apan.org).



Views from above provided crucial information that could have helped relief workers and other troops responding to the crisis develop a more comprehensive operating picture. Such aerial images were available before the Australian military deployed. However, as is sometimes the case in chaotic disaster response and sensitive combat operations, sharing that intelligence was not as simple as sending an email attachment.

"I could see it in Headquarters AST [Australian Theatre] before I deployed," now-retired Maj. Gen. David Chalmers said of a since-declassified

aerial image that he displayed during the International Lessons Learned Conference in Sydney in December 2012. "But as soon as we deployed, I could no longer access it."

Chalmers' observation from the humanitarian assistance mission almost a decade ago sounds frustratingly familiar to those made by many security officials today. Balancing the need to share information against the mandate to protect sensitive data presents a challenge for militaries around the world, experts say. Beyond the complications of sharing intelligence internally lies the complex

An Indonesian Soldier reviews posters requesting help and information after the 2004 earthquake and tsunami.



GETTY IMAGES





AFP/GETTY IMAGES

**Law enforcement personnel monitor activity from a control room at a police station in New Delhi, India. Sharing intelligence among various government agencies and partner nations can help authorities develop a common operating picture.**

task of relaying information to affected stakeholders from partner nations, government agencies, aid groups and the public.

### **CLASSIFICATION COMPLICATIONS**

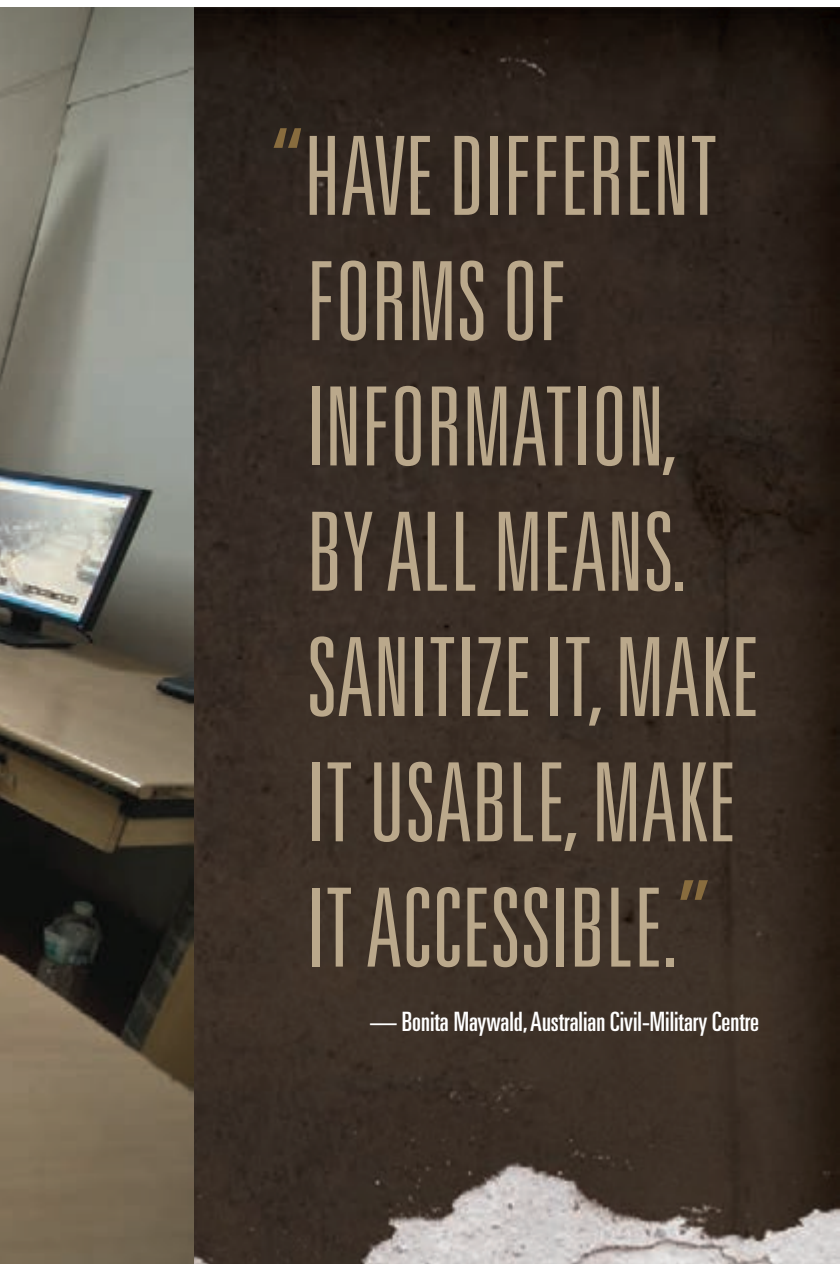
Whether participating in a disaster relief mission, combat operation or peacekeeping force, militaries often find themselves working alongside aid organizations and officials from partner nations who are invested in developing a common operating picture. However, as intelligence flows in from people on the ground, satellite feeds and media reports, a single sensitive tidbit can make a comprehensive security report off-limits

to a majority of stakeholders.

One solution for handling intelligence that includes both releasable information and sensitive material is to employ “tear lines.” This tactic enables security officials to indicate information that is cleared for public consumption at the beginning of a report, with classified information appearing below a designated line to signal that it should not be shared.

Security officials must make a concerted effort to ensure information isn’t trapped at too high a classification level, experts say, whether by producing situation reports with tear lines or by sanitizing classified data to share basic information with all stakeholders. “Have





**"HAVE DIFFERENT  
FORMS OF  
INFORMATION,  
BY ALL MEANS.  
SANITIZE IT, MAKE  
IT USABLE, MAKE  
IT ACCESSIBLE."**

— Bonita Maywald, Australian Civil-Military Centre

different forms of information, by all means. Sanitize it, make it usable, make it accessible," urged Bonita Maywald, disaster management and humanitarian program manager for the Australian Civil-Military Centre.

### **BETTER LATE THAN NEVER**

Despite a desire to collaborate with partner nations and agencies during joint operations, militaries must keep certain information close to the vest to ensure troops are not put at risk. However, sharing intelligence after the fact can help develop lessons learned for future operations. Researchers at the University of New South Wales (UNSW) in Australia are mining historical records from the Vietnam War for those lessons.

"There is a vast amount of data available about the Vietnam War, much more than I suspect is available about Afghanistan or Iraq," Dr. Bob Hall, a research

fellow at UNSW, explained at the International Lessons Learned Conference. Because Australia makes historical military data available, Hall and his fellow researchers have been able to plot "broader patterns in combat" through documentation of the Australia Defence Force's operations in Vietnam.

By tracking locations of reported contact with insurgent forces and seizures of enemy food storages over time, for example, researchers noted the insurgents began to rely on demanding food from local villagers. Intelligence showed that insurgents also tended to use villages to recruit fighters. Thus, the military's tactic of surrounding villages proved effective because it not only cut off the enemy's food supply but also hampered recruiting, researchers concluded.

Sharing lessons gleaned from analyzing historical intelligence can help troops in current and future combat operations. Hall and his team hope their work will expand to include information from other conflicts. "Wars come along very infrequently," he said. "They create lots of real-life data. It ought to be captured and put into a database and examined. We've often talked about the possibility of this Vietnam data being a baseline of data to which the Army, in particular, and defense generally ought to add from East Timor, from Iraq, from Afghanistan, from future campaigns."

### **AN ONGOING ARRANGEMENT**

To achieve long-term goals for intelligence sharing, partner nations need to have agreements in place to exchange security-related information regularly.

NATO, for example, set up a Terrorist Threat Intelligence Unit (TTIU) in 2003 to help partner nations collect and share information that could affect one another. The unit includes representatives from militaries, law enforcement and civilian security agencies. Since the TTIU's creation, NATO has also developed a liaison unit to encourage non-NATO nations to participate in the intelligence sharing.

Even without official agreements to share intelligence, nations should remain committed to building relationships in that area, experts say. The annual Asia-Pacific Intelligence Chiefs Conference brings together intelligence officials from dozens of nations throughout the region to discuss strategies for improving information sharing. The June 2013 meeting in Jakarta was planned jointly by Indonesia and the United States.

With security officials around the world striving to improve intelligence gathering and sharing techniques, the inclusion of all stakeholders — government agencies, the private sector and nongovernmental organizations — could help build a better common operating picture, experts contend. "The more you share, the less unwanted stuff, the less duplication, the less unnecessary efforts to no effect," Maywald explained. "It really is sharing information in order for less effort to be required to get maximum impact to the people on the ground." □



# POLICE FORCES

GET *Personal*

COMMUNITY POLICING PROGRAMS  
HELP OFFICERS FORGE RELATIONSHIPS  
WITH CITIZENS, BUILD TRUST AND  
CREATE SAFER NEIGHBORHOODS

FORUM STAFF





**Police officers patrol a housing development in Singapore, where the crime rate fell in 2012 to the lowest level it has reached in nearly 30 years.**

REUTERS

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CREATE A LIST OF THE WORLD'S 10 SAFEST PLACES, and Singapore undoubtedly makes the cut every time. No national security threat exists in this Southeast Asia city-state, where spitting on the street can draw a stiff penalty. With crime barely creating a blip on the radar, eight out of 10 people say they feel safe walking alone at night, according to the website Live and Invest Overseas.

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Singapore's crime rate fell in 2012 to the lowest level it has reached in nearly three decades with a total of 30,868 cases recorded — 640 fewer cases than the previous year for a population of about 5.1 million. Yet officials say for them, it's not enough.

"It doesn't matter if the population hits 6.9 million, we can go lower because a lot of the crime here is preventable," said Singapore Police Commissioner Ng Joo Hee, according to a March 2013 report by *The Philippine Star* newspaper.

To reach that goal, Singapore has implemented the Community Policing System, a shift in procedure to take officers out of patrol cars and police stations and place them in the community on foot and bicycle patrol. Ng said the change reallocates resources from responding to crime to preventing it.

"We wanted to move away from where most of our interactions with the public are when something bad has happened to them," Ng told *The Philippine Star*. "Now, we have the police officer walking a beat until he becomes a familiar face and a member of that community where he's trusted."

The shift to community policing has slowly gained attention across South and Southeast Asia. It's far from a quick fix to any precinct's problems and requires long-term commitment to be effective. Extended deployment of officers in a neighborhood is the only way police will gain the type of trust and confidence needed to prove community policing successful.

#### PUBLIC PROTECTION BEGINS IN THE COMMUNITY

"Although a precise definition of community policing does not exist, it is generally acknowledged that community policing is an agency-specific philosophy and a management approach aimed at achieving more effective and efficient crime control; reduced fear of crime and greater sense of safety amongst communities; improved police service; and greater legitimacy of the police through a proactive dependence on community resources," according to "Building Bridges: Experiments with Community Policing in South Asia," a 2011 report produced by the Commonwealth Human Rights Initiative (CHRI), a nongovernment organization with offices in Ghana, India and the United Kingdom.

One group spreading the message of community policing along with training is the Network for Improved Policing in South Asia (NIPSA). The organization aims to bring better police practices to South Asia, particularly in India, Sri Lanka, Bangladesh, the Maldives and Pakistan. To do so, NIPSA is working with CHRI, the Friedrich Naumann Foundation and some 20 other partner organizations.

"Police across South Asia are often viewed as corrupt, inefficient and untrustworthy," according to NIPSA. "They are seen as a law unto themselves. While not every police officer in South Asia behaves in this manner, there are a number of problems that generally plague policing across the region."

Those problems include lack of accountability, political interference, inadequate resources and poor training, according to NIPSA. "But if

there are problems, there are also cures," NIPSA says.

The organization has attempted to build a network of regional partners to focus on policing issues. It's a way to share success stories and challenges, build relationships, and offer a platform for police and civil society to collaborate.

#### BUILDING PRINCIPLES

The International Crisis Group warned in a February 2012 report on the "deadly cost of poor policing" that hostility toward police arises from years of police brutality and the public's perception that officers are arrogant and lack accountability.

"Failure to investigate or punish errant officers triggers mob action, often involving arson, while community resistance to the arrest of those responsible for such violence intensifies if the police in question go free," the International Crisis Group said. "The problem is compounded by the staffing of precincts with poorly trained graduates of provincial police schools who receive inadequate firearms training, let alone instruction in community policing. In many cases, local elected officials have to take on the burden of negotiating a way out of the police-community standoff because there are no available institutional mechanisms to resolve grievances."

The "Building Bridges" report lays out basic principles that should be established in all community policing programs regardless of their depth. Among them:







**Indonesian police officers patrol on bicycles in the Menteng district in Jakarta. Community interaction with police builds trust and confidence in law enforcement, experts say.**

AFP/GETTY IMAGES

- Practice policing by consent, not coercion.
- Be a part of the community, not apart from it.
- Find out — together with the community — what the community's needs are.
- Work in partnership with other agencies and the public.
- Tailor the “business” of policing to meet the community's needs.
- Be accountable for its service.

