# Exploiting Seams and Closing Gaps: Lessons from Mumbai and Beyond 

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# Exploiting Seams and Closing Gaps: Lessons from Mumbai and Beyond 

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#### Abstract

This article analyzes a single event-the 2008 Mumbai attacks-in order to consider the strategic and operational lessons for dealing with other armed groups. How and why was Lashkar-e-Tayyiba (LeT) able to carry out such a sophisticated attack in the heart of Mumbai? And what lessons does Mumbai hold for strategists seeking to counter other armed groups around the world? While tactical level lessons from Mumbai have been well documented, it is important to also consider what the Mumbai attacks tell us at the strategic and operational levels. Specifically, the Mumbai attacks provide valuable insight into how armed groups use the maritime environment, and how they use surprise, denial, and deception to mask intention and invite over-reaction by states. In addition, studying the Mumbai attacks provides insight into some of the strategic and operational seams and gaps that armed groups seek to exploit. These include environmental and geographical factors; institutional, bureaucratic, and jurisdictional seams and gaps between agencies; cognitive seams and gaps that made the use of the sea by LeT so difficult to conceptualize; and the diplomatic seams and gaps that led to heightened tensions among statesin this case, India, Pakistan, and the United States. This article discusses how to categorize these seams and gaps in order to better address the problems they create, and how states might best direct and focus their limited resources when faced with similar challenges.


## Introduction

"The enemy must not know where I intend to give battle. For if he does not know...he must prepare in a great many places. And when he prepares in a great many places, those I have to fight in any one place will be few." ${ }^{2}$
-Sun Tzu, Art of War
In a sustained and bloody attack from November 26-29, 2008, four teams of Lashkar-e-Tayyiba (LeT)-Army of the Righteous-gunmen attacked ten separate sites in the Indian coastal city of Mumbai. Among others, the Taj Mahal and Oberoi Trident hotels, the rail terminus, a women and children's hospital, a Jewish community center, a movie theater, and the Leopold Café were all targeted. Indian police reported that ten men, nine of whom were killed, carried out the attacks. The gunmen arrived in the city via a hijacked Indian trawler ( $M V$ Kuber) and used small boats to reach the shore. At this point they hired taxis to drive them to the first attack sites and planted bombs in the taxis. ${ }^{3}$ The explosion from those bombs created further fog, friction, chaos, and uncertainty in the besieged city. The only attacker who was captured alive, a Pakistani citizen named Ajmal Kasab, admitted being part of the Pakistani-based LeT, which is designated a terrorist organization by the United States, United Kingdom, India, and Pakistan (among others). ${ }^{4}$ The sophisticated and carefully coordinated attack stunned Indian officials and the international community. When it was over, 172 people had been killed and at least 300 were wounded. ${ }^{5}$

While tactical level lessons from Mumbai have been well documented, it is important to also consider what the Mumbai attacks tell us at the strategic and operational levels. ${ }^{6}$ This article analyzes a single event-the 2008 Mumbai attacks-in order to consider the strategic and operational lessons for dealing with other armed groups. Using a single case study to draw such lessons is not without its limitations; however, the argument in this article is that even a single event can provide us with valuable insights if we use it to evaluate how armed groups exploit seams and gaps to their advantage.

One of the challenges of using a single case from which to draw lessons is that many variables in the Mumbai attack could be considered so unique-sui generis-that generalizable lessons cannot be discerned. These unique factors include the specific sites targeted, the weapons used, the police response in Mumbai, and even the geography of Mumbai itself. In addition, without multiple data sets, it is difficult to test and falsify
hypotheses and to determine whether the four seams and gaps identified above are exhaustive, whether they should be prioritized, and whether more should be considered. One might also argue that the challenges of preventing or successfully disrupting another Mumbai-style attack are either too great or too specific to the armed group involved to provide generalizable discussion on how to minimize threats from any armed groups. Given India's finite resources for security in one city, Mumbai's coast line, and the determination of the LeT to attack targets in India, it could also be argued that it is simply too difficult to close seams and gaps, regardless of the lessons from Mumbai.

These are all valid points. However, the argument in this article is that the 2008 Mumbai attacks are a valuable and rich case study for analysis for three reasons: the armed group's strategic maturity and strategic evolution; the way the armed group used the maritime environment to its advantage; and the way this armed group exploited strategic and operational seams and gaps in Indian security forces and between states. These are discussed in more detail in sections two and three, following a brief section on methodology. Moreover, although the list of seams and gaps may not be exhaustive, a brief discussion of other armed groups in the conclusion helps to broaden the applicability of these lessons.

