

215

Maritime Terrorism in Asia: An Assessment

ABHIJIT SINGH



Maritime Terrorism in Asia: An Assessment

ABHIJIT SINGH



ABOUT THE AUTHOR A former naval officer, **Abhijit Singh** is Senior Fellow and head of the Maritime Policy Initiative at the Observer Research Foundation (ORF). He is a maritime professional with specialist and command experience in front-line Indian naval ships, and was involved in the writing of India's maritime strategy (2007). He is a keen commentator on maritime matters and has written extensively on security and governance issues in the Indian Ocean and Pacific littorals.

ISBN: 978-93-89094-96-1

Maritime Terrorism in Asia: An Assessment

ABSTRACT

This paper evaluates the possibility of an increase in maritime terrorist violence in Asia, based on a recounting and analysis of some of the most recent past incidents in these waters. It argues that the vulnerability of high seas shipping to criminal acts of violence and the weak and inconsistent nature of maritime governance raises the possibility of a terrorist strike in the Asian littorals. In assessing the odds of a major terrorist attack in coastal regions, the paper also explores the terrorism-piracy nexus and the state of port security in key continental spaces, highlighting measures to improve maritime readiness against acts of terror.

(This paper is part of ORF's series, 'National Security'. Find other research in the series here: https://www.orfonline.org/series/national-security/)

Attribution: Abhijit Singh, "Maritime Terrorism in Asia: An Assessment", *ORF Occasional Paper No. 215*, October 2019, Observer Research Foundation.

1

INTRODUCTION

In recent years, sea-borne terrorism has emerged as a major security threat in littoral-Asia. Since the November 2008 attacks in Mumbai—when ten Pakistani terrorists infiltrated the city from the sea, killing 166 people and injuring over 300—regional watchers have been wary of the possibility of another attack from the seas. Within India's security establishment, the anxiety has been palpable. In November 2018, a few weeks shy of the tenth anniversary of the Mumbai attacks, intelligence emerged that Pakistan-based militant outfits *Lashkar-e-Taiba* and *Jaish-e-Mohammed* had been training their cadres to execute another strike on Indian ports, cargo ships and oil tankers.¹

Reportedly, Pakistani militant commanders had been training volunteers at modified training sites and canals in Lahore and Faisalabad for "samundari jihad" (seaborne jihad). Unlike 26/11, when terrorists had used the sea route to enter Mumbai and stage attacks on land targets, the plan this time around was to deploy trained jihadi divers to target an Indian or coastal facility.²

The anticipated assault did not happen. Yet the speculation that surrounded its possible occurrence underscored the psychological grip of terrorism over the minds of Indian security watchers and strategic planners.³ Indian fears seem partly driven by events in Pakistan, where there have been two major militant attacks on naval installations in recent years.⁴ In May 2011, the Tehrik-i-Taliban Pakistan (TTP) and Al Qaeda attacked *PNS Mehran*, the headquarters of the Pakistan Navy's air arm and the most populous Pakistani naval establishment. Although the attack was not strictly "maritime" (as it neither came from the sea, nor targeted maritime assets), it was seen as an escalation by terrorists against a seagoing force.⁵ In September 2014, when Al Qaeda attacked

Karachi, it set off alarm bells in New Delhi, leading many to seriously consider the possibility of a terrorist attack in India's near-seas.

In the years since the Karachi strike, India's maritime observers have watched warily as the Al Qaeda and its associated groups have expanded their presence in mainland Pakistan, executing ever more deadly missions. In the quest for bigger and newer targets, terrorists have turned their sights on merchant ships, oil tankers, warships and coastal establishments, a raising the possibility of a bold attack in the littorals.

In Southeast Asia, too, violence at sea has touched a new high, particularly in the Sulu and Celebes Sea, where Abu Sayyaf (ASG), a radical extremist group with close links to the Islamic State (IS) has expanded its operations.⁸ The ASG's brutal tactics has led many observers to view the attacks not as incidents of armed robbery, but acts of terrorism. The IS has also made its presence felt in West Asia and North Africa, where rebel *Houthi* forces have intensified their attacks on naval and civilian targets belonging to the Saudi and Emeriti coalition in the Red Sea.⁹ These are not merely hostile interactions between 'combatants' in a civil war, as some have suggested.¹⁰ The *Houthi* rebels have in fact sought to target high-value shipping, employing methods mostly used by terrorists.

To be sure, maritime terrorism still accounts for a minuscule percentage of all acts of terrorism. The lack of specialist skills, equipment and resources has seemingly constrained the operations of terrorist groups, preventing major attacks at sea. Yet, these groups have expanded their tactical agency in the maritime commons, reportedly seeking targets in the vulnerable littorals. As recent attacks in the Southeast Asia and the Middle East demonstrate, non-state actors are developing the capability to target valuable platforms at sea.

This paper evaluates the possibility of an increase in maritime terrorist violence in Asia. In assessing the odds of a major terror attack, it explores a suspected terrorism-piracy nexus and the state of port security in key continental regions, highlighting measures to bolster regional security, and ways to improve coastal preparedness against terrorism. The paper is not an attempt to outline a comprehensive antiterrorism doctrine for maritime agencies – a task best left to professional security planners. Its objective is an evaluation of recent attacks in the Asian seas to help understand the dynamics of maritime terrorist violence.

Defining 'Maritime Terrorism'

Maritime terrorism is often defined as "the undertaking of terrorist acts and activities within the maritime environment, using or against vessels or fixed platforms at sea, or in port; or against any one of their passengers or personnel, against coastal facilities or settlements, including tourist resorts, port areas and port towns or cities". Another definition, however, sees the phenomenon as "any premeditated, politically motivated violence perpetrated against non-combatant targets at sea by sub-national groups or clandestine agents". As many see it, terrorism has a political dimension, with objectives that are primarily ideological. In this telling, a violent incident at sea can only be deemed to be an act of 'terrorism' if its ideological and political motives are clear. Others insist that all political violence (including maritime piracy and armed robbery) is a form of terrorism, their root causes and enabling factors being similar; this is not a view widely shared by most legal experts.

From an operational perspective, a simpler way to understand maritime terrorism is to set a typology based on the utilisation of the maritime space and the selection of targets.¹⁴

- (a) Where the sea is only a medium for terrorist attacks on land-based targets: An example is the Mumbai bombings on 26 November 2008, when ten terrorists landed on the city shores using speedboats and carried out a series of coordinated attacks on land targets.
- (b) The hijacking of naval vessels and hostage taking by terrorists: One of the most widely utilised maritime terror tactics in conflict-prone regions. Examples are the series of hijackings by the Abu Sayyaf in the Sulu Sea, the subsequent taking of hostages and their brutal treatment.¹⁵
- (c) An attack in ports, facilities and coastal installations: In June 2018, terrorists attacked the Libyan oil ports of Ras Lanuf and Es Sider, setting at least one storage tank on fire, following which the facilities were closed and evacuated. 16
- (d) Terrorist attacks against civilian ships and warships: Two Al Qaeda suicide bombers rammed an explosives-laden dingy into the *USS Cole* on October 12, 2000, killing 17 US service members.¹⁷ Two years later in October 2002, a terrorist strike on French oil tanker, *M/V Limburg* killed 16 people and injured scores others, also causing an environmental catastrophe with a massive crude oil spill into the Gulf of Aden.¹⁸

