# Thinking through the Unthinkable – How help from an unlikely source will strengthen capacity and reduce terrorist threats in and around the Straits of Malacca and Singapore



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## **Abstract**

This paper describes how the United States government can help Singapore's Information Fusion Center identify, target, and eliminate or reduce the threat of maritime terrorism in the Straits of Malacca and Singapore (Straits). The geography of the Straits and the volume of shipping trade that passes through its waterways make the Straits a prime target for terrorists, and an ongoing security concern for the Indonesian government. Despite coordination, joint patrols and even local maritime information centers amongst partner nations, there remains much to improve Indonesia's security posture and counter-terrorism capabilities in and around the Straits. Jakarta's concern over the Straits, and its nearby ports, is no different than another mega city that struggles with similar terrorist threats and challenges within its own ports and waterways – New York City. In New York, the agency charged with preventing terrorist attacks is a law enforcement one, the New York City Police Department, whose officers and analysts could share their knowledge, specifically in *predictive analytics*, to stop terrorist threats in Indonesia's 'back yard'. Such assistance will benefit both parties facing terrorists that plan and operate globally, but strike locally.

### INTRODUCTION

"After 9/11 it is no longer far-fetched to imagine that some terrorists might one day try to steer a floating bomb into a port in the Straits of Malacca — the way hijackers flew commercial planes into the Twin Towers...the Malacca Straits - with 50,000 ships carrying all the Middle East oil bound for Asia, 2/3 of the world's liquid petroleum gas, and 1/4 of its sea trade passing through every year - provides the potent ingredients needed to concoct just such an explosive splash."

Indonesia is one of four nations that surround the nine-hundred-kilometer narrow waterway known as the Straits of Malacca and Singapore (Straits). Through these Straits pass thousands of vessels transporting most of the world's oil to the largest economies - an attractive and target-rich environment for Islamic jihadist terrorists plotting their next big attack.<sup>2</sup> The Indonesian government, like others in the region, is trying to identify and thwart terrorist plots that have the potential to truly inflict damage, such as the hijacking and sinking of an oil supertanker at any one of several chokepoint locations in the Straits. The objectives of such an attack could be to disrupt maritime trade, undermine confidence in the Indonesian government and other countries bordering the Straits, and temporarily disrupt critical oil flow to countries throughout Asia. Any or all these effects could badly impact Jakarta and the rest of the country, domestically and internationally.

Jakarta is a *mega-city* that, no doubt, views the Straits as a major area of concern with regards to the threat of maritime-launched terrorist attacks. It is arguably only a matter of time before a terrorist attack is executed with devastating effect. But Jakarta is not alone in her struggles over maritime terrorism. Another mega-city, New York City, has similar challenges in securing its ports and busy waterways and the New York City Police Department (NYPD) has developed certain counter-terrorism capabilities that could be leveraged by other large cities facing domestic and international terrorist threats. New York's 'finest' (NYPD), specifically the NYPD's Counterterrorism Bureau, should assist Indonesia and her partner nations in and around the Straits by advising and assisting officers and analysts at the regional Information Fusion Center (IFC) on the design, development, and employment of *predictive analytics*.

While the NYPD and the IFC may seem like very different organizations they have remarkably similar mandates – to monitor, detect, and prevent terrorist attacks within their areas of responsibility. The NYPD has responded to these threats by building up a highly reputable, credible, and effective team of analysts and agents in its Counterterrorism Bureau who have identified and thwarted terrorist plots similar in complexity and level of sophistication as those that may likely be plotted against Indonesian and/or other flagged vessels transiting through the Straits. The NYPD would train and advise selected officers and analysts from the IFC in

<sup>&</sup>lt;sup>1</sup> Yun-Yun Teo, "Target Malacca Straits: Maritime Terrorism in Southeast Asia," *Studies in Conflict & Terrorism* 30, no. 6 (2007): 541.

<sup>&</sup>lt;sup>2</sup> Nazery Khalid, "With a Little Help from My Friends: Maritime Capacity-Building Measures in the Straits of Malacca," *Contemporary Southeast Asia* 31, no. 3 (2009): 425.

analytical capabilities and establish new relationships of collaboration in the fight against Islamic jihadism terrorism. Indonesia and the three other coastal nations bordering the Straits would greatly benefit from such an initiative, but the NYPD would gain skills and contacts as well.

