MARITIME SECURITY: FUTURE TRENDS AND CHALLENGES

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ABSTRACT

There has been a sudden and dramatic drop in maritime piracy in recent years leading security analysts to voice concern that the global community may feel it is an appropriate time – especially in years of economic recessions and constrained national budgets – to reduce its counter-piracy measures around the world, particularly in the Horn of Africa. At the same time, some shipping companies may also be inclined to conclude that the threat of maritime piracy has passed, and the more expensive "best management practices" are no longer needed. These would be premature conclusions. As this paper argues, a current decline in maritime piracy off the coast of Somalia does not mean it has been reduced elsewhere; indeed, we are seeing increases in pirate attacks off of Nigeria and resurgence in the Strait of Malacca. There are also other areas of the world that are possibly poised for increases in maritime piracy. Additionally, the threat of maritime terrorism can never be wholly dismissed, and the global shipping community remains at continued risk for exploitation by the illegal drugs and weapons trade, and human trafficking.

Keywords: *Maritime piracy; maritime terrorism; drug, weapons, human trafficking; maritime criminality.*

1. INTRODUCTION

The global maritime community has witnessed a sudden and somewhat unexpected and dramatic decline in maritime piracy attacks worldwide in the period from 2011 to 2012 and accelerating into 2013, particularly off the coast of Somalia and in the greater Gulf of Aden/Horn of Africa (HOA) region. This development has been attributed to multi-national naval efforts (including the Combined Task Force 151 and the European Union's Operation Atalanta); increased implementation of best management security practices by the world's global maritime fleet, and some strategic developments on land in Somalia.

As a result, there is speculation that there may be a drawdown of the (very expensive) international task forces, a pullback of patrols by some of the independent nations offering security for their vessels in the region, as well as a retrenchment of the number of vessels willing to implement many of the more expensive technical (lethal and non-lethal) anti-piracy measures (including the use of armed guards).

At the same time, the international community has witnessed a decrease in concern about maritime terrorist events; predictions about a "move to the sea" by groups such as al Qaeda in the Arabian Peninsula (AQAP), al Shabaab (Somalia), or Jemaah Islayiyah (Indonesia) have yet to materialize and there have been no known direct maritime attacks by al Qaeda since the *USS Firebolt* incident in the Persian Gulf. The most recent maritime terrorist event was the minor attack on the Japanese-flagged VLCC MV *M. Star* in the Persian Gulf near the United Arab Emirates in 2010 attributed to the al Qaeda-affiliated Abdullah Azzam Brigades.

With maritime terrorism currently at a seeming low point, and maritime piracy for the moment on the decline, this raises the question for the future of maritime security. Given the relative recent quiet on the maritime front, how concerned should we be about maritime terrorism and piracy, particularly in a time of significant economic constraints? The answer, unfortunately, is that we should continue to be very concerned.

2. MARITIME PIRACY: CURRENT TRENDS AND THE DECLINE OF THE SOMALI THREAT

As can be seen from Figure 1, maritime piracy has fluctuated significantly between the years 2002 and 2012 (unless otherwise noted, all pirate attack data is from the International Maritime Bureau). For the period 2002-2005, most of the world's reported maritime pirate attacks were situated in the area in and around the Strait of Malacca. However, with the increased security measures adopted in the region between Malaysia, Singapore and Indonesia, maritime piracy dropped substantially in this area in 2005 (the drop in maritime piracy in the Strait of Malacca region was also due in part to the Indian Ocean tsunami).
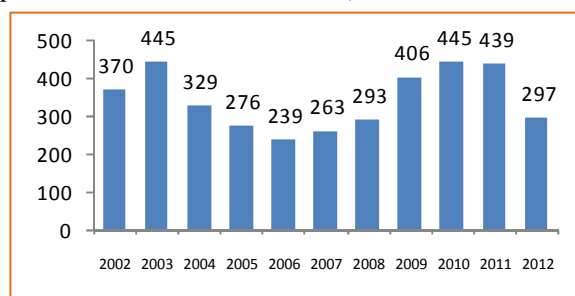

Figure 1 Global Maritime Piracy: 2002-2012 [1]

However, at the same time maritime piracy began to decline in the Malacca region specifically and Asia in general, it began to increase in the Gulf of Aden; rises in global maritime piracy after 2005 are attributed almost exclusively to the rise in acts of maritime piracy committed by Somali pirates.