“For community policing to be successful, police authorities must, in consultation with civil society, elected leaders and other stakeholders, formulate an approach that takes into account the contextual reality of the community they police,” the “Building Bridges” report points out. “A failure to do so, irrespective of how many resources are allocated, will doom the effort.”

Authorities in Johor Baru, Malaysia, credit community policing with crime reduction there — an initiative that has gained attention under

the Government Transformation Programme. Officials reported a more than 9 percent drop in criminal cases from 20,970 in 2011 to 19,068 in 2012, according to a report by AsiaOne.com.

“We had only five members when our community policing started on June 26, 2009, but now we have more than 1,200 members,” Bukit Indah community police chairman Yap Keng Tak said in March 2013, AsiaOne.com reported. “Residents were scared to walk out of their homes because of rampant snatch theft and robbery cases. That has all changed now.”

The “Building Bridges” report acknowledges that vesting street patrol officers with more power proves challenging in South Asia, where the culture dictates a hierarchical structure.

“Community policing requires the shifting of initiative, decision making and responsibility downward within the police organization,” according to the report. “Under community policing, patrol officers are given broader freedom to decide what should be






Indian police on horseback patrol a street leading to the Punjab Cricket Association Stadium in Mohali.

REUTERS





done and how it should be done in their communities — they assume managerial responsibility for the delivery of police services to their assigned areas.

“Patrol officers are the most familiar with the needs and strengths of their communities and are thus in the best position to forge the close ties with the community that lead to effective solutions to local problems,” the report adds.

#### PROTECTION FOR CHILDREN

Countries in the Greater Mekong subregion recognize community policing as a tool to fight child sexual exploitation. About 250 people received training from community policing specialists in Bangkok in November 2012, according to the U.N. Office on Drugs and Crime (UNODC), which was involved in the work.

Officers should strive to “create a protective environment for our children,” Gary Lewis, UNODC’s regional representative, said at the training, according to the agency. “This minimizes the risk that they will be exploited or abused.”

The training initiative supported Project Childhood, a U.S. \$7.5 million AusAID-funded project to counter sexual exploitation of children, mostly in the Greater Mekong subregion countries of Cambodia, Laos, Thailand and Vietnam.

“The police are a key element in building this protective environment,” Lewis said, according to UNODC, “but the police cannot work in isolation. They need the support of the community.”

#### CHINA LOOKS WEST FOR LESSONS

Recent reports reveal that the Chinese are on the hunt for ways to upgrade their domestic police force — and they’ve turned to the United States for tips.

“They’re really trying to make a

professional police force as opposed to just hiring someone, giving them a uniform and putting them in the neighborhood and saying ‘defend the party,’ ” Sgt. Erik Branson of the Metropolitan Police Department in Washington, D.C., told Voice of America (VOA) News. Branson has visited China and met with law enforcement officials there

to discuss U.S. police procedures, the news agency reported.

China’s police force has a centralized makeup, according to VOA, and lacks tiers of policing that include local, state and federal areas. Branson told VOA that China questioned him about his grass-roots efforts, such as patrolling on bicycle and getting to know community members personally.

“The focus is on local because that’s where the problems are with corruption and insurrection,” Branson told VOA.

“I think there’s a growing recognition that policing is going to have to involve the community as stakeholders in a variety of decisions, problem identification and development of solutions,” Vincent Webb, dean and director of Sam Houston State University in Texas, told VOA, adding that there’s growing concern about civil disorder in China. During the past few years, about 15 students from China’s Zhejiang Police College in Hangzhou have spent a year studying criminal justice at Webb’s school.

The Chinese Embassy in Washington, D.C., has also touted the bilateral collaboration: “Sending exchange students between law enforcement training academies of the two countries to learn from each other advanced policing philosophy and tactics will help enhance mutual understanding and trust, deepen pragmatic cooperation, and promote sustained and sound development of cooperative relations between China and [the] U.S. in the field of law enforcement.” □

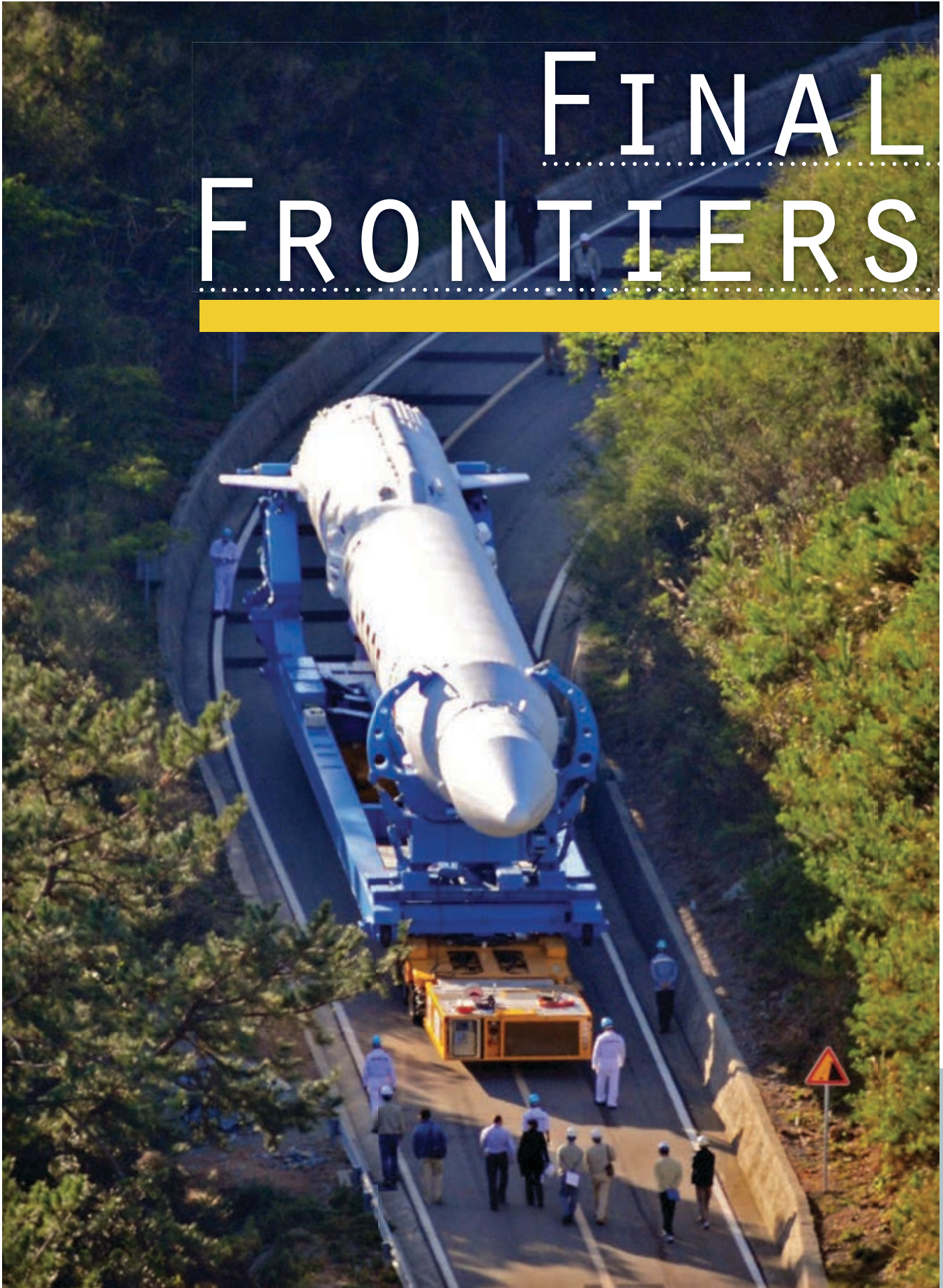
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“THE POLICE ARE A KEY  
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THE COMMUNITY.”  
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GARY LEWIS

UNODC’s regional representative



# FINAL FRONTIERS



## AS THE NUMBER OF SPACE-FARING NATIONS AND SATELLITES IN ORBIT GROW, SO DOES THE NEED FOR COOPERATION AND PARTNERSHIP

FORUM STAFF



**A**mbitions for outer space are surging across the Indo-Asia-Pacific region. China, India, Japan and South Korea have successfully launched satellites into orbit. China plans to land a rover on the moon in late 2013 and build a space station by 2020; India intends to dispatch a probe to Mars in November 2013; and Japan opened a Space Strategy Office in April 2012. Meanwhile, many nations in the region are also aiming to build missile defense systems.

Although North Korea attempted to launch its Unha-3 rocket in December 2012, its efforts to put an Earth-observing satellite in orbit are widely considered unsuccessful despite claims by the regime. *The New York Times* newspaper reported later that month that the satellite “is most likely dead” and that “the evident failure ... seems to represent a major blow to the North’s portrayal of the launching as a complete triumph.”

Space has become more important for commercial and military operations ranging from communications, weather forecasting and disaster relief to intelligence gathering, early warning programs and defense planning. Space assets “will play an increasingly important role in military operations. Space systems are also becoming more and more important for broader aspects of modern society, including our economies, transportation and communication,” an Australian Department of Defence spokesman told *FORUM*.

“As a result, the space domain is, and will continue to be, of growing interest to modern militaries, both in terms of using space systems to enable defense activities and assuring our continued access to space-based capabilities,” he said.

Militaries rely on satellites for intelligence information, precision targeting and more. The trouble is “all of these activities are taking place in a domain that is difficult to monitor, has few regulations, and is viewed

as a common domain for all to access and use,” the Australian Defence spokesman said.

For successful management, this new era requires not only cooperation but also advancement of the existing body of space law, experts say. Building consensus on how to operate in and protect this realm will bolster global and regional security, they say. Moreover, militaries have an increasing role to play in keeping the peace in outer space.

### EVOLVING SPACE POLICY

Space security relations remain largely in their infancy. Currently, no country or authority has the power to regulate space. So far, the Outer Space Treaty of 1967, the reigning law governing international space, has successfully maintained the peace in outer space. Current laws, however, do not fully address many new and emerging issues such as space debris and export control.

Space policy experts are calling for a better mechanism to define responsible behavior in space to reduce misunderstandings and potential conflicts. Better rules will also reduce risk for collisions in space, decrease unintended interference from radio frequencies and improve the overall use of orbit space.

The European Union is advancing development of an International Code of Conduct for Outer Space Activities. If adopted, the code would establish guidelines for the safe and responsible use of space, consistent with international law, in particular to prevent the proliferation of space debris. It also includes measures to increase the transparency of the space domain by including notifications of space-related activities such as launches and maneuvers.

“From a defense perspective, this is a practical and achievable step toward a more secure space environment,” the Australian Department of Defence spokesman told *FORUM*.

U.S. President Barack Obama’s administration considers the development of such a nonlegally binding code of conduct as being “an effective, pragmatic and timely way of strengthening the long-term



**A South Korean satellite-carrying rocket, known as the Korea Space Launch Vehicle-1, is moved to a launchpad at the Naro Space Center in Goheung in October 2012.**



# SPACE TRAFFIC BY THE NUMBERS

22,000

Estimated number of man-made objects the U.S. Defense Department tracks in orbit

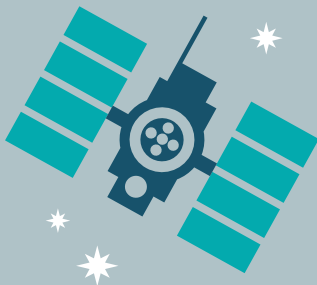
9,000

Estimated number of transponders expected in orbit by 2015



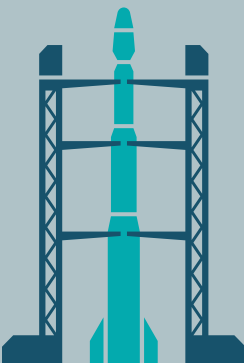
100,000

Number of objects too small to track that still threaten satellites



60

Number of nations and government consortia that operate satellites (commercial and academic satellite operators not included)



4

Number of Indo-Asia-Pacific countries with launch capabilities

12

Number of nations worldwide with space launch capabilities

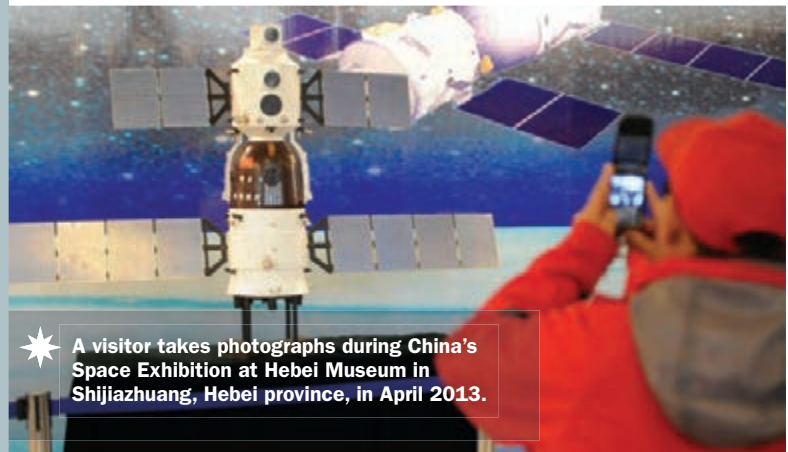
FORUM ILLUSTRATION

sustainability, stability, safety and security of the space environment,” Frank Rose, a U.S. Department of State deputy assistant secretary for space and defense policy, said at the International Symposium on Sustainable Space Development and Utilization for Humankind held in Tokyo in late February and early March 2013.