The paper provides background on the Straits, the nature of the terrorist threat in that region, background on past and current levels of cooperation in the region through regional maritime centers and introduces the reader to the NYPD and its history and capabilities associated with counterterrorism. The paper gives recommendations on how the NYPD could assist the IFC with counter-terrorism in the Straits through a three-staged approach including Assessment, Planning, and Execution. The results or benefits of such an approach would be formalized and mutually beneficial working relationships between the NYPD and IFC, as well as an increase in technical knowledge and skills on the use of predictive analytics to fight terrorism. Intended outcomes from this initiative would be documented situations where the use of predictive analytics by the IFC prevented terrorist acts in the Straits.

#### THE MARITIME THREAT

A terrorist group with aims to undermine the Indonesian government by staging a crippling attack on the maritime domain would view the Straits as an excellent location to do so for a couple of reasons. The Straits is a narrow channel of water, bordered by four coastal nations – Malaysia, Singapore, Thailand, and Indonesia, characterized by "...shifting sandbars and shoals, submerged rocks, unpredictable currents, the sudden, fierce squalls that are encountered in the Straits, not (to) mention unmarked wrecks ... to this must be added the risk of attack by pirates...the maritime traffic congestion and concomitant risk of collision,...and recently terrorist threats." At its narrowest point, the Straits are 1.5 miles wide which must accommodate more than 200 vessels daily, each typically weighing more than 300 gross tons. Additionally, the Straits are mostly shallow, with much of their depth in the funnel area of less than 23 meters, channelizing maritime traffic, despite traffic management and reporting protocols in place. Consequently, there are a number of natural chokepoints in the Straits that pose a high level of risk for maritime traffic if a tanker were sunk at any one of these chokepoints.

From an economic perspective, the volume of shipping traffic that passes through the Straits is staggering. Approximately half of all global trade and one-third of the world's crude oil supply passes through the Straits on an annual basis. Disruption of this trade could impact local, regional and even international financial markets, shaking consumer confidence in their governments' ability to safeguard trade and protect its citizens. For example, researchers Morabito and Sergi have developed economic models that show the financial impact of maritime

<sup>&</sup>lt;sup>3</sup> Donald B. Freeman, *The Straits of Malacca: Gateway Or Gauntlet?* (Montreal: McGill-Queen's University Press, 2003), 165.

<sup>&</sup>lt;sup>4</sup> Shicun Wu and Keyuan Zou, *Maritime Security in the South China Sea: Regional Implications and International Cooperation* (Farnham, England; Burlington, VT: Ashgate, 2009), 158.

<sup>&</sup>lt;sup>5</sup> Michael Leifer, *International Straits of the World: Malacca, Singapore, and Indonesia*, Vol. 2 (Alphen aan den Rijn: Sijthoff & Noordhoff, 1978), 55-56.

<sup>&</sup>lt;sup>6</sup> Martin Purbrick, "Pirates of the South China Seas." Asian Affairs 49:1 (2018): 11-26.

attacks on countries like Indonesia through variables such as gross domestic product numbers and bi-lateral trade agreements. While they argue that the level of impact from any given attack varies on the country depending on its level of population, direct distance from the attack, and volume of current exports, countries like Singapore and Indonesia could observe a drop in GDP as high as 1% (in a given year) which is significant as this would be an impact from only one terrorist attack such as the sinking of an oil tanker resulting in a blockage of the Straits. Moreover, if one is to associate institutional confidence with market stability, then any publicized terrorist attack could shake confidence from financial investors and insurance providers. On a regional and international level, such an attack could trigger an external drop in investor confidence by international institutions such as Lloyds of London, who may charge higher premiums for countries, including Indonesia, to insure their vessels that are traveling through the Straits or even recommend re-routing ships, incurring greater costs and indirectly achieving one or more of a terrorist's objectives to upend, redirect, and undermine. The nature and seriousness of the terrorist threat in and around the Straits should not be under-estimated.