The continued rise in global attacks from 2007 to its peak in 2010 is due largely to the geographical progression and expansion to the south and to the east of Somali pirates as a result of their adoption of

increasingly sophisticated methods of operation and attack. By the time they were functioning well into the Indian Ocean east to within 400 nautical miles of the Indian coast and south to Madagascar, and near the entrance of the Persian Gulf, the Somali pirates had perfected the use of "mother ships" capable of operating at sea for months at a time. This, and the use of multiple smaller attack boats, a seemingly endless supply of RPGs and other light arms, and an ability to adopt GPS, satellite phones and ship tracking methods, have made attacks by Somali pirates increasingly difficult to prevent.

However, from this high point, the global maritime community witnessed an unexpected sharp and significant drop in maritime piracy in 2012 (and into the first quarter of 2013) due exclusively to the sudden and dramatic drop of Somali piracy in the Gulf of Aden. As can be seen in Table 1, attacks attributed to Somali pirates on merchant shipping, yachts and fishing vessels dropped from a high of 237 attacks in 2011 to a low of 75 incidents in 2012. This represents a remarkable drop of over 300% in just one year.

Table 1. Somali Piracy: 2009-2012 [2]

Year	2009	2010	2011	2012
# Attacks	218	219	237	75

The reasons for the drop in Somali piracy are important to understand, especially since we are seeing increases in piracy in other parts of the world and will need to determine how "applicable" anti-piracy operations in Somalia will be to these new areas of maritime piracy.

The drop in Somali piracy is due largely to three separate and interrelated events: 1) The increasing success of the global multi-national naval task forces and independent operators, 2) the increasing adoption of best management practices by merchant ships, and 3) developments on the ground in the internal political situation in Somalia.

2.1 International Task Forces

Three separate international naval task forces have operated in the Gulf of Aden/Horn of Africa region with the mission of combating maritime piracy: Combined Task Force 151 (CTF 151), the European Union's *Operation Atalanta*, and NATO's *Operation Ocean Shield*.

At the same time, the naval forces of additional countries operating independently from the task forces have offered significant and cooperative anti-piracy support in the region as well. Known as "independent deployers," these include naval deployments from China, India, the Islamic Republic of Iran, Japan, Kenya, Malaysia, Russia, Saudi Arabia, South Africa and Yemen. (While the naval vessels of these countries are not part of the multinational maritime coalition operations, they do participate in the Shared Awareness and Deconfliction (SHADE) mechanism).

CTF 151 was established as a multinational operation in January 2009 in response to the rise of maritime piracy in the Gulf of Aden. Its mission, in accordance with United Nations Security Council Resolutions authorizing international action against Somali pirates, and in cooperation with non-member forces, has been to "disrupt piracy and armed robbery at sea and to engage with regional and other partners to build capacity and improve relevant capabilities in order to protect global maritime commerce and secure freedom of navigation" [3].

CTF 151 is a multinational force operating to protect merchant vessels in over one million square miles off the coast of Somalia, in the Gulf of Aden/Horn of Africa region, Indian Ocean, and approaching the Persian Gulf. Command of CTF-151 is rotated between participatory nations on a four to six month basis. Contributing members include over twenty countries, with a rotating command; previous commands include the United States, the Republic of Korea, Singapore, Turkey and New Zealand.

