

Opinion Piece: Maritime Security in the Real World: A Master Mariner's Perspective

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I joined the shipping industry as a cadet in 2009 at the age of 21 and spent my first year at sea on a tanker. In Greece, cadets go through a sandwich course of 6-month periods at a maritime university, followed by similar periods at sea, onboard commercial ships, where we put theory into practice. I completed my cadetship and was promoted to Second Officer in 2012. I joined my first ship and started the routine of signing up for 6-7-month contracts at sea, followed by similar periods of leave ashore and worked my way towards becoming a Chief Officer¹ in 2016. After four years at sea as a Chief Officer, I took a break to study for a post-graduate Master's in Maritime Operations and Management at the City, University of London, then returned to the sea. I was promoted to Master Mariner in 2022 and completed my first voyage as Captain of a Suezmax² (DWT: 15,8267 MT), with 26 crew members on board including me.

My career at sea has been predominantly on tankers, specifically product tankers³ but I have also gained considerable experience on Deep Sea Tankers ranging from MR⁴s to VLCC⁵. Having worked on CPP⁶ and DPP⁷ tankers, I have a deep understanding of the different duties involved in tanker operations. Apart from the navigation and seamanship skills required to take these large ships around the globe, I am also fully conversant with the important job of tank cleaning operations, purging of tanks safely, gas freeing and commingling of different categories of petroleum cargos on the same ship⁸. I have experience in Port State Control and the United States Coast Guard inspections⁹, vetting inspections as well as the maintenance scheduling, implementation of International Safety Management (ISM)¹⁰ and International Ship and Port Facility (ISPS)¹¹ code requirements and the extensive preparation for audits. I am also

¹ Chief Officer or Chief Mate in the Merchant Navy is the department head of the deck department of the ship's crew. The Chief Officer will complete watches on the Bridge and is traditionally responsible for the cargo and deck crew. His line manager is the captain of the ship, for whom he deputises.

² Suezmax (125,000-199,999 dwt) largest vessels that can transit Suez Canal

³ Product Tankers carry refined product in smaller quantities to distribution points.

⁴ Medium Range (42,000-59,999 dwt) Product Tankers

⁵ VLCC - Very Large Crude Carrier (200,000-320,000 dwt tons)

⁶ CPP - Clean Petroleum Product tankers: CPP are sometimes called white cargoes. They are more refined and ready to use while others are used as raw materials for further product composition.

⁷ DPP - Dirty Petroleum products are fuel oils.

⁸ Product Tankers can carry a number of different refined petroleum products (gasoline, diesel, aviation fuel), in separate tanks on the same ship. Carrying a range of different categories flammable fuels on the same vessel increases the cargo management and safety considerations especially during loading/unloading as well as during the voyage itself, often travelling through different climatic conditions.

⁹ Port Inspections

¹⁰ ISM - The International Safety Management Code was adopted in 1989 and applies to all commercial ships, including passenger ships, and tankers of 500 gross tons and upwards.

¹¹ ISPS - The International Ship & Port Facility Security Code was adopted in 2002 to establish an international framework involving cooperation between Contracting Governments, Government agencies, local administrations and the shipping and port industries to detect/assess security threats and take preventative measures against security incidents affecting ships or port facilities used in international trade.

familiar with Tanker Management Self-Assessment (TMSA)¹² preparation. I have developed my office-based experience ashore in Vetting, Health, Safety Quality and Environmental (HSQE) matters and working in the fleet operations department.

As part of my post-graduate degree, I studied the developing area of maritime security, which is becoming progressively more important to seafarers. My research revealed how little input there is from experienced seafarers or practitioners from across the maritime industry who deal with the realities of maritime security on a day-to-day basis. I, therefore, offer this opinion piece to add a seafarer's experiences and thoughts to the debate.

As a starting point I think it is useful to provide some background and context:

A Brief History of Maritime Security

According to Germond (2014), maritime security is a recent topic when looking at the Cold-War era and backwards, the expression was used to define the states-naval dominance at sea. Thus, during the Cold War, the phrase was used for geopolitical reasons such as sovereignty over the territorial sea baseline.

However, in the recent article, "Global maritime security studies: The studies of the geopolitical area of policy and research", (Amirell 2016), the author highlighted four historical phases of maritime security. The first phase covers the period from 1450-1600, when maritime security and sovereignty were dictated by several Papal Bulls or public decrees, dividing the global oceans between Portugal and Spain. In 1436, and 1455, Romanus Pontifex decreed the Crown of Portugal had dominion over all lands south of Cape Bojador (in modern Morocco). In 1494, the Treaty of Tordesillas divided the Atlantic Ocean along a longitudinal line 370 leagues/1,110 nautical miles west of the Cape Verde islands, between Spain and Portugal. In 1529, the Treaty of Zaragoza defined the Pacific boundary between Spain and Portugal giving the two Catholic kingdoms dominance of all known seas and oceans.