Nazira Rahman has called the Straits the "second front of global terrorism" following the 9/11 attacks in 2001. <sup>10</sup> There are three major terrorist groups, mostly Islamic Jihadists, including Abu Sayyaf, the Islamic State in Iraq and Levant or ISIL, and Jemaah Islamiyah or JI operating across Southeast Asia, including Indonesia and Malaysia. As recently as 2016 one researcher had estimated upwards of 1,000 ISIL fighters had returned to Indonesia following their fighting in the Middle East. <sup>11</sup> According to Rahman, dedicated ISIL recruitment in many of Indonesia's provinces is active and ongoing. <sup>12</sup> The main terrorist group in Indonesia is Jemaah Islamiyah, or JI, which seeks, like ISIL, to establish a region-wide caliphate across Southeast Asia, potentially connecting to other Islamic states in northwest and northeast Africa, the eastern Mediterranean, and Afghanistan. <sup>13</sup> Thus, a well-planned attack in the Straits resulting in massive loss of life, and sunken super tankers with massive oil spills, and a clogged waterway would fit into a terrorist group's agenda – one which included the use of terror to influence a local populace and undermine a sitting head of state and his or her cabinet. This strategy has been employed elsewhere in the region further to the west, in and around the waterways of Sri Lanka.

The Liberation Tigers of Tamil Eelam (Tamil Tigers) employed suicide attack craft and swarming attacks on vessels through the Gulf of Mannar against the Sri Lankan military and

<sup>&</sup>lt;sup>7</sup> Giacomo Morabito and Bruno S. Sergi, "How did Maritime Piracy Affect Trade in Southeast Asia?" *Journal of East Asian Studies* 18, no. 2 (2018): 260.

<sup>&</sup>lt;sup>8</sup> Morabito and Sergi, 262.

<sup>&</sup>lt;sup>9</sup> Graham G. Ong, *Piracy, Maritime Terrorism and Securing the Malacca STRAITS* International Institute for Asian Studies and Institute of Southeast Asian Studies, (Singapore; Leiden, The Netherlands: Institute of Southeast Asian Studies, 2006), 29.

<sup>&</sup>lt;sup>10</sup> Nazira A. Rahman, "Multilateralism in the Malacca Straits and Singapore," *Marine Policy* 44 (2014): 232.

<sup>&</sup>lt;sup>11</sup> Nathaniel L. Moir, "ISIL Radicalization, Recruitment, and Social Media Operations in Indonesia, Malaysia, and the Philippines," *Prism: A Journal of the Center for Complex Operations* 7, no. 1 (2017): 93. <sup>12</sup> Moir, 94.

<sup>&</sup>lt;sup>13</sup> Moir, 96.

other commercial, non-government vessels.<sup>14</sup> Even though the Sri Lankan government eventually crushed the Tamil Tiger rebellion, it took many years and cost thousands of lives, including the deliberate targeting and destruction of Sri Lankan-flagged vessels in its own straits and waterways. One might infer that the degree of lethality and effect from these attacks in Sri Lankan waters could embolden other groups to consider and adopt similar tactics against their own governments. A collective response to such threats may be the wisest move.

## THEY HAVE HELP BUT IS IT ENOUGH?

Indonesia has several cooperating neighbors and allies in the region, including the United States, albeit in a limited capacity. As a member of the Association of Southeast Asian Nations, Indonesia signed the Bali Accord II agreement in 2003, concurring with its other member nations that maritime concerns should be addressed regionally, in a more comprehensive approach. <sup>15</sup> Following that agreement, Indonesia partnered with Malaysia and Singapore to conduct joint naval air patrols of the Straits. <sup>16</sup> The United Nations' International Maritime Organization became heavily involved in assisting Indonesia, Malaysia, and Singapore to adopt a Cooperative Mechanism, a framework and funding vehicle whereby each user state and other stakeholders in the Straits could ensure safety in the local sea lanes. <sup>17</sup>

The United States has actively supported Indonesia and the other coastal nations in safeguarding and protecting the Straits, and has even contributed financial assistance through this fund. Support from the United States has also included donation of patrol boats to the Indonesian Marine Police, donation of maritime-air surveillance capabilities, and participation in numerous capacity-building exercises with the Indonesian Navy, as well as other navies in the region. <sup>18</sup> These exercises, such as *Cobra Gold*, are conducted jointly with the Indonesians and their neighbor nations. <sup>19</sup> Many of these joint patrols and exercises are in coordination with three regionally-aligned maritime domain awareness information and reporting centers, located in and around the Straits. <sup>20</sup>