Finally, in considering current and future irregular challenges, the purpose of this article is to consider how to minimize the threats and maximize the opportunities to counter armed groups. India is not alone in having finite resources to address security challenges. Nor is it alone in facing a determined armed group that is willing to innovate, and in having geography that makes it inviting for armed groups to target certain cities or areas. From the trans-Sahel states in Africa, to the archipelago states in Southeast Asia, to the states of Latin America, many countries face the same challenge from armed groups. The argument in this article is that the Mumbai attacks provide a useful case to consider how states might best direct and focus their limited resources when faced with similar challenges. Thus, despite the limitations of a single case study, it is still important to begin the process of identifying the types of seams and gaps that armed groups have taken advantage of in order to provide a steppingoff point for further discussion on how to incorporate these strategic and operational lessons into current and future security planning and coordination.

## Exploiting the Maritime Environment

As the opening quote illustrates, the strategist Sun Tzu warns his readers not to strike at the place where their adversaries are strongest, but to look instead for where they are vulnerable. ${ }^{7}$ Attack their strategies, undermine their alliances, and seek them out where they are least able to respond, he advises. ${ }^{8}$ LeT certainly seems to have taken a leaf from Sun Tzu's book in the planning and execution of the Mumbai attacks. ${ }^{9}$ Indeed, the 2008 attacks are a prime example of how armed groups use complex environments to attack where a state is least prepared to respond. Of particular importance in this assessment are the evolution of LeT's strategies and the use of the maritime environment by this otherwise land-locked armed group to attack a coastal city. How and why was LeT able to carry out such a sophisticated attack in the heart of Mumbai? And what lessons does Mumbai hold for strategists seeking to counter other armed groups around the world?

LeT was founded in 1990 as the militant wing of Markaz Daway ul Irshad (MDI)-Center for Religious Learning and Propagation. ${ }^{10}$ The MDI organization, which has its headquarters in Muridke, near Lahore, Pakistan, uses the combination of its educational programs and LeT's militant activities to develop a jihadi culture. LeT "was meant to equip the adherents for practical experience in waging jihad." ${ }^{11}$ According to former Pakistani policeman turned scholar Hassan Abbas, LeT "prides itself on introducing suicide bombings into the Kashmir theater" and carries out attacks in disputed Kashmir territories. ${ }^{12}$ In June 1999, one of LeT's three founding leaders, Hafiz Saeed, declared "that LeT was not working for the liberation of Kashmir alone, but intended to aid the 200 million Muslims in India." ${ }^{13}$

The expansion of LeT ambitions to include India made Mumbai a particularly attractive, symbolic target. ${ }^{14}$ Mumbai is a vibrant city that houses historical and modern economic, entertainment, cultural, and political focal points. Home to more than twenty million people, it is the fourthlargest city in the world. ${ }^{15}$ Mumbai also presents the perfect strategic communications opportunity for violent groups who wish to draw attention to their actions and instill a sense of fear. As noted above, the four teams of LeT gunmen that held Mumbai hostage for three days in November 2008 attacked ten separate places throughout the city, giving ample time and space for media coverage. The Mumbai attackers used focal points-widely recognized buildings-that were selected to catch public attention and create a sense of urgency and panic. Moreover, by targeting landmark buildings where large numbers gather such as the Taj Mahal and Oberoi Trident hotels and the rail terminus, the sheer number of peo-
ple involved captivated public attention. This combination of public attention and urgency created further seams and gaps as the attack unfolded, placing pressure on the authorities in Mumbai and the Indian government in New Delhi to act quickly with little time for planning and coordination. This further invited errors in judgment-strategic and tacti-cal-and the potential for state over-reaction, which created further confusion and fear. ${ }^{16}$ Finally, the presence of India's Bollywood film studios assured regional and international media coverage of the events and their aftermath. ${ }^{17}$

Several excellent reports have detailed the tactical and operational issues that made it possible for the 2008 attack to take place and the problems Indian security forces faced in ending the sieges. ${ }^{18}$ For example, the death of the deputy chief of police at Mumbai's central railway station, where the first attack took place, quickly created a command vacuum. Moreover, the attackers were more heavily armed than the police officers at the railway station, and their AK-47s were able to completely penetrate the bulletproof vests of the first responders. As a result, and due to the multiple attack sites, crisis response protocols inside the city were never completely executed, which allowed the LeT teams to move between locations with impunity. In particular, after the first attack at Mumbai's railway station, the gunmen were able to escape and move on to their next target even as security forces were attempting to respond to the first attack. ${ }^{19}$ By attacking in several places around Mumbai, moving between attack sites, and planting bombs in taxis, the gunmen were able to dictate the tempo of the attacks, keep the media focused on events, and sow confusion amongst police teams.

