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SECURITY STRATEGY IN THE PORTS OF SAUDI ARABIA

BY

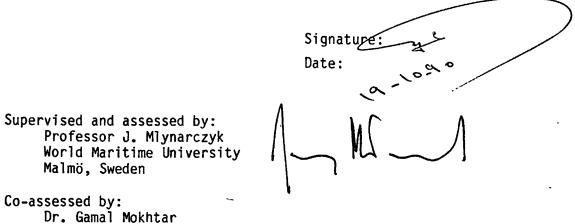
ABDULLA AL-NEMRI

SAUDI ARABIA

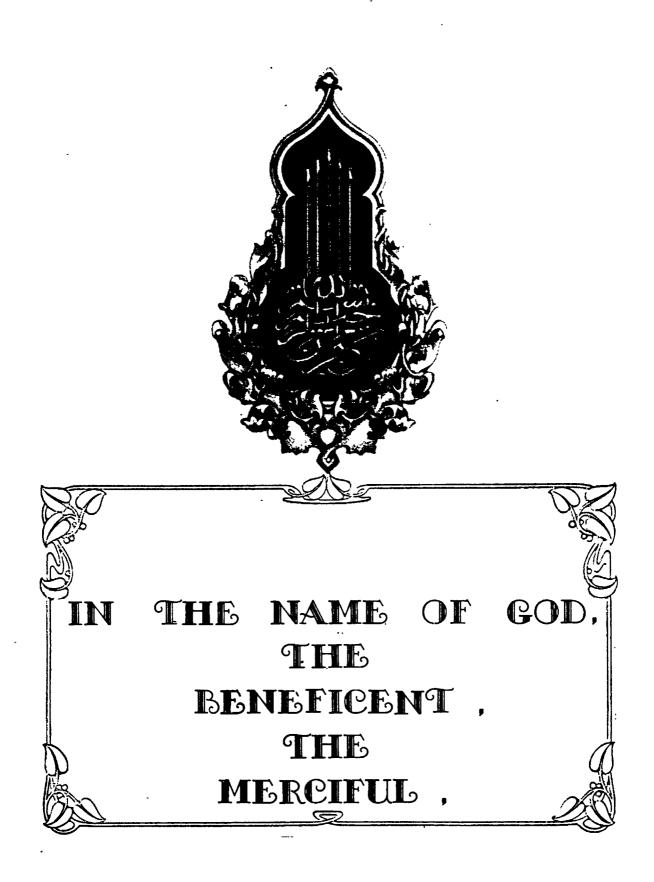
A paper submitted to the Faculty of the World Maritime University in partial satisfaction of the requirements for the award of a

MASTER OF SCIENCE DEGREE in GENERAL MARITIME ADMINISTRATION

The contents of this paper reflect my personal views and are not necessarily endorsed by the University.



Co-assessed by: Dr. Gamal Mokhtar Director General Arab Maritime Transport Academy Alexandria, Egypt



DEDICATION

To my country, Saudi Arabia as a gratitude to the favours with the hope that full use be made of this project.

To my wife and our new generation Abeer, Noaf, Oula and Ahmed.

To all those who sacrificed during my studies at World Maritime University.

I

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ABSTRACT

The ports in the Kingdom of Saudi Arabia are considered to be among the most vital and strategic goals of the government, being main outlets and inlets for the country, taking into consideration the unique geographical position of the Kingdom overviewing both the Red Sea and the Arabian Gulf as well as natural resources, the most important of which is oil and its exportation completely depends on sea transport.

Thus the Kingdom's port enjoy a very special and sensitive security position. The objective of this project is to achieve more security to guarantee a very smooth flow of work in all commercial and industrial ports. For this approach it was decided that the contents of this project should be divided in six chapters as follows:

Chapter One - Security and Ports Development

It explains in detail the idea of security from the language and practical point of view with brief explanation about ports development and their importance related to the security.

Chapter Two - Security Jurisdiction of the State

This section tackles to the limits of port security and protection within the framework of territorial sovereignty of the state.

Chapter Three - Saudi Frontiers Security Legislation

It denotes the tightening of surveillance on the Kingdom's land frontiers and territorial waters by controlling the inlets and outlets of the country.

Chapter Four - Dangerous Sources Affecting Port Security

It gives highlight to the sources of danger affecting port security.

Chapter Five - Port Security System

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It shows the procedures aimed to the taking security measures inside and around the ports (including land and sea).

Chapter Six - Conclusion and Recommendations

Conclusion gives broad overview of the project and recommendations recommend the port police managers.

CHAPTER ONE

SECURITY AND PORTS

1.1 GENERAL INTRODUCTION TO SECURITY

Security is aimed at safeguarding and defending the "state" against internal and foreign threat; in order to mobilize and utilize resources with the aim of achieving stability and progress.

The question of security has always been a priority for the state endeavouring to attain it either on its own or through cooperation with other countries.

Achieving security is a complicated and thorny problem exacerbated by the diversification of internal and external sources of danger, tense international relations or the division of the world into conflicting blocks.

The world security is difficult to define and the problems it contains are not only rhetorical. Arabic and foreign language dictionaries define "security" as opposite to "fear". Usually the word "security" is used to mean "security" from fear, threat or invasion; words which are not synonymous and each of which requires a separate definition.

However, to sum up, it could be said that "security" means protecting the nation in regard to the inviolability of its territory, sovereignty, political independence and stability.

This includes two aspects:

- First: Military - means and ways to safeguard the state from aggression and expansion policies.

 Second: Non-military - non-intervention into internal affairs of the state, expose it to a propaganda war or economic pressures.

As far as terminology is concerned, the word "security" is really very ambiguous. It is used in a variety of situation and fields, starting from securing citizens against potential dangers jeopardizing their well-being, enactment of laws and rules necessary for their security and the establishment of the appropriate bodies to enforce such laws and rules. However, this is the narrow concept of security, i.e. defending the state, pre-empting crime and punishing outlaws.

These measures extend to include steps to be taken to secure the state against other states, i.e. the broad sense of security which embraces several concepts starting from merely taking protective measures against foreign intervention by laying down the foundations necessary to stateguard boundaries, coasts and skies, guard the state's secrets, build-up military forces, and enter into alliances, up to taking positive measures to achieve security.

Development of the security concept has not only been confined to measures taken by the state.

Indeed military a threat is only one among other threats the state is facing in our time, which have social and economic aspects, i.e. economic and social security.

It has been the norm to consider that security in its narrow sense refers to achieving internal security, though in the broader and more comprehensive sense. It includes both internal and external security. Both are inseparable as they are aimed at guarding the state's entity and steering its policies to the right direction.

1.2 THE ROLE OF PORTS IN SECURITY

No scholar of the world's development problems - especially the third world - can ignore tackling the impact of ports on development as a whole, whether positively or negatively. Sea ports represent vital economic routes, outlets and inlets for the country. Ports the world over have played a significant role in foreign trade movement (imports/exports). Developed countries spare no effort to develop their ports, i.e. extensions, advanced equipment and building new quays to facilitate work.

Special attention has been paid to develop security in ports so as to keep abreast of progress in various facilities.

Port development in the Kingdom of Saudi Arabia is considered to be among the most vital and strategic goals of the government, being main outlets and inlets for the country, taking into consideration the unique geographical position of the Kingdom (Arabian peninsula) overviewing both the Red Sea and the Arabian Gulf as well as the natural resources the most important of which is oil. Here, exportation completely depends upon tankers (sea transport).

Thus the kingdom's ports enjoy a very special and sensitive security position, being closely related to communication with the outside world. Any stoppage or delay in the activities of ports would effect the dynamic interests of the country because of their significance in relation to political and economical anti-crime. Military security taking into account their impact upon higher interest of the nation's economy as well as national and internal security is considered to be the main corner stone of stability.

The Kingdom of Saudi Arabia represented by the authorities concerned has shown great interest in port security by setting

up the official bodies necessary to look after port security. Such a difficult task has been assigned to the Frontier Forces General Directorate "port security units". These units have been doing a very great job. The Ministry of Interior provided them with the latest technology and equipment necessary to guarantee a very smooth flow of work in all commercial and industrial ports.

1.3 GENERAL INTRODUCTION TO PORTS DEVELOPMENT

Ports play a very important role for the country's economy. This was recognized by the commencement of the first national development plan in 1970.

A great increase of imports took place to fulfill the requirements of the five year plan. Development with concentration of the infrastructure of ports and industries.

The Saudi Ports Authority was established by the Royal Decree M/65 dated 1.9.1396 H (26 August 1976) to carry out operation and development responsibilities of Saudi ports.

Since then, the Saudi Ports Authority achieved a wide range of developments by extending, modernizing and upgrading the operational efficiency. The government has implemented many construction and development projects. As a result there has been a five-fold increase in the number of operational berths from 37 in 1976 to 168 in 1986. The Saudi ports were capable by 1986 of handling the increased volume of imports and exports amounting to 60 million metric tonnes (excluding crude oil).

Within a short period Saudi ports were ranked among the most famous ports in the state of the art, for cargo handling equipment. The development of specific berths and the use of computer applications in all operations were established.

They are pioneers in some specialized fields, such as the handling of bulk and livestock. Containerization and Ro/Ro techniques have been established. Sophisticated facilities have been used for this purpose, such as yards, mechanical handling equipment and electronic data processing.

Direct cargo handling costs of one ton was reduced form 36 Saudi Ryals (USD 9.6) in 1980 to 14 Saudi Ryals (USD 3.7) in 1983 due to port development.

The Saudi Ports Authority introduced several pioneer developments, such as the standardization of loading and unloading operations and unitization of cargo handling equipment and other facilities.

By 1986, the Saudi Port Authority was able to finance its own operations and project expenditures and transfer the surplus revenues to the Ministry of Finance and National Economy. Their services to the national economy exceeded the traditional activities, such as cargo handling, pilotage, provision of yards, warehouses and safe navigational channels to support the private sector and the development of the commercial activities in the Kingdom. More than 12,000 vessels call at Saudi ports annually. The major aims of the the development of Saudi ports for the national economy are to establish the required projects as listed below:

- To import infrastructure material for general constructions all over the country.
- 2. To import equipment, instrument and spare parts.
- 3. To import food, meat and live animals.

- To import clothing, medicines and local market requirements.
- 5. To export crude oil.
- 6. To export oil products.
- 7. To export basic products for light industries.
- 8. To export grain and wheat.
- 9. To export other national products.
- In Saudi Arabia there are two types of civilian ports, namely:
- 1. Major Ports
- 2. Minor Ports ,

The following seven major ports are capable of cargo handling imports and exports of commodities with sufficiently shaded and open storage areas.

1.3.1 Jeddah Islamic Port

This is the largest port in the Middle East located at the western coast of Saudi Arabia in Jeddah. It receives half of the imported commodities and 85% of the food stuff. It is recognized as the world's largest port of handling livestocks. Of the pilgrims 75% are using the port. More than 6,000 vessels call at the port to come alongside the 51 berths which can handle 23.06 million tonnes annually. By the end of 1985 the port had 49 shaded stores with a total area of 342,000 square metres. The port is computerized, and equipped with the latest modern cargo handling. It handles the bulk cargo of 96,000 tonnes of cement and 120,000 tonnes of grain. There is one complex for ship repair and maintenance in the port which includes the main floating dock for the repair of ships up to 45,000 tonnes in addition to a smaller dock for the repair of ships up to 16,000 tonnes. There is about 11,000 men working in close relation with the port (excluding the other government employees and the private sector). The cargo handling activities for 1986 were: imports 14.955,206 and exports 935,510 in metric tonnes.

1.3.2 King Abdul Aziz Port

This is the second largest port in Saudi Arabia located in Demmam of the eastern province. More than 4000 vessels call at the port to come alongside the 39 berths which can handle 15.9 million tonnes annually. The port is equipped with modern cargohandling equipment and with sufficient storage facilities. There is one complex for ship repair and maintenance in the port which includes two floating docks. The first is for repairing large vessels up to 62,000 tonnes. The second for repairing the smaller vessels up to 35,000 tonnes. There are about 9,000 men working in close relation with the port (excluding other government employees and the private sector). The cargo handling activities for 1986 were: imports 5,897,297 and exports 1,209,934 in metric tonnes.

1.3.3 King Fahad Industrial Port Yanbu

This port was developed parallel to the Yanbu industrial city which was established in 1977. Most of the infrastructure material and equipment of Yanbu industrial city was imported through the construction support terminal. This was a temporary terminal till 1982 when King Fahad industrial port was ready to receive general cargo vessels, containers and Ro/Ro vessels. There are 22 berths spread over 12 kilometers of the coastline.

These berths form seven specialized terminals to receive 1200 vessels annually for imports and exports of general cargo, crude oil, oil products and basic products for the light industries. There is modern cargo handling equipment with sufficient storage facilities. It has special marine service facilities at the service harbour and the latest modern equipment for marine pollution prevention. The cargo handling activities for 1986 were: imports 22,965 and exports 18,038,100 in metric tonnes (excluding crude oil).

1.3.4 King Fahad Industrial Port, Jubail

This port was established in 1975 parallel to the industrial city of Jubail. It was meant for imports and exports of general cargo, oil products, other industrial products and the basic product for light industries through 16 berths. By 1985 this port handled 3.8 million tonnes exported commodities and 3.3 million imported commodities. It has the latest modern equipment for marine pollution prevention and expertise in this regard. The cargo handling activities for 1986 were: imports 1,928,288 and exports 12,015,360 in metric tonnes. The future plan of this port is to be facilitated by 1990 to handle 35 million tonnes annually.

1.3.5 Jubail Commercial Port

This was an old port, developed parallel to the fiveyear plan of the country. More than 1,500 vessels

call at the port to come alongside the 16 berths, which can handle 5.52 million tonnes annually. This port is independent of the industrial port. There are about 3,000 men working in close relation with the port (excluding other government employees and the private sector).

The cargo handling activities for 1986 were: imports 1,345,661 and exports 343,515 in metric tonnes.

1.3.6 Gizan Port

This is recognized as the fourth port on the western coast of Saudi Arabia. There are 12 berths which can handle 2.27 million tonnes annually. This port has the cargo handling facilities with sufficient storage areas to serve the southwestern region of the Kingdom. There are about 1,000 men working in close relation with the port (excluding the other government employees and the private sector). The cargo handling activities for 1986 were: imports 674,548 and exports 106 in metric tonnes.