U.S. National Space Policy “specifically stresses the complex, globalized and intertwined nature of the 21st century space environment,” said U.S. Air Force Maj. Gen. Jay Raymond who oversees space concepts and policy as director of plans and policy for the U.S. Strategic Command (STRATCOM). “Our most valuable orbits are also most susceptible and vulnerable to debris,” he said at the Tokyo forum.

The U.S. strategy includes partnering with responsible nations, international organizations and commercial firms to pursue cost- and risk-sharing opportunities as well as sharing space-derived information.

“It’s difficult to write space policy without close engagement with global and regional partners and allies,” the Australian Department of Defence spokesman said. “The costs associated with space capabilities, the growing threats and risks, and the economic pressures faced by



A visitor takes photographs during China’s Space Exhibition at Hebei Museum in Shijiazhuang, Hebei province, in April 2013.

AGENCE FRANCE-PRESSE

all countries are also promoting increasing cooperation between space-faring nations, in civil, commercial and national security fields, and this in turn is becoming an important element of many countries’ space policy.”

## GROWING THREATS

The biggest threats to the space domain are natural, accidental or deliberate activities that can inhibit access to space-based capabilities, experts agree. Solar weather activities, collisions between space assets or with debris, and the intentional use of counter-space capabilities are some obvious examples.

As the range of government and commercial players owning and operating space systems continues to grow, so does the number of satellites circulating the planet

— and the amount of space debris. The U.S. Department of Defense tracks more than 22,000 man-made objects in orbit that are roughly the size of a softball or larger. Experts estimate there are hundreds of thousands more pieces of so-called space junk that are too small to track but large enough to damage satellites or even the International Space Station. The fragments can travel at speeds up to 35,900 kilometers per hour.

Emerging technologies also pose new risks. For example, the destruction of objects in space can create debris that can present a threat for years, even centuries to come.

“As a consequence, the space environment is becoming congested, and this increases the risks for all space users and to the satellites upon which we all rely,” the Australian Department of Defence spokesman said. “With an increase in space-based services and the demand for global communication mediums, it is not only the physical aspect of space that is becoming congested but also the electromagnetic spectrum upon which we rely to pass information to and from the assets we place in space.”

To help relieve space traffic, Japan’s Defense Ministry is considering using the Air Self Defense Force’s advanced missile radar known as FPS-5 to monitor space debris. The stationary control and warning radar system, deployed at four sites across Japan, can detect objects at distances of thousands of kilometers away. The Defense Ministry also plans to create software and a database to track space debris, according to an April 2013 account in the English version of *The Mainichi* newspaper.

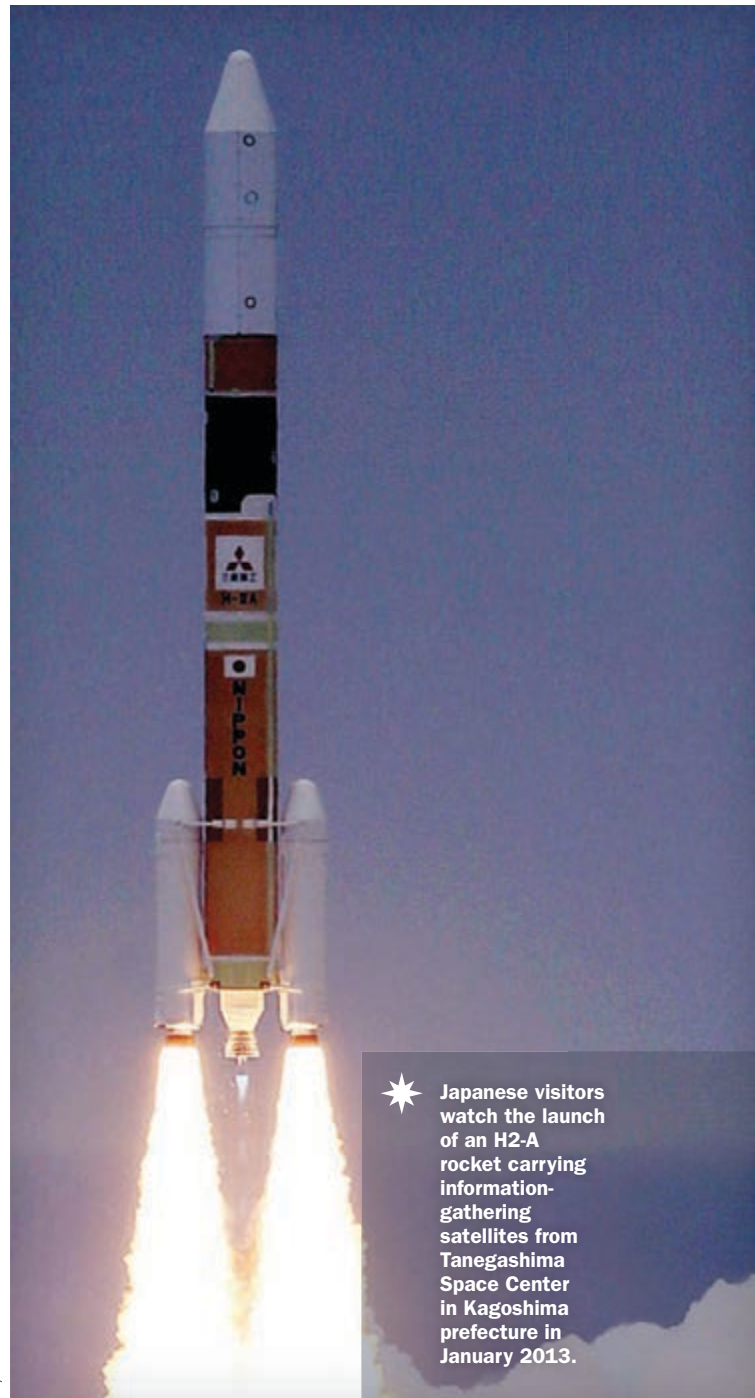
## COOPERATION AND PARTNERSHIP

The challenges of managing the increasingly crowded domain of space and its dual-use technologies, in particular, are likely to persist for decades. Experts hope nations can learn to work together to use outer space for the betterment of all.

Already there are some strong examples of cooperation in the Asia Pacific. Japan has launched at least one satellite for South Korea, for instance. Various nations are seeking to share space resources and continuing dialogues on the issue.

For example, Japan and the United States intend to integrate Japan’s advanced missile program into a new set of Japan-U.S. Defense Cooperation Guidelines, according to an April 2013 report in *The Mainichi*. In addition to preventing collisions between space objects and orbiting satellites, this collaborative effort will serve as a foundation for building bilateral cooperation in space, *The Mainichi* reported.

STRATCOM introduced its Combined Space Operations initiative in 2011 along with partners Australia, Canada and the United Kingdom. The multinational effort strives to optimize military space operations, improve mission assurance and increase resilience through integration, collaboration and cooperation. The joint



★ Japanese visitors watch the launch of an H2-A rocket carrying information-gathering satellites from Tanegashima Space Center in Kagoshima prefecture in January 2013.

AFP/GETTY IMAGES



AGENCE FRANCE PRESSE





The Indian Space Research Organisation successfully launched a spy satellite into orbit in April 2009 from Satish Dhawan Space Centre in Sriharikota aboard its Polar Satellite Launch Vehicle.



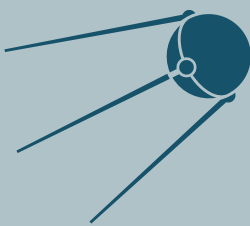
EPA

initiative has also invited New Zealand to join and is engaging other space-faring nations including Japan, France and Germany to collaborate as well.

STRATCOM is also working to provide Space Situational Awareness (SSA) to other countries. Chiefly, its SSA Sharing Program offers collision warning information. For example, the Joint Space Operation Center can provide pre-launch conjunction assessment to foreign and commercial operators to prevent collision of resident space objects with the launch vehicle and payload on ascent and insertion into early orbit. The program also conducts re-entry assessments for satellites and can help track asteroid threats as it did when the 45-meter-wide Asteroid 2012 DA14 passed between the Earth and its geostationary satellites in February 2013.

The U.S. and Australia have also teamed up to enhance launch coverage and space object detection and tracking in the Southern Hemisphere. First, a C-band radar will be upgraded and moved from Antigua Air Station to the Harold E. Holt naval communication facility in Exmouth, Western Australia, by 2015. A Space Surveillance Telescope, developed by the U.S. Defense Advanced Research Projects Agency to detect objects in deep space, will also be relocated to Australia from New Mexico under an agreement signed in November 2012. The nations are discussing establishment of a Space Fence System in the Southern Hemisphere

## SPACE POLICY TIMELINE



FIRST SATELLITE  
OCTOBER 4, 1957

The Soviet Union launched Sputnik 1, Earth's first artificial satellite.



FIRST EARTH IMAGES  
AUGUST 7, 1959

NASA's Explorer 6 takes the first photograph of Earth from orbit.



UNITED NATIONS COMMITTEE  
ON THE PEACEFUL USES  
OF OUTER SPACE 1959

- Reviews international cooperation efforts, encourages research and dissemination, and devises programs related to peaceful uses of outer space.
- Reviews legal issues resulting from exploration of outer space.



## U.S. STRATCOM

### SPACE SITUATIONAL AWARENESS SHARING PROGRAM

**Goal:** Increase the safety, security and sustainability of the space domain through an enhanced understanding of satellite positional information for all participants.

#### THREE LEVELS OF SERVICES

##### 1. **Emergency**

Alert satellite operators to hazardous situations.

##### 2. **Basic**

Post information on a website available to 88,000 users in 185 countries.

##### 3. **Advanced**

Provide data to satellite and launch operators through commercial and international agreements.

EPA



Indian Central Industrial Security Force personnel walk across the campus of the Master Control Facility of the Indian Space Research Organisation (ISRO) in Hassan in July 2011. The ISRO successfully launched a GSAT-12 communication satellite that month from Satish Dhawan Space Centre in Sriharikota.



## FIRST SPACE BUSINESS JULY 10, 1962

NASA launches Telstar 1, the first commercial satellite designed to transmit television and data communications, on a cost-reimbursable basis for AT&T.



## OUTER SPACE TREATY OF 1967

- Establishes principles governing activities of states in exploration and use of outer space, including the moon and other celestial bodies.
- Emphasizes prohibiting nuclear weapons in space or on celestial bodies, rendering of assistance by astronauts, notification of hazards, registry of space objects and acceptance of liability.



## SPACE RESCUE DECEMBER 3, 1968

The Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space expands the Outer Space Treaty to require member states to take all possible steps to rescue and assist astronauts in distress, promptly return them to the launching nation, and, if requested, assist in recovering space objects that return to Earth.



# SPACE FENCE

## VERY HIGH FREQUENCY

Very High Frequency (VHF) radar transmitters and receivers create an energy field in space or “fence.” When satellites pass through, they can be detected.

Note: Infographic depicts existing Air Force Space Surveillance System (AFSSS), which is being phased out and to be replaced with S-band radar technology.

Global Information Grid provides information to users.

## RECEIVERS

Dispersed VHF radar receivers intercept energy reflected from objects penetrating the fence, increasing timeliness of Space Situational Awareness.

FORUM ILLUSTRATION

## DETECTION FENCE

## TRANSMITTERS

The VHF radar transmitters project a fixed, fan-shaped energy beam in space.

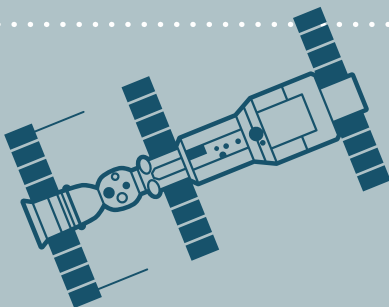
A portion of the master transmitter antenna in the United States



U.S. NAVY

SPACE  
FENCE  
(EXISTING)

Source: [www.globalsecurity.org](http://www.globalsecurity.org)



FIRST SPACE STATION:  
USSR SALYUT 1  
APRIL 23, 1971

The Soviet Salyut 1 orbited the Earth nearly 3,000 times during its 175-day stint in space.



SPACE LIABILITY  
SEPTEMBER 1972

The Convention on International Liability for Damage Caused by Space Objects expands the Outer Space Treaty to hold a launching state “absolutely liable” to pay compensation for damage caused by its space objects on the surface of the Earth or to aircraft and liable for damage due to its faults in space.