RECENT MARITIME ATTACKS: A BRIEF TIMELINE

South Asia

The point of departure for most discussions on maritime terrorism in South Asia is the 2014 terrorist attack on the *PNS Zulfiqar*, a Pakistani frigate, in Karachi. Planned and executed by the Tehrik-i-Taliban Pakistan (TTP) and the Al Qaeda, the attack is a case study of how radicalised militant groups attempt to sabotage a nation's military

assets.¹⁹ The strike came despite advance intelligence with the Pakistan Navy (PN), and while prompt action by security agencies prevented the situation from escalating into a full-blown crisis, the ease with which TTP militants entered Karachi raised uncomfortable questions about Pakistan's ability to protect its military facilities against terror strikes.²⁰ Lending another dimension to the saga was the involvement of former and serving naval officers in the attack, pointing towards the radicalisation of junior cadres in the Pakistan Navy.²¹

Following the strike on the *Zulfiqar*, Indian analysts considered the prospect of similar attacks by militant forces in India's near-seas. Amidst concerns that Al Qaeda and related groups have developed the capability to hijack naval vessels and stage attacks against Indian vessels in international waters, the country's naval leadership weighed the possibility of a terror attack on India's maritime assets. ²³

The Karachi attack seemed eerily similar to the 2011 assault on *PNS Mehran*, when radicalised elements of the Pakistan navy had worked with al-Qaeda to organise and infiltrate a premier naval air-station in Karachi. The strike had followed failed talks between the Pakistan Navy and al-Qaeda over arrested Navy personnel with suspected links to the militant organisation.

In the aftermath of the attack on the Zulfiqar, Indian analysts grappled with the contingency of a preemptive Indian strike on a Pakistani naval vessel suspected of harbouring terrorists.²⁵ In the absence of unambiguous intelligence indicating Pakistani security agencies had trained and sponsored the militants aboard a Pakistani warship, some felt an anticipatory strike by India would be unreasonable, indeed even unlawful.²⁶ Yet, doing nothing amounted to giving terrorists a 'free pass' to attack Indian shipping. Admiral RK Dhowan, India's then naval chief, summed up the dilemma aptly: "The

threat of terrorists and non-state-actors in Indian waters is huge and the Indian Navy must be prepared...we have 2.5 lakh fishing boats in the country... any one can take up arms, ammunition in remote islands. There are 1197 islands and 7016 km of coastline. [It speaks to] how easy it is from the other side and how difficult it is for us to secure."²⁷

In 2018, India's National Investigation Agency (NIA) sought a redcorner notice by Interpol against a counselor in Pakistan's high commission in Colombo between 2009 and 2016 who had reportedly hired Sri Lankan Muslims to attack various high-profile targets, including military establishments and ports in South India.²⁸ Apparently, the Pakistani agent was planning to send explosives from Mannar in Sri Lanka to between Rameswaram and Tuticorin in India by a rowing boat. This was to be followed up by two Pakistanis being sent from Colombo to Bengaluru via Maldives on Sri Lankan passports to carry out an attack on the American consulate, a plan that did not come to fruition.²⁹

Today, amidst growing violations by small boats in India's territorial seas, the state of coastal security remains fraught. While terrorists have not targeted any Indian shipping or maritime installations, the possibility of an Al Qaeda-inspired attack is far from hypothetical. Not only do terrorist organisations possess considerable sea-going skills, but modern technology—including GPS and satellite communications—are enabling them to train their cadres to execute terror plans with greater precision. The state of the s

Notably, the terrorists' tactics seems to have evolved over time. For instance, unlike the attack on naval base *PNS Mehran* in 2011 when maritime surveillance aircraft were destroyed, the Karachi incident in 2014 witnessed an attempt by the Al Qaeda to hijack (and commandeer) the *PNS Zulfiqar*. A year later, IS terrorists carried out a bomb blast in a

naval base in Dhaka, targeting not operational naval assets but personnel in a mosque. ³² The Bangladesh navy responded by undertaking measures to harden its bases, and even made terrorism cooperation a key vertical of its joint coordination patrols (CORPAT) with the Indian Navy. ³³

As some see it, jihadi acts at sea are not random strikes or spontaneous reprisal attacks fuelled by opportunism.³⁴ There is rather a discernible blueprint, suggestive of a strategic, more coherent approach. Al Qaeda's four-prong maritime strategy still seems to resonate strongly in contemporary jihadi thinking. It comprises: 1) suicide attacks on vessels; 2) hijacked ships used as "weapons" against port infrastructure; 3) attacks on supertankers from the air by using explosive-laden small aircraft; and 4) attacks using underwater demolition teams or with suicide bombers.³⁵

Southeast Asia

Terrorist groups based in Southeast Asia have long had a predisposition to use the seas as an attack vector. As Table 1 shows, between 2014 and 2018 there were nearly 200 actual and attempted attacks on ships in the littorals. The perpetrator of the vast majority of the attacks was the Abu Sayyaf Group (ASG), a radical Islamist organisation based in the Philippines. This is the same terrorist organisation that attacked the Superferry14 off the coast of the Philippines in 2004, killing 110 passengers and crew. The ASG metamorphosed in its initial years from an ideologically based group into a criminal organisation, seemingly intent on generating revenue, but soon returned to terrorism, carrying out a series of kidnappings in the seas off Indonesia. Since 2015, the ASG has existed at the intersection of crime and terror, carrying out armed robberies at sea, but also violent hostage taking and executions, revealing tactics inspired by the IS and Al Qaeda. As Table 2 shows, the number of actual attacks in the waters off Indonesia remains

significantly high. Many, reportedly, have been carried out by the Abu Sayyaf and Jemaah Islamiyah, another fundamentalist outfit with close links to the IS. 40

Table 1: Actual and Attempted Attacks on Shipping in South Asia and Southeast Asia (2014 – 2018)

Location	2014	2015	2016	2017	2018
Indonesia	47	54	24	19	25
Malacca Strait	1	3	-	-	-
Malaysia	9	11	4	3	3
Philippines	2	4	3	13	3
Thailand	-	1	-	-	-
Singapore Strait	6	6	-	1	-
China	-	-	5	1	2
Bangladesh	10	11	2	5	7
India	4	4	13	1	2

Source: ICC-IMB Piracy and Armed Robbery against Ships Report (01 January to 30 June 2018)

Table 2: Actual and Attempted Attacks on Shipping in Southeast Asia (January – June 2018)

Location	Actua	Actual attacks		Attempted attacks		
	Boarded	Hijacked	Attempted	Fired Upon		
Indonesia	19	-	6	-		
Malaysia	1	-	1	-		
Philippines	1	-	1	1		
China	-	-	2	-		
Vietnam	2	-	-	-		

Source: ICC-IMB Piracy and Armed Robbery against Ships Report (01 January to 30 June 2018)

In 2016, mounting pressure from the Philippines combined with renewed international interest in fighting global piracy, restricted ASG's freedom of movement on the Sulu archipelago, limiting its ability to conduct onshore kidnappings. In response, the group moved its operations farther out to sea, conducting kidnappings of seafarers while ships were underway. Its cadres initially targeted smaller vessels, but soon began attacking larger vessels, presenting a threat to both international and regional traffic. After Philippine armed forces clashed with ASG and IS militants in Marawi city in June 2017, Indonesia, Malaysia and the Philippines launched joint operations to fight terrorism and transnational crimes in the Sulu Sea.