The second period ran from 1600-1850, when trading companies began to rise, and were implementing their own version of maritime security. This increase in commercial prominence was the background to *Mare Liberum*, (*Free Seas*) published in 1609 by Hugo Grotius (Hugo de Groot, 1583-1645). Following disputes between the Portuguese, who claimed to have a *Mare Clausum* (closed sea) around their East Indies, Grotius, argued about companies' sovereignty. He stated that everybody, even non-Christians, has the right to freedom of navigation, *Mare Liberum*, and trade throughout the sea. The controversy around *Mare Liberum* prevailed until recent times and was the foundation of international maritime law. The new trading companies, including the Dutch East India Company (Grotius's employer) and other private and state-licensed European companies, were the main beneficiaries of Grotius's new regime. These companies gained tremendously high profits from *Mare Liberum*, freely exploiting the world's oceans (Amirell, 2016). Coastal states' authority to secure their territorial waters was limited to the range of a shore-based cannon¹³. Shipowners were therefore responsible for the defense of their own vessels, consequently, merchant vessels were heavily armed, to confront pirates and other enemies, when attacked (Amirell, 2016).

The third phase from 1850-1990, was when maritime power passed from trading companies to nation-states. During this period, governments oversaw the trading companies and the responsibility for maritime security was assumed exclusively by the states. European colonising powers, including the

¹² The Tanker Management and Self-Assessment (TMSA) programme provides companies with a means to improve and measure their own safety management systems.

¹³ Hence the three nautical miles of Territorial Sea that remained until the introduction of the United Nations Convention of the Law of the Sea (UNCLOS) in 1982, which pushed the territorial sea limit out to 12 nautical miles.

Dutch and the French, utilised their naval fleets and trading acumen to acquire numerous coastal states and hundreds of islands. Great Britain's maritime power was dominant allowing them to colonies extensive parts of Africa, the sub-continent, Southeast Asia, and Australasia. The acquisition of these lands allowed the British public to develop an insatiable appetite for merchandise from around the globe. The new United States of America became notable addition to the maritime status quo, with their capacity to project their power which extended far beyond their territorial waters. The opening of the Suez Canal (1869) and the Panama Canal (1914) provided easier access between the great oceans to the great naval and trading fleets. This phase also saw the start of the transformation from sail to steam, and the introduction of steel hulls, which along with improved guns and armour plating took naval warfare to a new level. Allowing colonial powers, to impose their regimes without any significant resistance over most of the world's vital maritime zones. The dominance of colonising powers with their strong naval presence imposed a form of stability and security across the high seas allowing unarmed merchant vessels relative security throughout the periods of peace (Amirell, 2016).

The fourth phase, the post-Cold War era, manifested an alteration to maritime security conditions. Firstly, the reduction of naval capacity and the absence of naval dominance. Secondly, the introduction of Exclusive Economic Zones (EEZs) by the United Nations Convention of the Law of the Sea (UNCLOS), where a delimitation of 200 nautical miles from the baseline (low water mark), gives coastal states exclusive rights over resources in the sea, such as seafood, fossil fuels and minerals on and below the seabed. However, this gift of increased ocean area did not take into consideration that many third-world countries lack the resources to enforce their rights across their EEZ; and their ability to maintain effective maritime security in their own waters.

The diminishing of the former colonial state's sea power left a maritime security vacuum. The lack of naval capacity to protect maritime trade was brought to a head when pirate attacks off the coast of Somalia surged between 2005 to 2012. With insufficient warships to dominate the area, the commercial shipping industry had to find a quick alternative if they were going to keep their crews, ships and cargo safe. In 2009, merchant vessel operators started to hire private armed guards to protect their ships. Although Amirell (2016) mentioned that a new era has begun for maritime security when the private sector is responsible for maritime security, there are some striking similarities with the second phase, when trading companies were wholly responsible for keeping their vessels secured.

What is Maritime security?

The answer to this question is not completely clear or accepted. The phrase *maritime security* was first used as a separate and distinct area of security in the US Maritime Operational Threat Response (MOTR) Plan 2005. The plan was developed after the 9/11 attacks in the US as a revision of potential security threats to the United States homeland.