Combined Task Force 151 is one of three task forces operated by Combined Maritime Forces (CMF), the other two being CTF 150 tasked with maritime security (largely anti-terrorism) more generally, and CTF 152, dedicated to maritime security in the Persian Gulf. In conjunction with the European Union Naval Force Somalia (EU NAVFOR), the North Atlantic Treaty Organization (NATO), and together with independently deployed naval ships, CTF 151 helps to patrol the Internationally Recommended Transit Corridor (IRTC) in the Gulf Aden between Somalia and Yemen in the Bab al Mandeb Strait.

Figure 2. IRTC [4]

EU NAVFOR's *Operation Atalanta* was formed in December 2008, with the initial objective of protecting the humanitarian relief vessels of the United Nations World Food Programme. Additional mission components include:

- The protection of shipping in support of the African Union Mission in Somalia (AMISOM);
- The deterrence, prevention and repression of acts of piracy and armed robbery at sea off the Somali coast;
- The protection of vulnerable shipping off the Somali coast on a case by case basis;
- Monitoring of fishing activities off the coast of Somalia [5]

In March 2012 the European Union extended the mandate of *Operation Atalanta* until December 2014. At the same time, the Council of the European Union also

extended its area of operation to include Somali coastal territory and internal waters (within the 12 nautical mile territorial water limit).

Working alongside CTF 151 and *Operation Atalanta*, NATO's *Operation Ocean Shield* (formed in 2008) is the third leg of the multi-national counter piracy mission in the Gulf of Aden and off the Horn of Africa. NATO's *Ocean Shield*'s role is to "provide naval escorts and deterrence capabilities, while increasing cooperation with other counter-piracy operations in the area in order to optimize efforts and tackle the evolving pirate trends and tactics" [6]. In March 2012, the North Atlantic Council, along with EU NAVFOR, also extended its counter-piracy operation through 2014.

In addition to the multi-national task force efforts, several countries independently contribute to the global fight against Somali piracy. Previously mentioned above, these include China, India, the Islamic Republic of Iran, Japan, Kenya, Malaysia, Russia, Saudi Arabia, South Africa and Yemen. Working in communication and cooperation with the task forces, the navies of these countries have also been responsible for a number of successes against Somali pirates, including the capture and arrest of pirates and rescue of ships under attack.

2.1.1 Task Force Success

In early 2013, the near unanimous conclusion reached by the international community has been that the task forces and the naval forces of the independent deployers have made a significant dent in the success and will of the Somali pirates. Several high profile rescues – including that of the *Maersk Alabama* – have made it clear to Somali pirates that engaging in maritime piracy has increasingly high costs – from being arrested, tried and imprisoned, and even to the loss of life.

For example, while complete statistics are understandably lacking, interviews with Somali elders show that many villages have lost "hundreds" of young men who go out to sea and never return (a very large part of this is due to drowning).

Additionally, as of July 2012, eighty-seven alleged pirates were on trial in various countries around the world; by May 2013 over 1,100 Somali pirates were in prison in twenty-one countries. This shows both that international forces are no longer willing to engage in "catch and release" (capturing pirates, taking away their weapons, and returning them to shore) and are doing their best to ensure the captured pirates are charged and tried for their crimes; and that piracy is no longer considered as "glamorous" as it once might have been.

2.2 Best Management Practices (BMP)

In addition to the work of the international task forces and the naval forces of the independent deployers, the global shipping community itself has taken a strong stand against Somali piracy and has begun to implement "best management practices" more thoroughly and successfully. While actions such as standing extra watch and increasing speed, mustering all hands, sounding the alarm, etc., have always been recommended for ships transiting dangerous waters anywhere in the world,

merchant vessels are increasingly adopting these measures in greater numbers, particularly off the coast of Somalia and in the greater Horn of Africa region.

The reason for this is clear. While the international task forces provide a strong deterrent to piracy and may assist in rescue operations, the international task forces cannot be everywhere and cannot prevent every attack – this means the ship itself must be prepared to be the "first responder" and, given enough notice, it still has a good chance of avoiding successful attack altogether if it takes aggressive best management practice actions against the pirates. To this end, BMP continue to be recommended as the first line of defence both by international organizations and many private shipping organizations.