Even so, action against the Abu Sayyaf challenge in the Sulu-Celebes Sea has been hard to coordinate. First, the militant group's primary area of activity is the Philippine seas, where Manila is less than eager to allow access to foreign maritime forces, resulting in a slowdown of security operations. Second, the presence of extra-regional forces in disputed spaces in the South China Sea (including China's navy, PLAN) has made Southeast Asian states wary of expanding cooperation. Manila has been particularly cautious, fearing that bigger and more competent maritime forces would eclipse the Philippines' navy and coast guard in its own backwaters. The ASG has exploited the situation, expanding regional networks, procuring weapons and ammunition from the black market, even using ransom money to buy off local officials. Its cadres have sought to replicate the IS' brutal tactics in Southeast Asia, with violent kidnappings and a series of suicide bombings, revealing a vicious streak in its ideology. Figure 1.

Littoral-West Asia

Ever since Al Qaeda's attack on the *USS Cole* in Yemen's Aden harbour in October 2000, the possibility of suicide bombings on warships has been

a perennial source of anxiety for seafarers in West Asia. The strike on the Cole resulted in a push for new safety procedures, and for a while, it seemed the threat of maritime terrorism had abated. With Al-Qaeda operatives plotting raids on British and US tankers passing through the Strait of Gibraltar in 2002, and insurgent attacks two years later on an offshore oil terminal in Iraq, sea-based terrorism was soon back.

Over the next few years, there was a brief lull in terrorist activity, but the attacks resumed shortly after. In November 2014, IS-affiliated militants commandeered an Egyptian Navy missile boat in a bid to attack Israeli targets in the Mediterranean Sea. Another terrorist attack on Egyptian navy vessels left many servicemen injured and others missing at sea. In the Red Sea, *Houthi* rebels have attacked Saudi and Emeriti forces in ways seemingly inspired by Al Qaeda. A mine-hit on a UAE patrol ship in 2015, and a drone boat attack on a Saudi Navy frigate in 2017 demonstrated the rebels' growing prowess. In September 2019, days after an attack on two Saudi oil installations, the Saudi-led coalition claimed to have intercepted and destroyed an explosives-laden boat launched from Yemen by the Houthis.

The jihadi threat also affects Southern and Western Europe, where security agencies have detected terrorist infiltration using the searoute. An investigation into the terror attack on Paris in November 2015 showed that at least two plotters had entered Europe via the refugee flow through the Greek island of Leros. More recently, NATO (the North Atlantic Treaty Organization) linked the Islamic State's threat to target tourist hot spots in Spain with rising refugee movement into Europe, strengthening counter-terrorism patrols in the Mediterranean. Meanwhile, foreign fighters returning from the IS' self-proclaimed caliphate in Iraq and Syria have raised the risk of complex and large-scale terror attacks in Europe. Regional states

realise the IS continues to attract followers and is widening its tactical arsenal, employing new technologies, and strengthening its roots in the region. Worryingly, Islamic State fighters continue to provide critical skills to other operatives and expand operational Islamist networks.⁵⁸

THE TERRORISM-PIRACY NEXUS AND PORT SECURITY

In assessing the nature of maritime terrorist activity in Asia, it is important to study the terrorism-piracy nexus – not least because pirates have in the past financed terrorist activity.⁵⁹

Evidence of a linkage between the terrorists and pirates first emerged in May 2003, when the *M/V Pen* rider, a Malaysian-registered oil tanker, was attacked off the coast of Malaysia, and three crew members were taken hostage. ⁶⁰ After ship owners paid \$100,000 to free the crew, it emerged that the attackers were associated with the Free Aceh Movement, an insurgent group operating in Indonesia. The receipt of a ransom of \$1.2 million by the Somali pirates to free a Spanish fishing vessel and 26 hostages in 2008 provided more proof of a possible link between terrorists and pirates; reportedly, the Al-Shabaab had received a five-percent cut. A year later, when the terror group hired pirates to smuggle in members of Al Qaeda to Somalia, the terror-piracy linkage seemed virtually certain. ⁶¹

In recent years, terrorists and pirates have appeared to draw closer, even if the exact nature of their collaboration is not clear. Somali pirates and terrorists are said to have worked together in arms trafficking, and Al-Shabaab is said to have even have trained pirates for 'duties' at sea. ⁶² An investigation by the United Nations (UN) in 2017 found evidence of collusion between pirates and the Al Shabaab, including the possibility that pirates helped the latter smuggle weapons and ammunition into

Somalia. As discussed earlier, in Southeast Asia, the Abu Sayaff's turn to piracy has resulted in millions earned via ransom payments. Its cadres have used the revenue earned for pirate activity to expand the radical organisation's presence in Southeast Asia.

The terror-piracy linkage is important because it highlights the causal mechanism behind rising violence at sea. The task of maritime security agencies becomes harder, however, when the lines between terrorism and piracy begin blurring, particularly in Southeast Asia, where the Abu Sayyaf has alternated between piracy and terrorism. Today's pirates are trained fighters onboard speedboats, armed not only with automatic weapons, hand-held missiles and grenades but also and global positioning systems; professional mercenaries that loop effortlessly between rent-seeking and violent acts. Their objectives are as muchideological, as they are material.

ISPS Code and Littoral Security

While most discussions around maritime terrorism presume a threat to sea-borne assets, port security constitutes the bigger challenge. Terrorists have long had seaports on their crosshairs, because of the latter's role in trade and economic development. In recent years, there has been a significant increase in freight traffic, with key ports in Asia transformed into global trading hubs. In keeping with the growing importance of port-enabled trade, regional governments have taken better measures to protect ships and onshore facilities. In many ports, authorities have increased guards, gates, and security cameras, even introducing identification card programs to screen those with access to critical port infrastructure. The installation of radiation detectors has been particularly helpful in screening critical cargo and identifying suspicious shipments.

Yet, not even the best ports in Asia are able to track and monitor large containers comprehensively. With a rising quantum of cargo to be handled every day, port authorities find it impractical to scan each and every container being offloaded from cargo ships. ⁶⁵ Container scanning in many ports is in fact a largely random exercise, with authorities insisting that shippers provide manifests of what is contained in cargo bins. ⁶⁶

The lack of effective checks on ports brings up the possibility of the use of containers as weapons to smuggle in arms, explosive materials or the terrorists themselves. While terrorists would not possibly target cargo ships directly, the latter could be used to transport weapons or to sabotage commercial operations. A dirty-bomb in an illicit cargo container of a cargo ship could cause a port shutdown and huge commercial disruption. Even a failed attempt to smuggle a device into a major transshipment hub would significantly impact port operations.

After the 9/11 incident in the United States, the International Maritime Organization (IMO) had established the International Ship and Port Facility Security (ISPS) Code—a set of maritime regulations designed to help detect and deter threats to international shipping. The code subjects ships to a system of survey, verification, certification and control to ensure that the security measures prescribed by the IMO are implemented by member countries. It also provides a standardised, consistent framework for evaluating risk and gauging vulnerabilities of ships and ports facilities, laying down principles and guidelines for governments, port authorities and shipping companies, making compliance mandatory. ⁶⁸

The code, however, has not been effective in a way originally intended. Firstly, the code is based on the experience of 9/11 and early piracy activity off Somalia. No amendments or revisions have been

made with regard to new types of security threats encountered in recent years. The exclusion of vessels less than 500 tonnes, and all fishing vessels regardless of their size, is a further impediment in the code's implementation, as terrorists have sought to use smaller boats to smuggle weapons and ammunition rarely subject to regulation.⁷⁰

Another shortcoming is that the code does not include official monitoring procedures for security matters. Unlike the International Safety Management Code (ISM) that prescribes office audits by internal and external sources, the ISPS enumerates general guidelines and precautions—a standardised template for evaluating risks on many different types, sizes and categories of vessels and facilities. The code also does not specify ways to strengthen capability to protect against new forms of terrorism, such as drone attacks. With no legal obligation to implement regulations, port authorities are unwilling to make necessary investments in security measures.