## Getting to Mumbai

As noted above, LeT is widely considered to have training camps inside Pakistan and Kashmir; thus, in order to plan and carry out the attacks, they had to solve the issue of how to reach Mumbai. Solving this problem required both creativity and ingenuity. Mumbai's train system, against which LeT led an attack on July 11, 2006 resulting in more than 200 deaths and 700 people injured, meant increased but not perfect security on the rail system. The most obvious and overland routes into India are both risky and predictable. A truck loaded with explosives making the long drive into the city would stand a high chance of being stopped and searched. The LeT reconnaissance team sent to Mumbai prior to the attacks noted, however, that the boat ride across the bay from the airport not only provided an excellent view of the city but also exposed how vulnerable Mumbai's coastline was to a maritime approach. ${ }^{20}$

In order to focus the attention of the world on LeT and its agenda, the group had to solve some perplexing operational and strategic challenges; for example, how to use the environment, including Mumbai's waterways, to their advantage to achieve freedom of movement and surprise. This was no simple feat as India has a coast guard and navy to ensure that domination of the waves near its shore remained under its control. With a few exceptions, this coverage is sufficient to guard against the usual maritime suspects, incursions by other states and criminal activities by pirates and smugglers. ${ }^{21}$

So, why did LeT attack Mumbai via the sea? How was it able to overcome the technical and logistical difficulties? What issues does this raise for consideration of how other armed groups use their environment to their advantage? First, by arriving via sea, LeT had more options to follow Sun Tzu's strategic advice, disguise their intentions and conceal their approach. Even though state-owned navies rule the oceans, their coverage is far from universal. Moreover, although interdicting access routes or supply lines is a difficult task whether on land or at sea, it is particularly tricky at sea. Mumbai is a very busy harbor surrounded by an even busier waterway. In this case, LeT was counting on the ocean to maintain strategic, operational, and tactical surprise. Their exploitation of the maritime environment was exceptionally imaginative and rested on their pre-attack reconnaissance of security features in Mumbai and the advantage that arriving by sea brought to the gunmen. ${ }^{22}$ In essence, they were banking on getting lost in the vast open expanses of the ocean while at sea, and then getting lost in the crowded commons near the shore.

Second, LeT treated the maritime environment as a line of communication rather than attempting to establish sea control. Although LeT had not used the maritime environment for attacks, the group was no stranger to using the ocean as a conduit for moving goods, people, supplies, and weapons across the Indian Ocean. They were able to move swiftly without developing an extensive maritime skill set of their own by using the sea around Mumbai as a conduit to move gunmen and supplies rather than a base from which to conduct an attack. They were also able to minimize the equipment and logistics required to carry out the attack. By hijacking an Indian trawler (MV Kuber) while it was still outside of Indian waters and killing the crew, LeT was able to use the ship's captain to drive the vessel into coastal waters undetected. ${ }^{23}$ Moreover, as discussed in more detail below, interoperability issues and confusion over maritime areas of responsibility among the Indian Navy, Coast Guard, and coastal police forces made it possible for the four teams to slip into the city unchallenged. ${ }^{24}$

While this was an innovative way for LeT to use the maritime environment, other groups like the Tamil Tigers in Sri Lanka have led the way in using the oceans as conduits for moving supplies and even amphibious landings. For example, the Tamil "Sea Tigers" developed into a 3,000strong force that carried out suicide attacks at sea, smuggled weapons and supplies across the Polk Straight between Sri Lanka and India, and ferried weapons from warehouse "mother ships" deep in the Indian Ocean. ${ }^{25}$ Certainly, this is an extreme example of what a well-funded armed group is capable of. ${ }^{26}$ However, both the Tamil Tigers and LeT's use of the maritime environment serve as reminders that armed groups can use the oceans and littorals to their advantage-and that states overlook these strategic capabilities to their peril.

In summary, this section discussed how LeT specifically used the maritime environment to its advantage and how it took advantage of other strategic and operational seams. This brief survey of the 2008 Mumbai attacks reveals some of the strategies that LeT used to their advantage. These included:

- The use of surprise, denial, and deception to mask their approach and cause confusion during the attacks;
- The use of the maritime environment to create strategic and operational freedom of movement;
- Creating strategic communications seams and gaps by inviting overreaction and dictating timing and operational tempo.