One of these centers, the Regional Cooperation Agreement on Combatting Piracy and Armed Robbery Against Ships in Asia Information Sharing Center (ReCAAP ISC) produces adhoc and planned weekly/monthly/quarterly, etc. reports on piracy or armed robbery incidents within the Straits. The ReCAAP ISC strictly reports on past events and provides recommenddations to those that may view or download their reports, but the information does not contain synthesis or analysis components – just the facts. Thus, this center has limited capability in

<sup>&</sup>lt;sup>14</sup> Alexander L. Carter and Damian Fernando, "The Rise of the Small Boats," *Daniel K. Inouye Asia-Pacific Center for Security Studies*, (2018) accessed on September 24, 2018, https://apcss.org/wp-content/uploads/2018/03/Rise-of-the-small-boats-2018.pdf.

<sup>&</sup>lt;sup>15</sup> Wu and Zou, 171.

<sup>&</sup>lt;sup>16</sup> Wu and Zou, 174.

<sup>&</sup>lt;sup>17</sup> Khalid, 430.

<sup>&</sup>lt;sup>18</sup> Khalid, 432-433.

<sup>&</sup>lt;sup>19</sup> David Rosenberg and Christopher Chung, "Maritime Security in the South China Sea: Coordinating Coastal and User State Priorities," *Ocean Development & International Law* 39, no. 1 (2008), 55.

<sup>&</sup>lt;sup>20</sup> Christian Bueger, "From Dusk to Dawn?: Maritime Domain Awareness in Southeast Asia," *Contemporary Southeast Asia: A Journal of International and Strategic Affairs* 37, no. 2 (2015), 158.

assessing, fusing information and informing others of likely or emerging threats in the Straits. While the ReCAAP ISC focuses on standardized reporting, the Piracy Reporting Centre (PRC) of the International Maritime Bureau, located in Kuala Lumpur, attempts to be a one-stop reporting shop of piracy attacks as they are in progress. <sup>21</sup> The PRC collects reports from any shipmaster on any piracy event on a vessel, and immediately relays that information out to all vessels in the area, presumably alerting them to the event and advising them to stay clear. This information is also relayed to local military and law enforcement agencies, likely decreasing response time for officials to react to an event while in progress. Both the ReCAAP ISC and the PRC, then, are reporting vehicles – the difference between the two is in typically how fast each center produces the report and disseminates it out in the region. <sup>22</sup> By design, both centers are reactive rather than proactive. A third regional center, located in Singapore, offers more promise in the way it is structured and managed to be a better candidate for further maturation and development.

The Information Fusion Center (IFC), established in 2009, is staffed by the Singaporean Navy full-time as well as liaison officers from the other navies border the Straits, including Indonesia and Malaysia. The IFC is a relatively new center dedicated to developing primarily a shared maritime picture of the Straits. It is the only center of the three with a dedicated, full-time, round the clock team of security professionals from the countries bordering the Straits. It is also the only center that regularly hosts maritime information sharing exercises in the region. While the IFC also provides near real-time reporting of events in the Straits to shipmasters and governmental representatives in the region, it is the best technologically-equipped and positioned to assume a more proactive role in detecting emerging threats before they materialize in the Straits. For example, technological features of the IFC include a dedicated portal/user interface for the Straits showing vessel tracking (real-time visualization) in the Straits as well as limited analytical tools that pull in limited amounts of structured data into sense-making models to interpret events and issue reports as needed to proper authorities for action. This analytical tool and engine, however, requires continuous improvement, does not accept or fuse unstructured data, and is constrained by challenges with interoperability, funding and limited technological expertise in the region.<sup>23</sup>

Compared to the other two centers, the IFC has the governmental support, facilities, staffing, and focus to be the more suitable center for further development, and the introduction of proactive techniques regarding counterterrorism. What the IFC lacks is skills and technology that is decidedly more proactive than reactive, focused on anticipating events, rather than simply reporting on them. In other words, the use of *predictive analytics* would be a vital and necessary addition to the repertoire of capabilities at the IFC.