The lack of national legislation/guidelines is another hurdle in the code's implementation. Regional governments have neither enacted necessary domestic legislation to fight terrorists nor allotted resources to implement security measures. In India, for instance, there is no comprehensive maritime security policy for protection of the commercial maritime infrastructure and supply chains. A new Merchant Shipping Bill in 2016 improved transparency and effective delivery of services, but has failed to address security concerns.

Given the complicated mix of variables contributing to port security, a study of security measures adopted by the civil aviation industry might offer some useful pointers. The latter's efforts to prevent hijackings of commercial aircraft over the past four decades has been widely hailed as a success. Developed in the late 1960s, the international legal regime governing civilian flight operations was significantly upgraded after the

attacks of 11 September 2001. The United States' efforts to bring in legislation to regulate foreign airlines and flights from foreign airports have been particularly helpful. In concert with other international conventions drafted by the UN International Civil Aviation Organization (ICAO), the regulatory regime has deterred terrorists and criminals from targeting aircraft. ⁷⁶

This may hold important lessons for port security; in particular, approaches used in the international legal regime governing civil aviation to eliminate safe havens for pirates and terrorists by ensuring legal accountability. A study of security in the aviation sector could offer important tips on how port security systems could be mobilised to encourage best management practices; the importance of freezing assets of those who fund piracy enterprises; and the utility of enhancing communication and coordination among the various stakeholders relevant to the fight against piracy and terrorism. ⁷⁷

A NEXT TERRORIST ATTACK: GAUGING THE ODDS

To design policies that help combat maritime terrorism it is important to assess the likely nature of future attacks and their probable targets. Future terrorist attacks could be directed against four kinds of targets: warships, supertankers, passenger ships and port facilities. The most vulnerable and attractive targets remain tankers out at sea. The recent attacks on tankers in the Persian Gulf revealed that the threat is evolving and could now include unmanned vehicles. More damaging would be the seizure and sinking of an oil-carrying tanker in a congested space, crippling the flow of maritime traffic. To get a sense of the extent of damage such an attack would cause, the Limburg incident in 2002 caused a massive spillage of oil (almost 90,000 tonnes) that took many weeks to clear.

Another kind of attack could be on cruise ships out at sea. Big cruise ships are a lucrative target since they are lightly defended and relatively easily accessible. An enquiry into the *Achille Lauro* incident in October 1984 highlighted fundamental deficiencies in safety procedures. Apparently, checks on passengers in the run-up to that fateful incident had not been foolproof. Despite acting nervously and even displaying anti-social behaviour, the Palestinian hijackers did not arouse the suspicions of passengers and crew. While safety procedures have since improved, security procedures at ports and aboard cruise ships (with certain exceptions) are far from immaculate. During the Super Ferry incident in the Philippines in 2004, Abu Sayyaf operatives disguised as tourists smuggled 20 sticks of explosives that were stored inside an emptied out TV set. There is some evidence that cruise shipping companies in Asia and Africa continue with the same lax approach that enabled that devastating attack.

The most likely venue of a future terrorist strike, however, might be inside a port facility, and it could possibly involve a 'lone wolf' with a loose affiliation to a bigger terrorist group. Ports are an attractive target because many of the tactical problems that terrorists face in orchestrating attacks on ships in the high seas do not apply to harbors, ports, or shore-based maritime facilities. Terrorists realise that the containerised supply chain is complex, and creates many opportunities for isolated acts of terrorism. An ineffective point of check, for instance, could allow a jihadi inside a container to detonate a vast quantity of explosives or a low-grade nuclear device; inadequate surveillance in a vessel could lead a jihadi diver to plant an explosives improvised explosive device (IED). While many ports have installed radiation detectors to combat the threat of IED, the pace of installation has been slow, and smaller ports remain vulnerable.

The fact that many Asian and African ports do not have mineneutralisation systems or integrated coastal defence, seems to suggest an increased possibility of an underwater attack.⁸³ According to a 2016 study, the likelihood of the East African community being a target of maritime terrorism remains high.⁸⁴ The Al Shabaab's proactive presence in the region, the study surmises, coupled with the lack of a regional maritime security strategy (including a maritime domain awareness program), un-policed waters and poor cooperation between Kenyan and Tanzanian maritime law enforcement agencies make East Africa extremely vulnerable.⁸⁵

The terrorists could also target a port like Mogadishu in Somalia, hitting international shipping for maximum impact. The attack could involve a high-speed suicide vessel strike, or a jihadi diver trained to breach port security and attack vessels undetected. One reason Somalia ports remain highly at risk is the political crisis in country. Since Somaliland (Somalia's breakaway province) inked a deal with the United Arab Emirates in early 2019 for a port upgrade in Berbera, UAE/Saudi backed militias have been intent on punishing Somalia, even reportedly organising an attack on Mogadishu port. Tomaliland has offered to host a new UAE naval base, a new launch point for the Saudi-led war in Yemen.

Even large international ports such as Djibouti are not safe from terrorist attacks. Home to US Camp Lemonier(the busiest Predator drone base outside of Afghan war zone), and Japanese, French and Chinese military bases, Djibouti has been a launch pad for antiterrorism operations in West Asia and neighbouring Somalia, and is an attractive target for terrorists. ⁸⁹ Yet ports in Djibouti have failed to implement effective anti-terrorism measures. In August 2018, the US Coast Guard found problems in the way the African state's ports were being administered, with glaring deficiencies in access control, security monitoring, security training programs, and security drills and exercises. It went on to implement conditions of entry on vessels arriving in the US from the Republic of Djibouti. ⁹⁰

Calculating a Response Spectrum

To develop an effective counter-terrorism paradigm for the littorals, Singapore and India offer some useful pointers. Singapore has enhanced its maritime security by adopting a "coordinated and multi-layered security regime" designed to tackle terrorist threats on both land and maritime domains, best exemplified by the setting up of agencies like the Singapore Maritime Crisis Centre (SMCC).⁹¹ The SMCC has tightened linkages between Singapore's maritime security agencies leading to enhanced surveillance, threat assessment, capability development, training and exercises, doctrine / operations planning, and in the conduct and monitoring of current and future operations. Its key achievement has been to enhance interoperability between security agencies during planning and operational response, minimising any duplication of efforts and closing any operational gaps in the security effort.⁹²

India, too, has focused on the improvement of maritime domain awareness and information sharing, emphasising rapid response in dealing with criminal and terrorist threats. A new information fusion centre in Gurugram – set up as an "adjunct" to the Indian Navy's Information Management and Analysis Centre (IMAC) – has been collating, assembling, analysing and sharing data related to maritime security matters with neighbouring states in the Indian Ocean. Meanwhile, transponder systems are being installed on fishing boats, and biometric cards issued to fishermen, many of whom have become the 'eyes and ears' of maritime security agencies.

The setting up of a committee focused on maritime security has been another significant step forward. Following 26/11, India established the National Committee on Strengthening Maritime and Coastal Security (NCSMCS) to bring stakeholders together and find collective solutions

to costal security challenges. It has also sought to address inter-agency problems, improving coordination between the Indian navy, Coast Guard, Marine Police and other marine agencies. The mainstay of the Indian effort has been an improvement of communication and intelligence gathering. New Delhi has prioritised a national Coastal Radar Chain, and set up Joint Operation Centers to monitor the exchange of information. Colour-coded fishing boats have helped security agencies better monitor the maritime environment, and White Shipping information sharing agreements have vastly improved domain awareness. Meanwhile, the Indian navy has strengthened its Coordinated Patrols (CORPATs) with Thailand, Indonesia, Myanmar and Bangladesh. Working Groups established under the aegis of the Indian Ocean Naval Symposium too have sought to plug gaps in the regional security architecture, and an atmosphere of enhanced trust between littoral nations has led to robust intelligence sharing.