## Exploiting Seams and Closing Gaps

In addition to providing us with an opportunity to think about how armed groups use their environment to their advantage, the Mumbai attacks are a reminder of how armed groups exploit seams and gaps in security coverage. It is common practice for states to draw lines separating operational, jurisdictional, and territorial lines of authority that flow from land to littorals, to sea, to land across international boundaries. Although the intent is to make distinct boundaries between different areas of authority, these lines often create seams that a host of actors exploit. This section discusses these seams and gaps more generally and argues that armed groups are particularly adept at exploiting four key seams and gaps: The environmental and geographical factors discussed previously; the institutional, bureaucratic, and jurisdictional seams and gaps between agencies; the cognitive seams and gaps that made the use of the sea by armed
groups difficult to conceptualize; and the diplomatic seams and gaps that led to heightened tensions among India, Pakistan, and the United States.

The Mumbai attacks exposed the institutional seams among the Indian Navy, Coast Guard, and Coastal Police. There was a tangible seam in terms of areas of responsibility, as well as seams in communication, information sharing, and interoperability. As a result, security around Mumbai was split between an outer layer (deep sea) that was given to the Indian Navy, and an inner layer (littorals and close to ports and beaches) that was the responsibility of the Coast Guard. These artificial lines and confused authorities created numerous blind spots that LeT took advantage of. Indeed, the hijacked trawler, the MV Kuber, was able to pass through the Indian Navy's jurisdiction and into the Coast Guard's jurisdiction without being stopped. ${ }^{27}$

Looking back at the attacks with 20/20 hindsight, it certainly seems that the maritime approach offered a potential point of failure for LeT, and was probably the last best point at which the attacks could have been prevented. This raises the question of what the Indian security agencies-and other states with similar challenges-could have done to close these seams and gaps, given the busy waterway and finite resources. For starters, practical skills sets and habits of cooperation are developed by training together, but the Indian Navy had discontinued joint coastal patrolling off the Mumbai coast after September 2005, and by 2008 neither the Navy nor the Coast Guard had practiced working together in joint operations. As a result, there was little understanding of the limits of their joint capabilities and coverage and the blind spots that standard operating procedures created. This lack of practical experience in working together was complicated by an inability to share intelligence or even best practices. ${ }^{28}$ Coupled with confused jurisdictions, this created a seamed environment in which there was no easy method to coordinate information or to act on information if it were coordinated. ${ }^{29}$

Of course, this issue of confused jurisdictions and seams between areas of responsibilities, as well as lack of interoperability and cooperation is certainly not limited to the Indian security forces and the Mumbai attacks. The 9/11 Commission Report, for example, argues that all of these factors, and others, contributed to the seams that the $9 / 11$ hijackers exploited in the attacks against the United States on September 2001. ${ }^{30}$ Moreover, developing habits of cooperation, interoperability, and intelligence sharing, and working through legal and national limitations continue to challenge defense and security professionals in the United States, despite the creation of an overarching bureaucracy-the Department of Homeland Security-to coordinate efforts among the agencies responsible for
domestic security. ${ }^{31}$ Competing interests, budgetary issues, institutional culture, bureaucratic inertia, standard operation procedures, and training schedules compound these difficulties at the strategic level. Additionally, as the cross-Strait activities of al-Qaida in Yemen and Somalia have demonstrated, even the divisions of geographic areas among military areas of responsibilities-such as Combatant Commands and Task Forces-create seams and gaps in coverage and coordination that armed groups exploit. ${ }^{22}$

Second, this case draws our attention to cognitive seams and gaps, the factors that the 9/11 Commission Report called "failures in imagination." ${ }^{33}$ In this case, the cognitive seam-the failure in imagination-was the use of the maritime environment as a conduit for an attack.

Although command of the high seas may belong to the world's state navies, armed groups use the world's waterways-oceans, littorals, rivers, and swamps-as conduits for flows of people, goods, drugs, weapons, and money. The Mediterranean and the vast Indian Ocean region, which extends from the south and east African coasts across to the Indonesian and Philippine archipelagos, is awash with tankers, freighters, and tiny dhows that flow undetected and unchallenged across the world's oceans. Armed groups are used to operating clandestinely, and since they don't typically need to develop dockyards and training academies, they can be very creative at hiding their vessels and operational preparation. For example, some armed groups such as the Tamil Tigers and narcotraffickers in Colombia have developed their own indigenous maritime capabilities of converting seemingly innocuous vessels into suicide-attack craft, in addition to submersibles, fast attack boats, and even warehouse mother ships to resupply weapons. ${ }^{34}$

