

The ship security officer - a new challenge for maritime education

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Abstract

From the academic point of view, we have to determine if the training for this job is a matter for the maritime education system only or if we have to deal with a cooperation process between different institutions in order to obtain an interdisciplinary approach. The first question is “how much maritime background is necessary for this new type of on-board personnel?” Analyzing the tasks required by this job, this paper will try to present a conclusion for this dilemma. We also have to think if the new security responsibilities could be “attached” to the already existing duties of the watch officer or if we have to create a new distinctive job on board. It is also very important to define how much supplementary training will be required in order to familiarize the watch officer with specific onboard security tasks: stowaways, drug smuggling, robbery, violent attacks, terrorism, etc.

Keywords: ship security officer, maritime security, SSO, ISPS Code, training, watch officer, designated person.

1 Introduction

In respect of IAMU 4th General Assembly goals regarding tasks and functions on board future ships and different aspects of Maritime Education and Training, we want to debate one of the last issues revealed by IMO regarding the Ship Security Officer (SSO).

From the academic point of view, we have to determine if the training for this job is a matter regarding the maritime education system only or we have to deal with a cooperation process between different institutions in order to obtain an interdisciplinary approach.

The first question is “how much maritime background is necessary for this new type of on-board personnel?”

To get an answer to this question we have two options:

- to “convert” an already certified deck or engine officer into a security officers.
- to “update” experienced security personnel in order to perform the new tasks as ship security officer.

For the first alternative we have to decide which type of maritime officer is more suitable for the new assignment: a deck officer or an engine officer. Analyzing the tasks required by this job, the paper would try to present a conclusion for this dilemma. We also had to think if the new security responsibilities could be “attached” to the already existing duties of a watch officer or if we have to create a new distinctive job on board. It is also very important to define how much supplementary training will be required in order to familiarize the watch officer with specific security onboard tasks: stowaways, drug smuggling, robbery, violent attacks, terrorism, etc.

For the second alternative, if we decide to hire specially trained security personnel in order to perform the ship security officer duties, this would mean that we have already taken the decision of having a special job on board for this purpose. After that we must decide the required amount of specific knowledge regarding maritime ships activities in order to perform the ship security tasks.

For a Navy Academy, the problem of the Ship Security Officer seems to be easier to solve, but for the major part of the IAMU members we think that it is a matter that must be debated in order to offer owners such type of personnel.

2 Pressure for meeting the deadline

World scale application of ISPS Code [1], imposed through SOLAS Chapter IX, with July 01 2004 as the deadline, was the most expedient implementation of an IMO decision. Owners and port users were confused for an appreciable period of time regarding the practical steps that must be undertaken in order to think out their own SSP or PFSP. Fortunately, some international organizations (IMO, ABS, Lloyd’s Register, USCG) draw up guidelines [2] for ships and port facilities security plans and started training courses for CSOs, SSOs, and PFSOs. The ISPS put in difficulty also Maritime Administrations due to the necessity to create a board able to certify the SSPs or the PFSPs. This problem occurs mainly in countries where the Maritime Administration was not based on a military structure (as USCG or the Canadian CG), because they do not have specialized staff in maritime security.

In Romania, validation of the security plans was divided between the Romanian Maritime Authority for the SSPs and the Maritime Ports Administration (MPA) Constantza for the PFSPs. In order to do this job, both institutions had to create special departments and to send personnel abroad for training. These new departments became operational only at the beginning of 2004, and due to this delay, some of the Romanian owners who were already ready with the SSPs had their plans certified by foreign classification registers. After the implementation of the maritime security department of Maritime Ports Administration Constantza, an unfair-play fight began for the accreditation of

organizations that could draw up security plans for the port facilities. More questions arose after the auction organized by MPA Constantza for the assignment of overall security system contracts in the Constantza, Midia and Mangalia ports.