Despite the ratification of the UNCLOS in 1994 and the introduction of the International Ship and Port Facility Security (ISPS) Code in 2004 (also prompted by the 9/11 attacks) neither of these supranational documents defined or used the phrase maritime security. In 2008, the UN Secretary General's (Ban Ki-moon) report on "Oceans and law of the sea" stated: "There is no universally accepted definition of the term "maritime security". He went on to say "Most definitions [of maritime security] also usually include security from crimes at sea, such as piracy, armed robbery against ships, and terrorist acts. ... However, intentional, and unlawful damage to the marine environment, including from illegal dumping and the discharge of pollutants from vessels, and depletion of natural resources, such as from IUU fishing, can also threaten the interests of States, particularly coastal States." (Ban Ki-Moon 2008)

Although no clear definition has been established, for what maritime security means, Chapsos (2019) stated the definition is embraced by the threats, affecting the maritime industry. He, therefore, classified two main perspectives for the meaning of maritime security. Conflicts between states for territorial purposes and geopolitical disputes that affected maritime commerce (Russia and Ukraine and the prevention of bulk grain being shipped out of the Black Sea for example) are the so-called traditional threats. The second perspective stands for human security challenges without states' involvement. Maritime terrorism, piracy, illegal fishing, trafficking of arms/drugs and human smuggling (Chapsos, 2019; Bueger, 2015; Bueger et al., 2019). The lack of a clear definition of maritime security means these crimes can be interpreted in many ways.

Similarly, illegal archaeological research and pillage of archaeological objects have been considered security risks by the other states of the EU (Chapsos, 2019). Consequently, many variations are involved in the concept of maritime security, and therefore, is it essential to define maritime security as a static or rigid subject area. By its very nature, the maritime domain is dynamic with a range of different risks and threats, security and otherwise, perpetually gaining and losing importance as the surrounding conditions change.

As Klein (2011) stated, the meaning of maritime security varies, depending on the purpose for which it is being referred and the party using it. The UK's official definition of Maritime Security in its 2014 *National Strategy for Maritime Security* (UKNSMS 2014: 14), for example, adopts a very broad definition, albeit from a UK perspective:

The advancement and protection of the UK's national interests, at home and abroad, through the active management of risks and opportunities in and from the maritime domain, in order to strengthen and extend the UK's prosperity, security and resilience and to help shape a stable world.

Another noteworthy example is how the U.S. Navy use the term; it relates to securing and preventing piracy, all kinds of trafficking and smuggling and generally, disruptions. In addition to the latter, the term is used to ensure navigation and commerce's independence. The United Nations recognises inter alia piracy, illicit trafficking and smuggling, armed robberies, and human disruptions (Burgess et al., 2017).

Ship owners, operators and managers focus on the safe and secure voyage of their vessel its crew and cargo from one place to another and the protection of the ship from threats such as piracy, seizure, and armed robbery. There is also a need for security whilst in ports and terminals during all cargo operations. For commercial ships, many of the responsibilities for the security of the vessel, crew and cargo are placed on the captain of the ship and his crew.

A very important question for the ship owner is how the financial risks of maritime security can be mitigated and/or transferred by using marine insurance. The Marine Insurance Act (MIA) 1906 continues to be the fundamental pillar for marine insurance; it is crucial that the risks a ship, crew and cargo are exposed to are included and identified as "perils"¹⁴ (Dadiani, 2018). Liabilities and piracy attacks are normally covered by Protection and Indemnity (P&I) risks under war insurance. However, this does not include ransom payments for crew members taken hostage, which was prevalent off the coast of Somalia. Discretionary kidnap and ransom insurance safeguards organisations against financial loss that may arise when their crew or vessel is seized for ransom (Swedishclub.com). Consequently, the shipowner's focus is more likely to be on his insurance underwriter's definitions of maritime security threats under the terms of the policy rather than anything else.

¹⁴ "Maritime perils" means the perils consequent on, or incidental to the navigation of the seas, fire, war perils, pirates, rovers, thieves, captures, seizures, restraints and detentions of princes and peoples, jettisons, barratry [fraudulent act conducted by Master and/or crew], and any other perils, either of the like kind or which may be designated by the policy. MIA 1906 Section 3c

Taking all the above into consideration, it is worth highlighting that, whether you are an Admiral, seafarer, commercial shipowner, fisherman, criminal, terrorist, shipping lawyer or underwriter, the victim of a devastating maritime disaster, or an islander in the South Pacific watching the exponential rise in sea levels threatening to inundate your home, maritime security is likely to mean very different things to you (Cook 2020).

A Master's view:

In support of the premise that different perspectives engender different interpretations of maritime security, I offer my view as a Master Mariner and Captain of an oceangoing ship, utilising a range of experiences to emphasise this seafarer's point of view.

Although Master Mariner qualifications are mostly practical, I strongly believe that nowadays, a good master's managerial and administrative skills are equal to that of a company manager whilst also practising and accumulating considerable leadership experience and expertise. A good mix of practical knowledge and accomplished seamanship are the most important qualifications for a captain to cross oceans. Moreover, having the foresight to initiate preventive actions for all matters, which mitigates threats and reduces risks makes a good sailor. I have a phrase, which I always say to my young officers; "Be proactive rather than reactive".