On the commercial side, however, progress has been slow. In 2017, Indian intelligence agencies conducted security audits of 227 non-major seaports. It found that while the Ministry of Home Affairs had extended security cover (through a Central Industrial Security Force) to 16 of India's major ports, two of those major ports—the Port Blair Port Trust and Cochin shipyard —still lacked radiation detection equipment. Out of 227 minor ports in the country, only 54 were found to be international ship and port security (ISPS) compliant; 187 minor ports were found to have minimal security cover; and 75 of the 187 had no security cover at all. ⁹⁴

When it comes to security of shore-based facilities, the navy again has taken a lead in implementing safety measures. To safeguard shipping and shore installations against militant 'frogmen' attacks, the Indian Navy has begun the installation of layered defensive grids in naval harbours. ⁹⁵ The Integrated Underwater Defence and Surveillance

Systems (IUHDSS), comprising a network of sonar, electro-optical sensors and radars, render the underwater domain transparent, making it hard for enemy divers to operate undetected. There is a move to secure physical infrastructure at ports as well. In India's premier shipment hubs, authorities have installed radiation sensors to scan cargo comprehensively. Regular coastal exercises and improved coordination between security agencies has helped raise the quality of littoral security.

Yet, more needs to be done on a pan-regional level in Asia. Combating maritime terrorism revolves around four verities of intelligence, threat levels/conditions, vulnerability assessments, and force/facility protection measures. Unfortunately, many regional states do not have the requisite capacities to combat terrorism. Not only is intelligence and data lacking; there is also the absence of expertise and knowhow. Many of the newly developed sensor technologies—including identification and authentication technology, screening and surveillance assets, and tracking and inspection systems are too costly for smaller states. What Asia needs is a maritime security framework that enables capacity building in a way that facilities and ships can be hardened at affordable prices. The solution may lie in partnerships that would help regional states leverage partner strengths to create baseline capabilities to fight terrorism. This includes measures to protect commercial shipping, marine installations and critical infrastructure.

In parallel, states must also act to deny funding and sponsorship to terrorist organisations. This would also involve identifying linkages with other terror groups, and safe havens that offer terrorists sanctuary. Also imperative is an intelligence-sharing network for the maritime community that would help preempt terrorist attacks. How successfully a nation is able to combat maritime terrorism would depend on its ability to institute appropriate preventive measures.

CONCLUSION

Fighting terror requires a close assessment of threats and a prioritisation of mitigation measures. The main challenge is to gear the mercantile community up to the task. Despite an increased adherence to best management practices, ⁹⁸ the shipping community at large does not treat maritime terrorism with the seriousness it deserves. Indeed, many in the shipping industry view terrorism as an exaggerated threat; they are convinced that terrorists have yet to develop capabilities to target high-value platforms. Their business-as-usual approach—aimed mainly at keeping costs low and turnover high—creates more opportunities for terrorists.

It bears mentioning that the psychological dimension of terrorism remains vital in gauging the strategy behind seemingly random attacks in the littorals. Terrorists are likely to stage violent attacks in ways that would target the minds of maritime security planners. Radical terrorist organisations know that an attack at sea is a logistical challenge. Yet if successfully carried out, it has the potential to psychologically affect the target state. Beyond its obvious economic consequences, a terror hit could erode the state's will to fight back.

Combating maritime terrorism is ultimately a question of national resolve: a dogged, single-minded approach in guarding and securing maritime borders; making necessary investments for the generation of timely and actionable intelligence; robust interagency cooperation, and an integrated strategy that can establish a system of effective law enforcement in coastal waters. What regional states need is structured and efficient ways of investigating threats, identifying vulnerabilities, and getting stakeholders involved in anti-terrorism processes. Strong legislation that empowers security agencies to act with alacrity and defend commercial and coastal military assets is a prerequisite. Regional

governments need to make stakeholders and security agencies accountable, with liability fixed in ways so that the related costs of a terrorist incident are borne by the parties responsible for having failed to prevent it. ©RF

ENDNOTES

- 1. "India on alert against possible Lashkar, Jaish attacks from sea", *The Hindustan Times*, October 12, 2018, at https://www.hindustantimes.com/india-news/india-on-alert-for-terror-attacks-from-sea/story-Z3sbBa WORD4X6R0QZqymaN.html (accessed March 12, 2019)
- 2. Ibid
- 3. "Maritime terrorism continues to be a major threat: Rajnath Singh", *Economic Times, May 2019, at.*https://economictimes.indiatimes.com/news/defence/maritime-terrorism-continues-to-be-a-major-threat-rajnath-singh/articleshow/5425013 (accessed March 16, 2019)
- 4. "Terrorists are being trained to carry out attacks via sea: Navy chief Sunil Lanba", *India Today*, at https://www.indiatoday.in/india/story/terrorists-are-being-trained-to-carry-out-attacks-via-sea-navy-chief-sunil-lanba-1470527-2019-03-05 (accessed May 19, 2019)
- 5. "Government reviews coastal safety to prevent Mehran-type attack", *The Economic Times*, June 02, 2011, at https://economictimes.indiatimes.com/news/politics-and-nation/government-reviews-coastal-safety-to-prevent-mehran-type-attack/articleshow/8686156.cms?from=mdr; Also Udai Rao, "Stay alert to Pak terror from the seas", *Deccan Herald*, August 20, 2018, at https://www.deccanherald.com/opinion/perspective/stay-alert-pak-terror-seas-688545.html (accessed January 10, 2019)
- 6. "India on alert for terror attacks from sea", *The Hindustan Times*, https://www.msn.com/en-in/news/newsindia/india-on-alert-forterror-attacks-from-sea/ar-BBOgAIf (accessed May 22, 2019)
- 7. Gurmeet Kanwal, Syed Ata Hasnain, Gurpreet S Khurana, Manmohan Bahadur, "India's Strategic Landscape, Hybrid Threats and Likely Operational Scenarios" in Satish Kumar (ed.) *India's National Security:* Annual Review 2016-17 (Routledge India: December 2017)
- 8. "Piracy and armed sea robberies on the rise in Asia, Singapore Straits", *Channel New Asia*, January 16, 2018 https://www.channelnewsasia.com/news/singapore/piracy-and-armed-sea-robberies-on-the-rise-in-asia-singapore-9866456 (accessed March 14, 2019)
- 9. "In Saudi Arabia's War in Yemen, No Refuge on Land or Sea", *The New York Times*, December 17, 2018, https://www.nytimes.com/2018/12/17/world/middleeast/yemen-fishing-boats-saudi.html (accessed July 12, 2019)