The most recent advice for shippers was made available in August 2011. *BMP4: Best Management Practices for Protection against Somalia Based Piracy* continues to recommend three basic actions for all ships transiting the Somali pirate area of operations [7]: 1) Register with the Maritime Security Centre Horn of Africa (MSCHOA) prior to entering the high risk area; 2) Report daily to the United Kingdom Marine Trade Operations (UKMTO), which acts as the primary point of contact for merchant vessels and liaison with military forces in the region. The UKMTO is also the primary point of contact during an attack and should be aware the vessel is transiting the region; 3) Undertake ship protection measures – the logic here being if pirates cannot board the vessel, they cannot hijack it and hold it and the crew hostage for ransom.

Private maritime security companies (PMSC), or "armed guards", continue to be in the "grey area" of best management practices. While it is true that no ship carrying private maritime security companies has been successfully attacked, the use of PMSCs has not been universally adopted for a number of reasons.

First, there are concerns about legal liability if injuries or fatalities occur. Second, the cost alone is prohibitive to many shipping companies; PMSC protection for a vessel is reported to cost $80,000 per transit; a figure well out of the reach of many shipping companies [8]. And third, acceptable universal rules of engagement have yet to be adopted. This latter concern may change, however, with the recent (March 2013) promulgation of *ISO/PAS 28007:2012, Ships and marine technology – Guidelines for Private Maritime Security Companies (PMSC) providing privately contracted armed security personnel (PCASP) on board ships (and pro forma contract)* [9].

2.3 Political Developments in Somalia

In addition to the international task forces, the consistent adoption of best management practices, and the use of private maritime security companies onboard vessels, a number of political developments have occurred within Somalia to reduce the occurrence of acts of maritime piracy. These include internal events such as:

- African Union military gains against the Al Shabaab terrorist group;

- Attacks on pirate attack vessels by French forces;
- Pirate kingpin "retirements";
- Amnesty being negotiated for children in piracy (this involves over 900 children who had been functioning as part of pirate organizations).

While it is too early to draw firm conclusions, there is some evidence that the current Somali government, assisted by its international partners, may be gaining a stronger control over parts of the country. African Union forces have managed a few key successes against the Al Shabaab insurgents which, while not directly linked with piracy, have managed to weaken their control over pirate strongholds in favour of more government influence. Examples include the joint African Union/Kenya land attack on Merca in August 2012, and the African Union/Somali government assaults on Kismayo in September 2012.

At the same time, European Union forces – without committing "boots on the ground" – engaged in the public destruction of a number of known pirate attack boats. This occurred in helicopter attacks on Xarardheere in May 2012. To the extent that these vessels need to be replaced, it is an additional cost imposed upon the pirates.

Additionally, in a highly publicized statement in January 2013, prominent Somali pirate leader Mohamed Abdi Hassan, also known as "Afweyne," announced his retirement. Men under Afweyne's command were responsible for two very high-profile pirate attacks: the 2008 capture of one of the largest vessels ever hijacked, the Saudi-owned oil tanker *Sirius Star*, carrying two million barrels of oil worth $100 million and the attack in the same year on the *MV Faina*, a Ukrainian vessel loaded with weaponry including tanks, anti-aircraft guns and 800 tons of ammunition.

In addition to high-profile retirements, other events have occurred which may portend further declines in Somali piracy. In February 2013, Somali President Hassan Sheikh Mohamud stated his intention during meetings with top pirate leaders to offer partial amnesty to boys under the age of eighteen involved with pirate groups: "We have been negotiating with pirates indirectly through the elders to see if we can organize a partial amnesty for the young boys lured in this criminal activity." This amnesty, if successful, could affect more than 900 youths [10].