Sea contracts for officers depend on the shipping company you work for, they are usually for 6 months, however, with my previous company, I had 4 monthly contracts. I am currently on a 5-month contract that has been extended to just over 6 months, this is not unusual, and it can be affected by a range of circumstances at sea and ashore. The nationality of the officers on board each ship depends on the company's policy and procedures. In Greek shipping companies the Captain and Chief Officer are normally Greeks whilst the other officers are often internationals. When a merchant ship is flying the Greek flag¹⁵, the captain must be Greek.

The ratings are invariably international and rarely employed by the shipping company. They are often provided by a manning agency as required. Their contracts are normally 7-8 months long, although the recent pandemic has significantly disrupted the process of conducting crew changeovers, as many ports have refused to allow seafarers to embark/disembark. This situation has improved but some countries (South Korea) continue to prohibit changeovers, which can be very distressing for the individuals and their families as they don't know when their contract will be complete or where they will disembark. This degree of uncertainty understandably impacts the crew's morale and can often affect their performance, and awareness, resulting in a general reluctance to obey orders or instructions, which can impact the safety and/or security of the ship.

All seafarers are expected to deal with specific security and criminal threats at sea such as piracy, armed robberies against ships, terrorist attacks, managing mass maritime migration, stowaways and now a range of sophisticated cyber-attacks. Various ports and sea areas are safer than others, resulting in a sense of anxiety and sometimes fear when vessels navigate dangerous sea areas or visit unsafe places. Despite increased threats, crews are very rarely supported or reinforced to cope with additional threats. Commercial pressures are invariably dominant. Modern merchant ships are subject to the continuous process of crew changes, when different members of the crew's contracts finish throughout a voyage and they may be replaced by another seafarer from a different nationality, speaking a different language with a different level of experience and sometimes expertise as far as security is concerned. Whilst all seafarers are trained in accordance with the Standards of Training, Certification and Watchkeeping for Seafarers

¹⁵ Registered with the Greek shipping registry.

(SCTW)¹⁶, there is inevitably a range of compliance, competence, and individual fitness level¹⁷ for an often physically demanding job¹⁸. This turbulence within the crew often results in an inconsistent level of security-trained and experienced personnel causing ongoing security continuity challenges, and disrupting a cohesive, security trained and now cyber-aware crew. Team disruption inevitably exposes security vulnerabilities, both physical and cyber-generated.

The hectic schedules of merchant's vessels, especially when the market is high, make life onboard very busy and seafarers are often required to do 18-hour days. Reduced crew numbers, place additional pressures on the personnel, especially in port during the loading or discharging of cargo, when simultaneous activities such as bunkering¹⁹, receiving stores and spares, impose additional demands on the ship's crew. Consequently, security requirements can sometimes be sacrificed for other more immediate seamanship and commercial realities. The pressure on ships to spend as little time alongside as possible makes port visits extremely busy, invariably preventing the crew time to go ashore for a break or any form of rest and recuperation away from the ship, or their fellow crew members. It seems that the days of a good "run ashore" in an exotic foreign port are a distant memory of the ancient mariner and a myth for the modern seafarer, with many shipping companies prohibiting shore leave for a range of sometimes spurious reasons²⁰.

As a result of the continuing impact of the pandemic, shore staff in ports who normally come onboard the ship shortly after arrival, are not visiting, meaning the customary meetings, discussions and inspections of documentation and vessels don't happen. Consequently, port visits are even shorter, just 24-30 hours, sometimes less. For example, the last cargo we loaded was from Yanbu, Saudi Arabia, and the ship was loaded within just 12 hours at the maximum load rate. The combination of high-intensity workloads, no time for shore leave, and the uncertainty of how long contracts will last can make crews very unhappy and discontented, potentially leading to low morale, discipline problems and deteriorating mental health of seafarers.

For a ship's Master, the meaning of maritime security is dominated by the immediacy and proximity of threats, perceived and actual. The focus is on the implementation of practical, rather than theoretical measures which keep the ship, its crew and its cargo, safe and secure so that the voyage is completed on time fulfilling the commercial requirements of the shipowner and charterer. It is therefore crucial that concepts and ideas related to maritime security are not detached from the realities of those at sea confronting the threats and managing the risks daily. Having spent five years at sea as a Chief Officer and Master I offer some general comments about the additional demands imposed on seafarers by increasing security threats and some other concerns highlighted by my most recent trip.

The ISPS Code and the human element

In the aftermath of the attacks by Al Qaeda on the USA in September 2001, Resolution A.924 (22) was adopted by the International Maritime Organisation (IMO), Maritime Safety Committee (MSC) and Maritime Security Working Group (MSWG), in November 2001, referring to measures and the prevention of acts of terrorism, where ship's crew and passengers are being threatened. A year later, that resolution became the well-known International Ship and Port Facility (ISPS) Code, and its implementation became

¹⁶ International Convention on Standards of Training, Certification and Watchkeeping for Seafarers 1978.