1.3.7 Yanbu Commercial Port

This was an old port at Yanbu and was the second largest port on the western coast of Saudi Arabia before the construction of the King Fahad industrial port at Yanbu. More than 400 vessels call at the port to come alongside the 11 berths which can handle 3.5 million tonnes. This port has 'the cargo handling facilities with sufficient storage areas and also a bulk cement industry. There are about 1,400 men working in close relation with the port (excluding other government employees and the private sector). The cargo handling activities for 1986 were: imports 2,262,586 and exports 1,702 in metric tonnes. All these ports are equipped with different types and sizes of vessels for:

- 1. pilot service
- 2. search and rescue
- 3. fire fighting
- 4. pollution prevention
- 5. garbage service
- 6. maintenance service for navigational aids

In addition to these ports there are 19 minor ports serving local areas. The Saudi Ports Authority plays a very important role for the development and regeneration of the minor ports, namely:

- 1. service of the fishing sectors
- 2. coastal transport, and
- 3. facilitating development in the hinterlands of these minor ports.

There was a 17% decrease in imports in these years after 1986 but as a result of the completion of many industrial and construction projects, there was a 4% increase in the total cargo exported which reached 46 million deadweight tonnes. This was due to the expansion in the local production of construction materials and industrial commodities, as well as the progressive growth of the agricultural sector in the Kingdom.

Regarding the legal aspects, the Saudi ports are to be confirmed officially by obtaining the following points:

- 1. ready berths for receiving cargo vessels
- conform measured customs yards by the Ministry of Finance and national economy's decision
- 3. security fence around the customs yard

This briefing of the ports development has shown a big transfer of port advancement within a very short time. Port security requires to be in parallel development with these ports to assure full consideration of the security control.

CHAPTER TWO

SECURITY JURISDICTION OF THE STATE

2.1 INTRODUCTION

This section tackles the limits of port security and protection within the framework of territorial sovereignty of the state.

Such an endeavour requires defining the territorial jurisdiction of a state, whose limits are secured and protected by security organs.

In my view, linking together the concept of security and protection to that of the territorial jurisdiction of the state can be attributed to the close relationship between security and the territorial jurisdiction of the state in its three components: land, water or sea and air space.

Regarding this study in which emphasis is placed upon the sea territory in its security and protection aspects, two facts have to be mentioned:

- First: There are three kinds of interests related to territorial sovereignty of the state, namely:
 - interest of coastal states in controlling territories closer to their shores,
 - 2. interest of states to secure right of passage for their ships in high seas, and
 - interest of states to secure right of passage for their ships in territorial waters of coastal states.

Second: The state sovereignty - security-wise in particular varies from one territory to another. The closer we come to the shore, the more powerful the coastal state sovereignty related to security and protection measures and vice-versa. As a result, the state will either have absolute soveriegnty on some of these territories including territorial waters or it will have sovereignty restricted by an agreement covering sea territory or will have sovereignty as an observer in the contignous zone or will have sovereignty rights with the aim of exploring and exploiting various resources or colony for scientific research and pollution fighting.

That includes the exclusive econmic zone (EEZ).

2.2 THE TERRITORIAL SOVEREIGNTY OF THE STATE

The territory of a state is the part of the sphere under its sovereignty and ending at its frontiers. It is the basis of its actual existence and the pillar on which its legal authority is founded and without which the state does not exist.

There is a difference between the land territory of the state which is a corner stone of its establishment and the other territorial rights which naturally adjoin the territory (dependent territorial rights of the state) such as air, space and sea territory to which state sovereignty has extended according to contemporary internatinal law.

Sea boundaries of the state define its territorial jurisdiction and the regions upon which it can exclusively exercise absolute rights or exercise mutual rights with other countries. There are two characteristics - among others - of a modern state territory - unchangedness and definition. That means a nation is permanently staying on a fixed and well defined territory - from a legal point of view specially under the present situation of the international community - a basic element for the existence of the state.

Any infringement of this stability or definition constitutes an elemental and stark involvement of the state's entity. A well-defined territory reflects the stability of a region where a political organization exercises its territorial jurisdiction.

International boundaries constitute points where territorial jurisdiction of a state cease to exist. As a territory of a state embraces land and air space coomponents and possibly sea component. The limits of a state's territorial jurisdiction emphasizing the sea territory will be tackled below.

First: Land Territory

Most lands are divided into parts each of which is annexect to a different state constituting the land component of its territory. While the dividing line between these parts is known as international boundaries; that part is the place where a state exercises its territorial sovereignty and internal jurisdiction without intervention from other states.

Land territory is defined by the state's international boundaries which are dividing lines and distinguished by unchangeability, clarity and perpetuality.

However, boundaries by nature constitutes a legal definition of the lines dividing various states. Boundaries are identified by natural barriers such as mountains, seas and

rivers which are in themselves unchanged and tangible, or by artificial barriers such as towers, pillars, walls, etc. Boundaries could also be identified by longitudes and latitudes.

Furthermore, boundaries also depend upon economic, cultural or demographic considerations.

Second: Air Space

Territorial air space is subject to the absolute territorial jurisdiction of the state. However, the rapid development of international communications and the growing scientific and technical progress in the field of outer space technology for the good of humanity, have prompted the introduction of a legal system aimed at organizing the employment of space and outer space which necessarily places restrictions upon the territorial jurisdiction of the states and fosters exceptions. This brief definition is cited as an introduction to the aspects related to the territorial security and protection of the state.

Third: Sea Territory

Most states of the world overlook seas or oceans even some of them exist as islands while others are land-locked.

International law has taken notice of defining the expanse of water considered as a part of the state's territory but only some territorial jurisdiction of the state is being recognized.

In both cases, international law has taken great interest in defining territorial jurisdiction and the exceptions necessitated by public interests with the aim of facilitating international navigation and exploitation of marine wealth. The best known conventions which tackled this matter are the Geneve Maritime Convention (1958) and the UN Maritime Laws Convention (1982).

2.2.1 <u>Sea Port and Internal Waters</u>

A port is a part of the inland waters of the state which in turn is an integral part of the territory of the state and under the latter's territorial sovereignty and jurisdiction in all matters regarding organization, guardian ship and administrative, legislative and judicial controls. Facilitating international communications and sea transport dictated the imposition of some special legal restrictions on the jurisdiction of the state so foreign ships could use inland waters within the limits of the state's interests.

The Arab boycotting of Israel is a unique case because of its political nature - a problem which has not been tackled by any of the international maritime treaties.

2.2.2 Territorial Sea

The territorial sea is that part of the sea enclosed between inland waters and the contiguous zone. The presents one of the most complex problems ever faced by the three sea law conferences held in Le Havre. However, Geneve could not come out with an agreement about the definition of territorial sea due to conflicting interests.

To avoid confusion, the territorial sea was synouymous to territorial waters as the Law Committee observed that such a term may be confused with the other term "inland waters".

Under the international treaties in which Kingdom participated, the territorial sea was defined. According to that the Kingdom has sovereignty on its territorial sea including the sea bed and beneath, as well as the space above the surface. Such a zone is considered to be a part of the land where all manifestations of sovereignty are practiced including enactment of laws pertaining to fishing, sea and air. space navigation and exploitation of wealth at sea bed and the layers beneath as well as land.

The only restriction to that is the innocent passage for ships. However, such right is only used within the legitimate limits. These ships have no right to misuse such a right to take any action contrary to the Kingdom's sovereignty or inimical to its interests, excluding the innocent passage of military ships which shall have a prior licence taking into consideration non-stoppage or sluggishness which may be deemed as an act of espionage

The Kingdom's territorial sea extends 12 nautical miles from the inland waters.

2.2.3 Continguous Zone

Contiguous to the territorial sea, is the zone where the Kingdom exercises control necessary to prevent violation of laws pertaining to customs, taxation, emmigration and health affairs inside the territorial sea.

The zone is determined by 14 nautical miles from the demarcation line at inland waters according to the Geneve Convention of 1970.

However, the Kingdom determined the contiguous zone by six nautical miles towards high seas. Thus the contiguous zone extends for eighteen nautical miles only.

Such a zone according to Boundaries Security Regulations is designated as a security zone where regulations and laws pertaining to public, political, health, customs and maritime security are enforced.

2.2.4 Legal System for Inland Waters and Ports

Inland waters - in maritime law - are subject to a special legal system - the same one that territories are subjected to, i.e. coastal state soveriegnty is exercised.

Inland waters are an integral part of the state's territory in which it practices all its jurisdictions. The state may prohibit foreign ships from entering such waters and may monopolize navigation, though only restricted by binding treaties.

2.3 LEGAL POSITION OF THE SHIP

Merchant vessels in the port or in the territorial sea are of two categories:

- The national vessel which is carrying the state flag will be governed by the local jurisdiction in both cases civil and criminal.
- A foreign vessel which does not carry the port state flag will also be governed by the port state local jurisdiction unless there is a special agreement between the two states.

2.3.1 In Case of Civil Cases

Here jurisprudents distinguish between the vessel's local problems and the problems related to the territoral sea and port state. The jurisprudents prefer to study each case separately according to the solutions stated in the jurisdiction of the port state. This sometimes creates conflicts between the port state and the flag state.

For the above reason the international treaties regulate some of the civil cases, such as the Brossel Treaty 1952 give the port state the right to detain any foreign vessel for any raise a claim against that vessel even if the vessel is about to leave the port. This law is applied in Saudi Arabia in similar cases.

The only one case where flag state legislation is applied in a port state, is the relation between the vessel and its crew such as work contracts, etc. This means that the port state legislations applied to the relation between the ship and any outside, cases not relating to its crew.

2.3.2 In Case of Criminal Cases

Article 27 of the New Convention of the Maritime Law gives the coastal state freedom of choice to exercise its jurisdiction on crimes committed aboard foreign ships at the port. Such a rule adopted by the convention emanates from the fact that the bearthing of foreign ships at the port, and not mere passage of the territorial waters, may effect the security or regulation of the port, or local interests. On the other hand, foreign ships entering the territorial sea of the

coastal state, places it under the territorial jurisdiction of the latter state and shall be subject to its laws and courts. There are two schools of criminal jurisdication: the Latin and the Anglo Saxon Schools, which are closely related to each other.

First: The Latin School "French Doctrin"

According to the French Doctrin, and as a general rule the flag state is entitled to take to its own courts crimes committed on board the ship flying its flag among the crew, or accidents related to the internal regulations of the ship.

Port authorities shall interfere and enforce the local jurisdiction in the following cases.

- Crimes committed on board the ship provided that the criminal and victim are not members of the crew.
- Crimes that lead to disturbance and violate port regulation, even if the violator is a member of the crew on board the ship.
- 3. Crimes committed by the crew on land.
- 4. Crimes committed on board the ship, if the local representative of the flag-state (e.g. consul) or the shipmaster asks for the intervention of port authorities.

Second: Anglo-Saxon School "English Doctrine"

This theory propounds absolute jurisdiction contract for the port state following the principle of the territorial penal codes without any exception, which in general contradicts the securing strategy in ports of the Kingdom. This strategy inclines move towards the French doctrine taking into consideration the obidance by Islamic Sharia in all dealings.

2.3.3 In Case of Stowaway

1. Commercial Vessels

As known internationally, commercial ships bearthing at ports has no right to stowaway neither persons wanted by security authorities nor for political criminals. Security authorities in case foreign ships commit any violation of the above rule have the right to search the ship and arrest the refugees - though for the sake of political customs, the consul of the flag state has to be informed about the search and arrest procedures of the criminals.

2. Warships

Here, the case is very different. Customarily the military ship authorities have no right to accept fugitives on board in case they have been charged for crimes (under the law), or convicted for a non-political crime. The ship authorities have to hand over such persons to the port authorities.

However, the ship master has the right to debark them on shore where the security authorities may arrest them.

Thus it is implicit that the port authorities have no right to get on board with the aim of searching for and arresting such persons. In the case of seeking political asylum on warships, international custom rules that political asylum on warship is an acceptable practice in case there is no international commitment to hand over such political refugees to the port authorities.

2.3.4 In Case of Chasing or Land Detention

1. In the Territorial Sea

The general rule propounds that the territorial sea is part of the state's territory and is subject to its legislative, judicial and executive jurisdiction, a right which is only restricted by the right of passage for well-meaning ships.

Under the Third United Nations Maritime Law Convention there are three consecutive zones in this regard.

First:

The state shall have extensive authority including the right to exercise civil executive procedures, such as detention and selling of ships which already left its ports though still in its territorial sea and which have not reached the high seas.

Second:

The state shall have no right to stop or change the direction of any well-meaning ships which pass through navigation lines in the territorial sea without having the intention to go to the state ports or not leaving the same.

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Such a rule also applies to criminal jurisdiction with exception of four cases:

- If the implicatons of crime extends to the state.
- If the nature of crime might threat the security and peace of the state, or of the order in the territorial sea.
- If a diplomatic representative or shipmaster or a consular authority at the flag state asks the port authorities for help to control the ship.
- If such procedure were inevitable to fight smuggling, drug and alcohol trafficking, etc.

2. In High Seas

As mentioned before, the basic principle recognized by international law propounds that ships at high seas are only subject to flag states. Such a principle is based on the fact that the high seas are not the domain of any state or falls under the jurisdiction of any state.

Naturally, jurisdiction at high seas is nationally exercised by flag states on ships through shipmasters or the ship's administration. Accordingly, law of the state owning the ship shall be enforced in crimes committed on board or in civil litigations, with the following exceptions:

 In case the ship at high seas there are crimes against humanity such as piracy or slave trade.

- 2. In case of construed presence at the territorial sea, which means that the ship though being on high seas, communicates with the coast through its crew or by means of its boats. In such a case the ship is deemed to be present at the territorial sea and it is then subject to all laws applied at the territorial sea.
- 3. In case of hot pursuit. The state has the right to pursue the contravening ship from the territorial sea towards high seas - an act designated internationally as the right of hot pursuit. To exercise such a right, it should be established that the ship contravened the laws while on the territorial sea and escaped after being asked to stop.

In this case, it is legitimate to pursue and detain the fleeing ship on high seas though the following should be taken into consideration:

- A. That the pursuit shall continue non-stop from the territorial sea to the high seas.
- B. That the ship on time of pursuit shall be on the high seas during pursuit and shall not take asylum at a territorial sea of any neighbouring state or flag state.

As regards to warships, they enjoy absolute immunity against jurisdiction of any state other than the flag state.

Thus no state other than the latter has any right to

arrest or detain a ship even if such arrest or detention aims at investigation. However, there is one exception, i.e. in case the warship crew commits an act of mutiny or piracy.

Article 16 of the Geneve Convention and Article 102 of the New Convention stipulate that in case an act of piracy is comitteed by a warship or a general ship or plane, the crew of which mutineered and seized the ship or plane, such acts shall be deemed similar to acts committed by a private ship.