- 10. "Yemen's War against the s has always been about ports and the sea", Stable Seas, August 13, 2018, https://stableseas.org/rule-of-law/yemen%E2%80%99s-war-against-s-has-always-been-about-ports-and-sea. (accessed June 12, 2019)
- 11. A definition by the Council for Security Cooperation in the Asia Pacific (CSCAP), see Peter Chalk, "The Maritime Dimension of International Security: Terrorism, Piracy, and Challenges for the United States", RAND Monograph (2008), https://www.rand.org/pubs/monographs/MG697.html (accessed May 10, 2019)
- 12. Title 22 of the United States Code, Section 2656f(d); at https://fas.org/irp/threat/cyber/docs/npgs/app_b.htm. (accessed May 2, 2019)
- 13. "Radicalization of Piracy", *Journal of Energy Security*, December 14, 2010, http://www.ensec.org/index.php?option=com_content&view=article&id=269:the-radicalization-of-maritime-piracy-implications-formaritime-energy-security&catid=112:energysecuritycontent&Itemid=367 (accessed June 12, 2019)
- 14. Ibid
- 15. "The most dangerous backwater in the world", *The BBC*, March 30, 2017. https://www.bbc.com/news/world-asia-39252503(accessed June 12, 2019)
- 16. "Attack shuts major Libyan oil ports, slashing production", *Reuters*, June14, 2018, https://www.reuters.com/article/us-libya-security-oil/attack-shuts-major-libyan-oil-ports-slashing-production-idUSKBN 1JA23I (accessed August 5, 2019)
- 17. "The USS Cole Bombing Facts", CNN, March 27, 2019, https://edition.cnn.com/2013/09/18/world/meast/uss-cole-bombing-fast-facts/index.html (accessed August 1, 2019)
- 18. "MV Limburg attack in Gulf of Aden", *The Jamestown Foundation*, April 6, 2006 https://jamestown.org/program/maritime-terrorism-in-southeast-asia-potential-scenarios/the-mv-limburg-was-attacked-by-terrorists-in-the-gulf-of-aden-in-2002-an-example-of-the-threat-posed-by-maritime-terrorism/. (accessed August 5, 2019)
- 19. Vijay Sakhuja, "Maritime Terrorism: Karachi as a Staging Point", *IPCS*, October 6, 2014, http://www.ipcs.org/comm_select.php?article No=4680 (accessed June 14, 2019)

- 20. The attack on the PNS Zulfiqar in Karachi is deemed to be an act of 'maritime terror' because it targeted a 'warship', and was reportedly carried out with the express intension of hijacking the latter and using it to attack naval vessels in the Arabian Sea. For the purposes of analysis, any act of terrorism that involves an attack on a nation's 'maritime' assets is treated as an act of maritime terrorism. It could then involve sea-going vessels, offshore installations, coastal establishments, dockyards and harbour facilities.
- 21. Five 'IS-linked' navy officers get death sentence in dockyard attack case, *The Dawn*, May 24, 2016, https://www.dawn.com/news/1260340 (accessed March 13, 2019)
- 22. "After Karachi attack, Navy sounds alert on terror from sea", *Indian Express*, October 10, 2014, https://indianexpress.com/article/india/india-others/after-karachi-attack-navy-sounds-alert-on-terror-from-sea/(accessed March 21, 2019)
- 23. "Pak ships in high seas can pose jihadi threat: Indian Navy chief R.K. Dhowan", *India Today*, December 4, 2014, https://www.indiatoday.in/india/story/pak-ships-in-high-seas-can-pose-jehadi-threat-indian-navy-chief-r.k.-dhowan-229678-2014-12-04 (accessed June 12, 2019)
- 24. D Suba Chandran, "TTP and the Karachi Airport Attack", *Institute of Peace and Conflict Studies*, June 11, 2014 at http://www.ipcs.org/comm_select.php?articleNo=4507(accessed July 10, 2019)
- 25. According to an initial statement from al Qaeda after the Karachi attack, the plan was to use the Zulfiqar to attack a U.S. navy vessel. A further statement issued by the group identified the target as USS Supply, a US replenishment vessel, and added that the Indian navy was also a target; See Syed Raza Hassan, Katharine Houreld, "In attack by al Qaeda, lines blur between Pakistan's military, militants", *Reuters*, October 1, 2014 at https://www.reuters.com/article/us-pakistan-militants-attacks-insight/in-attack-by-al-qaeda-lines-blur-between-pakistans-military-militants-idUSKCN0HP2MM20141001 (accessed Juley17, 2019)
- 26. Discussions with officers in the operations directorate of the Integrated Headquarters, Ministry of Defense (Navy)
- 27. "Indian Naval Chief: Sea-Based Terrorism Is 'Huge'", *The Diplomat*, December 15, 2014, https://thediplomat.com/2014/12/indian-naval-chief-sea-based-terrorism-is-huge/(accessed March 30, 2019)

- 28. NIA to seek Interpol Red Corner notice against Pak diplomat wanted in terror plot, The Economic Times, February 25, 2018 at https://economic times.indiatimes.com/news/politics-and-nation/nia-to-seek-interpol-red-corner-notice-against-pak-diplomat-wanted-in-terror-plot/articleshow/63066315.cms?from=mdr (accessed May 21, 2019)
- 29. Ibid
- 30. "Seven states put on alert after terror attack call to police", *Hindustan Times*, April 27, 2019, https://www.hindustantimes.com/indianews/seven-states-put-on-alert-after-terror-attack-call-to-police/story-eEk4JY8pthpakeGMkFD3DL.html (accessed May 06, 2019)
- 31. "Mumbai Terrorists relied on technology for attacks", *New York Times*, December 8, 2008, https://www.nytimes.com/2008/12/09/world/asia/9mumbai.html?mtrref=www.google.co.in&gwh=50FD8F8BC67A773F F83C32CBA55E1283&gwt=pay (accessed May 10, 2019)
- 32. "Multiple blasts at mosques inside Bangladesh Navy base, 6 injured", *The Economic Times*, December 16, 2015 https://economictimes.india times.com/news/international/world-news/multiple-blasts-at-mosques-inside-bangladesh-navy-base-6-injured/articleshow/ 50236339.cms?from=mdr(accessed June 20, 2019)
- 33. "Indian, Bangladeshi navies launch joint anti-crime maritime patrol", *The Financial Times*, June 27, 2017, https://www.financialexpress.com/defence/indian-bangladeshi-navies-launch-joint-anti-crime-maritime-patrol/1222881/(accessed March 30, 2019)
- 34. Discussions with officers in the operations directorate of the Integrated Headquarters, Ministry of Defense (Navy)
- 35. The four prong strategy of maritime terror was made popular by Al Qaeda's ace operative Abd al Rahim al-Nashiri, in US custody since 2002 at Guantanamo Bay, see Nincic, "Maritime Terrorism: How Real is the Threat?" July 16, 2012 at https://www.fairobserver.com/region/north_america/maritime-terrorism-how-real-threat/ (accessed March 21, 2019)
- 36. Rommel Banlaoi, "Maritime Terrorism in Southeast Asia -The Abu Sayyaf Threat", Naval War College Review, Volume 58, No 4, 2005 (accessed May21, 2019)
- 37. "Superferry14: The world's deadliest terrorist attack at sea', Safety for