REGISTRATION  
OF LAUNCHED  
OBJECTS 1976

Convention requires states conducting space launches to provide the United Nations with information on their launchings.



★ To help track space junk, Japan's Defense Ministry is evaluating using its advanced missile radar, which is now deployed at four sites across the country including Okinawa. The FPS-5 radar is nicknamed the "Gamera radar" because its cover resembles the shell of a giant turtle of that name popularized in a movie series.

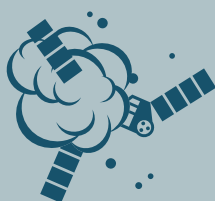
to improve detecting and tracking of space objects in low Earth orbit. In September 2012, the U.S. Air Force announced that an S-band Space Fence radar site would be operational on Kwajalein Island in the Republic of the Marshall Islands by 2017.

U.S. Pacific Command is working hard to implement the U.S. National Security Space Strategy in the Asia Pacific by advancing international cooperation to increase the resiliency of space capabilities — in particular the services provided by space systems — and deter threats, according to Col. Alan F. Rebholz, Pacific Air Forces chief of the Non-Kinetics Operations Division and director of Space Forces.

"Space partnering to build resiliency directly leads into our next objective of deterring threats. When we work together, none of the partners are 'playing to lose,'" he explained to *FORUM*. "In the Asia-Pacific region, we continue to push for norms of behavior for peaceful space operations."

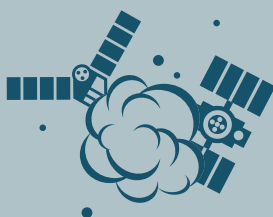
U.S. Pacific Command has also made significant progress in using information coming from space systems to enhance joint and combined military operations. "What excites me the most is our involvement with partners during military exercises," said Col. Rebholz, who integrates space, cyberspace, electronic warfare and influence operations capabilities into Pacific Command operations and planning. "We've had astounding success over the past two years working side by side with space professionals from other countries. These are the guys that in 20 years are going to be leading the space efforts in their respective countries," he explained. "We are able to train, learn and contribute the best practices on how to integrate space capabilities into operations."

Although more work remains among nations in the Asia Pacific to cooperate in such areas as science exploration, remote sensing and manned missions, experts agree on the importance of collaboration in space. As Maj. Gen. Raymond concluded at the 2013 Tokyo symposium: "The contested, congested and competitive space environment requires partnership to mitigate and operate in successfully." □



#### ANTI-SATELLITE DEVICE DEPLOYED JANUARY 11, 2007

China intentionally destroyed its Fengyun 1C weather satellite using an anti-satellite device, launching 2,500 chunks of space junk into Earth's orbit.



#### COSMIC COLLISION FEBRUARY 10, 2009

Russia's Cosmos 2251 satellite slammed into an Iridium satellite and destroyed the vessel, producing more than 500 pieces of debris.



#### THE U.S. NATIONAL SPACE POLICY OF 2010

"[We will] expand international cooperation on mutually beneficial space activities to: broaden and extend the benefits of space; further the peaceful use of space; and enhance collection and partnership in sharing of space-derived information."

— U.S. President Barack Obama





EXPANDING

*perspectives*  
FORUM STAFF

## Women play an important role in security efforts

**Sister Lorraine Garasu doesn't look like the type of person who slips across enemy lines and commands the ears of both rebel leaders and government forces. Draped in a plain blue habit with a tuft of black hair peeking out from the front of her white veil, Garasu answers her call of duty armed with only her unrelenting faith and fierce negotiation skills.**

"It's not easy to go in between warring factions, in between guns, to try to negotiate an end to the violence," Garasu explained at the International Lessons Learned Conference in Sydney in December 2012. Nonetheless, the brave nun and other local women risked their lives to keep communication lines open between Papua New Guinea government forces and rebels in the Bougainville region during a period of civil conflict in the 1990s.

Now working tirelessly to rehabilitate those who suffered trauma during the conflict, Garasu has become a powerful testament to the important roles women play in conflict and post-conflict situations. Those roles are increasingly being recognized by security officials who want to incorporate gender perspectives into their operational planning, experts say.

"This can be perceived as a women's issue or as a soft issue," Philippa Nicholson, humanitarian manager for the Australian Civil-Military Centre, said of the push to include women in all aspects of security initiatives. "It's actually a human rights issue and an

operational effectiveness issue."

As community leaders, peace negotiators, politicians, police officers and Soldiers, women can offer perspectives that shed light on often overlooked dimensions of complex problems. Security officials should capitalize on those gender perspectives to improve their operational outlook, experts suggest. "This requires a definite shift in thinking and of the normative framework. It's also about a more efficient means to undertake operations and programs by incorporating 100 percent of the environment, the communities and the operational context in which we work," Nicholson explained at the International Lessons Learned Conference, co-hosted by the Australian Civil-Military Centre and the Australian Defence Force's Headquarters for Joint Operations Command.

### More Than Victims

In conflict situations, civilian women often bear the brunt of the violence, from abuse at the hands of fighters to abuse at the hands of family members, research shows. Despite these harsh realities, those who are considered most vulnerable can also be most valuable.

"Although many women are victims in a conflict situation, they have much more to offer than needing support and aid being directed at them," said Mairi Steele, who leads the Australian government's Office for Women.

In Bougainville, for example, the women in the community played a pivotal role in peace negotiations. During the conflict, the island was divided into government- and rebel-controlled areas, with Sister Garasu living in a government area. "But I always had the privilege and the opportunity to move across

**Women from the Bougainville region of Papua New Guinea, which was ravaged by fighting between rebel and government forces in the 1990s, played an integral role in pushing both sides toward peace negotiations.**



borders because of my role in the church, because I always made it clear to the armed forces that I was not interested in fighting. I was interested in taking care of people,” she said.

The nun seized on the opportunity to huddle with fighters on both sides of the front lines, going from person to person to find anyone willing to talk peace. She also rallied with other women in the community to encourage husbands, sons and brothers to put down their weapons and take a seat at the negotiation table.

### A Force for Peace

In many conflict situations, it’s not just the men on the front lines. Women have taken up arms for legitimate causes around the globe. They have also participated in extremist attacks and enlisted with rebel forces, though, not always voluntarily. In Sri Lanka, for example, female combatants made up a third of the Liberation Tigers of Tamil Eelam, according to a report in *The Christian Science Monitor* newspaper. Some joined the fight on their own, while others were kidnapped as girls and forced into combat.

Women working in legitimate security forces can help temper female militants and provide a positive role model for young girls in the community who may consider joining enemy forces. Female Soldiers and law enforcement officials are typically in a better position to anticipate the needs of their militant counterparts as governments work to disarm and reintegrate the women, experts say.

Many security forces — both in militaries and law enforcement — also rely on female members to reassure and reach out to women and children in the community. Simply the presence of female Soldiers, police officers or peacekeepers can make women and children feel safer, experts say. That feeling of safety can open up lines of communication between security forces and the communities they serve.

“Experience to date has shown that having gender expertise, as well as having more female Soldiers in theater, improves our ability to conduct operations more effectively,” Mari Skåre, the NATO secretary-general’s special representative for women, peace and security, explained in

“It’s not easy to go in between warring factions, in between guns, to try to negotiate an end to the violence.”

**Sister Lorraine Garasu**



AUSTRALIAN CIVIL-MILITARY CENTRE



REUTERS



GETTY IMAGES

**Sister Lorraine Garasu worked with other women in her community to push for peace negotiations between rebels in Bougainville and Papua New Guinea government forces.**

**Female members of a Philippine peacekeeping force stand in formation in Manila. The presence of female peacekeepers can put women and children in the community at ease, according to the United Nations.**

**A new Afghan officer hugs her U.S. mentor after a graduation ceremony in Kabul. Female security forces can serve as role models for other Soldiers and young women in the community who may eventually become Soldiers, experts say.**





A U.S. Marine from a Female Engagement Team shows her camera to Afghan girls during a visit to a village in Helmand province. Female forces are sometimes able to engage populations that may be inaccessible to male forces due to cultural restrictions.

AFP/GETTY IMAGES









Female commandos train at a center on the outskirts of Patiala in India's Punjab state.

AFP/GETTY IMAGES

“Although many women are victims in a conflict situation, they have much more to offer than needing support and aid being directed at them.”

**Mairi Steele**, *head of the Australian government's Office for Women*

a statement in November 2012. “For example, we have learned that female soldiers in Afghanistan are at times able to better connect with members of the population otherwise closed off from their male colleagues. This has led to greater awareness of the specific situation and area and led to better dialogue and understanding.”

In India, police departments across the country have ramped up efforts to recruit women after the federal government mandated in March 2013 that complaints of sex crimes must be handled by female law enforcement. Some districts even have women-only police stations to make reporting of such crimes easier on victims. “Sometimes, women are more comfortable talking to other women,” Sudhir Yadav, a special commissioner of police in Delhi, told *The New York Times*' India Ink blog in April 2013. “We will make sure they have that option.”

### Understanding Needs

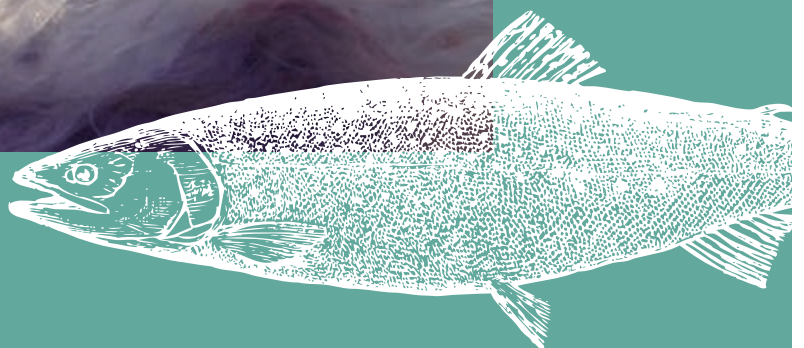
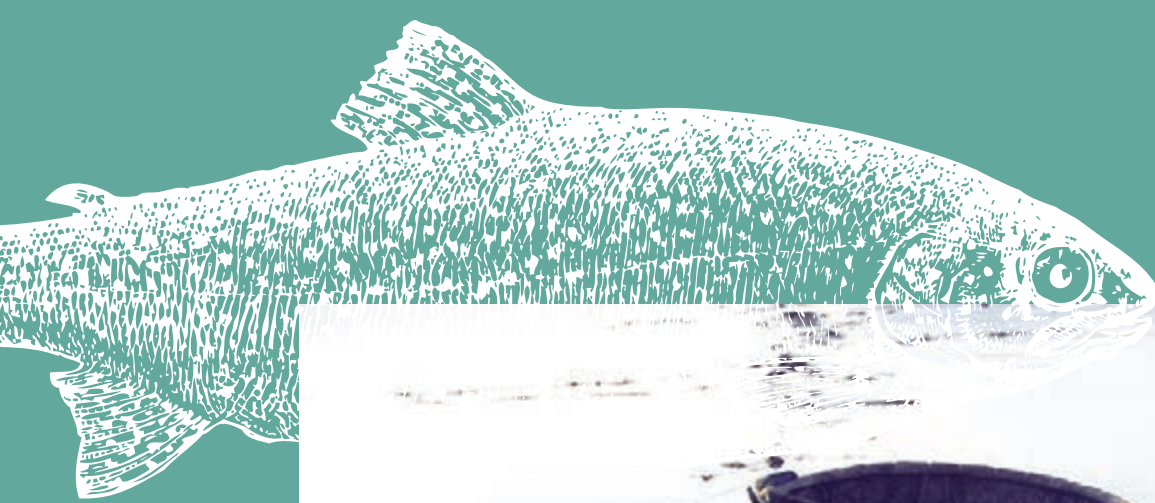
A national emphasis on incorporating gender perspectives will lead to greater long-term stability, experts say. Education and understanding of the political process ensures women are equipped to make their voices heard, especially in post-conflict situations.

In Bougainville, Sister Garasu and other female leaders are dedicated to making sure that happens. “More and more, we are engaging women in conversations, in training programs, so that they can understand their role and understand how they will participate,” said Garasu, who is working on a training program for women who want to be involved in Bougainville politics.

Programs such as this empower women and eventually increase the capabilities of governments that employ them, experts contend.

“No business, operation or government can afford to exclude 50 percent of its population's intelligence, opinions, ideas or experience,” explained Nicholson of the Australian Civil-Military Centre. “The most effective and efficient civil-military operation with the most sustainable impact is going to be one that incorporates male and female perspectives. It is simply not logical to undertake it any other way.” □



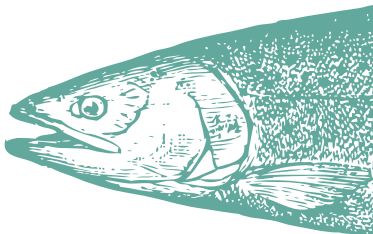




# marine management

COOPERATION AND  
CONSERVATION ARE  
NEEDED TO SAVE  
THE ASIA-PACIFIC  
FISHERIES INDUSTRY

SARA SCHONHARDT



Fishing is the lifeblood for millions of people in the Asia Pacific. It provides them with food and employment and ensures access to an important source of protein. Fish account for about one-fifth of all animal protein in the human diet, the World Resources Institute reports. Nearly 3 billion people — many of them in developing countries — depend on fish as their primary source of protein, according to the United Nations Food and Agriculture Organization (FAO).