CHAPTER THREE

SAUDI FRONTIERS SECURITY LEGISLATION

In accordance with the requirements of security and national sovereignty as well as securing of Saudi Arabian frontiers, the Royal Decree No. M/26 dated 24.06.1394 (1974) was issued to reiterate such legitimate and absolute rights with the aim of enforcing the state's soverignty and protecting society from aggressors.

3.1 THE ROYAL DECREE NO. M/26 1974

This law stipulated the following provisions:

Article 1:

Frontier security denotes the tightening of surveillance on the Kingdom's land frontiers and territorial waters by controling the inlets and outlets of the country and apply regulations pertaining to needs and ports.

Article 2:

Frontier Forces shall be assigned to guard land frontiers and territorial waters according to rules issued by the Minister of Interior.

Article 3:

Without any prejudice to the provisions of regulations in force all those concerned shall abide by the rules issued by the Minister of Interior, while passing by frontiers or territorial waters.

Article 4:

Any violation of the provisions of the regulations or by-rules issued to exercise the same shall be liable to be subject to one or more of the following penalties:

- 1. A maximum of five (5) years imprisonment.
- 2. A maximum of a SR. 50,000 fine.
- 3. Dismissal from work for ever.
- 4. Temporary suspension from work not exceeding one year.
- 5. Confiscation when necessary.

The by-rules shall specify the details of punishment within the above mentioned limits.

Artilce 5:

Frontier Forces may use force or arms to control any of the crimes stipulated in these regulations in accordance with Article 6 and 7 of the Internal Security Regulations.

Article 6:

Determine the authorities concerned with investigations and enforce penalties provided for these regulations and byrules.

3.2 EXECUTION CODES

Based on the afore mentioned, the Ministerial Decision No. 1440/105M dated 7.7.1396 was issuded including the by-rules of the Frontier Security Regulations based on Articles (2, 3, 4, 6) which authorize the Ministry of Interior to issue such by-rules.

We shall only tackle articles pertaining to port security systems, being authorities responsible for enforcing regulations and laws as regard to ports, security zones and frontiers beyond territorial waters.

By-Rules of Frontier Security Regulations promulgated by Royal Decree No. M/26 dated 24/6/1394 HIJ.

3.2.1 Definitions of Article 2:

The following terms and expressions shall have the meaning set forth below:

1. Frontier Line:

The demarcation line between the Kingdom and neighbouring countries, and also the end of the six nautical miles continuous to the territorial sea of the Kingdom.

2. Frontier Area:

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 Land The 10 Km. distance extending from the frontier lines inside the Kingdom.

b. Sea

The 6 nautical miles distance extending beyond the territoiral sea "territorial water" of the Kingdom extending 12 nautical miles towards the sea beyond inland waters of the Kingdom according to Decree No. 33 dated 27 Rajab 1377 H.

3. Territorial Sea: Defined accoarding to Royal Decree No. 33 dated 27/7/1377 H. (Shown in Annex No. 1)

3.2.2 Functions of the Frontier Forces

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Port security units represent the Frontier Forces in performing their functions at ports, territorial waters and frontier areas. According to Article 4.

To perform their duties, the Coast Guard shall carry out the following:

- a. Guard and supervise vessels at ports and when passing by sea frontiers.
- b. Take away all prohibited goods on board after completing search procedures and keep them in a safe place on the vessel, stamp and safe guard.

These duties shall be carried out by the Coast Guard if the vessel is in the anchorage area, and with the presence of customs representative if the vessel is at berth.

In both cases that ship master shall be present and a report shall be signed by all parties.

- c. Allow no disembarkment; only after completing procedures of quarantine measures.
- d. Search all vessels without flags, specify their nationality when entering or passing by frontier areas and detain them in case they cannot prove their identity.
- e. Search vessels, except warships and land transport vehicles which enter frontier areas when necessary.
- f. Size prohibited and smuggled goods and smugglers at the frontier area as well as preparing necessary reports.
- g. Investigate crimes and riots which befall on board vessels and at the frontier area where no security centres are available. They may also arrest persons accused, for a maximum of 24 hours.

3.2.3 Duties and Interdicted Acts According to:

A. Article 6:

Incoming vessels shall not be boarded or approached unless quarantine procedures are completed.

B. Article 7:

Explosives of whatever type or whatever purpose shall not be used at the frontier area unless permission is obtained from the authorities concerned and before giving due notice the Coast Guard.

C. Article 8:

Ship masters or vehicle drivers coming to or leaving the Kingdom shall not disembark any person or unload any cargo or material at the frontier area without prior permission from the authorities concerned and before giving due notice to the Coast Guard.

D. Article 9:

Vessels without flag specifying its identity shall not enter or pass through the frontier area without permission from the authorities concerned or before giving due notice to the Coast Guard.

E. Article 10:

Vessels shall not leave the port or harbour unless they obtain permission and give notice to the Coast Guard.

F. Article 11:

All persons, land/sea means of transport coming to or leaving the Kingdom shall use ports, harbours, inlets and outlets designed for that end by the appropriate authorities, and shall use roads specified by such authorities.

6. Article 12:

All means of fishing, diving or sea voyage shall enter or come out of the sea at the points specified by the Coast Guard pending the procurement of owners - a licence from the "Coast Guard" after filling a form specified to that end.

H. Article 13:

Any person who sees an object floating on the sea surface, shall inform the nearest station or patrol pertaining to the Coast Guard. In case the object is picked up, it shall be handed over to the nearest station or patrol.

I. Article 14:

The Coast Guard shall observe - when inspecting land and sea means at transport and persons or places - the following:

- Vessels entering/passing by the frontier area and which are not at the berth, shall be inspected by the Coast Guard.
- Vessels at the berth shall be inspected by the Coast Guard for security purposes on the presence of a Customs representative without prejudice to the Customs⁻ authority.
- 3. If the ship master of a vessel at the berth asks the Coast Guard to inspect them proceedings shall be signed by both ship master and representative of the Coast Guard.
- Inspection shall not include warships or boats.
 However, the Coast Guard shall inform the

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appropriate authorities when the latter enter, pass by or anchor at the frontier area.

- 5. In all cases of inspection, and whatever the consequences might be, proceedings shall be noted down including the response of those being searched, i.e. resistance, endeavour to escape, use of force, bribe, etc.
- Women shall be searched at port Customs according to norms and traditons.

3.2.4 Apprehension Procedures According To:

A. Article 15:

Members of the Coast Guard shall act as judicial officers when they perform jobs pertaining to apprehension and inspection.

B. Article 16:

Smuggled and prohibited items which are smuggled in by the means of land and sea transportation and therefore violating or assisting in violating laws, shall be seized. Also means of transportation which carried these items shall be searched. Proceedings shall be made at the venue of apprehension, including the type, number and characteristics of apprehended items, names of arrested persons who will be taken to the nearest Coast Guard Station together with apprehended items in order to make final proceedings.

C. Article 17:

Proceedings shall include the following:

 Date and opening and closing time of proceedings and the place where it is written.

- Date and time of apprehension, comprehensive description of the location, and distance from frontier line and main roads and customs and Coast Guard Station.
- Names, surnames, nationalities, occupations and place of residence of violators - if not possible, reasons shall be given.
- Names, surnames, ranks and occupations of persons who effected apprehension.
- 5. Incidents and circumstances accompanying the apprehension, e.g. smuggling or bribe, etc.
- 6. Comprehensive description of items seized, including their numbers, weights, method of packaging, places where such items were hidden, country of origin, whether they are new, second hand or absolute as well as assessing their value if possible.

If such items were weapons or ammunition their types and numbers shall be mentioned and whether they are of local or foreign make. If they are in the form of packs, they shall be counted and delivered to the Customs Department after writing down necessary proceedings.

 If the means of transport is a vehicle, the manufacturing country, year of make (Model), colour, horsepower and plate nubmer shall be mentioned.

Condition of the plate shall also be noted,

e.g. erased, broken or newly coated or misplaced. The driver's Licence shall be inspected to make sure whether it is not false.

If the means of transport is a vessel it shall be fully described.

- Proceeding shall be written down in the presence of the arrested and they shall be asked to sign. If they refuse, reasons of their refusal shall be noted.
- 9. Proceedings shall be written clearly and deliberately without leaving any space in between. Any commentary if any, shall be written and duly signed on the margin otherwise they shall be deemed null and void.

3.2.5 <u>International Agreement and Convention Ratified by the</u> Kingdom

The Kingdom joined the 1960 International Convention for Safety of Life at Sea concluded in London, the 1972 Convention for Prevention of Collision at Sea and the 1954 International Convention for Prevention of Oil Pollution of Sea and its supplementary 1969.

On 25/02/1969, the Kingdom also joined the Convention regarding the International Consultancy Organization for Maritime Navigation concluded in 19/02/1948 in Geneva (amended in 1972), which is now called IMO (International Maritime Organization - London).

- The International Load Lines Convention concluded in London in 1966.

- The International Ship Loading Convnetion concluded in 1969.
- The Passengers Ships Convention of 1971.
- The International Convention for Safe Containers 1972.
- The Royal Decree No. 39 dated 12/08/1404 H.
 stipulated the apporval of joinig the 1974
 International Convention for Safety of Life at Sea.

The laws and by-laws pertaining to safety at sea considered as a complimentary part of legislation.

3.3 MARITIME LEGISLATION AND SHARIA PROCEEDINGS

3.3.1 History and Development of Maritime Law

Maritime law is one of the oldest laws. It goes back to the immemorail time before Christ when man had become bold enough to travel by sea. Maritime law came into existence in the form of marine traditions and norms attributed by the historians to the maritime relations linking Egypt, Crete and Cyprus islands in the Mediterranean Sea with south of the Red Sea.

Pheonicians also knew some maritime systems, the most outstanding of which was Rhodes Law of 116 A.D. Concerning joint sea losses propounding that if a ship master throws off parts of a shipment into the sea with the aim of saving the ship from sinking, the owner of the cargo has the right to claim from the ship owner and the owners of cargo which had been saved, indemnity for the loss of cargo being sacrificed to keep the ship floating. The Greeks also knew the high risk loan contract, under which a financier lends a ship master a sum of money to cover the sea voyage. If such a voyage came to be successful, the financier would receive his capital plus a very high interest. However, if the ship sank for a reason or another the lender would loose his right to claim debt scholars say that such a kind of loan is the origin of marine insurance.

In the Middle Ages, the Arabs greatly contributed to navigation at sea. Their conquests resulted in securing land and sea routes and the flourishing of trade activities at sea. Especially on the eve of Crusades, in particular at the Italian ports. In modern times, the first maritime laws appeared in the form of legislations, the oldest of which was the Naval order 1681 which was enacted by Louis XIII, King of France with the aim of organizing sea trade. Most of its provisions were derived from marine traditions and norms when the French Trade Collection was issued in 1807 during the reign of Napoleon, the aforementioned trade order was the foundation of legislations included in Volume II of the Collection, pertaining to sea trade.

In the Kingdom of Saudi Arabia the Trade Tribunal Regulations issued on the 15th of Muharam 1350 H. included in the second chapter provisions pertaining to sea trade. Articles 150 to 431, whose stipulations had been derived from Ottoman Maritime Law originated from the French Trade Collection.

Finally under the Decree No. 12 dated 7.4.1395 H. the regulations for general ports organization which in turn issued a set of rules and instructions pertaining

to sea ports which later in 1405 H. became the consolidated rules and instructions for the Gulf Cooperating Countries seaport. They are till now in force.

So we can clearly see that the regulations are in harmony with international laws and customs and the legal rights of territorial sovereignty as well as the special nature of port security and protection. Thus attaining the goals set in the most effective way possible.

3.3.2 Judicial Decisions of Sharia

Judges shall refer to judicial decisions for consultation in the interpretation of legislative acts without binding themselves to courts' decision whatever their grade might be. Also maritime legislations play an important role in interpreting and analysing legislative acts and judicial decisions.

NOTE: The commercial law provisions are also considered general provisions for maritime law to be applied whenever another clause is not provided for in this law or has been a common practice.

CHAPTER FOUR

DANGEROUS SOURCES AFFECTING PORT SECURITY

INTRODUCTION

Sea ports are facilities of great importance that effect the interests and national security of a state. Being utilities of economic and commercial nature, they carry out interrelated and complex activities through technically and administratively well trained personnel. Ports accommodate a variety of manpower, exports and imports of various goods through different means of sea transport. Such a vast area of activities requires a protection and security umbrella comprehensive enough to keep the performance uninterrupted.

Therefore, sources of danger affecting port security have to be studied and analysed. These sources can be classified into two categories:

- 1. Natural Factors
- 2. Human Factors

4.1 NATURAL SOURCES

Consideration should be given to the factors emanating from force majeure and natural catastrophies, such as floods, conflagrations, storms, earthquakes or explosions resulting from natural and unusual climatic phenomena.

To avoid such dangers, a number of preventive procedures have to be taken to protect ports and installations - by choosing the right geographical spot, lighting methods, canal system and electric power distribution. The main procedures to be taken against the aforementioned dangers are as follows: Set-up pre-designed emergency plans based on accurate studies statistics from previous years and the potential natural factors expected to affect the region taking into consideration the coordination of such plans with security procedures designed to protect ports in normal conditions.

4.2 HUMAN SOURCES

These are human made, a material act pre-meditated or not leading to jeopardising security in facilities and installations. Such factors can be summarized as follows:

4.2.1 Robbery and Embezzlement

These are common crimes frequently committed in public facilities and ports by those with the aim of illegally appropriating money or movables.

4.2.2 Conflagration

At times conflagration has been premeditated by man, at other times force majeure has been the cause. However, being destructive and easily spread out, it is the most outstanding hazard endangering port security.

Real reasons behind fire are difficult to determine. It could be the result of a criminal act, negligence, misbehaviour or even unintentional fault or miscalculation.

4.2.3 Sabotage

Denotes all criminal acts contrary to civil or religeous norms, aimed at destroying or hampering production capacity or economy as a whole, enfeebling morale or undermining security achievements by hampering activities of ports and public properties or institutions. Danger of sabotage emanates from its intricacy and the variety of its ways and means.

The saboteur could be a foreign agent or even a citizen supported by a foreign power. Means of sabotage could be categorized as follows:

A. Mechanical Sabotage

Aimed at causing damage to, or destroying machines or pieces of machinery by adding harmful substances to operating stuff, i.e., oils, lubricants, fuel, water, which results in completely paralyzing such machinery.

Sabotage also includes destroying parts of machinery, hampering repairs, negligence, abstention from reporting information, changing composition, specifications or standards of products.

We have to note that acts of mechanical sabotage can easily be committed and difficult to discover, being easily taken for damage resulting from depreciation, erosion or from intentional negligence.