- *Sea*, February 27, 2019, https://safety4sea.com/cm-superferry14-theworlds-deadliest-terrorist-attack-at-sea/ (accessed March 30, 2019)
- 38. Bilveer Singh, "Crime-Terror Nexus in Southeast Asia: Case Study of the Abu Sayyaf Group", *Counter Terrorist Trends and Analyses*, Vol. 10, No. 9 (September 2018), p. 8, (accessed August 1, 2019)
- 39. Kevin Duffy, "Swords of the Sulu Sea: Countering the world's most maritime terrorist group", *Modern War Institute*, March 30, 2017, at https://mwi.usma.edu/swords-sulu-sea-countering-worlds-maritime-terrorist-group/(accessed May 16, 2019)
- 40. Gillian S. Oak, "Jemaah Islamiyah's Fifth Phase: The Many Faces of a Terrorist Group", *Journal of Studies in Conflict & Terrorism*, Volume 33, 2010 Issue 11, https://www.tandfonline.com/doi/abs/10.1080/1057 610x.2010.514697 (accessed June 20, 2019)
- 41. "The Deadly Evolution of Abu Sayyaf and the Sea:, *The Maritime Executive*, May 24, 2019, https://www.maritime-executive.com/editorials/the-deadly-evolution-of-abu-sayyaf-and-the-sea (accessed June20, 2019)
- 42. Ibid
- 43. "Indonesia, Malaysia, Philippines launch joint operations in Sulu Sea to tackle terrorism, transnational crimes", *The Straits Times*, June 19, 2017, https://www.straitstimes.com/asia/indonesia-malaysia-and-philippines-launch-joint-operations-in-sulu-sea-to-tackle-terrorism (accessed May 291, 2019)
- 44. Ian Storey "Trilateral Security Cooperation in the Sulu-Celebes Seas: A Work in Progress", *ISEAS Yusof Ishak Institute*, Issue 2018, No. 48, August 28, 2018 at https://www.iseas.edu.sg/images/pdf/ISEAS_Perspective_2018_48@50.pdf (accessed June 18, 2019)
- 45. Prashant Parmeshawan, "Are Sulu Sea Trilateral Patrols Actually Working, Wilson Center, January 29, 2019 https://www.wilsoncenter.org/blog-post/are-sulu-sea-trilateral-patrols-actually-working (August 4, 2019)
- 46. "ASG is bringing IS' brutal tactics to the Philippines", *The World Politics Review*, July 22, 2019, https://www.worldpoliticsreview.com/articles/28054/abu-sayyaf-is-bringing-more-of-isis-brutal-tactics-to-the-philippines; (accessed June 26, 2019)
- 47. "The investigation into the attack on the USS Cole", Report of the House

- Armed Services, United States Congress, May 2001 at https://www.bits.de/public/documents/US_Terrorist_Attacks/HASC-colereport0501.pdf (accessed May 21, 2019)
- 48. "Morocco 'uncovers al-Qaeda plot'", *BBC*, June 11, 2002, http://news.bbc.co.uk/2/hi/africa/2037391.stm (accessed June 29, 2019)
- 49. "Suicide bombers in boat attack on Iraq oil terminal", *The Guardian*, April 25, 2004 https://www.theguardian.com/world/2004/apr/25/iraq2 (accessed June 23, 2019)
- 50. "Terrorists commandeered Egyptian Missile Boat", *Business Insider*, at December 1, 2014, https://www.businessinsider.com/terrorists-hijacked-egyptian-navy-vessel-2014-12?IR=T(accessed March 23, 2019)
- 51. "Terror attack on Egypt naval boat leaves eight servicemen missing", *The Telegraph*, November 12, 2014, https://www.telegraph.co.uk/news/worldnews/africaandindianocean/egypt/11227639/Terror-attack-on-Egypt-naval-boat-leaves-eight-servicemen-missing.html (accessed March 12, 2019)
- 52. "Rebels in Yemen attack another UAE ship", *The War Zone*, July 31, 2015, https://www.thedrive.com/the-war-zone/13068/-rebels-in-yemen-attacked-another-uae-ship-and-thats-all-we-know-for-sure (accessed May 28, 2019)
- 53 "Attack on Saudi Frigate off Yemen Was Made by Drone Boat", *The War Zone*, February 20, 2017 , https://www.thedrive.com/the-war-zone/7769/attack-on-saudi-frigate-off-yemen-was-made-by-drone-boat (accessed May 28, 2019)
- 54. "Saudi-led coalition intercepts explosive-filled boat 'by Houthis", *Al Jazeera*, September 20, 2019 https://www.aljazeera.com/news/2019/09/saudi-coalition-explosive-filled-boat-houthis-intercepted-190919171404855.html (accessed September 22, 2019)
- 55. Jean-Charles Brisard, "The Paris Attacks and the evolving Islamic State threat to France", CTC Sentinel, November / December 2015, volume 8, issue 11 at https://ctc.usma.edu/the-paris-attacks-and-the-evolving-islamic-state-threat-to-france/ (accessed March 30, 2019)
- 56. "Royal Navy joins counter terrorism patrol after IS threatens Spain", *Cornwall Live*, June 21, 2019 https://www.cornwalllive.com/news/local-

- news/royal-navy-joins-counter-terrorism-3000788 (accessed March 12, 2019)
- 57. "Islamic State's Foreign Fighters Bring Terrorism Expertise Back to Europe", *IHS Markit*, June 11, 2018 https://ihsmarkit.com/research-analysis/islamic-states-foreign-fighters-bring-terrorism-expertise-back-to-europe.html (accessed May 20, 2019)
- 58. Ibid
- 59. Beatriz Filipe, "Conflating Piracy And Maritime Terrorism: The Need For Long Term Solutions", *Leiden University*, July 2018, at https://openaccess.leidenuniv.nl/bitstream/handle/1887/64658/Thesi s_Final_Beatriz%20Filipe.pdf?sequence=1(accessed may 20, 2019)
- 60. "Terrorism threat from Asia's pirates", CNN, September 11, 2003 http://edition.cnn.com/2003/WORLD/asiapcf/east/09/11/asia.pirates
- 61. Karine Hamilton, "The piracy terrorism nexus, Real or Imagine", *Proceedings of the 1st Australian Counter Terrorism Conference*, Edith Cowan University, Perth Western Australia, 30th November 2010 https://ro.ecu.edu.au/cgi/viewcontent.cgi?article=1002&context=act (accessed May 20, 2019)
- 62. Shani Ross and Joshua Ben-David, "Somali Piracy: An escalating security dilemma", *International Institute for Counter Terrorism*, August 20, 2009 at https://www.ict.org.il/Article.aspx?ID=1065#gsc.tab=0 (accessed June 16, 2019)
- 63. Pirates and terrorists are working together now in Somalia. *VOX News*, July 13, 2017 at https://www.vox.com/world/2017/7/13/15948184/pirates-terrorists-somalia-isis-shabaab
- 64. "Abu Sayyaf makes millions from Piracy", The Maritime Executive, October 28, 2016 at https://www.maritime-executive.com/article/abusayyaf-makes-millions-from-piracy(accessed May 21, 2019)
- 65. 'Scanner issue adding to cost of cargo handling', *The Hindu*, August 6, 2019 https://www.thehindu.com/news/cities/Kochi/scanner-issue-adding-to-cost-of-cargo-handling/article28828270.ece (accessed August 6, 2019)
- 66. "Major ports to get 16 new cargo scanners", *DNA*, March 13, 2017. https://www.dnaindia.com/business/report- major-ports-to-get-16-new-cargo-scanners-2351795(accessed March 21, 2019)