The value of the industry is also enormous, estimated at U.S. \$90 billion in 2011, according to the latest FAO data. Ensuring the region's fisheries remain safe and well stocked, therefore, remains vital to guaranteeing global food supplies and the economic well-being of many.

Economic, political and environmental factors — including pollution, rising sea temperatures and overfishing — present challenges to safeguarding fisheries. Territorial disputes in the oil- and gas-rich South China Sea have also created tensions that raise competition and make cooperation difficult.



**Fishermen prepare nets on a beach in Vietnam off the central province of Quang Ngai.**

AFP/GETTY IMAGES



"You have rapid-growing economies around the South China Sea, and they all claim to need the fish and oil," said Mark Evidente, a lecturer on politics and international relations at De La Salle University in the Philippines.

## Stopping Exploitation

Managing fisheries to ensure maximum yields and secure employment and future food supplies might help ease tension, but that requires a willingness to cooperate, Evidente said. It also requires surveillance, which involves more technical capabilities and money than many countries have at their disposal.

"While they have so many resources available in the ocean, they don't have the fiscal resources to really monitor and police these areas," he explained.

Conservationists and regional maritime authorities say overfishing presents one of the most pressing problems. About 80 percent of the world's marine fish stocks are overexploited, meaning they produce lower yields than possible. Of the top 10 species, most are overfished and have no potential for increases in production.

The population of Pacific bluefin tuna, estimated at 150,000 adults, has dropped 96.4 percent from unfished levels due to decades of unregulated fishing, according to a stock assessment published in December 2012 by scientists tasked by the U.S. and Japan to study tuna and tuna-like species of the North Pacific Ocean.

Overfishing also contributes to biodiversity loss, since nontarget fish are often caught in the process. The Census of Marine Life, a survey of ocean life completed during a decade of study, blamed overfishing for the disappearance of up to 90 percent of the world's large marine animals. Fisheries management advisors say unmanaged fishing practices could eventually lead to a detrimental loss of marine species that would threaten food supplies.

## Promoting Sustainability

"Policies need to be put in place that maintain a balance between sustainable extraction rates of target species without impacting significantly on nontarget species," James Movick, director general of the Pacific Islands Forum Fisheries Agency, a regional advisory body that helps 17 Pacific island members manage their fishery resources, told *FORUM*.

Some countries are moving to address these issues by implementing an ecosystem approach to fisheries management. Plans call for better management of tuna catches, strategies for future fisheries development and ways to reduce bycatch.

Indonesia, for example, has designated zones for capture fisheries and has tuna catch quotas. Maritime officials, however, admit that Indonesia's long coastline makes it difficult to enforce those measures.

"Surveillance is very important for us because Indonesia is a huge area we need to monitor," said Shahandra Hanitiyo, assistant deputy director for multilateral cooperation through the United Nations at Indonesia's Ministry of Marine Affairs and Fisheries. "Our ministry only has maybe 20 patrol boats to patrol from Aceh to Papua. It's not enough."

Without proper surveillance, illegal, unreported and unregulated (IUU) vessels have flourished, creating huge economic losses for the region. IUU vessels don't pay the access fees that help boost country revenue, and they make fish less available to legitimate fishing ships. IUU fishing accounts for U.S. \$23.5 billion annually, or as much as one-fifth of the global reported catch, according to a study

co-authored by David Agnew, a senior research fellow focused on marine fisheries management at Imperial College in London.

## Breaking Ties to Illegal Trafficking

Many IUUs are also involved in other illegal activities, such as trafficking of people and weapons, said Alex Rogers, a professor of conservation biology at Oxford



**As economies in the Asia Pacific continue to grow, so does demand for expensive fish, putting more strain on stocks, said experts at a 2012 U.N. conference in Manila, Philippines.**



# ILLEGAL, UNREPORTED AND UNREGULATED FISHING IN ASIA PACIFIC

FORUM STAFF

On a warm, cloudless morning in late March 2013, a group of four fishing vessels went about trawling the waters around the Riau Islands of Indonesia, one of the most abundant and varied fisheries within the Asia-Pacific region, itself home to world's largest supply of fish. The fishermen aboard were all Indonesian, each of them carrying official permits and each was paid about U.S. \$32 per day. The flags their vessels flew that day were not Indonesian, however, but Malaysian, and the vessels themselves did not have permission to fish there.

The incident, which ended with the Malaysian boats and their Indonesian crews apprehended by Indonesian patrol boats, is a case of illegal, unreported and unregulated (IUU) fishing, according to Indonesia's Ministry of Maritime Affairs and Fisheries, which dispatched the arresting patrols. Although the fishermen were arrested and the boats impounded, IUU fishing remains a persistent problem with enormous costs, both to those countries whose waters are robbed of billions of dollars of fish each year and, less tangibly, to the global marine ecosystem. According to the Food and Agriculture Organization's Fisheries and Aquaculture Department, "IUU fishing undermines national and regional

efforts to conserve and manage fish stocks and, as a consequence, inhibits progress towards achieving the goals of long-term sustainability."

Indonesia has been particularly hard hit by illegal fishing, losing as much as U.S. \$5.2 billion, according to the People's Coalition for Fisheries Justice, an Indonesian nongovernmental organization. As the March arrests illustrate, however, actions are being taken.

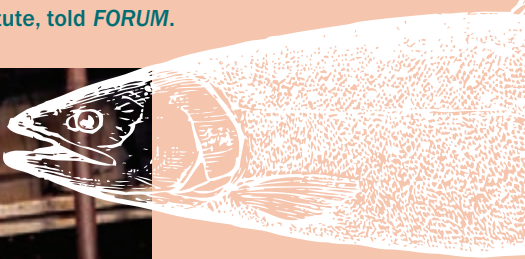
"The strengths of Indonesia's marine and fisheries' capacities have to be balanced with operational work on marine and fisheries resources surveillance and support of law enforcement at the sea," Indra Sakti, director of the information center of maritime ministry, told *FORUM* in a telephone interview. "We have synergized with the Navy, the police, the attorney general and Supreme Court to support law enforcement to combat IUU fishing."

Sakti added that Indonesia has recently implemented technology-based vessel monitoring and vessel registration systems as part of its efforts to combat IUU fishing, in line with the Food and Agriculture Organization recommendations. The ministry plans to increase its number of patrol boats from 25 to 80. According

to Maritime Ministry Secretary-General Gellwynn Jusuf, Indonesia's efforts in 2012 had reduced the country's loss to illegal fishing by nearly U.S. \$100 million.

Indonesia is not alone in its efforts to curb IUU fishing. It ranked among the top issues being addressed by the member states of the Asia Pacific Fisheries Commission (APFIC) in 2013, along with species depletion and the effects on fisheries of climate change.

Like Indonesia, Sri Lanka has opted for high-tech surveillance activities and the installation of a vessel monitoring system on high-seas vessels, said Chamari Dadigamuwege of the National Aquatic Resources Research and Development Agency. The Philippines announced to APFIC that it had increased its 2012 and 2013 budgets to combat the problem to "40 times" the amount spent in previous periods, according to Asis G. Perez, director of the Bureau of Fisheries and Aquatic Resources. Meanwhile, grass-roots initiatives to combat IUU fishing have been the pattern in South Korea, where community-based management projects are being used with the cooperation of South Korean fishermen to combat IUU fishing. Deukhoon Peter Han, senior researcher at the Korea Maritime Institute, told *FORUM*.



The Philippine Navy arrested sailors in May 2012 from a Chinese fishing boat near Scarborough Reef, over which Manila and Beijing claim sovereignty. China protested their arrest, claiming the fishermen were in Chinese territory.

REUTERS





The Philippines, Indonesia, Malaysia, Papua New Guinea, the Solomon Islands and Timor-Leste lie within the 5.7 million-square-kilometer fishing ground of the so-called Coral Triangle.

AFP/GETTY IMAGES



University and scientific director of the International Program on the State of the Ocean.

Such links between IUU fishing and other serious crime has caught the attention of Interpol, the world's largest international police organization. To address the issue, Interpol launched Project Scale in February 2013. The global initiative's goals include collection and analysis of information and intelligence on all types of crime linked with illegal fishing such as money laundering, fraud, human trafficking and drug trafficking. In addition, a Fisheries Crime Working Group and a National Environment Security Task Force were created to support Project Scale.

From an ecological perspective, "many of these vessels don't obey rules with regard to fishing, so we don't know what they're catching or if they're catching illegally," said Rogers, who explained how that makes it difficult for scientists to accurately assess fish stocks.

Some regional fisheries management organizations have started keeping lists of IUU vessels and restricting those ships from offloading their catches. Still, more at-sea observers, onshore vessel inspections, regional vessel registries and intelligence gathering among fishing communities are needed to prevent IUU operations, Movick said.

The Australian government has helped these efforts by providing patrol boats and surveillance personnel to most Pacific island countries. Now New Zealand, the United States and France are also giving

support by providing aerial and surface maritime surveillance to help those countries monitor fisheries operations and share the information with one another. The results are starting to show.

"We've seen over the course of the last four or five years a significant reduction in the number of IUUs as a result of these exercises," Movick said.

### Information Sharing

Sharing of surveillance and intelligence information is essential, Movick continued, as are uniform regulatory measures. In some parts of the Asia Pacific, however, territorial disputes and a lack of trust are preventing better maritime security cooperation.

Tension flared once again in the South China Sea in 2012 between four countries from the Association of Southeast Asian Nations (ASEAN) and China over ongoing territorial disputes. Representatives from the 10 member states of ASEAN have yet to create a code of conduct that would govern actions in those waters, and analysts say the lack of a legal framework means some states are giving up on cooperation.

"The existence of territorial disputes creates questions of who is responsible for what," said Evidente, the De La Salle University lecturer. "And when it's not clear who is responsible for what, the situation really deteriorates into a free-for-all."

More international forums are needed to build trust between countries so they can tackle overfishing and illegal transshipment, he said.





Indonesian fishermen unload a fresh catch on the shores of the easternmost end of Java island.

AFP/GETTY IMAGES

Workers offload fish for trading in Yangon, Burma's biggest city, in February 2012.

AFP/GETTY IMAGES

## Cooperative Patrolling

Joint patrols are also key. Malaysia, Indonesia, the Philippines and Thailand conduct coordinated patrols of the 805-kilometer Malacca Strait, an area prone to acts of piracy.

Several of those countries also work together on the Coral Triangle Initiative (CTI), a partnership among Indonesia, Malaysia, Papua New Guinea, the Philippines, the Solomon Islands and Timor-Leste, to conserve rich marine areas that serve as spawning grounds for fish and coral.

Evidente said the CTI and ASEAN are good platforms for cooperation and exchange of ideas in Southeast Asia, an area with some of the world's fastest-growing economies. It's also a region where traditional fishermen with low education and incomes still account for the majority of those employed in the fishing industry.

More money generated by the industry should be put toward programs that improve the health and education of fishing communities or support conservation programs, the FAO suggests. Yet, underperforming fisheries have produced a huge gap between potential and actual economic benefits from the sector.

A 2008 joint report between the World Bank and the FAO stated that about U.S. \$50 billion a year, more than half the value of the global seafood trade, is lost through poor governance that has allowed for the overexploitation of fish stocks.

## Implementing Reforms

Reform will require security forces and government leaders to crack down on illegal fishing and remove incentives that have allowed unsustainable practices to flourish, conservationists say.

One possible solution is "catch shares," which allow fishermen to harvest a share of a total catch that is determined by scientists based on the amount of fish that can be caught and still allow the fishery to regenerate.

Regulations exist for tuna in much of the Pacific that limit how many boats can be deployed for fishing. But that does not mean "no matter how many days you fish you can only take so many tons," said Amanda Nickson, director of the global tuna conservation campaign at the Pew Environment Group, part of a Washington-based, public policy, nonprofit organization.

She says a better solution is catch limits, which have shown success in not only preventing fisheries from collapsing but also reversing their depletion. As countries start to see conservation as vital to ensuring their future economic development, officials are starting to agree.

"More than 70 percent of Indonesia is sea area," said Hanitiyo, of Indonesia's Ministry of Marine Affairs and Fisheries, "so we need to preserve the sustainability of fisheries and related systems."

Getting countries to work together to share information to help improve marine fisheries, Movick said, remains a work in progress. □





REAR ADM. KAZI  
SARWAR HOSSAIN

# VISIONARY LEADERSHIP



THE BANGLADESH COAST GUARD  
AND ITS DIRECTOR GENERAL ARE READY  
TO TACKLE MARITIME THREATS

FORUM STAFF

**A**s a sage seafarer and veteran naval commando, the director general of the Bangladesh Coast Guard, Rear Adm. Kazi Sarwar Hossain, thrives on challenges.