Because each port user was constrained to apply a PFSP, in Constantza Port there are no less than 78 approved PFSPs. Due to the hiring and leasing system for berths and storage facilities applied in the port of Constantza, we have now many security areas extended only along one or two berths. The result was a tissue of fences and checkpoints, a lot of access passes that must be obtained by the same person who has to go on board ships (agents, chandlers, and other representatives). Consequently, the transportation time needed to shift cargo by road inside the port increased by 25-30% and the number of foreign crew members leaving their ships to visit the town decreased by 50-55%, due to the required supplementary formalities and limitation of private transport means (cars, taxi).

In Figure 1 we have an example of a pier in Constantza Port (berth 35 to 44) divided between two port users and the security areas established in accordance with their PFSPs.

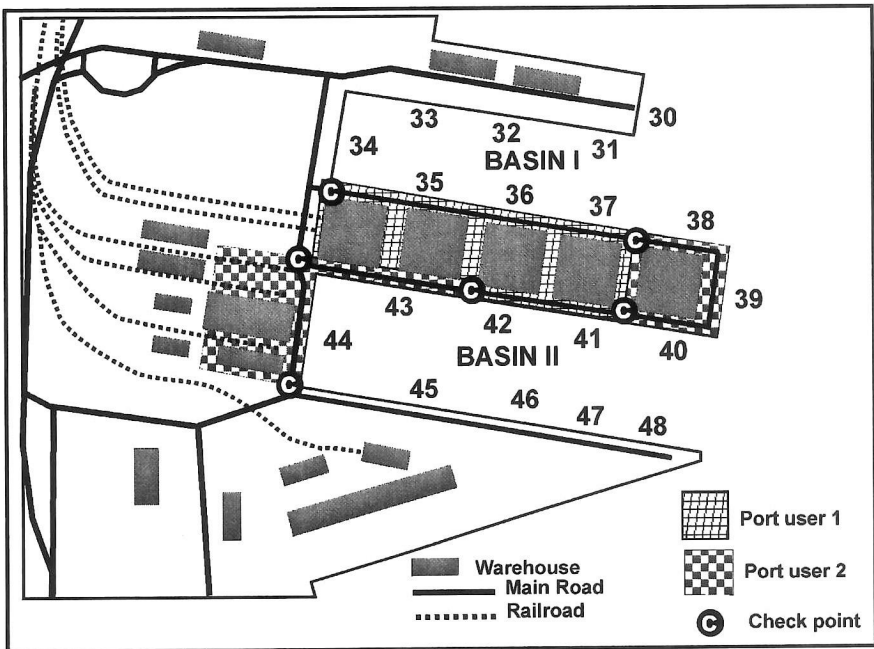


Figure 1: Pier in Constantza Port, divided between two port users.

3 Training of SSO

Since the first edition of the IMO model courses 3.19 ISPS-SSO, 3.20 ISPS-CSO, 3.21 ISPS-PSFO it was obvious that their aims get beyond the traditional

problems related to maritime security with a great number of events, such as piracy, illegal immigration and smuggling. All the security risk evaluations, measures and actions included in the syllabus of these courses were mainly orientated towards prevention of terrorist and sabotage acts. From merchant ships officers' point of view, these new issues were not included in their basic training, field of activities and duties.

That is the reason why the first organizers of ISPS courses were firms specialized in protection and security and many of these delivered courses that were focused on inland prevention of terrorism and countermeasures, without an actual connection with the realities of the maritime transport activities. Such courses were mainly valuable for the port user, facilitating their knowledge concerning the drawing up of the port facilities security plans.

Meanwhile, the maritime training institutions, specialized in delivering IMO courses, have sent their own instructors to take train-the-trainer special maritime security courses. After that, these centres started to run their own IMO ISPS courses, but in most of the cases, such a course was delivered with a combination of 2 or 3 instructors with different backgrounds and qualifications (maritime, police, and/or secret service officers), in order to cover the syllabus of the SSO and PFSO courses as well as possible.

In Romania, the Maritime Training Centre CERONAV, started IMO model courses for SSO, CSO and PFSO in August 2003. By the end of 2004, 3300 SSOs, 80 CSOs and 180 PSOs were trained. In the first semester of 2005, CERONAV trained another 415 SSO, but the request for these courses has diminished very much.