<sup>&</sup>lt;sup>21</sup> Bueger, 158.

<sup>&</sup>lt;sup>22</sup> Bueger, 158.

<sup>&</sup>lt;sup>23</sup> Bueger, 170.

Predictive analytics is a term to describe both an approach as well as a supporting collection of software tools and applications to predict future behavior based on emerging structured and unstructured data. The goal of predictive analytics, according to Brian Lozada, is to "...anticipate the outcome of future events by answering the following three questions: What happened? What is happening? What will happen?"<sup>24</sup> Predictive analytics aims to address the who, when, and why questions regarding patterns of individuals' (i.e. terrorist leaders) current behaviors; and forecasting, which concerns their future behavioral patterns. Brad Hill of the IBM corporation defines predictive analytics as a set of tools that enable a user to access up to four different types of data – interaction data (email, chat transcripts, web click-streams, in-person dialogues), descriptive data (attributes, characteristics, self-declared information from suspect individuals and groups), attitudinal data (mostly from social media), and behavioral data (orders, transactions, payment and usage history). <sup>25</sup> There is a wealth of data that, when fused correctly, can provide alerts or clues to an informed consumer of data about the likely movements and intentions of 'bad actors'. Predictive analytics is one of the few areas of counterterrorism that, unfortunately, is practiced by those that have the critical mass and funding to support and manage such sophisticated, expensive, but effective capabilities. While the IFC may not have these capabilities yet there exists the potential for the United States to increase its current level of support in the region by introducing its partners, as in Indonesia, to these skillsets particularly when we are fighting the same fight – terrorism.

#### **NEW YORK'S FINEST**

Fortunately, the United States government, including at the state and local levels, are heavily invested in thwarting terrorist plots at home and abroad. Given that Indonesia's capital, Jakarta is the capital and seat of the federal government, whose officials are charged with national security including that of the Straits, it makes sense that there are other mega cities that face similar security challenges in its immediate waterways and straits. New York City certainly has similar challenges to Jakarta in that it, too, plays host to thousands of ships that visit its ports and harbors. There are other major port cities in the United States that, arguably, could also have been included in this paper but New York City stands out from the others. New York City is the highest-profile US city in the country, if not the world. For that reason alone the author looked to counter-terrorism resources that are employed there in combatting domestic and international threats to the security and safety of its waterways and residents. In New York City, the agency tasked with preventing terrorist attacks in such a high-threat environment is the New York City Police Department or NYPD. Due to similarities in population and threat profiles from Islamic jihadist-inspired groups operating in and out of Jakarta and New York City, it is reasonable to claim that the NYPD or New York's 'finest' is well positioned to help others fighting a common enemy. New York, like Jakarta, should concern itself with anticipating the motivations, agendas, and movements of a growing network of Islamic jihadist-inspired groups that seek to threaten the

<sup>&</sup>lt;sup>24</sup> Brian A. Lozada, "The Emerging Technology of Predictive Analytics: Implications for Homeland Security," *Information Security Journal: A Global Perspective* 23, no. 3 (2014): 119.

<sup>&</sup>lt;sup>25</sup> Brad Hill, "What is Predictive Analytics?" YouTube. 7/9/2013, IBM Corporation.

security of her ports, harbors, shipping traffic, and citizens of all countries passing through her borders. Unlike Indonesia and the IFC, however, the NYPD has some capabilities that are quite advanced - capabilities in the form of techniques, methodologies, tools, and technologies that may help others in their fight.