3. NEW CHALLENGES IN MARITIME PIRACY

At the same time the global community has witnessed the sudden and dramatic drop in maritime piracy in the Gulf of Aden, maritime piracy has risen in other parts of the world. Attacks are up in the Strait of Malacca area over previous year highs, and concerns continue to grow in the Gulf of Guinea due to continued and escalated threats from Nigerian pirates. As can be seen in Table 2, while the world has focused its attention on the drop in Somali piracy, far less attention has been paid to the increases in pirate attacks in other parts of the world.

This is especially apparent in the first quarter (January-March) of 2013. During this period, there were only five pirate attacks in Somalia, representing 7.6% of all attacks during this period. At the same time, there were 11 attacks in the Gulf of Guinea, and 25 attacks in the region in and around the Strait of Malacca, accounting for 16.7% and 37.9% of total attacks in this period, respectively.

Table 2. Regional Attacks: 2011-2013 [11]

	Somalia	Gulf of Guinea	Malacca Region
2013 (1st Qtr)	5	11	25
2012	75	37	95
2011	237	33	63

3.1 Strait of Malacca

The rise in maritime piracy in the Strait of Malacca is one of the less well-reported occurrences in the current period, especially with so much attention focused on the decline in Somali piracy. However, the increases in Malaccan piracy are important to note for at least two reasons.

First, maritime piracy in this part of the world (which had already been at previous global highs) had declined substantially in the 2004-2006 period due, in large part, to the increased air and naval patrols and anti-piracy commitments of Indonesia, Malaysia and Singapore, assisted by intelligence and financial support from other interested nations (such as Japan and Thailand, for example). However, these efforts appear to have been unsustainable, given the recent increases in attacks in the last few years.

Second, the success rate (percentage of attempted attacks that result in a successful boarding or hijacking) of Malaccan pirates is among the highest in the world. Due to the vast ocean space in which the Somali pirates have operated, they never achieved a success rate (successful boarding of the vessel) much higher than 50%; this dropped substantially after the deployment of the multinational task forces.

However, due to the narrow geographical constraints of the Strait of Malacca which forces vessels to transit at very slow speeds, nearly all pirate attacks in the Strait of Malacca can be regarded as successful (from the pirates' point of view), in that the pirates manage to board the ship, and rob the crew and/or steal various goods from the vessel. For example, of the twenty-five attacks noted in the Malacca region in the first quarter of 2013, twenty-four of the attacks were successful – a 96% success rate. Continued rises in piracy in this region of the world mean that more ships are likely to find themselves victim of actual attacks, versus attempted attacks.

3.2 Gulf of Guinea

As noted in Table 2, there have been more attacks in the Gulf of Guinea region in the first quarter of 2013 than there have been attributed to Somali pirates. While pirate attack statistics are considered to be under-reported worldwide, what is worth noting is that Nigerian piracy is considered to be even more under-

reported, largely due to the number of attacks on fishing vessels and smaller supply vessels for the offshore oil industry (smaller regional vessels are far less likely to report attacks to the international reporting agencies).

For example, the Nigerian Maritime Security Task Force on Acts of Illegality in Nigerian Waters (IAMSTAF) reported at least 293 documented sea robberies and pirate attacks between 2003 and 2008 on the country's fishing vessels alone [12]. Additionally, another source reported 100 attacks on fishing vessels just in 2007 [13]. And the Piracy Reporting Centre in Kuala Lumpur stated it was aware of 100 unconfirmed attacks in 2008, in addition to the 40 confirmed attacks reported by the International Maritime Bureau in that year. If these trends in under-reporting are even somewhat stable from year to year, maritime piracy in the Gulf of Guinea is almost certainly more problematic than current statistics would suggest.

In addition to the rise in attacks by Nigerian pirates, the situation is further complicated by the various "models" of maritime piracy in the region. Unlike in Somalia, where the general model is attack for ransom of ship, cargo and crew, Nigerian piracy is emerging to follow at least four distinct models.