B. Sabotage by Using Explosives

This type of sabotage esults from using explosives to hit - wholly or partially - facilities causing irreparable damage in order to hamper the operational capacity of a ports.

There is a variety of materials that cause sabotage. They are all explossives such as vapour pressure, inflammable gases, substances and compounds explosible by heat or electric current or by both or explosible by unprompted intense collision.

C. Sabotage by Fire

Fire is one of the most popular methods used by saboteurs and perverts, because it is easy to start a fire in installations, warehouses, stores and yards at ports.

Moreover, it is difficult to discover perpetrators, who often join by-standers unscathed. On the other hand, fire destroys material evidence and indications which might otherwise have led to uncover saboteurs.

D. Moral Sabotage

Such act is often pre-planned and aimed at demoralizing port personnel; thus controlling their production abilities or in other cases, make them commit acts of sabotage - prompted or unprompted which constitutes a grave threat to ports and installations in particular or jeopardizes the national economy itself in general.

The most important means of moral sabotage are:

- Sowing the seeds of wrath and despair among port personnel.
- Propagation of rumours aimed at igniting psychological war.
- 3. Feedling disputes among port personnel.
- Encouraging manpower to submit to management unfair claims which are covertly legal while hiding potential illegal objectives, e.g.

salary increases, less working hours or changing holiday systems.

All the aforementioned perversive acts will be committed by the enemy using his local or foreign agents in implementation of the enemy's plans.

Various types of sabotage are usually not directed to a certain stage of port operations but could occur at any time or place. Therefore, protection procedures should cover various stages starting from provision of raw materials to production and exploitation stages.

There are also subsidiary processes related to these stages, that should also be protected by taking preventive measures such as communications, internal sea and land transport and vital facilities at ports.

4.2.4 Smuggling

One of the gravest damages security authorities are facing at ports due to the fast developments in sea transport is the use of containers in drug and alcohol trafficking, because there are many difficulties regarding comprehensive search of containers. The rate of smugglings discovered through this trend is amounting only to 50%, a percentage which reflects great concern because of the destructive nature of drugs.

There is adequate evidence of this danger especially in Europe and the USA.

4.2.5 Infiltration and Sneaking

Fulfiltration and sneaking includes illegal mass or individual immigration which is negligible compared to

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coastal mass immigration from outside the ports, a problem the Frontier Forces (Coast Guard) are facing all over the Kingdom's frontiers.

It also includes sneaking out of country by people who have committed crimes in the Kingdom and who usually try to leave the country with the help of an intermediary. However, such problems are of minor implications.

4.2.6 Pollution

Pollution includes the following:

- 1. Crude oil and its derivatives.
- 2. Chemicals.
- 3. Wate (paper-plastics).

Pollution results from the movement of ships on sea and inside ports. Such ships do not abide rules and regulations set up by the International Maritime Organization (IMO).

Pollution may also result from collision of ships (tankers). It represents a grave economic jeopardy because of its negative effect on the marine environment and shores.

These problems should be handled by the Port Authority.

4.2.7 Transport of Dangerous Goods

Introduction:

The transport of dangerous substances in port areas and their handling and storage therein should be controlled to ensure the safety of people working or living in or near port areas as well as the protection of port installations and environment.

The safety of life and the safety of the ship, its cargo and its crew in port areas are directly related to the risks taken in the process of handling dangerous substances prior and subsequent to loading and unloading.

Dangerous Goods means any dangerous substances contained in receptacle, portable tank freight container or vehicle.

The term includes an empty receptacle, portable tank or tank vehicle which has previously been used for the carriage of a dangerous substance unless such receptacle or tank has been cleaned and dried or, when the nature of the former contents permits with safety, has been securely closed.

Dangerous Substance means any substance, whether packaged or in bulk intended for carriage or storage, and having properties coming within the classes listed in the (IMO) International Maritime Dangerous Goods Code (IMDG Code), where it should be noted that the qualifying flashpoint for flammable liquids is 60° C for bulk cargoes and 61° C for packaged goods.

NOTE: An annex of this study will show the way to deal with hazardous materials at Saudi Ports.

CHAPTER FIVE

PORT SECURITY SYSTEM

5.1 INTRODUCTION

As mentioned before, ports are a reflection of the nation's civilization and have a great impact on national security and the country's good will. Thus, the appearance and behaviour of their personnel, management and services should be taken care of as an utmost priority.

For that, security units (Coast Guard Units) in the ports work around the clock to safeguard ports at sea and land where they are responsible for guarding the port assets including facilities, buildings, equipment, machinery and goods from theft and damage.

In addition to that the security units - within the limits of their authority - are assigned to keep order and enforce the law in the territorial waters of the state. This is a very sensitive job touching upon international relations while enforcing domestic regulations upon violators.

On the other hand, security units are responsible for fighting trafficking and smuggling and illegal immigrants where the special features of port security have always affected the nature of security measures and the extent of their effectiveness in achieving the objectives set-up for protection and security.

So the procedures tackled in this chapter are aimed at taking security measures inside and around the ports (including land and sea) to prevent any hostile act. Such procedures include:

1. External protection and security of ports.

- 2. Internal protection and security of parts.
- 3. Protective lighting system and electronic equipment.
- 4. Patrols.

5.2 EXTERNAL PROTECTION AND SECURITY OF PORTS

To achieve external protection and security of ports, the geographical zone of the port has to be determined in order to study reinforcements necessary to be installed around it, control of inlets, building of control towers and supervision of various means of transport permitted to enter and leave.

5.2.1 Fence Systems

Determining the geographical zone of the port necessitates forging material boundaries, i.e. fence which also constitute a psychological barrier for the passers.

On the other hand, fences consolidate control of entries and exist through specific inlets and outlets.

Technically, the most important rules pertaining to fence buildings are as follows:

- A. Building metal netted fences with 2 square inches opening and 2 m. height.
 Barbed wires shall be fixed on the upper edge of the fence.
- B. Leave an open space from inside and outside the fence free from barriers.
- C. Minimize the number of gates throughout the fence so as to facilitate control and supervision.
- D. Place directional signs aimed at prohibiting the traffic around the fence.

- E. Distribution of control towers according to climatic conditions prevailing on the location.
- F. Secure the external opening and inlets of the fences such as water pipes, sewage systems and new railways by placing metal netted fences and warning systems.

Also a closed circuit TV network should be installed around the fences facing the sea area, connected with an operation room linked to sea and land patrols.

G. In areas of high sensitivity, a double fence line may be considered. When using double fence lines, a clear zone should be established between the fence lines. This zone enables security personnel to see intruders and the zone also provides space for exterior intrusion detection systems.

5.2.2 Guarding and Protecting the Gate

- A. Gates denote ordinary openings on outer fences facilitating incoming and outgoing traffic. Their number should be minimized so as to enable the flow of inspection and control procedures and be operated in coordination with automatic barriers. Also gates should be equipped with suitable instruments for the detection of explosives and closed circuit television (CCTV) system for security control.
- B. Specified gates for the private vehicles attached to personnel gates should be considered. These gates are to facilitate heavy transports.

Where the gate securities carry out the security investigation it should be ensure that:

- All persons passing through the gates are properly authorized.
- 2. No prohibited goods are allowed.
- Official release of cargo passing through the gates exists.
- 4. Any specific order is to be carried out.

5.3 INTERNAL PROTECTION AND SECURITY OF PORTS

Internal protection and security systems vary according to the nature and characteristics of a port and its significance, e.g. there is no comparison between the Jeddah Islamic Port and the minor ports, or between oil or industrial ports and general cargo ports.

However, this kind of assignment basically depends on controlling incoming and outgoing traffic, supervising visitors and controlling movement of ships, boats and cars as well as securing and protecting facilities of the port.

Preventive procedure here are meant to include checking all means of transport, their load and validity of licences, taking into consideration the necessary coordination in order not to hamper the flow of work in related organizations, trailers or individuals. Therefore, such procedures should depend on the following rules:

- First: Provide definite means investigating the real identity of individuals entering the port.
- Second: Facilitate entry to and exit from ports for individuals, vehicles as requested and under efficient control.

Third: Device an accurate method for effective control pertaining to regulations and restrictions imposed at the port, such as organizing entry to prohibited areas, customs yards and areas where hazardous and dangerous substances are stored.

In Saudi Arabia, efforts are being extended to consolidate port regulations. However, the main point is to respect general rules when establishing any new plan taking into account and keeping abreast of changes and new developments. Such rules are as follows:

 Issuance of licences necessary for the passage of means of transport, the control of which should be one of the main functions of security units.

The principle of control is represented in prohibiting entry of vehicles without prior permission and also to organize entry and parking of cars used by port personnel.

Other means of transport, such as trucks, railway cars and other equipment should also be subjected to a strict control system based on installing guarded gates.

2. Issue identity cards. These are of five kinds:

- A. Personal Cards
- B. Occupational Cards exchangeable between port personnel
- C. Entry Permit for port laborers
- D. Ship Boarding Cards for official and freighters
- E. Visitor's Cards

We are not going to concentrate here on the ways through which such licences and cards are issued but our main objective is to discuss the means of security.

5.4 PREVENTIVE LIGHTING SYSTEM

Darkness jeopardizes security. Therefore endangered areas should be consolidated with an appropriate lighting system which provides suitable background for security personnel to perform their duties in the best possible way.

First: Types of Lighting

 Continuous Lighting: Ceaseless for the whole night. A series of stationary lamps are used inside the port and the surrounding areas.

2. Temporary Lighting:

Used during emergencies or in exceptional situations. Such lights may be manually or automatically controlled. They should be concentrated upon areas around control towers, fences and internal yards such as container areas and stores, warehouses with important materials and around gates.

Temporary lighting is normally in addition to continuous lighting.

3. Moveable Lighting:

This is a light which is moved from a place to another inside facilities and ports. They are operated by vehicle-mounted or manual operators, batteries, etc. Such lighting may be continuous or temporary according to the need and it compliments the other two types of lighting and is usually used in emergencies.

Second: Lighting Areas

 External Areas: Composed at the outside border line of a port, spaces and areas outside the fence as well as the strip surrounding the fence. It also includes the nearby roads and areas near the gates. The lighting facilitates control, inspection and close supervision as well as identifies people and means of transport. Usually very strong lights are used in such areas.

2. Internal Areas:

Internal areas usually include roads and passages used by patrols, customs areas, berths, stores and warehouses. Usually traffic is minimised in such areas. However, appropriate lighting systems should be used.

5.5 SECURITY EQUIPMENT SYSTEMS

1. Wireless Control Systems:

These systems provide effective control for security personnel and protection as well. Their movements could thus be followed up while performing their duties. These systems also enable commanders to contact patrols.

2. TV Monitoring:

TV systems should be installed at gates and around fences, roads and entries the sea. Usually such systems are connected with the operation room through closed TV circuits equipped with wire or wireless systems according to the need.

3. Warning Systems:

Scientific and technological development in recent years has helped in designing various warning devices which are used to promote security and protection of ports.

- A. Warning systems placed at entries, gates ceilings and floors to control entry to and exit from ports.
- B. Warning systems designed to monitor fences, based on electronic vibrations.

- C. Systems designed to protect safes and documents against robbery.
- D. Automatic warning systems against fire to early discover fire, the most important of which are know as "indicating heads":
 - 1. smoke indicators
 - 2. high temperature indicators at warehouses
 - 3. sensitive infra red rays indicators
 - 4. sensitive ultra violet rays indicators

All the above systems could be used collectively by using an electronic control network capable of detecting dangers.

5.6 OPERATION ROOM

There is one operation room for each port security unit (Coast Guard Units) to receive information and direct the guards and surveyors for the required procedures. Also to receive the casualty signals within the port area and to direct the nearest patrol. The operation room is considered to be the heart of the port security units. It carries out the following responsibilities around the clock:

- Supervision of the performance of the security guards and surveyors.
- 2. Advice and direction to the security guards and surveyors.
- 3. Provision of service or enforcement of the law whenever required.
- It may act as a Sub-Rescue Coordination Centre (SRCC) within the port areas.

5.7 SURVEILLANCE

This is the main element and corner stone of security and protection operations at ports, representing a natural extension of the state's sovereignty and jurisdiction over port or sea.

5.7.1 Port Surveillance

Port surveillance is either roving patrols or mobile vehicle patrols for keeping watch inside the ports and inform the operation room of any abnormal matters.

1. Roving Patrols:

They carry out their responsibilities in the following limited areas to ensure cargo protection form any theft or damage.

- A. Roving patrols are employed to enforce the security protection of the cargo in the open storage area around the clock.
- B. Roving patrols are used to enforce the prevention of unauthorized persons entering the shaded storage areas after working hours.
- 2. Mobile Vehicle Patrols:

These are short range vehicle patrols for keeping inside the ports and near the fences around the clock to ensure that:

A. Enforcement of security protection to all constructions, installations and other port facilities, e.g., berths and vessels alongside, storage areas, fences.

- B. Prevention of any illegal passengers through the port fences.
- C. Supervision of traffic inside the ports by taking care of traffic casualties, speed limits, driving licenses and vehicle documents.
- D. Follow up of the sentries and surveillance inside the ports to ensure that they carry out their jobs properly and provision of the available assistance required.
- E. Arrest of any violator of the port security rules and regulations and frontier security legislation.

5.7.2 Marine Surveillance

There are two types of marine surveillance, namely:

- 1. short range marine surveillance
- 2. medium range marine surveillance

Both types have the following responsibilities within their ranges:

- A. Early warning of any abnormal matters.
- B. Information of any detection of marine pollution.
- C. Dealing with marine floating bodies according to the specific rules and regulations.
- D. Assisting in marine search and rescue (SAR).
- E. Security inspections of all vessels other than military whenever required.

- F. Arrest of any violating vessel to the frontier security legislation.
- G. Security protection to all marine vessels, constructions and installations within the port area.

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CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

First of all ports are a reflection of any nation's civilization and have a great impact on national security and the country's good will. Thus the appearance and behaviour of their personnel, management and services should be taken care of as an utomost priority.

Ports are also an important source of national income. They are organs of supervising and executing regulations pertaining to movement of trade, thus protecting national industries.

Thereby the port security units were established to carry out the basic duties and responsibilities for security protection of sea ports.

For that reason, security units work around the clock to safeguard ports at sea and land, representing the front security lines to protect society from foreign evils, dangers of terrorist organizations, trafficking, illegal immigration and sabotage of the state's interests. Also security units are responsible for guarding the port assets including facilities, building, equipment, machinery and goods from theft and damage. They also organize transport traffic, individual's movements and supervise the port's main and subsidiary gates. In addition to that the security units within the limits of their authority are assigned to keep order and enforce the law in the territorial waters of the country - a very sensitive job touching upon international relations while enforcing domestic regulations upon vilators. On the other hand, security units are responsible for fighting traffickers and smuggling, pursuing traffickers and illegal immigrants all of which are activities related to international organized crime such as:

- 1. Drug and alcohol trafficking, and arms smuggling.
- 2. Marine fraud, acquisition of hazard and radioactive materials and those which cause environment pollution.