Because the Ship Security Plans were drawn up only in respect of the ISPS Code provisions, without a real life feasibility test of this onboard measure, many of the owners decided to designate, as SSO, the on board officer with less responsibilities during the ship's operation in ports. As a result, we have second engineer officers, electrical officers or radio officers as SSOs. In other cases, the Master is also SSO, because the owner considered that he already has a long experience dealing with port authorities.

Duration of SSO training courses, organized by Maritime Centres or other certified institutions are very different, even if all these courses are sometimes certified by the same authorities. Average SSO training period was set to 2-3 days but longer periods of time could be found in courses organized by security companies. For example:

- Hudson Trident, US, duration 1,5 days, certified by DNV;
- Star Center, US, duration 2 days, certified by USCG;
- Aalesund University College, duration 2 days, NORWAY;
- AMC Search Limited, Australia, duration 2,5 days, certified by AMSA;
- ABS Consulting, US, duration 3 days, certified by ABS;
- Lloyd's Register, UK, duration 3 days, certified by Lloyd's Register;
- Lairdsie Maritime Centre, UK, duration 3 days, certified by MCA;
- Ship and Port Security Services, UK, duration 3 days;
- Pacific Maritime Institute, US, duration 3 days, certified by USCG;

- Elkins Marine Training International, US, duration 2 days, certified by DNV;
- US Merchant Marine Academy, US, duration 3 days, certified by USCG;
- Port Maritime Security International Ltd, UK, duration 2-3 days, certified by DNV, MCA;
- Security Solutions International, US, 8 days.

Taking into account the goals of ISPS regarding the training and competences required for SSO, and the real background knowledge of maritime officers in terms of maritime security, we consider that a minimum period of 7 up to 10 days is required in order to achieve the declared objectives of the SSO course. We underline here some of the provisions of ISPS Code – Part B [1], that demonstrate the exaggerations of the ISPS Code expectations from the merchant marine officers designated as SSO:

- instruction techniques for security training and education, including security measures and procedures;
- handling sensitive security related information and security related communications;
- recognition and detection of weapons, dangerous substances and devices;
- recognition, on a non-discriminatory basis, of characteristics and behavioural patterns of persons who are likely to threaten security;
- methods of physical searches and non-intrusive inspections;
- crowd management and control techniques operations of security equipment and systems; and testing, calibration and maintenance of security equipment and systems while at sea;
- simulation of emergency situations.

More than that, the SSO is also responsible for the training of other crew members with specific security duties, in accordance with the SSP, in matters regarding:

- recognition & detection of weapons, dangerous substances & devices;
- recognition of characteristics and behavioural patterns of persons who are likely to threaten security;
- crowd management and control techniques;
- security related communications;
- methods of physical searches of persons, personal effects, baggage, cargo, and ship's stores.

In accordance with the ISPS provisions, there are no compulsory stages of training for the crew members with responsibilities in the SSP. That means that the only training regarding their specific security duties is made by the SSO or in very few occasions by the CSO. After a 12–20 hours course, the SSO must have enough knowledge regarding maritime security issues in order to deliver a credible training for the rest of the crew. In case of an inspection on security matters, these crew members must demonstrate their skills in order to satisfy the inspector's standards [3]. We consider that the initial training of SSO in accordance with the duration specified by the IMO model course, is totally

insufficient for delivering an efficient training to other crew members subsequently. It is puzzling that the draft for the SSO IMO model course, in which the 12 hours duration was stipulated for the first time, was drawn up by the United States Merchant Marine Academy at Kings Point. We think that the authors of the draft believed that all merchant marine officers were trained as students in a Naval Academy [4].