However, as the Mumbai attacks demonstrate, states continue to be surprised by the innovative use of the maritime domain by armed groups. One reason is that states mainly focus their intelligence assessments on other states. In the twenty-first century, the development and exertion of naval power includes the ability to disrupt the free flow of goods and oil on which the global economy depends. Iran's 2012 threats to close off the Straits of Hormuzin response to the threat of EU oil sanctions are a good example of this; in response, the United States, Britain, and France sent an aircraft carrier and six warships to pass through the Straits. ${ }^{35}$ In comparison to the complex regional and international security issues that surround the development of Chinese or Iranian naval capabilities, it is understandable that the use of the oceans by armed groups can be
overlooked. The strategic repercussions of the Mumbai attacks on IndoPakistani relations, however, demonstrate the costs of continuing to overlook armed groups at sea.

States ignore the use of the maritime domain by armed groups at their peril. To give but one example, al-Qaida operatives and affiliates attempted at least eighteen major attacks on or via the ocean between 1998 and 2011. In addition to the attack on the USS Cole, these included attacks on private yachts, the delivery of explosives for the Tanzania and Kenya embassy bombings in 1998, a successful attack on the French oil tanker Limburg in 2002 near Yemen, and attacks on oil tankers off the coast of Iraq in 2004. ${ }^{36}$ Given the advantages of surprise and deception that using the maritime domain confers, it is less surprising that LeT used the ocean for the Mumbai attacks and more a question of which other armed groups might follow suit.

The 2008 Mumbai attacks also serve as an important reminder of how armed groups and states can exploit intangible seams and gaps such as diplomatic tensions between states to their advantage. In the case of Mumbai, the attacks seemed intended to further exacerbate tensions between Indian and Pakistan, and between India's Muslim and Hindu populations. LeT's attacks in Kashmir against Indian troops are well known, and many observers consider LeT to be acting with the supporteither concrete or tacit-of Pakistani intelligence officers. ${ }^{37}$ This raised the stakes for both India and Pakistan during the 2008 attacks and elevated the risk of an event with regional consequences. Indeed, given this context and the very public nature of the attacks, the diplomatic and military restraint both states showed during the attacks and in the aftermath was probably a bitter disappointment to LeT and its supporters. However, the attacks also raise the issue of how an armed group can exploit its tactical success to escalate strategic tensions. Had India been less restrained in its reaction to the shocking and prolonged siege in Mumbai, it is conceivable that LeT might very well have provoked another deep-freeze in relations between Indian and Pakistan, or even another hot war in the Kashmir region.

The ability of armed groups to affect local, regional, and even international security is not limited to LeT and is certainly not limited to IndiaPakistan relations. In 2006, for example, Israel's reaction to Hezbollah's kidnapping of Israeli Defense Force officers quickly escalated into a hot conflict across the Israeli-Lebanese border. Moreover, when the crossborder shelling had subsided, Hezbollah took advantage of the destruction caused by Israeli rockets in order to further extend its networks of power and patronage in Southern Lebanon. The conflict also undermined
the Lebanese government's legitimacy and authority and raised serious doubts about its ability to hold onto power. ${ }^{38}$ The timing of the 2008 Mumbai attacks was unfortunate from a U.S. perspective, given the delicate diplomatic negotiations between the United States and Pakistan to put pressure on Afghan Taliban and al-Qaida leadership thought to be hiding in the Federally Administrated Tribal Area (FATA) region of Pakistan. The attacks were intended to divert Pakistani attention on the new tensions with India, as well as to its own troops in the Kashmir region, leaving little spare energy to support U.S. adventures in FATA. ${ }^{39}$

Finally, despite this seemingly dire assessment of how non-state armed groups use the environment to their advantage and exploit seams and gaps, there is reason to be hopeful. States do prevail against armed groups on a regular basis, and attacks such as Mumbai are memorable in part for their rarity. For example, the Sri Lankan government successfully disrupted and defeated the Tamil Tigers, who were extremely adept at exploiting seams. In addition to transforming their own navy to cover maritime gaps, the Sri Lankan government was able to disrupt and degrade the fundraising activities of the LTTE among the Tamil diaspora in Canada, UK, and India..$^{40}$ Unfortunately, these cases point to the reality that a lot of time, blood, treasure, and political capital are typically expended before states learn which seams and gaps armed groups are taking advantage of and how to close those gaps.