No doubt these crimes have a negative effect on the national security and the importance of taking necessary security measures.

Secondly, there should be a connection between the limits of ports security and protection within the framework of territorial sovereignty of the state. Such an endeavor requires defining the territorial jurisdiction of a state, the limits of which are secured and protected by its security organs.

In my view linking together the concept of security and protection to the territorial jurisdiction of the state can be attributed to the close relationship between security and the territorial jurisdiction of the state in its three components - land, water and air space.

Regarding this study in which we place emphasis upon the sea territory in its security aspects, two facts should be mentioned:

- 1. The interests related to territorial sovereignty of the state.
- The state sovereignty: the closer we come to the shore, the more powerful the coastal state sovereignty related to security and protection measures, and vice versa.

Thirdly, the legal position of the ships which are:

1. Merchant vessels in the port or in the territorial sea are governed by the local jurisdiction.

The only one case where flag state legislation is applied in port state is the relation between the vessel and its crew.

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2. Warships:

The port authorities have no right to get on board with the aim of searching or arresting or detaining warships.

3. The pursue and detain foreign merchant vessels: The general rule propounds that the territorial sea is part of the state territory and is subject to its legislative judicial and executive jurisdiction. This is a right which is only restricted by the right of passage for well- remaining ships.

For that the Royal Decree No. M/26 dated 24.6.1394 Haj was issued to reiterate such legitimate and absolute rights with the aim of enforcing the state's sovereignty and protect society from aggressors.

Finally, we can clearly see that the security regulations are in harmony with international laws and customs and the legal rights of territorial sovereignty as well as the special nature of port security and protection; thus, attaining the goals set in the most effective way possible.

RECOMMENDATIONS

First, the most important aspect of developing a port security plan is the preliminary assessment and the on-scene security survey.

If these are improperly conducted, then the security plan itself will be almost useless. It should be ensured that the plan contains all of the recommended sections. There are also reports and forms which are required to be filled in and/or kept on file. The following should be born in mind:

- An ongoing training program is most vital to maintain a high degree of security.
- 2. Everyone must be aware of security and the part it plays in prevention of the acts of terrorism.
- 3. It is important that the ship security survey be reviewed for compatability with the port.

Second, Qualifications of Command and Administrative Personnel

 The commander and senior police administrators of a port's law enforcement operation should have a wide range of experience in law enforcement.

Training in police administration should be required but should not take the place of experience and ability to lead.

- 2. They should be able to motivate and inspire subordinates.
- They should understand the importance of balancing the need for effective law enforcement with the operation of port facilities.
- They must be able to delegate authority and to a degree, responsibility without giving up ultimate responsibility.
- 5. They must have a thorough knowledge of the position and responsibilities of the job as well as an understanding

of specific factors relating to port operations, specific risks related to terrorist activities, and specific operational factors relating to port law enforcement.

6. They must do all they can to assure that the people who carry out the essential job of protection do it humanely as well as efficiently.

Third, <u>Coordination of Law Enforcement Activities and Port</u> <u>Operations</u>

 There must be a clear understanding between the port police commander and the port administration authorities to ensure a balance between operational and law enforcement concerns.

Under normal circumstances the police operation would not adversely impact port operations, however, during high risk situations or during actual terrorist related activities the police commander must insist on the implementation of tight anti-terrorist related control measures.

- Port operation personnel should be included on the crisis management team.
- An important item is establishment of "level of readiness", such as:
 - Code Red Threat in Imminent
 - Code Yellow Threat is Probable
 - Code Green Condition is Normal

Fourth, Media Relations

Attention of the media is one of the primary goals of terrorists, therefore it is of great importance that the agency already have a good working relationship with the media keeping them well informed of situation developments. It must be ensured that the media has the means to transmit information to the publice that is factual, timely, and as complete as security considerations will allow.

Finally, more consideration to port security protection will give full confidence to the port users and reduce the insurance costs including the direct and indirect benefits to the country.

A P P E N D I X

REGULATIONS

FOR PORT SAFETY

1. PRELIMINARY

1.1 Application

- 1.1.1 These regulations shall apply to all ports listed in Part 1, 1.2 and to all vessels carrying dangerous goods and to all persons engaged in the handling, transportation and storage of dangerous goods and hazardous materials covered by the "International Maritime Dangerous Goods Code," within the ports.
- 1.1.2 Nothing contained in the regulations of this part shall be construed to invalidate any general safety regulation contained in other parts of these regulations. To the extent that any special regulation conforming to the International Maritime Dangerous Goods Code and pertaining to dangerous goods is in conflict with any other general safety regulation, the said special regulation shall prevail.
- 1.2 Responsibility
- 1.2.1 The Master and the berth operator shall be responsible for complying with these Regulations according to their respective duties.
- 2. <u>GENERAL SAFETY REGULATIONS PERTAINING TO</u> DANGEROUS GOODS
- 2.1 Acceptance of dangerous goods in port
- 2.1.1 No vessel shall carry, nor shall anyone cause to be brought into port, any dangerous goods other than in compliance with and listed in the IMO International Maritime Dangerous Goods Code (IMDG Code), and without written notification of the intention so to do. All dangerous goods must be packed, labelled and marked in accordance with the IMDG CODE.
- 2.1.2 The Port Management has the power to refuse dangerous goods for handling, storage or transhipment in the port, if it considers that in so doing there would be danger to life or property on account of the condition of the goods, the packing, the means of transport or conditions in the port.
- 2.2 Advance notification
- 2.2.1 In addition to the notification required in Part 1, 2.1, the Master, Owner or agent of any vessel carrying dangerous goods either for discharge or in transit to another port, must supply the Port Management, the Customs, the Coastguard, the Port Police and the Port Civil Defence with copies of a list of all dangerous goods on board. The list shall be submitted not less than 48 hours before the expected time of arrival showing:
 - a) the name of the vessels and the expected date and time of arrival;
 - b) stowage details;
 - c) the quantity of all dangerous cargo on board by IMDG class, technical name, UN number, and weight and number of packages; showing separately cargo for other destinations:

- d) for each consignment for discharge;
 - i) the shipping marks and Bill of Lading number;
 - ii) the net quantity of powder or explosive material for all dangerous goods in IMDG class 1.
- Where it is not possible to give 48 hours notice, i.e. in an emergency or because the incoming voyage is very short, the said lists shall be submitted on arrival or prior to berthing.

Classification, labelling and properties of dangerous

2.3.1 The classification, description and properties of, and labelling instructions for, all dangerous goods are those defined in more detail in the International Maritime Dangerous Goods Code (IMDG Code). The briefest possible summary thereof, including suggestions as to suitable fire fighting measures is enumerated as follows:

2.3.1.1

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2.2.2

2.3

CLASS I

Labelling

Description

Explosive substances and pyrotechnic articles.

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Properties Mass explosion or projection hazard.

Fire fighting

Refer to IMDG Code.



Properties Non-inflammable compressed or inflammable.

Description

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Gases

Fire fighting Liberal water spraying, jettison.

2.3.1.3 CLASS 3

Labelling

Description



Inflammable liquids.

Properties Flashpoint below 61°C. Vapours have narcotic, toxic effect, may be corrosive or poisonous.

Fire fighting

Foam, finely dispersed water spray, CO2. Labelling

Description







Inflammable solids.

Substances liable to spontaneous combustion.

Substances emitting inflammable gases when wet.

<u>Properties</u> Easily ignitable, easily combustible. Igniting spontaneously. Evolving inflammable gases when wet.

Fire fighting Refer to IMDG Code.

2.3.1.5 CLASS 5

Labelling



Description

Oxidizing agents.



Organic peroxides.

Properties

Oxidizing agents give off oxygen when on fire, ignite readily when united with combustible substances, may evolve highly toxic gases.

Organic peroxides may act as Oxidizing agents; some are liable to explosive decomposition, most burn rapidly and are sensitive to heat, friction or impact. Fire fighting

Large quantities of water.

Large quantities of water.

2.3.1.6 CLASS 6

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Labelling



Description

Poisonous (toxic) and infectious substances.

Properties Poisonous: Liable to cause death or serious injury. Infectious: contain disease-producing micro- organisms. Fire fighting

Refer to IMDG Code.

2.3.1.7 CLASS 7

Labelling

Description

Radioactive substances.

Properties Emitting invisible radiation, may emit heat. Accidents

Refer to IMDG Code.

Labelling

Description



Corrosives

Properties Able to damage living tissue. Fire fighting Refer to IMDG Code.

2.4 Signals

- 2.4.1 Vessels carrying dangerous goods shall hoist the signal flag B by day and a red all round light by night.
- 2.4.2 The said flag or light shall be displayed in such a position above any other signal or light as may best ensure its visibility.
- 2.4.3 Harbour craft which cannot comply with the foregoing shall display the signal in a conspicuous position.
- 2.4.4 Vehicles carrying dangerous goods shall mount or display a red flag.
- 2.5 Communications
- 2.5.1 Vessels carrying dangerous goods shall ensure that VHF communication is established with the Port Management and emergency services on the frequency established for this purpose. A ship to shore telephone shall be installed on board immediately on berthing if such a connection is available.
- 2.6 Emergency services
- 2.6.1 The Master and berth operator shall take appropriate steps to advise all persons concerned of the location and the means of communication with fire, medical or other emergency services.
- 2.7 Emergency procedures
- 2.7.1 The Master of a vessel carrying dangerous goods under way in the port shall ensure that a radio listening watch is kept on the frequency published by the Port Management.

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- 2.7.2 The Master shall ensure that full written information on the quantity, correct technical name, classification and stowage of all dangerous goods on board the vessel (including the measures to deal with accidents) is in the possession of the duty officer and berth operator and is available for use by the emergency services.
- 2.7.3 The Port Management shall coordinate all services in the event of a major emergency and shall designate responsibility for dealing with minor emergencies, leaks, spillages or shifting of dangerous goods.
 - 2.7.4 Anyone observing an imminent or actual leakage, spillage, incident or accident relating to or involving dangerous goods whether or not it is endangering life or property within the port area, shall report same to the Port Management. This obligation shall not relieve the individual of the duty to take immediate safety precautions.
 - 2.7.5 Attention is drawn to "Emergency Precautions" in Part 1.7.9.
 - 2.8. Fire fighting
- 2.8.1 Before discharging or loading dangerous goods commences, the Master and Port Management shall jointly agree on the precautions and procedures in the event of fire or emergency. Attention is drawn to "Fire on vessels" in Part 1, 7 and especially to the "No Smoking" notices.
- 2.8.2 The fire watchman on duty shall be informed whether or not water may be used in the event of a fire in the particular cargo.
- 2.8.3 The berth operator shall ensure that full access to the vessel and to the berth is maintained for the emergency services.
- 2.8.4 Dangerous goods shall only be stored in special segregated areas according to their classification and type.
- 2.8.5 All areas used for handling and storage of dangerous goods shall be kept clean and tidy.
- 2.9 Unauthorized persons

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- 2.9.1 A watchman shall be posted at the gangway of a vessel carrying dangerous goods to prevent access of any unauthorized person. Only Authorized Persons, persons necessary for the dispatch of the vessel and crew members are allowed on board.
- 2.9.2 When discharging or loading operations are being carried out at any quay, pier or jetty, temporary barriers are to be set up and the entry of unauthorized persons into the working area is forbidden.

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2.10 Inspection

- 2.10.1 Prior to unloading dangerous goods from any vessel or vehicle, the goods are to be inspected by an authorized, competent person of the Port Management to ensure that the packaging is intact and in accordance with IMDG Code.
- 2.10.2 The inspections shall also include a scrutiny of cargo documents and certificates relating to the dangerous goods. Any discrepancies must be reported.
- 2.11 Handling of dangerous goods
- 2.11.1 As soon as practicable after berthing the vessel, the Master and the berth operator according to their respective duties shall appoint a responsible and fully trained person to supervise handling and stowage of dangerous goods.
 - 2.11.2 No dangerous goods shall be discharged or loaded without the permission of the Port Management, who shall specify the time of commencement of operations.
 - 2.11.3 The Master and berth operator according to their respective duties shall ensure that personnel involved in the handling or storing of dangerous goods are trained to a level commensurate with their respective duties.
 - 2.11.4 The Master and berth operator, within their respective areas of responsibility, shall ensure that all equipment used for handling dangerous goods is suitable for such use. The lifting equipment and accessories including pallets, slings, boxes shall be supplied with safety nets, bars or devices to prevent damage to or dropping of the packages.
 - 2.11.5 Dangerous goods shall always be handled with care to prevent them being thrown, pushed, set down violently or otherwise suffering impact or damage. Cargo stacks must be secured to prevent movement, chafing or falling. All unnecessary handling should be avoided and the use of hooks is forbidden.
 - 2.12 · Safety of personnel
 - 2.12.1 The Master and the berth operator, according to their respective duties, shall ensure that, in the event of imminent danger to personnel, operations are suspended.
 - 2.12.2 Anyone noticing anything unusual or risky shall immediately report same to the person in charge of the operation.
 - 2.12.3 There shall be no admittance to any hold or cargo compartment containing dangerous goods liable to give off inflammable or toxic gases until the Master has caused such hold or cargo compartment to be opened and ventilated and has declared such hold or cargo compartment to be safe. Gas-testing equipment designated for the particular gas or gases may be used to ensure safety instead of or in addition to ventilation.

2.12.4	In an emergency, protective clothing shall be worn before
	entering any hold or cargo compartment containing dan-
	gerous goods. If breathing apparatus is required, only per-
	sons trained in the use thereof shall be allowed to enter
	the hold or cargo compartment.

2.12.5 Anyone involved in handling dangerous goods which present a particular health risk or danger of bodily injury as indicated in the IMDG Code, shall be provided with appropriate protective clothing equipment.

2.13 Weather conditions

- 2.13.1 The Master and the berth operator within their respective areas of responsibility shall not permit dangerous goods to be handled in weather conditions likely to seriously increase the hazards presented by such goods.
- 2.14 Limitation of quantities
- 2.14.1 The Master of a vessel shall ensure that not more than the quantities mentioned below are on board his vessel during its stay in port except with the prior permission of the Port Management:

IMDG Class	Quantity	Remarks
1	25 tonnes	Weight to mean net weight of hazardous substance
2 3		Non-flammable compressed gases bearing one label (green only) are excluded from limitations
J	200 tonnes	
4.2	200 tonnes New INCLUS	Goods of Class 4.1 bearing one label only are excluded from limitations
5.1	250 tonnes	from innitations
(5.2)	50 tonnes	No. 500 100
others	no limit	

The Port Management has the right to amend these quantities and to impose quantity limitations on other IMDG classes (for such amendments see Part 3, 7: "Special Amendments").