¹⁷ Age, physical fitness, language fluency/comprehension.

¹⁸ Often exposed to the elements across all climatic regions, climbing and descending ladders and steep stairs, manoeuvring around cargos in confined spaces on an often-multi-dimensional moving platform.

¹⁹ Bunkering is the phrase used for the taking on of fuel for the engines. The term derives from coal bunkers on steam ships.

²⁰ One shipping company deemed Singapore (ranked as the second safest city in the world by many agencies) as too dangerous for the seafarers to go ashore.

mandatory for all ships the code Chapters XI-1 and XI-2 of SOLAS aim to enhance maritime security (Suppiah, 2009).

It is widely agreed that security has improved through the adoption and implementation of the ISPS Code, however, with the terrorist threat evolved and the commercial fleet has more than doubled in size, it may be time to review the Code. Despite an absence of formal training, a Master and/or the officers are expected to identify a bomb within the stores being loaded onto a ship and if discovered, know how to deal with the incident, which places a significant responsibility on barely trained individuals.

Nowadays, states' collaboration, government agencies, local administrations of the shipping industry and port authorities aim to adopt an effective policy in order to establish a safe and secure maritime regime. The primary objective of this policy is the detection and assessment of security threats, and the establishment of security measures, which are likely to affect ship operations and port facilities, used for international trade. One of the major requirements of the code is the entitlement of the Ship Security Officer (SSO)²¹, who prepares the crew and implements the ship's security plan and takes preventive measures to confront any security breach (Suppiah, 2009).

However, looking carefully at the requirements of the code and the entities of the MSC and MSWG, seafarers' roles and obligations onboard ships have been questioned or/and misunderstood. The implementation of the ISP's code is based exclusively on seafarers. Indeed, according to Article 7.2 of Part A of the ISPS Code, at security level 1 the ship shall:

1. ensuring the performance of all ship security duties.
2. controlling access to the ship.
3. controlling the embarkation of persons and their effects.
4. monitoring restricted areas to ensure that only authorized persons have access.
5. monitoring of the deck areas and areas surrounding the ship.
6. supervising the handling of cargo and ship's stores; and
7. ensuring that secure communications are readily available.

Furthermore, in accordance with Article 8.4.1 a ship security assessment on-scene is conducted by the SSO, which should ensure the following:

1. identification of existing security measures, procedures and operations.
2. identification and evaluation of key shipboard operations that it is important to protect.
3. identification of possible threats to key shipboard operations and the likelihood of their occurrence, in order to establish and prioritize security measures; and
4. identification of weaknesses, including human factors, in the infrastructure, policies and procedures.

In addition, the SSO's responsibilities and duties, according to Article 12 are:

1. undertaking regular security inspections of the ship to ensure that appropriate security measures are maintained.
2. maintaining and supervising the implementation of the ship security plan, including any amendments to the plan.
3. coordinating the security aspects of the handling of cargo and ship's stores with other shipboard personnel and with the relevant port facility security officers.
4. proposing modifications to the ship security plan.

²¹ Ship Security Officer means the person on board the ship, accountable to the master, designated by the Company as responsible for the security of the ship, including implementation and maintenance of the ship security plan, and for liaison with the company security officer and port facility security officers. ISPS Code, Part A, 2.1.6

5. reporting to the company security any deficiencies and non-conformities identified via internal audits, periodic reviews, security inspections and verifications of compliance and implementing any corrective actions.
6. enhancing security awareness and vigilance on board.
7. ensuring that adequate training has been provided to shipboard personnel, as appropriate.
8. reporting all security incidents.
9. coordinating the implementation of the ship security plan with the company security Officer (CSO)²² and the relevant port facility security officer (PFSO)²³; and
10. ensuring that security equipment, is properly operated, tested, calibrated and maintained if any. (Suppiah, 2009)

It should be taken into consideration that the ship's Master or his Chief Officer will likely be the SSO. Thus, it needs a significant effort from one of these two, very busy individuals, and the ship's crew to implement all the above, whilst also conducting all the duties required by the port, keeping the ship safe and secure and fulfilling the commercial imperative of the ship owner and charterer.