## Conclusion

In conclusion, this article used the example of the 2008 Mumbai attacks carried out by LeT to analyze how armed groups can use the maritime domain as a conduit for clandestine attacks. The case also illustrates how an armed group can exploit four different types of seams: environmental and geographical; institutional; cognitive; and alliances and coalitions.

- The environmental and geographic factors included Mumbai's geographical position as a bustling coastal city with crowded coastal waters.
- The institutional factors included institutional inertia, entrenched bureaucratic interests, standard operating procedures and routines that resulted in interoperability, blind spots, and limited habits of cooperation between maritime agencies, legal authorities, and jurisdictions.
- The cognitive factors included the failure to recognize that the LeT and other armed groups use the Indian Ocean to move goods, people, weapons, and money, and that attacking Mumbai from the sea, whether through an amphibious landing or small boats laden with explosives, was well within their imagination.
- The diplomatic and alliance factors included the tensions between states-India and Pakistan-and the strain the attacks placed on the U.S.-Pakistan partnership. The LeT was able to exploit existing diplomatic tensions, geographic boundaries, and political rivalries to leverage blind spots and amplify operational and strategic effects. ${ }^{41}$

As noted in the introduction, although this single example of the 2008 attacks in Mumbai does not provide an exhaustive list of how all armed groups can use the environment to their favor and of all the seams and gaps they can possibly exploit, this article is intended to provide a jump-ing-off point for further research, analysis, and debate on some of the most pressing issues facing states today; such as, where and how to focus scarce resources in order to close seams and hopefully exploit gaps against innovation and surprise by armed groups.

## About the Author

Dr. Andrea J. Dew is the Co-Director of the Center on Irregular Warfare and Armed Groups (CIWAG) and an Associate Professor of Strategy and Policy at the U.S. Naval War College, Newport, RI. She lectures and researches on the strategic utility of terror, armed groups on land and at sea, and the strategies of a range of C2oth and C21st armed groups. She holds an MALD and Ph.D. in International Relations from the Fletcher School, Tufts University. Dr. Dew is the co-author of Insurgents, Terrorists, and Militias: The Warriors of Contemporary Combat (Columbia UP, 2009) and teaches workshops on the strategies of armed groups for Special Operations Forces. Her forthcoming co-edited book is entitled: Deep Currents, Rising Tides: The Indian Ocean and International Security (Georgetown UP, 2013).

## References

1 The views in the article are my own and do not represent the U.S. Naval War College, the U.S. Navy or the U.S. Department of Defense.
2 Griffith, Samuel B., translated, The Art of War (Oxford, UK: Oxford University Press, 1963), 98.

3 See "Final Form/Report (Under Section 173 Cr.P.C.)" (Court Of Addl. Ch. M.M., 37th Court, Esplanade, Mumbai), available at:
http://www.hindu.com/nic/mumbai-terror-attack-final-form.pdf, 7-8. According to Indian reports, the gunmen were each carrying an AK-47 with 8 spare magazine, a pistol with 2 spare magazines, $8-10$ hand grenades, Khanjir knives, cash (Indian rupees), Nokia mobile handsets, headphones, water bottles, one GPS per group, 8 kg of explosive (RDX-laden IED (with timer)), three 9 volt batteries. They also had a single satellite phone. Indian intelligence services later released recordings of conversations between the gunmen and their LeT handlers on the satellite phone in which they discuss killing of the MV Kuber's crew.
4 Gethin Chamberlain, "Mumbai gunman convicted of murder over terror attacks," The Guardian (London), May 3, 2010, available at:
http://tinyurl.com/3xvzfzb (www.guardian.co.uk/world/2010/may/o3/mum-bai-gunman-convicted-murder). Kasab's Pakistani citizenship was acknowledged by the Pakistani government in 2009. He was sentenced to death on 5 counts in May 2010.