Bangladesh faces many of those from humankind and nature alike. Pirates, smugglers and polluters threaten its seas, while its 24,000-kilometer-long network of more than 230 rivers, canals, creeks and water bodies leaves it vulnerable to flooding during monsoon and cyclone seasons.

Although some flooding is desirable to grow rice and replenish soils, the downpours create problems. On average, about 18 percent of the country floods each year, devastating homes and families. When severe flooding occurs, more than 75 percent of the country can be affected since much of its land area lies fewer than 10 meters above sea level.

Luckily for Bangladesh, Sarwar is prepared for the daunting task of policing and protecting the nation's vast sea area, estuaries and waterways. Not only has he led combat ships of every size and variety in the Bangladesh Navy's fleet, but Sarwar has developed his unique perspective over the course of decades. After graduating from Britannia Royal Naval College in the United Kingdom, he was commissioned in 1980. He attended Underwater Demolition Training at U.S. Navy SEAL Training School in 1983 and earned his golden trident. He is also a graduate of the prestigious U.S. Navy War College in Newport, Rhode Island. His list of accomplishments goes on and on.

#### **Curbing Piracy**

Since becoming director general in 2011, he has already turned maritime odds in his country's favor. As a result of phenomenal growth in recent years, Bangladesh is increasingly dependent on the sea for trade

and commerce through its Chittagong and Mongla ports, which handle more than 2,500 ships a year. Analysts predict trade will triple in the next decade. Moreover, effective resource management is required to meet the demands of the nation's ever-increasing population, he explained.

Under Sarwar's leadership, the Bangladesh Coast Guard — in partnership with the Bangladesh Navy — has worked to reduce piracy and secure the Chittagong port, which handles the majority of the nation's shipping traffic.

The Regional Cooperation Agreement on Combating Piracy and Armed



BANGLADESH COAST GUARD

Robbery (ReCAAP) against ships in Asia has recognized the effectiveness of the operational activities of the Bangladesh Coast Guard, especially for combating piracy in the anchorage. In 2012, 11 incidents were reported at the port and anchorage of Bangladesh. Authorities successfully apprehended the robbers and recovered the stolen items in two incidents. The situation has been improving since 2008, with incidents declining by 70 percent, Sarwar said. The International Maritime Bureau

**The Bangladesh Coast Guard strives to ensure unhindered sea trade; safeguard sea users, especially coastal fishermen; and protect sea and forest resources.**





**Bangladesh Coast Guard and Navy members practice apprehending criminal suspects during counternarcotics training in January 2013.**

also sounded the same note of praise for the Bangladesh Coast Guard in its 2012 yearly report, acknowledging that piracy incidents in Bangladesh have fallen significantly in recent years.

“This is a success story which we’re part of and proud of and plan to continue the drive,” Sarwar told *FORUM*. “We plan to work for success in our future undertakings and are determined to continue the decline.” As a result, insurance premiums for shippers in the region have dropped 30 percent, Sarwar said. “The amount of savings that the government is enjoying because of this is phenomenal.”

Sarwar mentioned that Bangladesh’s elite Navy special forces, known as the Special Warfare Diving and Salvage Unit, are also working to build up a combined maritime quick reaction force as well as enhanced search-and-rescue capabilities. “In search-and-rescue

operations, time is of the essence. If you can’t respond, life is lost and the operational significance goes down,” Sarwar explained.

### **Securing Commerce**

Early in his career, Sarwar realized that a safe and secure maritime space is paramount for Bangladesh. Given that the global maritime situation changes rapidly, it is more essential not only to fulfill his nation’s political, economic and legal interests but to establish sovereign and economic rights, Sarwar said.

Since its inception in 1995, the Bangladesh Coast Guard has strived to ensure unhindered sea trade; safeguard sea users, especially coastal fishermen; and protect sea and forest resources. The Bangladesh Coast Guard will continue to work so that “the fishermen of that area, especially the southern part of Bangladesh, can go out to sea and

Continued on page 52

## BANGLADESH PARTNERS WITH

# Joint Interagency Task Force West

STORY AND PHOTOS BY JIATF WEST

**S**panning the Bay of Bengal between India and Burma is the nation of Bangladesh. The country holds some of the region's most historically significant sites as well as contemporary advancements in architecture. Bangladesh is both the eighth-most-populous nation as well as the densest large nation in the world. Since 2005, Bangladesh has been a member of investment bank Goldman Sachs' "Next Eleven" — a moniker economists coined to describe a group of 11 countries with a promising outlook for investment, future growth and a high potential for joining the ranks of the world's largest economies in the 21st century.

Along with the expanding economy, international development and ever-growing population, comes the increased challenge of maintaining security and stability within its borders. The exponential economic growth rates and booming population have made Bangladesh ripe for narcotics trafficking.

With the support of the U.S. Defense Department, Bangladesh continues to improve its sovereign control over territory to prevent use of its maritime domain to transport narcotics through the region. Despite the challenge of being the world's most densely populated large nation, Bangladesh has successfully governed its maritime and land borders.

Joint Interagency Task Force West (JIATF West) personnel appreciate the eagerness of their Bangladeshi counterparts to learn new skills to enhance their law enforcement capabilities. The coordination of training events in Bangladesh is a true team effort. U.S. law enforcement sponsors work closely with the country team and JIATF West trainers to create focused and meaningful training missions in one of the most challenging environments in the Asia Pacific.

JIATF West visited Bangladesh for two training events in January 2013 for a total of nine events since the task force's first mission in 2005. One three-week event combined counternarcotics training for law enforcement and military. The other event, in conjunction with counternarcotics training, was a Small Craft Maintenance Training Team (SCMTT) mission to support maritime police forces for two weeks. Training took place at the Coast Guard base and headquarters for the East Zonal Command in the port city of Chittagong. JIATF West organized training with the same Bangladesh units in 2012, yet this event was attended by new students from various regional zones of the

Bangladesh Coast Guard (BCG) and the Bangladesh Navy.

Twenty-eight enlisted members received counternarcotics training, and 25 members received marine craft maintenance and engine diagnostics training from the SCMTT. The counternarcotics training focused on a different area each week. The first week's focus was law enforcement training provided by U.S. police trainers from Oregon's Portland Police Department and from the U.S. Naval Criminal Investigative Service.

The Portland police have a longstanding relationship with Bangladesh and provide training at the police academy in the city of Rajshahi. It was the first time they trained in Chittagong, as well as with the BCG. Their team was made up of subject-matter experts in the fields of forensics, investigations and counter gang units.

The second week of training was primarily for boat operations, such as visit, board, search and seizure procedures. Members of the BCG and U.S. military instructors trained with two highly advanced aluminum response boats to practice boarding large vessels on the Karnaphuli River, a 400-meter-wide river in the southeastern part of Bangladesh.

The third week included marksmanship training and tactical combat casualty care medical training. A culmination exercise was conducted during the last week of training, requiring students to devise a timeline for overtaking a target vessel and exploiting the site once aboard. During the exercise, BCG members practiced apprehension, interviewing techniques and evidence processing.

JIATF West's work in Bangladesh is at the forefront of the U.S. Pacific Command's vision of building strong relationships with allies, partners and other government agencies as part of the rebalance effort in the Asia Pacific.



**Members of the Bangladesh Coast Guard listen to a lecture on engineering theory and principles of maintenance in January 2013.**



**Bangladesh Coast Guard and Bangladesh Navy members train with members of the U.S. Portland Police Department in January 2013 in Chittagong.**



carry out fishing safely, securely and smoothly,” Sarwar told *FORUM*.

During his military career, Sarwar has also promoted various projects and plans to maintain law and order of the seaport area, and he has pushed for progress on securing ships and boats to expand the force. Sarwar has worked to expand the size and platforms of the Coast Guard. He credits Bangladesh Prime Minister Sheikh Hasina and her associates with fully understanding this requirement.

In the past few years, the Coast Guard’s manpower has grown more

than 10 percent. It has inducted 29 high-speed boats into service, and six more are under construction, he said.

“Seagoing ships are the top priority at this time,” Sarwar said, with hopes to further expand his fleet. “We have to go out to sea area and establish our sphere of influence over there so it deters illegal activities from brewing in the area.”

Eventually, Sarwar would like the Coast Guard to have its own aerial platforms. For now, it relies on the Bangladesh Air Force for such support.

## SITES OF COASTAL CRISIS MANAGEMENT CENTERS IN BANGLADESH





## BANGLADESH Coast Guard Objectives

- Control piracy, smuggling, trafficking and pollution.
- Protect people, fish populations and offshore resources.
- Enforce law and order at sea.
- Conduct relief and search and rescue operation.
- Curb drug trafficking.
- Prevent illegal migration through the sea.
- Prevent terrorists activities at sea.

**A member of the Bangladesh Coast Guard stands watch as a fishing boat passes in Teknaf in June 2012.**

### Coastal Management

During his tenure as director general, Sarwar has facilitated the creation of a network of coastal crisis management centers in partnership with U.S.

Pacific Command. The multipurpose, multiuse two-story facilities will enhance surveillance and intelligence sharing, improve communications and expand reach for the Coast Guard. The first facility opened in March 2013, and 11 more were operational by June 2013. Eighteen more are expected to be completed by the end of fiscal year 2015.

“These centers, once functional, will be very useful in developing awareness of the coastal population about the effects of natural disasters and water-borne diseases,” Sarwar said, as well as the “requirement of conservation of fishery and forest.”

The buildings are designed to serve as support shelters during natural disasters to house people displaced from their homes. They will be safe on the second stories of the centers when disaster

strikes. The dual-purpose shelters will add to the cyclone shelters that have been successfully implemented during the past few decades. His plan is also to enhance maritime disaster preparedness of the Bangladesh Coast Guard.

Observers agree that Sarwar has been the driving force behind the swift progress of the Bangladesh Coast Guard. He had the leadership, vision and experience to put it all together.

Sarwar would like to see more done to increase the “awareness among people and government bodies on the use of the sea, the potential of the sea, and the implications for the development of the country and the restitution of the region in general.”

For his part, he plans to continue to build partnerships and enhance integration of capabilities and services. “It’s a matter of envisioning the requirements for the long-term goals of the country and trying to reach out to other organizations as to how we want to develop and bring other resources to focus,” Sarwar said. “Being a member of the maritime community brings us closer together.” □



# Enhancing Resiliency

## TO TRANSCEND DISASTER



U.S. ARMY PACIFIC



U.S. ARMY PACIFIC



## THE U.S. ARMY PACIFIC EMPLOYS A CIVIL-MILITARY APPROACH

U.S. ARMY MAJ. G. SCOTT DEWITT AND JUSTIN PUMMELL

Natural disasters provide mounting challenges to governments, populations and the environment. Without proper preparation and response planning, the increase in the severity, length and scale of disasters will detrimentally impact responders' abilities to overcome and recover effectively and efficiently. In this age, it is paramount that all countries in the Asia-Pacific region work collaboratively to respond to floods, earthquakes, typhoons, droughts, tornados and other natural disasters.

The U.S. Army Pacific (USARPAC) has developed a unique and effective means to prepare for inevitable disasters through a program called Pacific Resilience. The program is built on the premise that in the spectrum of disaster response, the military plays an important role within a narrow band of capabilities and based on a restricted timeline. This means that the U.S. military possesses specific assets (such as rotary wing and wheeled transport) and skill sets (such as route clearance and security functions) that have proven invaluable in recent international disaster operations.

Traditionally, the implementation of these response multipliers has been delayed by distance or postponed based on the affected nation's request timeline for international help. The overall impact of international military reaction is further reduced by the limited life span of military response efforts, which typically are concluded within two weeks. The bottom line is there is little time to harness the maximum benefit from the vital military resources in a crowded and complex environment of real-world, international response. Therefore, through exercises and exchanges, all parties must build interpersonal relationships with civilian and military stakeholders to create a familiarity with shared response procedures and systems. This approach speeds the integration of life-saving military assets and ensures continuity of effort across the wide scope of humanitarian



U.S. ARMY PACIFIC

**Left: A member of the Bangladesh Armed Forces gives senior leaders from the U.S. Army Pacific, Bangladesh Ministry of Disaster Management and Relief, and U.S. Embassy a status briefing during the 2012 Pacific Resilience Disaster Response Expert Exchange (DREE) held in Dhaka, Bangladesh.**

**Center: First responders from the Bangladesh Army, Fire Service and Civil Defense, and International Red Crescent Society provide medical stabilization and treatment to victims during the DREE.**

**Right: Members of the Bangladesh Fire Service and Civil Defense use a rope and pulley system to safely rescue citizens trapped in a burning building during the DREE.**



assistance/disaster relief (HA/DR) practitioners based on a mutual understanding of response procedures.