First, theft of the lucrative oil carried by many ships leaving Nigerian ports – bunkering – is problematic in many areas, due to a lack of oversight on a significant corruption problem in many areas. A recent report commissioned by Royal Dutch Shell estimated that 10% of Nigeria's daily oil output (approximately 100,000 barrels) is stolen every day, worth approximately $1.5 million [14]. Over the last 50 years, the amount of oil stolen or wasted has amounted to between $300 and $400 billion [15].

Second, Nigerian piracy also follows a hostage-taking model; however, unlike Somali piracy, Nigerian pirates are more interested in kidnapping oil workers for ransom and have shown less interest in seeking ransom payments for the ship and cargo. This makes it considerably more difficult to find and track those captured by Nigerian militants and pirates, especially when ransom demands are not immediately forthcoming.

Third, some attacks carried out against ships in the Gulf of Guinea do not follow the traditional pirate model of seeking economic gain. For example, in 2009 militants attacked the *MT Meredith*, loaded with 4,000 tonnes of diesel, badly damaging it (in some reports, actually dynamiting the vessel), while, at the same time, abducting a crew member. The ship called for assistance as its engine and superstructure were reported to have been seriously damaged. The Movement for the Emancipation of the Niger Delta (MEND), which continues to seek greater autonomy for the Niger Delta region, claimed that an "affiliate group" carried out the attack. If this is the case, this could point towards an increasing trend in pirate attack violence in Nigeria. This is significant as Nigerian piracy has always been considered more dangerous than Somali piracy, as seafarers have traditionally run a greater risk of injury and death at the hands of Nigerian pirates than Somali pirates.

Fourth, many attacks are directed specifically at the fishing industry. Fishing in Nigeria is the second highest non-oil export industry in the country. Pirate attacks on fishing trawlers have reached the point where many fishing boat captains have refused to sail. Attacks range from minor harassment to theft of fish cargoes, engines and other material on board, financial shakedowns, and to the killing of fishermen. Nigerian pirates are increasingly reported to have effectively taken over the coastal waters of the country; and similar piracy problems are reported among fishermen elsewhere in the African continent. All told, Nigeria stands to lose up to $600 million in export earnings due to the piracy threats to its fisheries [16].

All predictions point to an increased rise in Nigerian piracy in 2013. Most of the pirate attacks are directed against smaller ships involved in oil exploration in Nigeria. Piracy is especially common in the Niger Delta region, the center of oil exploration and production activities in the country. These include supply and support vessels, barges and small security vessels. Attacks on general merchant cargo ships are still relatively rare, but could stand to increase as pirates in the region become more bold and able.

The wealth represented by the region's oil industry is significant, meaning the implications of increased attacks could be significant as well: Nigeria is the world's eighth largest exporter of crude oil, and one of the largest producers of highly-valued light sweet crude. The Gulf of Guinea region supplies more than 15% of the hydrocarbons imported by the United States alone, and by 2015 may supply more than 25%. This wealth, and the presence of a large number of foreign companies in the Delta, is a huge draw for those engaged in criminal activities.

3.3 On the horizon

In addition to the known increases in maritime pirate attacks in Nigeria and the Strait of Malacca, there are a few regions of the world showing some signs of possible increases in piracy as well. Between January and April 2013, Vietnam, Bangladesh, India, Columbia and Peru are already showing attack figures equal to – or nearly equal to – their numbers for all of 2012. Others point to Haiti as an area of possible piracy/maritime criminal potential. While there have been no reported maritime crimes in Haiti though the first quarter of 2013, and only one to two attacks per year in recent years, the socio-economic conditions present there point to possible exploitation by maritime criminal elements.

It is, of course, too early to speak of "new trends" in these areas as the current and recent attack numbers are still too low; however, as one of our roles as maritime security analysts should be the ability to predict new areas of maritime criminal activity (as well as describe existing activity), these are all areas worth watching in the future.