5 "Final Form/Report (Under Section 173 Cr.P.C.)," 2. See also: Angel Rabasa, Robert D. Blackwill, Peter Chalk, et al., "The Lessons of Mumbai" (Santa Monica, CA: RAND Corporation, 2009), 1-6.
6 Ibid.; Ashok T. Duraphe, Final Report: Mumbai Terror Attack Cases, 26th November 2008 (Mumbai: Office of the Assistant Commissioner of Police, 2009); Sarah Johnstone and Alexander Nicoll, "Terror in Mumbai: Attacks raise intelligence, security and political questions," IISS Strategic Comments 14:10 (December 2008); Alan K. Kronstadt, Terrorist Attacks in Mumbai, India, and Implications for U.S. Interests (Washington, D.C.: Congressional Research Service, 2008); Rabasa, et al., "The Lessons of Mumbai;" Stephen Tankel, "Laskhar-e-Taiba: from 9/11 to Mumbai," International Centre for the Study of Radicalisation and Political Violence (King's College, London, 2009).
7 Tzu, Art of War, 96-101.
8 Ibid., 77-78.
9 Tankel, "Laskhar-e-Taiba: from 9/11 to Mumbai," 3-5, 23-29.
10 LeT was founded by Zafar Iqbal, Hafiz Saeed, and Abdullah Azzam.
11 Abbas, Hassan, Pakistan's Drift Into Extremism: Allah, then Army, and America's War Terror (New York, M.E. Sharpe 2004), 212.
12 Ibid., 214.
13 Ibid.
14 On LeT origins see: Abbas, Pakistan's Drift into Extremism; on the LeT in Mumbai, see: Tankel, "Laskhar-e-Taiba: From 9/11 to Mumbai," 3-5.
15 "Muslims in Mumbai, Shadow of a Darker Decade," The Economist, August 14, 2012, available at: http://www.economist.com/blogs/banyan/2012/o8/muslims-mumbai.

16 In Iraq and Afghanistan, for example, some armed groups including al-Qaeda focused their attention on developing and exploiting these seams in perception: planting improvised explosive devices with cameras set to record the bloody aftermath, and using technology and social media to broadcast the attacks and state responses to the violence. See, for example: Edward Wyatt, "Now on YouTube: Iraq Videos Of U.S. Troops Under Attack," October 6, 2006, New York Times, available at: http://tinyurl.com/chpulum (query.nytimes.com/gst/fullpage.html?res=F70D14FE39540C758CDDA90994DE404482); Frederick Gaghan, "Attacking the IED Network" (NDIA Global EOD Conference, May 5, 2011), available at: http://www.dtic.mil/ndia/2011GlobalExplosive/Gaghan.pdf.

17 In addition, the gunmen singled out a women and children's hospital, a Jewish community center, a movie theater, and the Leopold Café. See: Rabasa, et al., "The Lessons of Mumbai," 6.

18 See for example, Duraphe, Final Report; Kronstadt, Terrorist Attacks in Mumbai; Rabasa, et al., "The Lessons of Mumbai;" Tankel, "Laskhar-e-Taiba: from 9/11 to Mumbai."

19 Duraphe, Final Report.
20 Rabasa, et al., 3.
21 Michael Richardson and Andrea J. Dew, "Armed Groups at Sea: Maritime Terrorism in the Indian Ocean Region," in John Garofano and Andrea J. Dew (eds.), Deep Currents and Rising Tides: The Indian Ocean and International Security (Washington, D.C.: Georgetown University Press, forthcoming, 2013); see also: Mark Mazzetti and Thom Shanker, "Arming of Hezbollah reveals U.S. and Israeli Blind Spots," New York Times, July 19, 2006, available at: http://tinyurl.com/bmk65ys (www.nytimes.com/2006/07/19/world/middleeast/
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Rabasa, et al., 3.
23 Although the ship was reported missing on November 13, 2008, the Indian flagged vessel was not detected until after the attack. The LeT gunmen also used satellite phones and GPS to continue their coordination with LeT handlers. Finally, they were well prepared with ID cards that held up to inspection when their small inflatable boats were reportedly stopped by the Indian Coast Guard on the way to landing sites south of Mumbai. See note: "Final Form/Report (Under Section 173 Cr.P.C.)," 8-11.
24 Ibid
On the Sea Tigers' capabilities and the Sri Lankan Navy's response, see "Maritime Threat: Tactics and Technology of the Sea Tigers," Jane's Intelligence Review, May 9, 2006; Will Hartley, Jane's World Insurgency and Terrorism 30 (Alexandria, VA: Jane's Information Group, Inc., 2009), 428-429; Paul A. Povlock, "A Guerilla War At Sea: The Sri Lankan Civil War," Small Wars Journal, September 9, 2011, available at: http://tinyurl.com/brnm8pg (smallwarsjournal.com/jrnl/art/a-guerilla-war-at-sea-the-sri-lankan-civil-war).

26 Other notable examples include Abu Sayyaf in the Philippines and Jama'a Islamiyya in Indonesia. On Jama'a Islamiyya see, for example: "The Jemaah Islamiyah Arrests and the Threat of Terrorism," Singapore Government White Paper, January 7, 2003, 29-30. On Abu Sayyaf see for example: Peter Chalk, "Christian Converts and Islamic Terrorism in the Philippines," Jamestown Foundation, Terrorism Monitor 4:8 (April 20, 2006).