### EVOLUTION OF AN EXERCISE

The Disaster Response Expert Exchange (DREE) concept was first employed in 2007 as a way for USARPAC to share best practices and lessons learned with Indonesian first responders who deal annually with multiple types of natural disasters. In its infancy, the DREE started in a conference setting and focused on building interpersonal relationships and bridging the gap between national and international stakeholders. The multilateral event matured in subsequent years with the additions of a field training exercise and collaborative presentations by prominent members of the various strata of disaster response. In 2010, an active campaign began in the USARPAC Security Cooperation and Policy (SCP) branch to increase the complexity and focus the potential of this important event with the inclusion of field training exercise platforms and additional stakeholders. In 2012, USARPAC SCP moved the DREE one step further by formulating an umbrella strategy to bring together all medical, engineering, HA/DR and consequence management efforts and link them under the Pacific Resilience program.

The DREE remains a fluid platform for engagement. As Pacific Resilience, the program is a persistent exercise engagement that includes plenary exchanges, a scenario-driven command post exercise and a hands-on response field training exercise. The scope of participation has also widened to include a multitude of civilian and military organizations that traditionally respond to international disaster scenarios. Finally, the Pacific Resilience concept has expanded to include events in other countries in South and Southeast Asia, such as Nepal and Bangladesh, further broadening collaboration and compiling additional perspectives for conducting disaster response. Pacific Resilience was designed to be a constant event that is continually malleable to focus on multiple disaster scenarios and geographic regions.

### INCORPORATING ALL STAKEHOLDERS

Pacific Resilience is USARPAC's main platform to engage, partner and prepare as part of a whole-of-government approach using both the military and civilians to plan and execute events. It uses medical, engineering, HA/DR and other related activities to test plans, equipment and personnel in a variety of emergency scenarios that are likely to impact the Asia-Pacific region. Pacific Resilience enhances all parties' abilities to respond to and recover from an emergency through tabletop exercises, command post exercises and field training exercises that simulate reality, identify procedural gaps, and practice techniques required for efficient and collaborative response. It integrates all first responder communities and rehearses how militaries would support civilian authorities during disaster situations, the reception and dissemination of foreign humanitarian assistance, and the strategic communication required to successfully execute emergency management plans.

USARPAC executes the DREEs in Nepal, Bangladesh, Indonesia and the Lower Mekong region. These activities promote and engage partner nation governments and militaries to posture themselves to recover quickly from catastrophic situations. Furthermore, consultation with partners allows for combined concepts and the development of regional institutions that can reduce reliance on foreign assistance to support common disaster scenarios. Through these engagements, the most vulnerable disaster situations can be evaluated, and the partner nations can increase their readiness to recover and overcome for the benefit of the civilian populace.

USARPAC prepares these events by teaming its Civil-Military Operations Branch with subject-matter experts from civilian organizations. Currently, a civilian U.S. Army Corps of Engineers geographer is embedded with the military team to approach and plan Pacific Resilience activities using many perspectives. This increases coordination with civilian organizations that offer similar services, such as the Office of Foreign Disaster Assistance, U.S. Forest Service or the Federal Emergency Management Agency, which are often not incorporated into military exercise planning and development. Additionally, it allows for an integrated and consistent face to deliver Pacific Resilience themes with partner nations, with reach-back capability to subject-matter experts familiar with the U.S. National Response Framework and Emergency Support Functions.

In addition to readying partner nation organizations, Pacific Resilience is designed to expose USARPAC Soldiers to domestic and foreign civilian organizations, processes and plans. This allows elements such as the Contingency Command Post (CCP), which is USARPAC's front-line organization to support HA/DR



THE ASSOCIATED PRESS

**A Bangladesh Soldier, left, interacts with a U.S. Soldier during a joint Bangladesh and U.S. military disaster preparedness exercise in Dhaka in September 2012.**

# USARPAC IN BANGLADESH

**A**t the 2012 Disaster Response Expert Exchange (DREE) in Bangladesh, the U.S. Army Pacific (USARPAC) engaged the Bangladesh Armed Forces Division and the Ministry of Disaster Management with its civil-military approach. This made all parties at the table feel comfortable and resulted in a successful field training exercise that included more than 70 organizations and 1,250 participants throughout the city of Dhaka. “Usually when we plan any military activity, it is led, organized and managed by military participants. However, Pacific Resilience takes a new approach to the military-led paradigm by enabling military and civilian leadership to jointly execute the training. This leads to a more realistic event, which forces us to break down communication barriers and roll up our sleeves to solve common problems,” said Maj. Greg Pipes, USARPAC South Asia desk officer. “When it comes to disaster response, the military is

usually there to provide support to civilian authorities. Pacific Resilience allows military organizations, like the CCP [Contingency Command Post], to exercise coordination with agencies like OFDA [Office of Foreign Disaster Assistance], civil government emergency managers and military of the affected government. These practices are taught in the Joint Humanitarian Operations Course and Humanitarian Assistance Response Training but are not replicated in traditional military exercises,” explained Maj. Kenneth Frey, USARPAC Humanitarian Assistance Survey Team engineer officer. “Exposure to these situations cannot be underestimated. The more practice and collaboration performed between different civil and military organizations, the more governments can develop their capability to confront calamities presented by Mother Nature and enhance USARPAC’s effectiveness if called to assist.”

missions, to better understand how disaster response works in a particular nation. It also allows the CCP and other units to increase their coordination with the U.S. Agency for International Development and the State Department to provide a swift and unified response.

## TRANSFORMATION

USARPAC has transformed its approach to HA/DR through the past two years to incorporate more of a civil-military approach to planning and preparedness. This transformation started with the USARPAC Security Cooperation and Plans Branch teaming with the U.S. Army Corps of Engineers’ International Capacity Development Program (ICDP). ICDP is an international all-hazard program planned and executed by a host nation and supported by the Army Corps of Engineers, USARPAC and the U.S. Pacific Command. It focuses on all phases of the disaster management lifecycle, with a special interest on preparedness. ICDP emphasizes civil-military and interagency cooperation. It is a methodology whereby partner nations can build and share technical skill sets. ICDP is deliverable-oriented and ensures activities under its program leave something behind that permanently impacts change. For example, it may be the development or enhancement of an existing disaster plan, the turnover of support equipment or the institutional knowledge to grow an organization’s ability to perform a function more efficiently.

## WAY FORWARD

Because each disaster is unique, Pacific Resilience continues to adapt to all circumstances. For example, the inclusion of the Lower Mekong Initiative DREE in 2013 demonstrates a regional approach to disaster preparedness where a group of partners (Cambodia, Laos, Thailand, Vietnam and the United States) will join their civilian and military emergency service components to respond to a regional disaster that impacts more than one country. The

catastrophic flooding that occurred along the Mekong River and its tributaries in 2011 is a prime example of how governments need to collaborate to overcome a common problem.

Pacific Resilience will expand its bilateral platform to evaluate multilateral concerns and coordinate USARPAC support at a regional scale. The evolution of Pacific Resilience will remain flexible to include new partners, approaches and concepts to prepare for all hazards. Additionally, the complexity of exercise scenarios will increase to ensure gaps can be identified and lessons learned can be prominently shared. Additional supporting elements, such as a medical first-responder course or urban search-and-rescue workshop, will help shape future Pacific Resilience activities. In any disaster response program, it is imperative that planning remains fluid to capture experiences and promote readiness. The risk, if the engagement stays static, is that a false sense of security could set in, leaving populations and property vulnerable to potentially catastrophic situations.

Pacific Resilience is USARPAC’s fundamental HA/DR platform to allow its Soldiers and supporting elements to be prepared, advocate for interagency and multilateral coordination, and exercise real-world scenarios. The refinements and increases in complexity will continue as the Pacific Resilience initiative adjusts to new challenges and envelopes shared international capacities. Improving operational links and moving toward full-response certification exercises will be key milestones in the near-term. As Pacific Resilience grows in size and scope, it will move forward as a vital shaping element to strengthen collaborative HA/DR response capabilities and support theater security cooperation in the Asia-Pacific region. It will build trust among partners and allies through consistent and pragmatic engagement, result in stability and security for the theater by increasing readiness and communication, and save lives by reducing inefficiencies and common civil-military friction points. □



# PERSPECTIVES ON THE Arab World

India stresses  
the importance  
of changes in  
the Middle East

INDIAN DEFENCE MINISTER  
SHRI A.K. ANTONY

Since December 2010, the Middle East has been experiencing tumultuous changes. These changes have ushered in fundamental political and socio-economic transformation in the Arab world. New political dispensations have taken over in Tunisia, Libya, Egypt and Yemen. Such transition, unfortunately, has been accompanied by large-scale violence. The ongoing violence in Syria is a matter of concern for the region, as well as the world. Moreover, recently, extremists believed to be linked with the al-Qaida elements took over the government in Mali. Meanwhile, France has sent its military forces for intervention.

The recent developments in all of these countries afford a few lessons: Firstly, no government, or regime, can afford to ignore the popular aspirations anymore. The common strand running through all of these protests and demonstrations has been the youth. The voice of the youth is a universal message that is strongly echoing across to governments in all regions of the world. The strong urge for change is clearly visible across the region. Secondly, the process of transformation is far from complete and, on the contrary, has just begun. The journey ahead will be long, tortuous and full of unexpected twists and turns. Thirdly, the developments in West Asia have the potential of changing the regional and geo-political landscape. The West Asia region is critical for energy security. Instability in the region will have an impact on global oil prices, availability of oil and gas, and shipping of these resources. Fourthly, though traditional political and socio-economic structures have been transformed, new structures that will replace them have not yet got consolidated. While fundamentalist forces have got a fillip, democracy is yet to be consolidated. New political equations are emerging in Iraq and Afghanistan, which has heightened regional and global uncertainties. Lastly, social media have emerged as a potent and vibrant force. Social media have served as a “force multiplier” in the hands of the protesters.

For India, in particular, West Asia is a critical region. People-to-people contacts have existed between India and West Asia for centuries. These links have got deepened and further strengthened in the era of globalization. Our stability and prosperity are affected by the developments in the region. First, the Gulf region is vital for India's energy security. The region has about 48 percent of the world's total proven oil reserves and almost 16 percent of the world's natural gas reserves. Nearly two-thirds of our hydrocarbon imports are from this region. This will continue to be so in the near future. In addition, nearly 6.5 million Indians live and work in different countries of this region. A World Bank report says that India received U.S. \$70 billion in remittances during



2012, and a majority of the remittances came from the Gulf region. These remittances support nearly 40 to 50 million families in India and, at the same time, contribute to local prosperity. During 2011, India evacuated nearly 19,000 Indians working in Libya. The safety and security of Indians working in the region is a sensitive concern for the Indian government.

India's trade with the region is expanding. During 2011 to 2012, India's trade with the Gulf Cooperation Council (GCC) was more than U.S. \$145 billion (with exports and imports from the region standing at 20 percent and 14 percent, respectively). India also offers a destination for surplus funds in GCC countries. India has a long tradition of democracy, and it is home to a diverse, pluralistic society. The democratic processes have managed its vast regional, cultural, linguistic and regional diversity. At a time when several West Asian nations are in a state of transition, India can share its

experiences with the governments and civil societies.

Recent developments have complicated the security situation in the region. Given India's vital stakes in peace and stability in the region, it is natural for India to have an interest in abiding peace and security in the region. At the same time, long-standing conflicts in the region cannot be ignored.

India can ill afford to remain aloof from the transformative changes taking place in its immediate and extended neighborhood. We have centuries-old linkages with the Arab world. Our civilizations have closely interacted and influenced each other in the past. We have excellent bilateral relations, and the relation can be placed on an even stronger footing in the new phase that has set in recently in West Asia.

*This is an excerpt from Indian Defence Minister Shri A.K. Antony's inaugural address at the 15th Asian Security Conference on "Emerging Trends in West Asia: Regional and Global Implications" held in New Delhi February 13-15, 2013.*



**Indian voters raise their hands during an election campaign rally in January 2012. India's history with democracy could provide lessons for Middle Eastern countries in transition.**



TANZANIA



GETTY IMAGES

## RATS to the RESCUE

A baby rat in a tiny red and black harness twitches its pointed nose incessantly. It is probing a grassy field in Tanzania, where it is being trained by a pioneering Belgian nongovernmental organization to sniff out deadly land mines.

Giant African pouched rats have been found to be highly effective in mine detection by APOPO, the organization that launched the training project. So far, they have helped reopen nearly 2 million square meters of land in Mozambique.

The rodents are trained to detect the TNT in land mines through operant conditioning: A click sound signals a food reward whenever the rats make the correct detection. In all, it takes nine months of painstaking on- and off-field training for a rat to be deployed for mine detection.

"This work is not easy," recounted trainer Abdullah Mchomvu, holding a rat cage under his left arm. "You have to be patient. Sometimes I get frustrated, but then again, I tell myself these are animals." However, he added, "this work saves lives."

It takes two human deminers a day to clear a 200-square-meter minefield, but if they work with two rats, they can sweep it in two hours. Agence France-Presse

REUTERS



DUBAI

## A POLICE CAR criminals want to ride in

The Dubai Police Department added a serious boost of speed to its fleet in April 2013 with the addition of the Lamborghini Aventador. The Italian-made sports car can reach a speed of 349 kilometers per hour, making high-speed chases a breeze for police.