4.   ADDITIONAL CHALLENGES: MARITIME TERRORISM [17]

Ten global organizations have been identified as having maritime terrorist capabilities, or at least of having demonstrated maritime capabilities in the past:

al-Qaeda, Abu Nidal Organization, Abu Sayyaf Group, Basque Fatherland and Liberty, Hamas, Hizbollah, Jemaah Islamiya, Lashkar e-Tayyiba, Liberation Tigers of Tamil Eelam (currently defunct) and the Palestine Liberation Front – Abu Abbas Faction [18]. In addition, al-Shabaab, al-Qaeda in the Arabian Peninsula (AQAP), and the Abdallah Azzam Brigades, are known to be acquiring – or would like to acquire – maritime capabilities.

Despite earlier high-profile attacks – the Abu Sayyaf attack on *SuperFerry 14* in Manila Bay in February 2004, which killed 116 people, and the al Qaeda attacks on the *USS Cole* and *MV Limburg* – most maritime terrorist concerns seemed to have shifted to al-Qaeda-related affiliates, many of which operate in Africa. In February 2010, Yemen-based al Qaeda in the Arabian Peninsula (AQAP) stated it would coordinate with "Islamic fighters" from Somalia to secure both sides of the Bab al-Mandab strait, through which 30% of the world's trade passes annually. While there are doubts about AQAP's current ability to close the strait, both the Yemeni and Somali governments have urged the international community to take steps to eliminate AQAP and al-Shabaab "to avert the risk to the global economy posed by a seizure of Bab al-Mandab."

However, since these concerns were noted, the international community has witnessed a decrease in concern about maritime terrorist events; predictions about a "move to the sea" by groups such as al Qaeda in the Arabian Peninsula, al Shabaab, or Jemaah Islayiyah have yet to materialize and there has been no known direct maritime attack by al Qaeda since the *USS Firebolt* incident in the Persian Gulf. The most recent maritime terrorist event was the minor attack on the VLCC MV *M. Star* in 2010, attributed to the al Qaeda-affiliated Abdullah Azzam Brigades.

With maritime terrorism at a low point, many wonder how concerned the global shipping industry should be about maritime terrorism, particularly in a time of significant economic constraints. The answer, unfortunately, is that we should continue to be very concerned. A former UK First Sea Lord and Chief of Naval Staff deemed maritime terrorism "a clear and present danger" that may "potentially cripple global trade and have grave knock-on effects on developed economies." USN Captain Jim Pelkofski (Ret.) has noted that "indications point to an acceleration of the pace of maritime terrorism, heralding a coming campaign."

The real concern however is not so much that a maritime terrorist attack might or might not be imminent; rather the threat is the potential for harm were even one minor maritime terrorist event to occur in a major port or maritime facility. Hijacking and using a ship as a weapon or to sink and close a major shallow chokepoint such as the Strait of Malacca or the Suez Canal could have significant economic implications for the global economy. Similarly, an improvised explosive device (IED), chemical or biological weapon, or other weapon of mass destruction discovered in a container could have dramatic economic repercussions [19]. As recent events in Boston unfortunately show us, terrorist incidents do not have to be associated with know terrorist organizations; the "lone wolf" remains the most significant threat and the most difficult to locate in advance and apprehend.

5. MARITIME CRIMINALITY: WEAPONS, DRUG AND HUMAN TRAFFICKING [20]

An emerging area of concern for maritime crime is the expansion of known pirates and terrorists into other forms of illicit activity, such as drug, weapons and human trafficking.

Drugs are routinely shipped from all continents of the world, primarily to markets in Europe and North America. To give a sense of the scope and size of the problem, looking only at US Coast Guard figures for the United States from 1997 through mid-2012, the US Coast Guard (responsible for all US maritime drug interdiction) seized 806,469 pounds of cocaine and 333,285 pounds of marijuana, and accounted for 52% of all US government cocaine seizures [21].