The shipping companies that own passenger ships and ferries realized, before the entry of the ISPS, that the problems related to the security of their ships and passengers could be solved, in an efficient way, only by specially trained personnel, able to carry out the following procedures, routine tasks and checks:

- photo identification badges to employees [5];
- matching tags of luggage;
- visitors not allowed on board ship unless they have pre-arranged permits;
- passengers are provided with guest identification cards (also used for onboard purchases) that are electronically checked before each passenger is allowed to board the ship;
- hand-carried luggage is X-rayed and passengers pass through a walk-through security;
- screening system prior to embarkation;
- cabin baggage is x-rayed;
- canine search of stores for explosives ;
- all shoreside workers are credentialed;
- ship stores are security screened prior to loading;
- ship personnel security checks;
- access points to the ship are secured or manned.

As a result, on board these ships we have a well defined category of hired staff, led by a Chief of Security Officer with the following job description requirements:

- prevention and detection of crime and to maintain law and order on board the ship;
- ensure that the Company's rules and regulations are not breached by passengers or crew;
- ensure security measures when docked and be aware of the correct protocol and procedure in relation to local customs and immigration regulations;
- investigation of minor and serious crime;
- must have experience in the field of drug use, and know the signs, symptoms and effects of any particular type of drug;
- advise the Captain of any intelligence reports received and related threat assessments in any particular port or location;
- assess vulnerability of crew and/or passengers and formulate drug search patterns and procedures; provide training for such drills;
- be mindful as to what effects an act of terrorism would have on the ship;
- should have experience in bomb search techniques and provide training by means of regular drills on board the vessel;

- prevent stowaways from boarding the ship;
- have an idea of International Migration Law and procedures for handling stowaways caught.

It is obvious that the person able to comply with all these tasks must be a security and protection professional with enough land based experience, but also familiarized with the characteristics of passenger ships activities.

If we compare the imposed job description of a Security Officer onboard a passenger ship with the competences for tasks of all SSOs required by the ISPS, we will find no significant differences. This means that ISPS promoters had applied the standards used by passenger ships owners to all merchant ships [6]. Unfortunately this policy could not work in real life with the same expected results as for passenger ships and with only 12 to 20 hours of training for the merchant ship SSOs.

Taking into account the above mentioned issues, it is obvious that, from the practical point of view, an onboard security system for normal cargo ships similar with the one already existing for passenger vessels, could not be applied at the same standards. In our opinion, the role of the SSO of cargo ships must be limited to an active cooperation with PFSO and local authorities, in order to reduce the risk of incidents related to smuggling, stowaways, and maybe drugs traffic. Large-scale implementation of the onboard ISPS will have a very limited impact on risk reduction against terrorist assaults or other types of terrorist threats. More than that, even the piracy attacks against merchant ships will not decrease without an active, determined and in force measures from the national authorities, in the already known high risk maritime areas [7]. If we look at the graph from Figure 2, we can see that there are no major differences between the number of piracy incidents in 2001, 2002, 2004 and 2005.

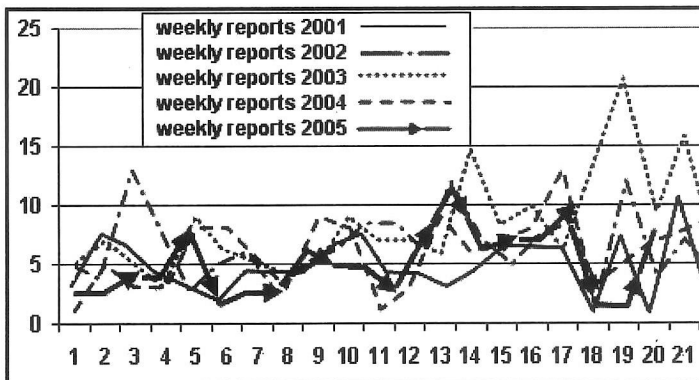


Figure 2: Piracy incidents between 2001-2005.

Reduction of potential terrorist threats in maritime transport could only be achieved with the help of security systems and measures implemented by port and local authorities [8], using specialized companies and personnel with

upgraded training relating to antiterrorist measures. In these circumstances, the SSO and crew members, designated in the SSP from cargo ships, must ensure the onboard implementation of the procedures required by the PFSO, during the stay of their ship in port, and maintain an active communication with the PFSO, in order to report any incidents or suspicious events.