- 2.15 Storage of dangerous goods
- 2.15.1 Dangerous goods received in the port shall be cleared or shipped within the same day unless otherwise permitted by the Port Management.
- 2.15.2 Storage areas for dangerous goods in the port set aside by the Port Management shall be suitably designated by conspicuously displayed notices. Sheds, sheltered and open storage areas shall be protected against unauthorized entry.
- 2.15.3 Storage areas shall be subject to constant supervision and inspection for signs of leakage, spillage, damage or any other irregularity.
- 2.15.4 The IMDG Code shall be used to provide the necessary rules for segregation of cargo, methods of storage and any limits required on weight or number of packages.
- 2.16 Vehicles
- 2.16.1 Within the port, all vehicles used for feeder services, whether travelling by road or rail, shall observe the safety weight limits, and display the appropriate IMDG Code warning labels.
- 2.16.2 All such vehicles shall be clean and fit for the purpose for which they are to be used.
- 2.16.3 All drivers of such vehicles shall be aware of the inherent risks of the dangerous goods carried and what steps should be taken in an emergency.
- 2.17 Harbour craft
- 2.17.1 Stowage of dangerous goods in harbour craft shall conform to the IMDG Code General Segregation Table. Each craft shall be supplied with a dangerous cargo list.
- 2.17.2 In addition to the warning signals, harbour craft may need to adopt the IMDG Code for labelling.
- 2.17.3 A competent person shall be appointed to attend and keep watch over the cargo constantly, where required under the IMDG Code. Such person shall not have charge of more than one craft.
- 2.18 Exemptions
- 2.18.1 Packed dangerous goods are exempted provided they are carried in exempted limited quantities under the provision of Section 18 of the General Introduction to the IMDG Code.

3. <u>SPECIAL SAFETY REGULATIONS PERTAINING TO</u> DANGEROUS GOODS

- 3.1 Vessels built for special purposes
- 3.1.1 Dangerous goods shall only be carried on vessels built for special purposes provided the vessel conforms to the recommendations of IMO and that the stowage of the goods conforms to the IMDG Code and any general or special safety requirements.
- 3.2 IMDG Code Classes I and VII
 - 3.2.1 The Master and berth operator shall pay special attention to the provisions of the IMO Code where the dangerous goods are explosive.
 - 3.2.2 Precautions should include but not be limited to:
 - a) segregation and limitation of quantities by weight;
 - b) constant supervision and a permanent watchman;
 - c) stopping all other operations including bunkering when handling goods of these classes;
 - d) keeping all other hatches closed when handling goods of these classes;
 - e) keeping hatch covers to the dangerous cargo closed when not working;
 - f) discharging this dangerous cargo prior to other cargo or loading after completion of loading other cargo;
 - g) use of forklifts and other pieces of equipment which are electrically driven and conform to the IMDG Code;
 - h) lightning protection;
 - i) safe electrical equipment including lighting conforming to the IMDG Code;
 - j) prevention of sparks from metal objects, use of spark arrestors and forbidding matches and lighters being carried on the person;
 - k) de-energising radar transmitters and ensuring safety of all radio equipment.

- 3.2.3 When radioactive cargoes are being carried, advance notification should be given to the bodies concerned at least 20 days in advance of arrival; permission to berth should be requested at the same time. The notification should include all information required under IMDG Code Class VII, 9.5 - 9.5.3 (page 7030).
- 3.2.4 When radioactive cargoes are being discharged, a guard, who shall be responsible for safety, must always be present. Both the guard and the expert shall be provided at the consignee's expense.
- 3.2.5 Radioactive substances in transit to another port must not be moved, restowed or discharged during a visit. A guard, who shall be responsible for safety, should be specially assigned to ensure adherence to these conditions.
- 3.2.6 If there are any doubts about the radioactivity and the safety distance to be observed during discharge of other cargo, the civil defence should be asked to take measurements of the level of radioactivity.
- 3.2.7 Before stevedores are instructed to enter a vessel loaded with radioactive cargo, they should be informed of the dangers of this cargo, the stowage plan, and the risks involved.
 - 3.2.8 No radioactive substances are to be stored within the ports. All discharge of radioactive substances must be for direct delivery.
- 3.3 Dangerous goods in containers
- 3.3.1 Dangerous goods carried in cargo containers by sea shall be subject to the IMDG Code and the special provisions contained therein governing their handling between ship and shore and subsequent transportation and storage.
- 3.3.2 Marking and labelling.

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3.3.2.1 Containers in which dangerous goods are packed should bear IMDG Code class labels not less than 15 cm x 15 cm in size. There should be at least 3 such labels placed externally in conspicuous places, one on each side and one on the door end. The container should also show externally the correct technical name of the dangerous goods or hazardous materials packed therein.

- **3.3.2.2** Old labels, no longer applicable, should be removed.
- 3.3.2.3 Each package inside the container and containing dangerous goods should be marked and labelled as specified for each class in the IMDG Code, unless in the opinion of the competent authority such a label is not required.
- 3.3.3 Container packing certificate
- **3.3.3.1** Each container must be accompanied by a container packing certificate certifying that:
 - a) the packing has been properly carried out;
 - b) the container was clean, dry and apparently suitable to receive dangerous goods;
 - c) no incompatible substances have been packed into the container;
 - d) all packages have been externally inspected for damage, and only sound packages packed;
 - e) all packages have been properly packed in the container and secured;
 - f) the container and packages are properly marked and labelled;
 - g) the dangerous goods declaration required in subsection 9.3 of the General Introduction to the International Maritime Dangerous Goods (IMDG) Code has been received for each dangerous goods consignment packed in the container.

3.3.4 Handling precautions

- 3.3.4.1 The berth operator shall make a visual inspection of the condition of the container and for any signs of leakage of contents. If such inspection reveals any risk to safe handling or storage of the container, the berth operator should subject the container to a more thorough inspection to determine whether the container is fit for further handling or storage.
- 3.3.4.2 The berth operator shall ensure that no unauthorized persons opens or otherwise interferes with any container holding dangerous goods. Anyone authorized to examine the contents shall be aware of the possible dangers arising from the presence of dangerous goods.
- 3.3.5 Storage
- 3.3.5.1 A container containing any quantity of explosives (other than safety class explosives) must not be brought into the port premises unless prior application has been made in writing to the Port Management and permission has been given.
- 3.3.5.2 The storage in the port of containers holding dangerous goods should follow the principles of stowage and segregation set out in the IMDG Code.

3.3.5.3 Any container loaded with dangerous goods, if permitted to be stacked at the terminal shall be stacked in accordance with the specific instructions of the terminal superintendent. Such instructions will require that containers be stacked in an easily accessible position. There must be sufficient space to open the doors and provide free access for fire fighting.

3.3.5.4 The dangerous cargo area shall be clearly marked and protected from passing traffic by clear road markings and by a fence.

4. <u>SPECIAL SAFETY REGULATIONS PERTAINING TO</u> TANKERS

4.1 Application

4.1.1 All vessels carrying liquid hazardous materials — including liquefied gases — in tanks forming a structural part of the vessel, all vessels having carried such cargoes and are not clean or gas-free and the shore terminals under the jurisdiction of the relevant Ports Authority for handling such materials shall, as applicable, be subject to the Regulations contained in Parts 1 and 2, and also to the following special Regulations.

4.2 **Responsibilities**

- 4.2.1 The Master of the vessel and the terminal operator shall be responsible for complying with these Regulations according to their respective duties, having due regard to any other international or technical instructions concerning the vessel, cargo or their handling.
- 4.3 Additional definitions

4.3.1 TANKER

means a vessel designed to carry liquid cargo in bulk in tanks' forming a structural part of the vessel including a combination carrier when being used for this purpose.

4.3.2 TANKER TERMINAL

means a place where tankers are berthed or moored for the purpose of loading or discharging liquid hazardous materials.

4.3.3 LIQUEFIED GAS

means a gas having a vapour pressure exceeding 275 kPa (2.8 kp/cm²) absolute at a temperature of 37.8°C and certain other substances as shown in Chapter XIX of the IMO "Code for the Construction and Equipment of Ships carrying liquefied gases in bulk" maintained in liquid form by compression or refrigeration or a combination of compression and refrigeration.

4.3.4 FLASH POINT

means the lowest temperature at which a liquid gives off sufficient gas to form a flammable gas mixture near the surface of the liquid. It is measured in the laboratory in standard apparatus using a prescribed procedure.

4.3.5 INERT CONDITION

A tank is in an inert condition when the oxygen content of the atmosphere throughout the tank has been reduced to less than 8% by volume by the addition of inert gas.

4.3.6 INERT GAS

means a gas or a mixture of gases containing insufficient oxygen to support the combustion of hydrocarbons.

4.3.7 FLAMMABLE

means a material capable of being ignited and of burning. For the purposes of this guide the terms "flammable" and "combustible" are synonymous.

- 4.3.8 APPROVED EQUIPMENT means equipment of a design that has been tested and certified for use under given hazardous conditions and approved by an appropriate authority. The authority should have certified the equipment as safe for use in a specified hazardous atmosphere.
- 4.3.9 SPONTANEOUS COMBUSTION

means the ignition of material brought about by a heat producing (exothermic) chemical reaction within the material itself without exposure to an external source of ignition.

4.3.10 SELF-IGNITION

means the ignition of combustible material, without initiation by spark or flame, when the material has been raised to a temperature at which self-sustaining combustion occurs.

- 4.3.11 VOLATILE CARGO means cargo having a flash point below 60°C (140°F) as determined by the closed cup method of test.
- 4.3.12 ULLAGE means the amount that a partially filled tank lacks being full.
- 4.3.13 ULLAGE PORT means the opening in the tank lid to take the ullage.
- 4.3.14 GAUZE SCREEN means a portable or fitted device incorporating one or more corrosion resistant wire woven fabrics of very small mesh used for preventing sparks from entering a tank or vent opening, or, for a short time, preventing the passage of flame. For the purposes of this guide the terms "gauze
 - screen" and "flame screen" are synonymous.
 - 4.4 Classification and other certificates
 - 4.4.1

4.4.2

All tankers entering any of the ports under the jurisdiction of the ports authority of any member state of the Gulf Cooperation Council shall be fully classed 100 A-1 or the equivalent of a recognized Classification Society approved by the relevant Ports Authority. All tankers must comply with the International Covention for the Safety of Life at Sea, 1974 (effective May 1980).

The construction of any vessel carrying dangerous chemicals or liquefied gases shall comply with the IMO Code for the construction of such vessels; notwithstanding the generality of the foregoing, the Port Management shall have the discretion to accept ships carrying such cargoes which do not conform to that Code provided they hold a valid certificate for the carriage of those goods issued by the competent authority of the country of registration.

4.5 Arrival

- 4.5.1 The Master of any tanker or the ship's agent shall give notice of intended arrival as far in advance as is practicable to the Port Management stating:
 - a) the estimated time of arrival;
 - b) the quantity and nature of cargo to be discharged or loaded;
 - c) the flash point of any cargo to be discharged;
 - d) any other relevant information concerning special conditions, difficulties, defective equipment or gear which could create special hazards when mooring and unmooring or handling the cargo;
 - e) if the vessel is in ballast, whether gas-free or not, or whether in an inert condition.
- 4.6. Port entry
- 4.6.1 No tanker shall enter a port under the jurisdiction of the concerned Authority without express permission of the Port Management.
- 4.6.2 Signals
- 4.6.2.1 The vessel shall display the approriate warning flag or lights upon entering the port.
- 4.6.3 Tug assistance
- 4.6.3.1 No tug shall come alongside to assist a tanker to berth until all cargo and ballast water tanks and ullage and sighting ports have been closed or unless the cargo tanks are gas-free.

4.7 Berthing

- 4.7.1 No tanker shall drop anchor within the port or berth at any place other than that allocated by the Port Management.
- 4.7.2 If required, the Port Management shall indicate the minimum safe distance to be kept between a tanker and any other vessel at anchor or at berth.
- 4.7.3 No craft shall come alongside a tanker without permission of the terminal operator or Port Management. Such craft shall comply with safety precautions to prevent all sources of ignition and shall supply proper fendering.

- 1.1.1 Mooring and unmooring
- 4.7.4.1 The master shall be responsible for the safe mooring of the vessel.
- 4.7.4.2 The Master shall ensure that the full engine power shall be available for manoeuvring in and out of the berth. Manoeuvres with other than full engine power available shall only be performed with the consent of the Port Management.
- 4.7.4.3 The Port Management may decline to moor a tanker with unsatisfactory mooring equipment.
- 4.7.4.4 The moorings should be regularly monitored by the officer on duty on board and by a competent person from the shore. Tension winches on the vessel shall be on manual brake.
- 4.7.4.5 Upon completion of loading or discharging and the disconnection of hoses, the vessel will be unmoored and, if using Early Departure Procedures, the Master should make ready to depart as soon as possible. Otherwise, vessels are to await cargo and port clearance documents while lying in stream.
- 4.7.4.6 When the assistance of small harbour craft is provided, the craft, Master and crew thereof shall, in the performance of such services as they render to the vessel, become and be deemed to be the agents and servants of the owners and/or charterers of the vessel assisted. The Port Management shall not be responsible and shall be held harmless from all liability for any damage that may be done by or to the craft or its crew while assisting another vessel, whether occasioned by any act of omission of the craft or its crew or by any defect or inadequacy of the craft or the craft's machinery or gear. This shall not give the tanker's Master the right to detain such craft for duties other than mooring, unmooring or hose work nor shall this prevent the craft from being reassigned during mooring, unmooring or hose work.
- 4.7.5 HOSES
- 4.7.5.1 No hose for loading or discharging shall be connected until safe mooring has been secured.
- 4.7.5.2 The terminal operator shall supervise the connecting and disconnecting of cargo and bunker hoses by the tanker's crew. The loading or discharging operation shall be performed to the complete satisfaction of the terminal operator.
- 4.7.5.3 The Master shall inspect and ensure to his satisfaction that cargo loading hoses or arms are in good condition.
- 4.7.5.4 The Master shall ensure that the oil loading line connection between the shore and the vessel is inspected and is made to his satisfaction.
- 4.7.6 Authorized Persons
- 4.7.6.1 The Master shall permit an Authorized Person to come on board at any time while in port to inspect the state of the vessel, its tanks and the condition of the cargo, the vessel's documents and papers required and listed in Part 1 of these regulations, (including the oil register), and to ascertain whether these safety regulations are being observed.