Arms smuggling occurs freely and openly throughout many parts of the world as well, particularly in Africa and Asia, with the shipping industry wittingly or unwittingly carrying many of these illegal cargoes. For example, in Nigeria, it is already noted that criminal elements not only commit acts of maritime piracy, they are engaged in the arms trade as well. In support of this conclusion, a recent report commissioned by Royal Dutch Shell estimated that 10% of Nigeria's daily oil output (approximately 100,000 barrels) was stolen every day, worth approximately $1.5 million. This would buy enough weapons to sustain a fighting force for two months [22].

In addition to arms trafficking, maritime transport accounts for the majority of seizures and suspect shipments of military equipment, dual-use goods and missile technology to and from Iran and North Korea. Merchant shipping is also a primary means of delivering large shipments of heavy conventional weapons and military equipment to countries such as the Democratic Republic of the Congo (DRC) and Sudan. Additional studies have found that sea transport has been the primary means of illegal deliveries of small arms and light weapons to non-state actors in Colombia, Somalia and Sri Lanka [23].

Finally, human trafficking is another example of the criminal exploitation of the maritime industry, with women and children frequently transported across borders by sea. Trafficking in human beings is estimated to be the third largest criminal enterprise in the world, behind illegal drugs and arms trafficking, with between 600,000 and 800,000 people trafficked across international borders annually [24].

The modes of transportation used to traffic humans around the world are numerous and include transporting people across borders hidden in cars or trucks, as well as people trafficked into countries as stowaways or packed into shipping containers. Human traffickers are currently exploiting the maritime domain by using vessels as means to transport the victims of human trafficking. Smugglers and traffickers are also using passenger ferries as a way to transport people across bodies of water. They are hidden among crates to avoid detection from officials [25].

While of concern in and of themselves, trafficking in drugs, weapons and human beings are even more problematic when it is noted that they are all part of an increasingly overlapping "web of criminality" connected through the global maritime domain. Figure 2 shows these connections in explicit detail. The green lines show global cocaine routes; red routes connote the global trade in heroin; purple are pathways of illegal migrants, and yellow represent the routes used for trafficking in women and children.

It should be noted that many of these converge on known pirate areas such as Nigeria and the Strait of Malacca. At the same time – and even more significantly – is the number of these routes that are explicitly maritime, specifically linking global supply to demand in European and North American markets.
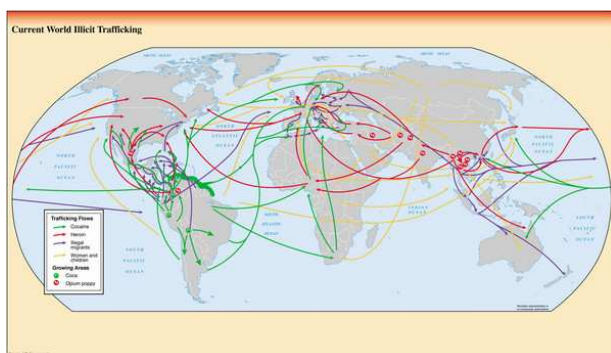

Figure 3 Current World Illicit Trafficking [26]

6. CONCLUSIONS

Maritime criminality will regretably always be a fact of life at sea, despite the current 2012-2013 downturn in global maritime piracy, particularly since the downturn is driven by the decline in Somali piracy; numbers are actually increasing in Nigeria and the Strait of Malacca.

Additionally, the potential for maritime terrorism still exists – particularly from the single, "lone wolf" acting without any affiliation with a current or known terrorist organization. At the same time, criminal elements are finding it increasingly lucrative to exploit the maritime domain for the transport of illicit drugs and weapons, and for human trafficking.

What is not yet fully known – but is increasingly suspected – is that many of the individuals involved in maritime piracy, terrorism and illegal trafficking are working together in an expanding "web of criminality." The criminal exploitation of the maritime domain, with all of its interlinkages between areas of criminal activity, is an area needing far more research and attention in the future.

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