For the moment, the risk of violent acts against cargo ships remains focused on the piracy attacks. We consider that during the SSO training courses, the main security issues must be directed towards the practical measures that could prevent boarding the ship by pirates. Also, the SSO must be instructed on how to react and how to manage the emergency situation when pirates are already on board [9], when they have fire arms and/or have captured members of the crew. A lot of scenarios could be set on these matters based on real events reported and analyzed in the past years. Because the time to react is very limited in many cases, the SSO must have a clear knowledge about the risks involved and the best practice in these type of events.

Some of these practical actions were included in IMO circulars, but application of these measures is optional and responsibility for the consequences lies only on the Master or the SSO [7]. Here we can start another debate, regarding a potential conflict between the decisions of the Master and the SSO in such a specific case. Also a debate regarding possible legal prosecution against the SSO and his decisions must be brought to attention. It seems that the ISPS code had missed this aspect and majority of the designated SSOs, at the moment, is not aware of this possibility.

4 Maritime Universities' reaction

The Maritime Universities have a slower reaction concerning curricula update with new courses, due to the bureaucracy characteristics of the academic education system. With some exceptions, the situation regarding implementation of ISPS courses was the same, and today there are not many universities that have a special maritime safety course included in their regular teaching program. We are talking about a course that could assure the required competences for SSO or CSO. For Navy Academies it was easier to respond to this challenge because they already have their own staff that could teach such type of courses.

In many cases Maritime Universities organized SSO, CSO and even PFSO courses, based on IMO model courses, for the already certified maritime officers or port user's personnel, as requested by third parties. The issue of maritime security was also brought to attention in Master's courses, because the Master Program curriculum is more flexible and easy to update, especially in case of a modular system.

Now, taking into account the practical experience regarding the on board personnel designated as SSO, the question is which category of students must attend an SSO course, if we decide to introduce such a course in the basic curriculum.

Consequently we will have the following options:

- this course must be attended by the students from the deck department;

- the course must be taught to all the students, including the students from the engineering and electrical departments.

From the point of view of the Constantza Maritime University, the best solution is to keep such a dedicated course outside the basic curriculum because we do not have a teaching staff specially trained in these matters. If a SSO course is included in the curricula, the number of teaching hours will be not enough to allow for employment of a new full time teacher qualified to deliver this course. If the University does not intend to give to the graduates, an explicit certification as SSO, the maritime security training issues could be brought into the already running courses related to ship management and on board regular activities and officers' duties.

5 Conclusions

Taking into account the above mentioned issues we think that we can underline the following conclusions:

- the time available for implementing the provisions of the ISPS Code was very short and some of the solutions found, were improvised by ship owners and port operators;
- the training courses for SSO and CSO are very short, compared with the goals and competences that have to be achieved in accordance with the ISPS Code requirements;
- for most of the merchant ships, there is no practical justification to put into operation a security system similar to the security measures implemented for passenger vessels of ferries;
- the main role for the maritime security must be played by port authorities and port operators because they are the only ones who have the means to assure an efficient control of goods and persons into the port operational area;
- overdoing of security measures in ports have created a new stress factor for ship crews;
- for most of the ships, the main risk involving violent acts is represented by pirates attacks;
- the new equipment for sending distress alarms in case of any kind of attack against a ship are welcomed, but real help for the crews could come only if national authorities have the determination, expertise and means to solve such type of crises;
- efficient training for SSO could be done through specially tailored courses, starting from the framework of the IMO model courses, but using instructors with practical experience in the field of security and law enforcement;
- for ships at higher risk of terrorist targets, protection of the crew and passengers could be insured only by employing special security personnel, who are also trained for crowd management crises and are familiar with ships activities and characteristics.

We think that in the following years, application of ISPS provisions will be more pragmatic, with a more realistic evaluation of the practical possibilities to undertake security measures on board merchant ships and focused on the national maritime waters, ports and terminals security systems efficiency.

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