4.8 Fire precautions

- 4.8.1 All proper precautions shall be taken on a tanker for the prevention of accidents by fire or explosion.
- 4.8.2 The Master of a vessel shall be responsible for ensuring that all steps are taken to avoid risk of ignition in any cargo compartment, pump room, deck space or where concentration of flammable gas may be expected. All practicable steps shall also be taken to avoid the formation of such flammable gas concentrations by closing tank and ullage ports or by any other means at his disposal.
- 4.8.3 The prohibition of smoking, use of naked lights, and carrying of matches or lighters on the person shall be rigorously enforced both on board and ashore in hazardous areas which are to be clearly marked. Danger warning signs and no smoking signs shall be prominently displayed, written in both English and Arabic, and adequately illuminated by night. Ship's fire safety orders shall be fully observed, particularly in respect of living accommodation and quarters, by both ship and any shore personnel authorized to come aboard. No galley fires shall be used without permission in writing from the terminal operator.
- 4.8.4 Fire fighting equipment
- 4.8.4.1 Fire fighting equipment both on board and ashore shall be kept ready for immediate use at all times while the vessel is at the berth. Vessel's fire hose will be uncoiled and laid out, one forward and one aft, unless vessel's monitors can be substituted for this requirement.

4.8.5 Electrical equipment

4.8.5.1 All electrical equipment both fixed and portable used on board and ashore shall be of an approved type. Portable equipment shall be carefully examined for possible defects before being used. Power cables to portable equipment shall be of an approved standard and be disconnected before commencement of handling operations.

4.8.6. RADIO EQUIPMENT

- 4.8.6.1 Port rules concerning use of radio VHF equipment shall be carefully observed (Part 1, 6.13 and Part 2,4).
- 4.8.6.2 Portable VHF and UHF radio sets shall not be used on deck during cargo handling unless specifically permitted by the Port Management.

- 4.8.7.1 The funnel of a tanker shall be fitted with spark arresters, failing which every precaution shall be taken to prevent sparks escaping from the funnel.
- 4.8.7.2 No repair or maintenance work of any kind involving the risk of sparks or other means of ignition shall be undertaken on a tanker at the berth without written permission of the Port Management.
- 4.8.7.3 Instruments made of iron, steel or other materials capable of causing sparks shall not be used for the purpose of opening or closing the hatches of a hold or the lids, screw caps, ullage plugs, sighting port and other coverings of a tank or in connection with any of the following operations.
 - a) loading, discharging or transhipping hazardous materials from or into a tank;
 - b) cleaning or gas-freeing a tank;
 - c) discharging or loading ballast water from or into a tank.
 - 4.8.8. Spontaneous combustion
 - 4.8.8.1 No cotton waste, rags, canvas, jute sacking or other similar absorbent material shall be stowed or left lying in close proximity to oil or other material liable to spontaneous combustion.
 - 4.8.9 Self-ignition
 - 4.8.9.1 All measures shall be taken to prevent any petroleum product liable to self-ignition coming into contact with hot surfaces.
 - 4.8.10 Engines at the ready
 - 4:8.10.1 While the tanker is berthed at a terminal, the main engines and all other machinery essential for manoeuvring shall be maintained at the ready. All navigational equipment shall be tested prior to sailing, or shifting to another berth or anchorage.
- 4.8.11 Emergency towing-off wires
- 4.8.11.1 Towing-off wires of adequate strength and condition must be made fast to bollards on the tanker, forward and aft, and their eyes run out and maintained at or about the waterline. The wires must be over the offshore side.
- 4.8.11.2 In order that sufficient wire can be put out to enable the tugs to tow effectively, enough slack must be retained between the bollard and chock and prevented from running out by a ropeyarn or other easily broken means.
- 4.8.12 Earthing
- 4.8.12.1 All connecting pipe lines or hoses shall, whilst rigged, be adequately and continuously earthed and kept constantly under supervision.

4.9. Emergency plan

4.9.1 Immediately on arrival the Master and terminal operator shall agree on an emergency plan which will outline the procedure and responsibilities to be adopted in the event of an emergency. The location and means of summoning specialist emergency services and equipment shall be clearly set out.

4.10 Loading/discharging plan

- 4.10.1 The master shall provide the terminal operator with the following information:
 - A/ Prior to loading:
 - a) details of last cargo carried, method of tank cleaning (if any) and state of the cargo tanks and lines;
 - b) maximum acceptable loading rates and topping up rates;
 - c) maximum acceptable pressure at the ship/shore cargo connection during loading;
 - d) cargo quantities acceptable from the terminal nominations;
 - e) proposed disposition of nominated cargo and preferred order of loading;
 - f) maximum acceptable true vapour pressure (where applicable);
 - g) maximum acceptable cargo temperature (where applicable);
 - h) proposed method of venting;
 - i) disposition, composition and quantities of ballast and time required for discharge;
 - j) quantity and disposition of slops.
 - B/ Prior to discharging
 - a) cargo specifications
 - b) flash points (where applicable) of products and their temperatures upon arrival particularly when the cargo is non-volatile;
 - c) cargo quantity or quantities loaded and disposition in ship's tanks,
 - d) quantity and disposition of slops;
 - e) any unaccountable changes of ullages in ship's tanks since loading;
 - f) water dips in cargo tanks (where applicable);
 - g) preferred order of discharge from ship's tanks;
 - h) maximum attainable discharge rates and pressures.

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The terminal operator shall provide the Master of the vessel with the following information.

- A/ Prior to loading:
 - a) cargo specification:
 - b) flash points (where applicable) of products and their estimated loading temperatures, particularly when the cargo is non-volatile;
 - c) nominated quantity or quantities of cargo to be loaded;
 - d) any other limitation;
 - e) emergency stop procedure.

4.10.3 Communication between terminal and vessel

4.10.3.1 Before loading or discharging commences, a reliable communication system shall be established and tested for control of the operations. A secondary stand-by system should also be established and agreed. Allowance should be made for the time required for action in response to signals.

These systems should include signals for;

"Stand by"

"Start loading" or "Start discharging"

"Slow down"

"Stop loading" or "Stop discharging"

"Make an emergency stop."

- 4.10.4 On the basis of the information so exchanged a detailed loading/discharging plan shall be agreed between the vessel and the terminal operator to cover the following.
 - a) The sequence in which ship's tanks are to be loaded/ discharged, taking into account:
 - i) ship and shore tank change over;
 - ii) avoidance of contamination of cargo;
 - iii) pipelines clearing for loading/discharging;
 - iv) other movements or operations which may affect flow rates;
 - v) limiting stresses and trim of the tanker.
 - b) The initial and maximum loading/discharging rates, topping off rates and normal stopping times, having regard to:

- i) the nature of the cargo to be loaded;
- ii) the arrangement and capacity of the ship's cargo lines and gas venting system;
- iii) the maximum allowable pressure and flow rate in the ship/shore hoses or loading arms;
- iv) precautions to avoid accumulation of static electricity;
- v) any other flow control limitations.
- c) The method of tank venting to avoid or reduce gas emissions at deck level, taking into account:
 - i) the true vapour of the cargo to be loaded;
 - ii) the loading rates;
 - iii) atmospheric conditions;
 - iv) emergency stop procedures.
- 4.11 Precautions before cargo handling
- 4.11.1 Doors and ports amidship accommodation
- 4.11.1.1 All external doors and ports in the amidships accommodation shall be kept closed during loading/discharging and every effort shall be made to prevent entry of gas into this accommodation.
- 4.11.2 Doors and ports after accommodation
 - a) all doors, ports and openings in the after accommodation that overlook the cargo loading/discharging deck shall be kept closed;
 - b) portholes and doors downwind of loading/discharging deck which might take in gas shall be closed. If requested by the terminal operator such other action as is necessary shall be taken to ensure that no hydrocarbon vapour shall enter a hazardous area of the vessel.
- 4.11.3 Ventilators

4.11.2.1

- 4.11.3.1 Ventilators shall be kept suitably trimmed at all times with regard to tank vents and prevailing wind conditions to prevent entry of flammable gas.
- 4.11.4 Central air conditioning intakes
- 4.11.4.1 Any air conditioning or fresh air intakes which might take in gas shall be closed. That is, intakes within the range of gas releases from cargo tank openings and/or venting points shall be closed.
- 4.11.5 Window type air conditioning units
- 4.11.5.1 All window type air conditioning units shall be kept disconnected during the cargo handling operations.

- 4.12 Loading of cargo
- 4.12.1 The flow of cargo shall be controlled by the terminal operator in accordance with the loading plan. Topping off shall be effectively controlled to prevent overflow or damage to pipes, fittings or valves.
- 4.12.2 If a stand-by period is required for shutting off pumps this shall be established before loading commences.
- 4.13 Supervision
- 4.13.1 The Master shall ensure that there is a responsible ship's officer and sufficient crew on board to supervise cargo operations. The terminal operator shall ensure adequate supervision ashore and maintain close communications with the vessel.
 - 4.14 Incidents
 - 4.14.1 Any leak, spillage, incident or accident shall be reported immediately to the senior officer on duty and if necessary all operations shall be immediately stopped until appropriate remedial action has been taken.
 - 4.15 Ballast and slops
 - 4.15.1 The Master of a vessel shall ensure that no contaminated ballast water or cargo slops are discharged except into an approved reception facility.
 - 4.15.2 The vessel shall be responsible for any and all cleaning costs in the event of release of oil or oily ballast water at either the berth or in the anchorage area. In this connection the Master will be requested to sign a letter along the lines of the specimen in Appendix C.
 - 4.16 . Tank cleaning and gas-freeing
 - 4.16.1 The Master of a vessel carrying or having carried fluid hazardous materials shall ensure that no gas-freeing, tank cleaning (crude oil washing included) or purging with inert gas is carried out within the port without the permission of the Port Management and then only at such berth or place as may be designated.
 - 4.17 Special purpose tankers
 - 4.17.1 Gas tankers
 - 4.17.1.1 Additional precautions shall be taken appropriate to the nature of the cargo, paying special attention to thermal stress, automatic controls and protective clothing.
 - 4.17.2 Chemical tankers
 - 4.17.2.1 Additional precautions shall be taken appropriate to the nature of the cargo, paying special attention to segregation and contamination.

- 4.11.6 Openings in cargo tanks
- 4.11.6.1 During the handling of hazardous materials into tanks not gas-free, and while ballasting after the discharge of volatile cargo, all cargo tank lids, ullage plugs and sighting port should be closed and secured.
- 4.11.6.2 Tank lids of cargo tanks not gas-free should normally be kept closed unless gas-freeing is done with permission of the Port Management.
- 4.11.7 Sighting and ullage ports
- 4.11.7.1 During any of the cargo and ballast handling operations, sighting and ullage ports should be kept closed wherever possible. When open for operational purposes, the opening should be protected by gauze screens. The gauze screens must be kept clean and in good condition.
- 4.11.8 Cargo tank vent outlets
- 4.11.8.1 The cargo tank ventilation system must be set for the operations concerned, agreed and signed by both Master and terminal operator and the outlets should be protected by gauze screens.
- 4.11.9 Cargo system alarms and safety trips
- 4.11.9.1 All cargo system alarms and safety trips should be tested and in working order prior to cargo handling.
- 4.11.10 Equipment
- 4.11.10.1 All pipes, valves, hoses, and other apparatus, used in the operation shall be suitable for the purpose, in good condition, and as far as practicable free from leakage, and, when not forming part of the permanent fittings of the tanker, shall whilst rigged be capable of being disconnected without delay
- 4.11.10.2 Before either routine or emergency disconnection of the couplings, the hoses or arms should always be drained, purged or isolated, as appropriate, to prevent oil spillage.
- 4.11.10.3 Pipe lines including cargo and bunker connections, and stern discharge line if fitted, not in use shall be securely blanked or isolated as appropriate.
- 4.11.10.4 Before loading or discharging all pipeline valves not in use shall be closed and all drip pans and deck scuppers shall be in position and plugged except where refrigerated gases or corrosives are being handled when they may be kept open provided that ample supply of water is avialable.
- 4.11.10.5 Sea valves and overboard discharge valves shall be closed, and if necessary lashed, and monitored during cargo operations to ensure that there is no oil escape or leak.

- 4.17.3 Combination vessels
- 4.17.3.1 A combination vessel which has carried oil as her last cargo shall be subject to the special Regulations for tankers unless the Master can produce evidence that the tanks are clean and gas-free.
- 4.17.4 Bunkering vessels
- 4.17.4.1 When operating within the jurisdiction of any G.C.C. Ports Authority fuel bunkering vessels shall be subject to the same regulations that apply to tankers.
- 4.18 Supply of bunker fuel
- 4.18.1 Before commencement of delivery of bunkers a plan shall be agreed between the supplier and recipient showing:
 - a) the quantity of bunkers required;
 - b) the type and quality of the bunkers required;
 - c) the maximum rate of pumping;
 - d) the stopping time to avoid overflow;
 - e) the sequence of the tanks and the change over, if required;
 - f) the connections of the hoses
 - g) the safety precautions;
 - h) the communications and signals for the bunkering operations.
- 4.19 Supply of bunker prohibited
- 4.19.1 The supply of bunkers is prohibited during:
 - a) the loading and discharging of dangerous goods and hazardous materials;
 - b) the embarking and disembarking of passengers to or from passenger vessels;
 - c) the loading or discharging operations of tankers with volatile cargo;
 - d) the ballasting operation of tankers after discharging a volatile cargo;
 - or at any time on gas tankers loaded with liquefied gas of a type with a low flash point.
- 4.20 Bunker fuel supply register
- 4.20.1 A vessel licensed to supply bunker fuel to ships in port shall keep a register recording:
 - a) the quantity of fuel taken on board the bunkering craft and the times of loading;
 - b) the quantity of fuel supplied to each ship and the times of the operation;
 - c) the name of every ship supplied with fuel and the anchorage or berth at which the ship was supplied.

- 4.21 Safety Check List
- 4.21.1 The Master of a tanker, bunker supply vessel or vessel receiving bunkers shall be supplied with a Safety Check List similar to that shown in Appendix A and no operations shall commence before all items have been checked in a joint inspection with the terminal operator, and duly signed by both parties. Any costs or expenses arising from delay caused by the vessel not conforming to these Regulations shall be for account of the vessel.
- 4.21.2 The Safety Check List should be presented to the Master with an accompanying letter along the lines of that produced in Appendix B.
- 4.22 Recommendations to Master concerning hazards while loading crude oils containing hydrogen sulphide.