FORUM staff

SUDAN



## NEWLY FOUND PYRAMIDS SHOW DEMOCRATIZATION

ENGLAND

# a sand salute

## TO HOLLYWOOD

Sand sculptor Helena Bangert from Holland works on a King Kong sculpture, as pieces are prepared for the Hollywood-themed annual Weston-Super-Mare Sand Sculpture Festival in March 2013 in England. Twenty award-winning sand sculptors from across the globe created the works, which includes Harry Potter, Marilyn Monroe and characters from the *Star Wars* films, as part of the town's very own movie-themed festival on the beach. *FORUM* staff



GETTY IMAGES

People power may have come to modern-day Egypt and not Sudan, but the unearthing of ancient pyramids in Egypt's southern neighbor shows that greater social equality existed there 2,000 years ago, a French archaeologist says.

Three years of digging by a French team at Sedeinga, about 200 kilometers from the Egyptian border, has unearthed 35 pyramids that emphasize the contrast between the two ancient cultures, said Claude Rilly, director of the mission.

Sudan's remote and relatively undiscovered pyramids contrast with their grander and better-known cousins to the north. Egyptian pyramids — built far earlier than those in Sudan — held the tombs of kings, the royal family and nobles but never the middle class, Rilly said. *Agence France-Presse*

AFP/GETTY IMAGES

MEXICO

## MEMORIAL *honors drug war victims*

Mexico opened a U.S. \$2.4 million memorial with towering steel walls in April 2013 to honor tens of thousands of victims of a brutal drug war.

Funded with money seized from drug cartels, the memorial was built during the administration of President

Felipe Calderon, whose six-year term ended in December 2012 and was marked by an escalation of violence.

"This memorial remembers not only those who are gone but also

those who are still here," said Alejandro Marti, founder of the Mexico SOS group, whose teenage son was murdered in 2008. *Agence France-Presse*



THE ASSOCIATED PRESS





Tamasaburo Bando performs during a dress rehearsal at the Chatelet Theatre in Paris in February 2013.

AFP/GETTY IMAGES

## Japan's National Living Treasure Keeps

# Kabuki Alive

AGENCE FRANCE-PRESSE

Tamasaburo Bando has dedicated his life to the intimate study of women — the way they walk, the way they move, the way they hold their hands. He is also good at it. So good, in fact, that Japan has named him a National Living Treasure, an accolade given to individuals who are guardians of an important cultural asset.

Bando, 62, is Japan's leading specialist of "onnagata" — the theatrical portrayal of a female kabuki character by a male actor.

"More than simply recognition, this anointment represents a duty, a moral obligation to future generations for those who practice and perpetuate traditional Japanese art forms," Bando told Agence France-Presse (AFP) in Tokyo.

Kabuki is a form of traditional Japanese theater that has been performed in the country since the 17th century, combining dance, drama and music. As in its contemporary European equivalent, there are no female actors. The all-male cast dons elaborate costumes and heavy makeup to perform on extravagant sets.

"My main priority is to create a moment, a second on the stage, to share something with the audience ... but if I never get there, if the people who come to watch me fail to appreciate it, then I will not be able to protect this treasure," Bando said.

The actor once explained he realized he could never see the world through the eyes of a woman, that his vision would always be that of a man. Bando tries to create this essence piece by piece: the gestures, the eyes, the use of his fan, blurring the boundary between his male life and his female stage persona.

"The frontier is not clear. I am a man; I have never been a woman. The same concept of onnagata is based on a man's imagining of a woman. It goes a lot further than a simple physical transformation," he told AFP.

"The real Tamasaburo is in front of you. On stage, I am a dream, maybe just a creation. It's on stage that I am happiest," he revealed.

A typical kabuki performance runs upward of four hours, yet remains remarkably popular in Tokyo — a city renowned for its love affair with modernity. The metropolis's most famous kabuki theater, Ginza's

Kabuki-za, reopened to much fanfare in April 2013 after extensive renovations.

Bando believes technological changes have benefited kabuki and need to be embraced, without compromising the essence of the art. "The kabuki of 300 years ago was very different," he said. "There was no electricity for lighting, no electronics — for example, the trapdoor in the floor had to be moved manually.

"Kabuki evolves, but it has kept its spirit and will continue to do so in the future — just like the Greek tragedies, the opera or the ballet," he said.

Bando started a run in Paris in February 2013, his first in the French capital for a quarter of a century. In addition to performing kabuki solos, he also performed *The Peony Pavilion*, a classical Chinese opera that he has directed.

About 60 actors and musicians perform in the abbreviated version of the Ming Dynasty masterpiece, which runs to 55 acts in the original. The complex love

story, in which Bando plays the heroine Du Liniang, the daughter of an important official, received a standing ovation on its opening night in Paris.



**Japanese kabuki actor Tamasaburo Bando, who plays a female role, tries to create the essence of a woman in small ways — through gestures, the use of his fan and his eyes.** AFP/GETTY IMAGES

Before his tour, Bando said he was both nervous and excited about performing overseas, but he was confident that the exoticness and unusual aesthetic of kabuki would survive the transition to a European stage. "It's enough to like the theater," said Bando, dismissing suggestions that audiences would need a lot of historical or cultural knowledge.

"You don't need to know anything about the War of the Roses to love Shakespeare."



## Football: Japan Comic Superhero Returns

Japanese comic strip football superhero Captain Tsubasa has returned from a storybook stint in Spain to save his “birthplace.”

His bronze statue was unveiled in March 2013 in the eastern Tokyo town of Yotsugi, the hometown of Captain Tsubasa creator Yoichi Takahashi. The statue shows Tsubasa Ozora as an elementary school boy in the early phase of the comic series — standing 145 centimeters tall, smiling broadly and putting on a captain’s armband.

The Captain Tsubasa strip was launched in a Japanese boys’ weekly magazine in 1981 when football was still a minority sport in baseball-hooked Japan. Over the years, Captain Tsubasa has become a professional player in Brazil and moved to Barcelona.

His fortunes rose alongside those of the game in Japan, where the J-League was launched in 1993. The national side reached the last 16 of the 2010 World Cup.

“There are many people who fell in love with football after reading this manga among the world’s top players and Japan’s national team players,” Japanese MP Katsuei Hirasawa told the ceremony. Agence France-Presse

*“Tsubasa’s dream is to see Japan win the World Cup. I definitely hope I get to draw this scene one day.”*

— Yoichi Takahashi



AFP/GETTY IMAGES

## India's HOPES FOR THE SLOPES

Hindi may still be a rare language at the World Ski Championships, but with one-sixth of the world’s population and mountains higher than the tallest peaks in the Alps, India is planning to rival traditional ski nations in the near future.

Roshan Lal Thakur, head of India’s Winter Games Federation, hopes to turn India into a skiing powerhouse and boost his northern region’s economy.

Although India’s image is mostly one of a hot country with spicy food and Bollywood movies, the northern regions of Kashmir and Himachal Pradesh and the resort of Auli in Uttarakhand are high in the Himalayas with snow for months on end in the winter.

With India’s economy booming and exposure to winter and adventure sports through mass media increasing, more people are going to the mountains and trying out skis.

Agence France-Presse



AFP/GETTY IMAGES



AFP/GETTY IMAGES

## Tourists Fight the Flab at Thai Boxing Camps

In a sweltering training camp on a tropical Thai island, sweaty tourists wearing oversize gloves and baggy shorts slam their fists, knees, elbows and feet into a row of heavy bags. Welcome to the latest craze in extreme fitness — Muay Thai boxing.

With worries growing about the world’s bulging waistlines, many foreigners are flocking to Thailand to spend their holidays not on the

beach but following a punishing regime of training in Muay Thai and other martial arts. Some are going to even more extreme lengths, quitting their jobs to spend weeks or months training in an effort to win their long battles with obesity or hone their skills in the hope of becoming professional fighters.

Jordan Henderson, 26, left behind his London lifestyle of long workdays,

parties and overeating after the doctors warned him that he faced looming heart problems. “It’s about taking yourself out of the box that you live in and just focusing on one thing, and that’s to train and lose weight.”

Muay Thai — Thailand’s national sport — is known as the “Art of Eight Limbs” because it combines punches, kicks, elbows and knee strikes.

Agence France-Presse

# ANCIENT VOLCANOES KILLED HALF OF THE WORLD'S SPECIES

AGENCE FRANCE-PRESSE

New rock-dating techniques have helped narrow the time frame of a chain of massive volcanic eruptions that wiped out half the world's species 200 million years ago, a study revealed in March 2013.

The result is the most precise date yet — 201,564,000 years ago — for the event known as the end-Triassic extinction, or the fourth mass extinction, according to a study in the journal *Science*.

The eruptions “had to be a hell of an event,” said co-author Dennis Kent, a paleomagnetism expert at Columbia University's Lamont-Doherty Earth Observatory.

The new analysis winnows the estimated date from its previous range of up to 3 million years to 20,000 years at most — a blink of an eye in geological terms.

The eruptions caused an already hot Earth to become even more stifling, killing off plants and

animals and making way for the age of the dinosaurs — before they, too, were obliterated some 65 million years ago, possibly by another volcanic event combined with a devastating meteorite strike.

Volcanoes roiled the Earth in a time when most of the landmass was united in one big continent, spewing some 10.4 million cubic kilometers of lava that, over time, split the terrain and led to the creation of the Atlantic Ocean.

For the study, scientists analyzed rock samples from Nova Scotia, Morocco and outside New York City, all of which came from this once-united landmass known as the Central Atlantic Magmatic Province.

An analysis of the decay of uranium isotopes in the basalt, a type of rock left by the eruptions, offered researchers more precise dates.

The eruption in Morocco was the earliest, followed by Nova

Scotia about 3,000 years later and outside of New York City 13,000 years later.

Sediments that lie below that time hold fossils from the Triassic era. Above that layer, they disappear, the study said.

Some of the lost creatures include eel-like fish called conodonts, early crocodiles and tree lizards.

“In some ways, the end-Triassic extinction is analogous to today,” said lead author Terrence Blackburn, who carried out the study while at the Massachusetts Institute of Technology but who is now with the Carnegie Institution.

“It may have operated on a similar time scale. Much insight on the possible future impact of doubling atmospheric carbon dioxide on global temperatures, ocean acidity and life on Earth may be gained by studying the geologic record.”





## On Top of the World

A Nepalese climber received confirmation as the first woman to scale Mount Everest twice in a single season, Guinness World Records said in February 2013.

Chhurim Sherpa, 29, reached the 8,848-meter peak on May 12, 2012, before returning to base camp for rest and then repeating the feat a week later.

**"I am very happy for this recognition. I was determined that the record should be held by a**



AFP/GETTY IMAGES

**Nepalese woman, and I'm proud to be one,"**

said Sherpa, who is from Nepal's eastern hills.

Another Sherpa, Pasang Lhamu, died on her descent after becoming the first Nepalese woman to reach the summit in 1993.

Agence France-Presse



AFP/GETTY IMAGES

## Cardboard as a Force Multiplier

India's police officers are getting help from, well, their cardboard twins. Bangalore authorities seeking to make roads safer by curbing speeders have strategically placed cardboard cutouts of officers in high-traffic areas throughout Bangalore, *The Daily Mail* newspaper reported in March 2013.

The tactic, although not a long-term solution to an officer shortage, has seen results. Mumbai police have also fooled drivers with the cardboard cutouts.

FORUM staff

## CROCODILE TEARS

A remote southern Philippine town went into mourning in February 2013 over the death of the world's largest saltwater crocodile in captivity, even though it was blamed for the deaths of several villagers.

Bunawan town planned to preserve the remains of the 6.17-meter, 1-ton crocodile, named Lolong, in a museum to keep tourists coming and to stop the community from

slipping back into obscurity, the mayor said.

Lolong was declared dead after being found floating on its back in a pond in an ecotourism park that had begun to draw tourists, revenue and development because of the immense reptile, Mayor Edwin Cox Elorde said.

"The whole town, in fact the whole province, is mourning," Elorde said. The Associated Press



THE ASSOCIATED PRESS





## PEACE IN PARTNERSHIPS

Soldiers from more than 20 countries present honors during the opening ceremony of Shanti Prayas-2 in March 2013 at Birendra Peace Operations Training Center in Panchkhal, Nepal. Shanti Prayas-2 is a multinational partnership exercise designed to build peacekeeping proficiencies. The two-week training exercise, led by the Nepalese Army, is organized by the United Nations, the U.S. State Department and facilitators from U.S. Pacific Command's Global Peace Operations Initiative.

Photo By **SGT. CORY GROGAN**, U.S. ARMY

WOULD YOU LIKE YOUR FAVORITE PHOTO OF A RECENT EXERCISE OR PARTNERSHIP DRILL FEATURED IN PARTING SHOT? PLEASE SEND SUBMISSIONS TO [EDITOR@APDF-MAGAZINE.COM](mailto:EDITOR@APDF-MAGAZINE.COM) FOR CONSIDERATION.



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