Tanker fleet fluctuations and Russian ports:

There have been significant fluctuations in the demand for oil over the past couple of years caused by several factors: predictable seasonal requirements, unexpected global events including COVID-19²⁴ resulting in the sudden glut of oil in 2020, and the embargo of Russian oil after the invasion of Ukraine causing a worldwide oil shortage. Oil prices have been erratic making life in the tanker sector both unpredictable and extraordinarily busy. The major oil companies (referred to as an oil major across the maritime industry) retain a relatively small fleet of their own tankers, they fulfil most of their crude and oil product maritime transit requirements by chartering vessels from private shipping companies. Ships will be chartered for a period of time/number of voyages (Time Charter²⁵), whilst other ships will be chartered to fulfil an immediate requirement on the "spot" market²⁶ for a single voyage. For a vessel to be chartered by an oil major, it must comply with a very stringent Ship Inspection Report Programmed (SIRE)²⁷. The SIRE process focuses on the most professionally qualified officers; Master, Chief Officer, Chief Engineer, and Second Engineer. For example, when the ship's Master is new, the requirement will be for an experienced Chief Officer to support him/her and together, they must have a combined sea time of at least three years.

The ship I captained was time-chartered by a US oil major, for a period of 50 days, the first voyage on the time-charter required loading at the Russian port, Novorossiysk²⁸. The discharging port of the first voyage was Sikka, India²⁹. The second voyage was again loading cargo at Novorossiysk, steaming out of

²² Company security officer means the person designated by the Company for ensuring that a ship security assessment is carried out; that a ship security plan is developed, submitted for approval, and thereafter implemented and maintained, and for liaison with port facility security officers and the ship security officer. ISPS Code, Part A, 2.1.7

²³ Port facility security officer means the person designated as responsible for the development, implementation, revision and maintenance of the port facility security plan and for liaison with the ship security officers and company security officers. ISPS Code, Part A, 2.1.8

²⁴ <https://www.reuters.com/article/us-global-oil-tankers-storage-idUSKBN21Z2A2>

²⁵ The hiring of a ship, from a ship owner for a period of time or number of voyages.

²⁶ The hiring of a ship for an immediate requirement.

²⁷ The SIRE Programme is a unique tanker risk assessment tool of value to charterers, ship operators, terminal operators and government bodies concerned with ship safety. <https://www.ocimf.org/programmes/sire/> shipping companies will use the TMSA programme (see above) to prepare for SIRE audits.

²⁸ Novorossiysk, Russia – largest port in Black Sea and largest Russian port

²⁹ Sikka – NW India

the Black Sea, into the Mediterranean to conduct a Ship to Ship (STS) transfer of cargo operation off Malta, and a final discharge port of call in the USA. The next voyage included two loading ports, Arzew in Algeria and Yanbu, Saudi Arabia destination S. Korea, transiting through the Red Sea and passing through the High-Risk Area (HRA)³⁰ off the coast of Somalia.

Despite the invasion of Ukraine by the Russians in February 2022, the ship has visited Novorossiysk, the largest Russian seaport, located in the Black Sea, twice to load oil under the charter of the same oil major. I received no specific instructions for the visit, my office informed me that the location of the port is not part of a war zone. However, I am not convinced that was correct, especially after they found submerged bombs, within the port a couple of days after our departure.

Before the invasion of Ukraine, the Russians were very polite and friendly during various port visits. It was one of the few ports where we could take shore leave but that is now prohibited, and the atmosphere is now suspicious and hostile.

Figure 1. Putin fridge magnet presented to the author at Novorossiysk



The level of the security onboard the vessel, while the ship was at the port was security level 2³¹, although we were loading at a single point mooring (SPM³²) therefore, nobody could get off or onto the ship, except by boat.

During a separate call at the Russian port, the officers and crew were instructed to avoid any unnecessary conversation regarding the Russian invasion and politics. The team from the port that came onboard the ship brought the subject to the table, and they gave us some Russian [fridge] magnets and souvenirs of President Putin (Figure 1). Our priority was to load the vessel safely and protect our company's interests. Consequently, we followed their "way" without any further discussion.

Both I and the whole crew felt uncomfortable visiting Russian ports. Especially after most of the world had announced an embargo on Russian oil. However, the commercial realities were that the price of Russian oil made it very attractive to clients and the queue of ships waiting to load Russian oil was tremendously long.

Before the invasion, we would often have both Russians and Ukrainians as part of the crew. Despite the potential tensions Russian and Ukrainians continue to be deployed as part of the same crew. We had a

³⁰ A High-Risk Area (HRA) is a shipping industry defined area where it is considered that a higher risk exists, and additional security requirements to counter piracy may be necessary. Redefined 1 September 2021, includes Red Sea, Gulf Of Aden, Somali Basin, Arabian Sea <https://www.maritimelocalsecurity.org/media/1053/1-sep-2021-hra-revision.pdf>

³¹ ISPS Code security level definitions Part A para 2.1.10 Security level 2 means the level for which appropriate additional protective security measures shall be maintained for a period of time as a result of heightened risk of a security incident.

³² SPM is a loading buoy anchored offshore, that serves as a mooring point and interconnect for tankers loading or offloading gas or liquid products. SPMs are the link between geostatic subsea manifold connections and tankers.