The NYPD has an impressive track record of foiling many terrorist attacks, mostly accomplished through what is termed *predictive analytics*. <sup>26</sup> The NYPD Counterterrorism Bureau's internal operations and practices may be proprietary and classified, but much can still be shared with the IFC that would not compromise NYPD proprietary data, techniques and procedures.<sup>27</sup> The NYPD has an information center that is similar but more advanced than the IFC regarding processing and analytical capabilities. NYPD's Real Time Crime Center (RTCC) is a collection of integrated crime-related information systems that support the end user querying the system to look for criminal and terrorist-related indicators that determine the validity or credibility of a threat on the city. The RTCC consists of local internal databases containing crime-related data, internal computer-aided dispatch data, sensor data (closed-circuit television feeds, license plate readers, radiation and chemical sensors), external city data (location of schools and other public/key infrastructure sites, etc.), State databases (department of motor vehicles, terrorist watch lists), external information aggregators, and social media information (Facebook, Twitter, various chat rooms, etc.). 28 NYPD analysts use the RTCC in coordination with predictive analytics and proprietary models to stop the terrorist act before it progresses beyond the initial planning phase...before things are blown up and people die. The IFC seeks to do the same thing that the NYPD does with the RTCC and predictive analytics – use advanced technologies and techniques to stop terrorists before they execute their deadly attacks in the Straits.

Some would argue or question why the NYPD would assist the IFC. Firstly, the NYPD, like other terrorist fighting and law enforcement organizations around the globe, understands that identifying and prosecuting terrorist networks is not local, it is a global endeavor requiring cooperation that transcends international borders. As such, the NYPD has a long history of working with law enforcement and counterterrorism agencies of foreign countries before the 9/11 attacks and continuing today.<sup>29</sup> Secondly, the benefits outweigh the risks when it comes to this potential information sharing agreement between the NYPD and the Indonesian Navy and the IFC. For example, NYPD would gain a partner and an ally in the global fight on terrorism, be able to extend knowledge and share its contacts and information. NYPD counterterrorism

<sup>&</sup>lt;sup>26</sup> Matthew Quinn, "A History of Violence: A Quantitative Analysis of the History of Terrorism in New York City." *Homeland Security Affairs* XII (2016): 5.

<sup>&</sup>lt;sup>27</sup> The author worked as an Associate Partner with IBM Corporation from 2004-2012 and had direct contact with some of the IBM contractors within his consulting practice who supported NYPD's Real Time Crime Center (RTCC), including IBM's chief architect of the RTCC. The author's assertion is, therefore, based on his understanding of the general nature of law enforcement as it relates to counterterrorism and the amount of information that can be shared freely without compromising agency protocols or 'classified' operations.

<sup>28</sup> New York City Police Department, Developing the NYPD's Information Technology (New York: NYPD), 3-4.

<sup>&</sup>lt;sup>29</sup> Jonathan Dietz, "Inside the NYPD's Anti-Terror Program Overseas," NBC News, 3:14, November 13, 2016, https://www.nbcnews.com/nightly-news/video/inside-the-nypds-anti-terror-program-overseas-808044099960?v=raila&.

officers are already working with their counterparts in Afghanistan, Pakistan, and Indonesia so working directing with the IFC would create new, and quite useful, working relationships. <sup>30</sup> The IFC would not be the only beneficiaries from this venture –NYPD officers would benefit. The NYPD Counterterrorism Bureau with its staff, methodologies, processes, and information databases would also receive more detailed information on terrorist groups and their activities in and around the Straits which could enrich and mature understanding on developing similar threats in New York City and help prevent another 9/11.

## CONCLUSIONS AND RECOMMENDATIONS

In May 2018, 68 participants from 12 countries, including the United States, Indonesia, Malaysia, Singapore, and India, met as colleagues and security practitioners at the annual Southeast Asian Maritime Situational Awareness workshop in Bangkok to discuss regional information sharing requirements within the region, including the Straits. <sup>31</sup> Post-workshop polling results overwhelmingly supported the need for continued information sharing and the need for posting of liaison officers to facilitate learning and nurture working relation-ships through operations, exercises, training and mentoring between and among Southeast Asian partners and the United States. Therefore, there is clear interest from this region that assistance would be gratefully received. The analysts and officers of the NYPD Counterterrorism Bureau have the skills, abilities, and experience to assist the IFC in improving their ability to develop and apply predictive analytics in identifying and thwarting maritime terrorism threats in the Straits, but would also benefit from the initiative through increased exposure to Islamic jihadist terrorism operating within the Straits and other agencies' approaches to counterterrorism that may have applicability back in New York. Given the interest and likely support from Indonesia, a set of recommendations should be characterized by practicality, deliberateness, and a spirit of cooperation and joint resolve.