27 This is not as surprising as it may sound; thousands of ships ply the waters around Mumbai and the LeT was counting on the ability of an Indian flagged vessel to not draw attention in a busy waterway. Nor is this a unique occurrence; as recently as summer 2011, a 1,000-ton trawler, MV Pavit, washed up near Mumbai to the surprise of all the agencies charged with coastal security. The ship had been reported missing and adrift, but its movements had not been tracked until it ran aground on a local beach. See Raja Murphy, "Mumbai does a 'Bermuda Triangle,'" Asia Times, August 16, 2011, available at: http://www.atimes.com/atimes/South Asia/MH16Dfo1.html.

28 Johnstone and Nicoll, "Terror in Mumbai: Attacks raise intelligence, security and political questions;" Rabasa, et al., 9, on some of the critiques of this process.

29 See, for example: "India to Restructure Security Services After Mumbai Failings," Jane's Defense Weekly, December 1, 2008.
30 National Commission on Terrorist Attacks upon the United States, The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States (New York: W.W. Norton \& Company, 2004), 339.
31 For an in-depth discussion of interagency coordination challenges see the Project for Budgeting for Foreign Affairs and Defense at the Stimson Center. In particular, Gordon Adams, "Interagency National Security Reform: The Road Ahead" (Testimony before the Subcommittee on Oversight and Investigations of the House Armed Services Committee, U.S. House of Representatives, June 9, 2010), available at: http://tinyurl.com/bmjfgls (www.stimson.org/images/uploads/Inter-agency\%2oNational\%2oSecurity\%2oReform\%2o\%2oThe\%2oRoad\%2oAhead.pdf).
32 "Al Qaeda In Yemen And Somalia: A Ticking Time Bomb" (Report To The Committee On Foreign Relations, United States Senate, One Hundred Eleventh Congress Second Session, January 21, 2010), available at: http://www.foreign.senate.gov/imo/media/doc/Yemen.pdf.
33 National Commission on Terrorist Attacks upon the United States, The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks upon the United States.
34 Richardson and Dew, "Armed Groups at Sea: Maritime Terrorism in the Indian Ocean Region;" Povlock, "A Guerilla War at Sea;" see also: "Maritime Threat: Tactics and Technology of the Sea Tigers," Jane's Intelligence Review, June 1, 2006.
35 David Blair, "Iran Threatens to close Strait of Hormuz over EU oil sanctions," The Telegraph, January 23, 2012, available at: http://tinyurl.com/87w92wq (www.telegraph.co.uk/news/worldnews/middleeast/iran/9032948/Iran-threatens-to-close-Strait-of-Hormuz-over-EU-oil-sanctions.html).

36 Richardson and Dew, "Armed Groups at Sea: Maritime Terrorism in the Indian Ocean Region;" see also: Chris Rawley, "Al Qaeda's Sea Power Strategy," Small Wars Journal, August 8, 2011, available at:
http://smallwarsjournal.com/jrnl/art/al-qaedas-seapower-strategy.
37 For a scholarly discussion of the overlap between LeT and Pakistan intelligence services, see: Abbas, Pakistan's Drift Into Extremism, 212-216.

38 On the Israeli perspective see: "English Summary of the Winograd Commission Report," New York Times, January 30, 2008; available at: http://tinyurl.com/c8m5kz8 (www.nytimes.com/2008/o1/30/world/middlee-ast/31winograd-web.html?pagewanted=all).
39 See discussion by Ahmed Rashid, "Pakistan's Continued Failure to Adopt a Counterinsurgency Strategy," March 15, 2009, CTC Sentinel, available at: http://tinyurl.com/bss6gw4 (www.ctc.usma.edu/posts/pakistan\�\%8o\�s-continued-failure-to-adopt-a-counterinsurgency-strategy).

40 Indeed, as part of a post-9/11 international effort to crack down on terrorist financing, some sources estimate revenues were cut by $75 \%$ starting in 2006. International cooperation was also vital in interdicting supplies of weapons, technologies, and equipment to the LTTE including jet-skis, GPS units, and ammunition. See, for example: Brian White, "Six Indicted In Arms Brokering For Tamil Tigers And Indonesia," Associated Press, September 29, 2006.

41 See for example, the discussion in Kronstadt, Terrorist Attacks in Mumbai.


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