Russian and a Ukrainian crew member during this charter. Both were engineers, working in the engine room. The Russian was the 2nd Engineer, and the Ukrainian was a fitter. When the 2nd Engineer found out that a Ukrainian fitter was joining, they keep their job as a priority". However, when they discussed the invasion, sensibly, they didn't give any room for political arguments, and they were both very professional. Even though the Ukrainian fitter had lost his house in the first week of the invasion, there was no disruptive friction between the two men.

Privately Contracted Armed Security Personnel (PCASP)

As part of our second voyage from the Mediterranean, into the Red Sea, through the Gulf of Aden and out into the Indian Ocean on our way to the Korean Peninsula we transited the High-Risk Area (HRA) shown on UKHO Chart Q6099. As Master of the ship, instructions regarding the position of the embarkation and disembarkation of the PCASP³³ are given by the ship owner/manager. Quite often on tankers, there is a clause in the Charter Party Agreement³⁴ from the charterer (oil major) that requires PCASP to be embarked if the ship is transiting the HRA. Usually, the guards are collected from floating armouries³⁵, and various emails are exchanged with the Private Maritime Security Company that employs the guards regarding the ship's ETA at the position of floating armouries. Usually, the position for embarkation/disembarkation of the guards is inside the Red Sea (17°N, 040°E), before entering the HRA.

The PCASP team members (1 team leader and 3 guards) are usually ex-military professionals with high training and specific skillset, aiming at dealing with the protection of the ship. They perform watches along with the bridge team, and they perform drills with various scenarios daily. The Team Leader (TL) of the Private Maritime Security Company (PMSC) our shipowner uses (and accepted by the charterer) is usually Greek, as the PMSC is Greek.

In my experience, the PCASP we have embarked have been professional and alert throughout the period of the transits. Having PCASP teams onboard makes the ship's crew feel much safer and more confident about the passage. The PCASP implement a range of prevention measures prior to ships entering the HRA, including vessel hardening measures, in accordance with the Best Management Practices (now in its fifth iteration BMP5³⁶). They conduct security drills, designed to familiarise the crew with the specific actions for the vessel and instil the need for vigilance and general alertness to the threat.

When the armed guards embark on the vessel, the TL will explain to me (as Master) the team's standard operating procedures (SOPs) and specifically the rules for the use of force (how and when weapons and lethal force can be used to protect the crew/ship). The PCASP regard the use of weapons as a last resort, however, as a master of the ship, who is responsible for every crew member on board, I believe that the use of weapon should be used effectively and possibly as a first resort to prevent a pirate attack. Our reasoning is that if pirates board the ship we would be completely unprotected and extremely vulnerable.

My own experiences have shaped my thoughts about the use of PCASP and their use of firearms to protect the ship and its crew. When I was a cadet on board a ship transiting the HRA in 2010, a suspicious skiff approached our ship, the captain ordered the ship to go to maximum speed and commenced a zig-zag pattern of manoeuvring to make it more difficult for the pirates to get alongside the ship, switched on the fire pump so the fire hoses were spraying high-pressure water at possible points where the pirates

³³ PCASP - Privately Contracted Armed Security Personnel

³⁴ Charter-party is the contract between the ship owner and charterer incorporating all the terms and conditions of the agreement, signed by both parties.

³⁵ A floating armoury (FA) is a vessel that has the facility to store small arms, ammunition and security related equipment and usually operates beyond territorial sea of any coastal state. TH FA may also have the facilities to accommodate PCASP.

³⁶ <https://on-shore.mschoa.org/reference-documents/bmp5/>

might try to board. The captain contacted the navy (UKMTO³⁷) and described the situation with the skiff full of pirates and the evasive action he was taking to prevent the pirates from boarding the ship. As I was on the Bridge with the captain, it was easy to hear both sides of the conversation. I heard the naval person ask if the pirates were onboard, the captain, replied “No” and the naval person said, “let us know when they do get onboard.” The message was clear, we cannot help you, you are on your own! Eventually, we got lucky, and the pirates left. It was a very scary experience that remains vivid in my memory.

Today the navies say the piracy threat has only been suppressed but there are far fewer warships patrolling the HRA than there were at the peak of piracy in 2010 when we experienced the failed piracy attack, so in my view, armed guards are more important today than ever. This attitude may sound cruel and possibly brutal, but with the prospect of entering an area where pirates operate the survival instinct kicks in, and such feelings are at the forefront of the crews’ mind whilst transiting the areas where pirates have attacked ships.