It is envisioned that selected officers and analysts from the IFC, including officers from the Indonesian, Malaysian, and Singaporean navies, would be trained in *predictive analytics* to identify and target emerging terrorist threats in and around the Straits through a consultative, mutually-benefitting multi-staged approach in coordination with the NYPD. In the first stage ('Assessment'), the U.S. Department of State with local leadership from ambassadors and country teams of the four nations that border the Straits would actively support the formation of a governmental memorandum of agreement outlining scope, expectations, and expected benefits from this proposed information and sharing exchange between the NYPD and the IFC. Following the signing of the agreement, initial funding would be allocated by the United States government through the UN's International Maritime Organization funding vehicle, the Cooperative Funding Project, to receive and distribute the funds to the IFC, in keeping with other previous financial contributions from the United States to partners and allies in the region. In this

<sup>&</sup>lt;sup>30</sup> Brian Nussbaum, "Protecting Global Cities: New York, London and the Internationalization of Municipal Policing for Counter Terrorism," *Global Crime* 8, no. 3 (2007): 222.

<sup>&</sup>lt;sup>31</sup> The author served as one of the facilitators from the Daniel K. Inouye Asia-Pacific Center for Security Studies during the Maritime Situational Awareness IV workshop held in Bangkok, Thailand during May 14-17, 2018.

stage, following the agreement, officers and analysts from NYPD's Counterterrorism Bureau would conduct on-site sessions and workshops to identify and confirm current or 'as-is' capabilities relative to desired or 'to-be' capabilities. From this 'audit' would come a prioritization of gaps between to-be and as-is assessment.

The second stage (Planning) would be a detailed training and acquisition plan to include training goals, curriculum, and funding requirements for off-the-shelf hardware and software tools for use at the IFC. This stage would result in a detailed, managed project plan designed to up ramp and upskill identified officers and analysts at the IFC to employ *predictive analytics* in their daily work at the IFC. In this stage, users and user roles would be created to mirror existing practices and protocols that are used by the NYPD to as realistic degree as possible. Training would be given on how to use *predictive analytics* to foil terrorist plots using realistic scenarios. For example, NYPD would train IFC officers and analysts on how the use of geospatial data, geo-tagged social media activity, online search history tracking on individuals belonging to suspected groups, etc. <sup>32</sup> Project managers would carefully track and manage milestones, training plans, deliverables, and benefits relative to the plan throughout this stage based on the scope agreed to in the memorandum of agreement.

The third and final stage (Execution) would be the execution of the 'train and assist' visits by the NYPD Counterterrorism Bureau and the provision of technical support to the IFC on the use of predictive analytical tools to work actual cases of emerging terrorist threats in the region. If we were to use the model of *crawl-walk-run*, common in military training, this would be the run phase. Trained officers and analysts would be evaluated on their ability to use predictive analytics to identify and address emerging terrorist threats in the Straits. These individuals would be heavily coached, procedures would be updated and refined to local conditions, and lessons would be captured and incorporated into an environment of continuous improvement at the IFC. Networks and data feeds would be tested and optimized during this stage between New York and the IFC and likely Jakarta. The result of this final stage would be a trained and functioning team of individuals in the IFC that had demonstrated mastery of predictive analytics and had successfully incorporated this skillset and capability into their existing processes and practices with tangible effects.

The benefits of introducing predictive analytics as added skillsets to the officers and analysts assigned at the IFC would be measurable and substantial. There would be constructive and effective working relationships between the NYPD and the IFC. There would be an increase in technical knowledge and an advancement in the use of advanced technologies to increase the speed and probability of thwarting terrorist plots in the Straits and prosecuting those groups. This initiative might encourage other western powers to lend more support to Southeast Asia in fighting terrorism where the threats are increasing and our ability to harness advanced technologies will help us address these threats with increasing speed and lethality. What happens or could happen in Southeast Asia has the potential to impact US national security interests at

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<sup>&</sup>lt;sup>32</sup> Lozada, 120-121.

home or abroad. Our willingness to help our partners and allies sends signals to others. We demonstrate our resolve and our character by how we share our skills, our expertise, and our strength. What can happen in the Straits can happen on our shores and in our ports.

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