- 67. Ibid
- 68. ISPS Circular, NT/ISPSCOM/01/2016 dated September 5, 2016, *GoI*, *Ministry of Shipping*, http://dgshipping.gov.in/writereaddata/ShippingNotices/201605121217258291467dgscircular_isps.pdf (accessed March 16, 2019)
- 69. Lars H. Bergqvist , "The ISPS Code and Maritime Terrorism", *The Maritime Executive*, at July 17, 2014 https://www.maritime-executive.com/article/The-ISPS-Code-and-Maritime-Terrorism-2014-07-17 (accessed March 21, 2019)
- 70. India's Director General Shipping issued an order in 2011, extending the scope of ISPS implementation to vessels below 500 GT, not engaged in international voyages, and class of vessels defined as 'River Sea Vessels' (RSVs). Yet not many Asian states are able to regulate ships below 500 GT, especially when passing through narrow straits. See Sam Bateman., Joshua Ho, and Mathew Mathai, "Shipping patterns in the Malacca and Singapore straits: an assessment of the risks to different types of vessel", *Contemporary Southeast Asia: A Journal of International and Strategic Affairs*, no. 2 (2007): 309-332 (accessed March 21, 2019)
- 71. "Summary of ISPS Code Implementation", *International Register of Shipping*, July 8, 2019 https://intlreg.org/2019/07/08/maritime-knowledge-summary-of-isps-code-implementation/ (accessed Aug 5, 2019)
- 72. "ISPS Code fails to contemplate aerial threats from drones", *Maritime Journal*, May 3, 2018 https://www.maritimejournal.com/news101/security-and-alarm-systems/isps-code-fails-to-contemplate-aerial-threats-from-drones-says-martek (accessed July 21, 2019)
- 73. Bill Gasperett, "Security since 9/11: Creating the maritime transportation security act and the ISPS code", *Homeland Security Today*, February 9, 2018, at https://www.hstoday.us/subject-matter-areas/maritime-security/security-since-9-11-creating-maritime-transportation-security-act-isps-code/ (accessed July 09, 2019)
- 74. Although all provisions of the ISPS Code have been enacted in India via a 2004 Amendment to the Merchant Shipping Act, 1958, this has still not translated into a comprehensive commercial security policy. There is a clear absence of demarcation of responsibilities in port operations, with

- operators unwilling to undertake any security commitments at port terminals.
- 75. "The Merchant Shipping Bill", *PRS Research*, December 16, 2016, http://www.prsindia.org/uploads /media/Merchant%20Shipping/Merchant%20Shipping%20Bill,%202016.pdf (accessed August 5, 2019)
- 76. Richard I Kilpatrick, Jr, "Borrowing from civil aviation security: Does international law governing airline hijacking offer solutions to the modern maritime piracy epidemic off the Coast of Somalia?", Oceans Beyond Piracy, Working Paper. August 2011, http://oceansbeyondpiracy.org/sites/default/files/attachments/kilpatrick_borrowing_from_civil_aviation_0.pdf
- 77. Ibid
- 78. Andrew Walker, "Breaking The Bottleneck: Maritime Terrorism and Economic Chokepoints", NATO Association of Canada, June 5, 2012, http://natoassociation.ca/breaking-the-bottleneck-maritime-terrorism-and-economic-chokepoints-part-1/(accessed July 20, 2019)
- 79. Ibid
- 80. "A retired Navy Admiral is 'very concerned' about terrorists attacking cruise ships", *Business Insider*, June 30, 2017, https://www.businessinsider.in/Aretired-Navy-admiral-is-very-concerned-about-terrorists-attacking-cruise-ships/articleshow/59392108.cms (accessed July 21, 2019)
- 81. Ibid
- 82. "Bomb Caused Philippine Ferry Fire." BBC News. October 11, 2004, http://news.bbc.co.uk/2/hi/asia-pacific/3732356.stm (accessed May 15, 2019)
- 83. Discussions with officers in the operations directorate of the Integrated Headquarters, Ministry of Defense (Navy), November 2018
- 84. Hamad Bakar Hamad, "Maritime Terrorism: Why the East African Community is the Next Potential Target of Maritime Terrorism", Research on Humanities and Social Sciences, ISSN (Paper), Vol.6, No.6, 2016, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2923373 (accessed March 19, 2019)
- 85. Ibid
- 86. In the great Arab conflict in the Middle East and North Africa, many of

- Somalia's federal states have aligned with the United Arab Emirates, even as the central government has sided with Qatar.
- 87. Matt Kennard, Ismail Einashe, "For Somaliland and Djibouti, Will New Friends Bring Benefits?", Foreign Policy, March 19, 2019, https://foreignpolicy.com/2019/03/19/somaliland-somalia-horn-of-africa-djibouti-military-oil-uae-qatar-berbera-port/ (accessed June 21, 2019)
- 88. "Somalia port boss assassinated and car bomb leaves nine dead in al-Shabab attacks", *Japan Times*, February 5, 2019. https://www.japantimes.co.jp/news/2019/02/05/world/somalia-port-boss-assassinated -car-bomb-leaves-nine-dead-al-shabab-attacks/#.XUO3Ko4zbcs (accessed March 11, 2019)
- 89. "Al-Shabaab planning attacks in Djibouti", *The Guardian*, June 2014, https://www.theguardian.com/world/2014/jun/12/somali-insurgents-al-shabaab-planning-attacks-djibouti (accessed March 20, 2019)
- 90. "USCG imposes conditions of entry on vessels arriving from Djibouti", *Saferty4Sea*, May 17, 2019 at https://safety4sea.com/uscg-imposes-conditions-of-entry-on-vessels-arriving-from-djibouti/ (accessed August 2, 2019)
- 91. Joseph Franco and Romain Quivooij, "Terrorist Threats from the Maritime Domain: Singapore's Response", *Rajaratnam School of International Studies*, October 10, 2014 at https://www.rsis.edu.sg/wp-content/uploads/2014/10/CO14197.pdf (accessed June 24, 2019)
- 92. Ibid
- 93. "Navy to operate information fusion centre to boost Indian Ocean security", *The Week*, November 13, 2018, https://www.theweek.in/news/india/2018/11/13/navy-to-operate-information-fusion-centre-to-boost-indian-ocean-security.html (accessed August 05, 2019)
- 94. "India's port and coastal security still has gaping holes", *LiveMint*, July 21, 2017, https://www.livemint.com/Politics/Ty68zWc5ukwu5nmks SIjdP/Indias-port-and-coastal-security-still-has-gaping-holes.html
- 95. Abhijit Singh, "After 26/11, A half transformation: Why India's coastal security project remains work in progress", *The Economic Times*, November 26, 2018, https://economictimes.indiatimes.com/news/

- defence/after-26/11-a-half-transformation-why-indias-coastal-security-project-remains-work-in-progress/articleshow/66805214.cms (accessed June 30, 2019)
- 96. "Navy, Coast Guard test India's coastal readiness", *The Hindustan Times*, January 22, 2019, https://www.hindustantimes.com/india-news/navy-coast-guard-test-india-s-coastal-readiness/story-Fw3tvZnE2T8cb PCHMORZNI.html (accessed June 18, 2019)
- 97. "Major ports to get 16 new cargo scanners", *DNA*, March 13, 2017, https://www.dnaindia.com/business/ report-major-ports-to-get-16-new-cargo-scanners-2351795 (accessed June 16, 2019)
- 98. "Best management practices to deter piracy, and enhance maritime security in the Red Sea, Gulf of Aden, Indian Ocean and Arabian Sea", *EUNAVFOR*, June 2018, https://eunavfor.eu/wp-content/uploads/2018/06/BMP5-PP.pdf

Observer Research Foundation (ORF) is a public policy think tank that aims to influence the formulation of policies for building a strong and prosperous India. ORF pursues these goals by providing informed and productive inputs, in-depth research, and stimulating discussions. The Foundation is supported in its mission by a cross-section of India's leading public figures, including academic and business leaders.



Ideas · Forums · Leadership · Impact

20, Rouse Avenue Institutional Area, New Delhi - 110 002, INDIA
Ph.: +91-11-35332000 Fax: +91-11-35332005

E-mail: contactus@orfonline.org Website: www.orfonline.org