On 22 August 2022 shipping industry bodies announced the removal of the Indian Ocean High-Risk Area at 00:01 UTC on 1 January 2023 (BIMCO 2022). The shipping industry statement stated, “The removal of the HRA reflects a significantly improved piracy situation in the region, largely due to concerted counter-piracy efforts by many regional and international stakeholders. No piracy attacks against merchant ships have occurred off Somalia since 2018.”³⁸

As seafarers, we are also concerned if armed guards are no longer embarked, because there have not been any substantial attacks for some years, and we fear that piracy could return. Commercial ships do not possess any realistic defence against pirates, regardless of the hardening measures and crew training. The ship’s crew can do nothing to defend themselves against pirates, except gather in the citadel³⁹ and because there are hardly any warships in the area, await their doom.

The security guards are part of the navigational bridge team during the transit through the HRA, they take significant pressure off the crew, allowing us to get on with our job. There is a continuous requirement for the crew to comply with the special procedures including restricted movement around the ship and security drills, which prevents crew complacency whilst the guards give us the confidence that we have guardians assuring us of protection.

Maritime Cyber Risk Management

The latest and most pervasive threat to crew members personally and their ship is cyber security. Sophisticated threats, that outwit the crew might cause a tremendous cost to shipping companies and the ships. Again, preventive measures should be taken by the ship’s Master to mitigate cyber-attacks but with very limited training or knowledge. There is also a need for specific training and policy guidance from shipping companies. The complexities of cyber security don’t only challenge seafarers. When we visited a major port during one of the voyages, Port State inspectors came on board to conduct an audit, which included maritime cyber risk management elements. As part of the process, I asked the audit team a number of questions I had about cyber security. I was hoping to get knowledgeable advice, but they were unable to answer the questions, they only seemed to be able to tick the relevant boxes on the audit form

³⁷ UK Maritime Trade Operations (UKMTO) capability acts as the primary point of contact for merchant vessels and liaison with military forces within the region.

³⁸ <https://www.bimco.org/news/priority-news/20220822-indian-ocean-high-risk>

³⁹ A Citadel is a designated pre-planned area purpose built into the ship where, in event of imminent boarding by pirates, all crew will seek protection. A Citadel is designed and constructed to resist a determined pirate trying to gain entry for a fixed period of time. The crew should withdraw to the Citadel where they await naval support.

rather than understand the technical and managerial aspects of this new and difficult area of technological compliance. There is much room for improvement.

To the best of my knowledge, the ships and crew I have worked with have not been involved in either smuggling or trafficking. Luckily, I have not experienced the challenges of seeing or having to deal with hundreds of poor wretched migrants whilst crossing the Mediterranean. Each time the ship leaves port, and before the navigational pilot leaves the ship at the port limits, a full stowaway search of the ship is conducted. If a stowaway is discovered whilst the ship is inside the territorial waters of the port State, the ship can return to port and deliver the stowaway to the authorities. Whilst I have not had the experience of stowaways the last shipping company, I worked for have had several cases over the years.

Many practitioners, especially ship's crew and those employed inshore companies, have been debating whether safety should be overridden by security, or the opposite way round. Occasionally, it is questionable whether security procedures are fulfilled due to some other restrictions which affect the safety of the ship. To better explain this, when a vessel is passing through a high-risk pirate zone, the emergency generator cannot be secured to prevent the pirates from gaining access. The only way to secure the generator is to seal the door. The emergency generator is used when the main power unit (engine) of the ship is closed down. By closing down the main engine, the ship is no longer underway, so in effect, the pirates have an immovable ship. However, the ship still needs power for lighting, communications systems etc. Without any power on the ship, the prospect of the crew occupying the citadel would be impractical.

Whilst it is safe to say that some security threats can be tackled with preventive measures taken onboard ships, such as counter-piracy teams, razor wire, barricades, additional protective bars on doors and hatches etc, establishing an effective citadel and most importantly crew training during security drills, all these actions involve an additional workload and can significantly increase crew anxiety. When seafarers are frightened, they will sometimes prioritise security over safety making the ship vulnerable to other risks. Deciding which threat is more important and implementing the appropriate measures can be challenging.

Whilst academics, lawyers, diplomats and politicians debate the theoretical meaning of maritime security, seafarers confront it daily. From a captain's perspective, maritime security is about balancing threats with risk and managing competing demands with diminishing resources. The situation is dynamic and evolving; since I started my career at sea, piracy has returned and the international community struggle to keep them at bay. The number of warships seems to be shrinking, and the navies' focus is on competing adversaries, leaving the protection of merchant ships to private companies. The threat of terrorism is a constant concern we are reminded of every time we enter the port and implement the ISPS Code regime. Reliance on internet-connected electronic devices on the ship and in our personal lives exposes us to the invisible and often imperceptible threat of cyber security. Despite our importance to the world's economy, the treatment of seafarers in global ports during COVID-19 demonstrated quite how our role is rarely valued and invariably attracts disdain.

As seafarers continue to be expected to do more with less and treated with derision rather than respect, our working hours increase and time off becomes a distant memory, many of us are looking to a life ashore where we are visible, valued, and valuable.

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Date: 26th September 2022