IMPORTANT NOTE:

Persons overcome by hydrogen sulphide must be promptly moved out of the gaseous area and immediately given artificial respiration.

If your cargo nomination includes oil containing more than 20 parts per million hydrogen sulphide by weight in liquid, the vapours vented from this cargo might contain lethal concentrations of hydrogen sulphide gas. This hazard is greatest while topping up the last ten feet of any tank.

If the instructions from your owners do not include procedures for handling high H2S content crude oils, we offer the following recommendations to lessen the H2S hazard on board your ship:

- 1. Use the mast venting system, if so equipped, to vent all vapours.
- 2. Provide a watchman with the sole duty of standing in a safe place to observe everyone working on deck. This watchman should carry an atmosphere supplying respirator and should be trained in resuscitation.
- 3. Make frequent gas tests for hydrogen sulphide on deck, in the accommodation area, the engine room and at all intakes. Recommendations to Master concerning hazards while loading crude oils containing hydrogen sulphide (page 2).
- 4. If a concentration in excess of 50 parts per million H2S in the air is found in any location more than ten feet from any vent or tank opening, the terminal operator should be notified. For your information, terminal personnel will stop loading immediately if concentration of hydrogen sulphide is greater than 50 parts per million in the air.
- 5. Ensure that no one on deck stands downwind of sampling or gauging hatches or other deck level vent openings.
- 6. Anyone working within ten feet of an open deck vent, hatch or ullage port, during the last ten feet of filling of that compartment or tank, shall wear an atmosphere supplying respirator. Sampling or gauging at open hatches or ports after all loading has stopped may be conducted without special respiratory equipment in the absence of any vapours.
- 7. Avoid loading through the pump-room to reduce the possibility of H2S contamination of the pump-room atmosphere.
- 8. Ensure that anyone entering the pump-room first starts the ventilation system, tests the pump-room atmosphere for hydrogen sulphide, and has a man standing by.

The Port Management assumes no liability in respect of your loading H2S bearing crude oil other than that arising out of possible negligence on the part of its employees engaged in such loading operations.

REGULATIONS FOR PORT SAFETY

Recommended memorandum to Master when loading crude oils containing hydrogen sulphide.

Date

То:	Captain
	Vessel
	Berth

......

Your cargo nomination includes crude oil containing hydrogen sulphide. Breathing the vapours vented from this cargo could be hazardous. Crude oil shipped at will often have a high concentration of hydrogen sulphide. Concentration of H2S in the crude oil liquid will often be between 70 and 100 parts per million and will at times reach 150 to 175 parts per million. Vapours formed during loading of these crudes can contain deadly concentrations of thousands of parts per million H2S content.

We recommend you review the instructions issued by your owners in regard to this subject. If the loading of H2S bearing crude oil is not covered by your instructions, you may refer to the attached extract from the IOTTS G Safety Guide.

The Port Management assumes no liability, with respect to your loading of H2S bearing crude oil, other than that arising out of possible negligence on the part of its employees engaged in such loading operations.

> Terminal Operator

SHIP/SHORE SAFETY CHECK LIST

VESSEL

BERTH _____

INSTRUCTIONS FOR COMPLETION:

The safety of operations requires that all questions should be answered affirmatively after checking by both ship and terminal representatives. If an affirmative answer is not possible, the reason should be given and agreement reached upon appropriate precautions between the ship and the terminal.

_		Ship Representative	Terminal Representative	Remarks
3	Is the ship securely moored?			
2				L
3.	Is there safe access between ship and shore?			
4.	Is the ship ready to move under its own power?			
5.	is there an effective deck watch in attendance on board and			
	adequate supervision on the terminal?		·	
6.	is the agreed ship/shore communication systems operative?			
7,	Have the procedures for cargo, bunker and ballast handling			
	been agreed?			
8.	Has the emergency shut down procedure been agreed?			
9.	Are fire hoses and fire fighting equipment on board and shore			
	ready for immediate use?			
10.				
	properly rigged?			
11.				
	both on board and ashore?	1 1		
12.				_
	discharge line, if fitted, blanked?			
13.				
	and lashed?			
14.	Are all cargo and bunker tank lids closed?			
15.	Is the agreed tank venting system being used?			
6.	Are hand torches of an approved type?			
7.	Are portable VHF/UHF transceivers of an approved type?			
8,	Are the ship's main radio transmitter aerials earthed?			
9	Are electric cables to protable electrical equipment			
	disconnected from power?			
O.	Are all external doors and ports in the amidships		1	
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1.				
•••	Are all doors and ports in the after accommodation leading into or overlooking the tank deck closed?			
2.	Are all conditioning int the bit t		4	
••	Are air conditioning intakes which may permit the entry			
3.	of petroleum gas closed?			
4.	Are window-type air conditioning units disconnected?			
4. 5.	Are smoking requirements being observed?			
σ,	Are the requirements for the use of galley and other			
	cooking appliances being observed?		[
9.	Are naked light requirements being observed?	· · · · · ·		
	valion:			
RCH	n stivn.			

we have checked win each other the items listed on this check list in the course of a joint inspection, and have satisfied ourselves that the entries we have made are correct to the best of our knowledge.

_ Signature _

Signature .

For Ship Name _____ Rank _____ For Teminal Name _____ Position _____

Name _____ Position . Time _____ Date ____

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 Time and date

 Acknowledgement of repetitive checks '
 Initials: For ship

 For terminal
 Initials: Provide the ship

Specimen letter for issue to Masters of tankers at terminals

Terminal.....

Date.....

The Master S.S./M.V.....

PORT.....

Dear Sir,

SAFETY REQUIREMENTS

Responsibility for the safe conduct of operations on board your ship while at our terminal rests with you as master. Nevertheless, since our personnel, property and other shipping may also suffer serious damage in the event of accident aboard your ship, we wish, before operations start, to seek your full co-operation and understanding on the safety requirements set out in the Ship/Shore Safety Check List.

These safety requirements are based on safe practices widely accepted by the oil and tanker industries. We therefore, expect you and all under your command to adhere strictly to them throughout your stay alongside this terminal. We, for our part, will ensure that our personnel do likewise and co-operate fully with you in the mutual interest of safe and efficient operation.

In order to assure ourselves of your compliance with these safety requirements, we shall, before the start of operations and thereafter from time to time, instruct a member of our staff to visit your ship. After reporting to you or your deputy he will join one of your officers in a routine inspection of cargo decks and accommodation spaces.

If we observe any infringement on board your ship of any of these safety requirements, we shall bring this immediately to the attention of yourself or your deputy for corrective action. If such action is not taken in a reasonable time we shall adopt measures which we consider to be the most appropriate to deal with the situation and we shall notify you accordingly.

If you observe any infringement of these requirements by terminal staff, whether on the jetty or on board your ship, please bring this immediately to the notice of our representative who is nominated as your contact during your stay in port. Should you feel that any immediate threat to the safety of your ship arises from any action on our part, or from equipment under our control, you are fully entitled to demand an immediate cessation of operations.

The senior terminal representative on duty is

Telephone number

IN THE EVENT OF CONTINUED OR FLAGRANT DISREGARD OF THESE SAFETY REQUIREMENTS BY ANY SHIP, WE RESERVE THE RIGHT TO STOP ALL OPERATIONS AND TO ORDER THAT SHIP OFF THE BERTH FOR APPROPRIATE ACTION TO BE TAKEN BY THE CHARTERERS AND OWNERS CONCERNED.

Please acknowledge receipt of this letter by countersigning the attached copy.

Signed:

• • • • • • • • • • • • • • • • • •

Terminal operator

Receipt of this letter is acknowledged

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Signed:

Master

S.S./M.V.....

Date ... Time

Specimen letter

PORT MANAGEMENT

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Port of.....

Date

Master S.S./M.V.

Dear Sir,

It is your responsibility as Master to ensure that no oil is pumped or spilled overboard from your ship in the vicinity of the Port's terminal area. In the event of any spillage or loss of oil from your vessel as the result of any act or omission of the vessel, such as but not limited to, pumping of oily water overside from ballast or bilge, or oil spill during loading, the vessel shall be responsible for all costs and expenses of cleaning and for any damages to property or injury to persons resulting from such spillage or oil loss.

APPENDIX C - Specimen letter (Page 2)

The Port Management reserves the right to take all reasonable measures to clean up any resulting pollution or contamination on land or sea, but only as a contractor acting on behalf of your vessel and her owner, and will charge the vessel for all costs and expense incurred thereby.

Please sign the attached duplicate of this notice, acknowledging receipt of same.

PORT MANAGEMENT

By.....

ACKNOWLEDGED:

S.S./M.V.....

DATE:HOUR.....

REGULATIONS FOR PORT SAFETY

5. LIST OF VIOLATIONS AND FINES

5.1 Any person contravening any of the provisions of these Regulations shall be guilty of an offence and be liable to a penalty imposed by the respective Ports Authority within whose jurisdiction the offence took place. The amount of the fine shall be not less than the minimum and not exceeding the maximum shown hereafter.

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	General Safety Regulations pertaining to dangerous goods		Emirate Dirham		Bahraini Dinar		Saudi Riyal		Omani Riyal		Qatary Riyal		aiti r
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
2.1.1	Vessels or persons bringing dangerous goods into port not in compliance with IMDG Code and without written notification		5000	50	500	500	5000	50	500	500	5000	100	500
2.2	Persons not providing advance information in the prescribed manner	100	1000	10	100	100	1000	10	100	100	1000	25 [•]	100
2.4	Vessels or vehicles not displaying the prescribed signals	500	5000	50	500	500	5000	50	500	500	5000	25	100
2.7	A Master not arranging an emergency procedure	500	5000	50	500	500	5000	50	500	500	5000	100	250
2.8	Persons not taking the prescribed fire precautions	500	5000	50	500	500	5000	50	500	500	5 0 00	100	250
2.9	Master or persons not providing watchmen or safety barriers	500	5000	50	500	500	5000	50	500	500	5000	100	250

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	DIVISION_2 (Continued)				Bahraini Dinar		Saudi Riyal		ni	Qatary Riyal		Kuwa Dinai	
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
2.11 .	Master or persons not complying with the prescribed Regulations for safe handling of dangerous goods	500	5000	50	500	500	5000	50	500	500	5000	100	500
2.12	Master or berth operator not providing for the safety of personnel as prescribed	500	5000	50	500	500	5000	50	500	500	5000	100	250
2.16 2.17	Persons not ensuring that vehicles or harbour craft comply with the Safety Regulations	500	5000	50	500	500	5000	50	500	£000	V 500	25	100
	DIVISION 3 Special Safety Regulations pertaining to dangerous goods	•											
3.1	Special purpose built vessels carrying dangerous goods not in conformity with the prescribed Regulations	500	5000	50	500	500	5000	50	500	500	5000	100	500

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	DIVISION 3 (Continued)			Bahraini Dinar		Saudi Riyal		Omani Riyal		Qatary Riyal		Kuwa Dinar	
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
3.2	Vessels carrying or persons hand- ling IMGD Code Class I goods other than in the prescribed manner	500	5000	50	500	500	5000	50	500	500	5000	100	250
3.3	Master or persons responsible for carrying, packing, labelling or handling containers and not complying with the Safety Regulations	500	5000	50	500	500	5000	50	500	500	5000	25	50
•	DIVISION 4 Special Safety Regulations pertaining to tankers												
4.4	Tankers not complying with classification society requirements or other certificates and documents	100	1000	10	- 100	100	1000	10	100	100	1000	10	100
4.5	Tankers not giving required information	100	1000	10	100	100	1000	10	100	100	1000	10	100
4.6	Tankers entering port without permission	500	5000	50	500	500	5000	50	500	500	5000	50	500

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	DIVISION 4 (Continued)		Emirate Dirham		Bahraini Dinar		Saudi Riyal		Omani Riyal		Qatary Riyal		aiti T
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
4.6.2	Tankers not displaying required signals	500	5000	50	500	500	5000	50	500	500	5000	50	500
4.7	Tankers not observing berthing regulations	500	5000	50	500	500	5000	50	500	500	5000	50	500
4.8	Tankers not observing fire precautions	500	5000	50	500	500	5000	50	500	500	5000	50	500
4.9	Master not arranging emergency plan	500	5000	50	500	500	5000	50	500	500	5000	50	500
	Terminal operator, where a licensee, not observing safety precautions	500	5000	50	500	500	5000	50	500	500	5000	50	500
4.10	Master, or terminal operator where a licensee, not preparing loading/ discharging plan	100	1000	10	100	100	1000	10	100	100	1000	10	100
4.11	Persons not observing precautions before cargo handling.	500	5000	50	500	500	5000	50	500	500	5000	50	500

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	DIVISION 4			· · · · ·									
	(Continued)	Emir Dirhi			Bahraini Dinar		Saudi Riyal		ni l	Qatary Riyal		Kuw Din a	
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
4.13	Master, or terminal operator where a licensee, not providing responsible supervision	500	5000	50	500	500	5000	50	500	500	5000		500
4.14	Person not reporting incident	500	5000	50	500	500	5000	50	500	500	5000	50	500
4.15	Master not using special dirty ballast or slops reception facilities	500	5000	50	500	500	5000	50	500	500	5000	50	500
4.16	Master not observing regulations concerning tank-cleaning and gas-freeing	500	5000	50	500	500	5000	50	500	500	5000	50	500
4.18	Supplier or recipient of bunkers not observing the regulations or agreeing a loading plan	500	5000	50	500	500	5000	50	500	500	5000	50	500
4.19	Supplier or recipient of bunkers not observing the prohibitions	500	5000	50	500	500	5000	50	500	500	5000	50	500

	DIVISION 4 (Continued)			Bahraini Dinar				Omani Riyal		Qatary Riyal		Kuwa Dinar	
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.,	Max.	Min.	Max.
.20	Masters of bunker supply vessels not keeping a supply register	500	5000	50	500	50 0	5000	50	500	500	5000	50	500
.21	Masters not observing and signing safety check list	500	5000	50	500	500	5000	50	500	500	5000	50	500

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6. EXEMPTIONS AND CANCELLING OF FORMER REGULATIONS AND CIRCULARS

- 6.1 Exemptions
- 6.1.1 The concerned Authority in each country is entitled to grant exemptions, amend, alter, suspend or issue Rules and Regulations in the interests of improved discipline, better performance and efficiency of the ports under its supervision.
- 6.2 Cancelling
- 6.2.1 All former Circulars and Regulations contradicting these Rules and Regulations are hereby cancelled.

SPECIAL AMENDMENTS

7.1

7.

The concerned authority is entitled to carry out any necessary amendments to the regulations for port safety as may be appropriate to the requirements of each individual port.

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