1995

The Use of Targeting in Port State Control

Mary E. Landry
University of Rhode Island

THE USE OF

TARGETING

IN PORT STATE CONTROL

by

MARY E. LANDRY

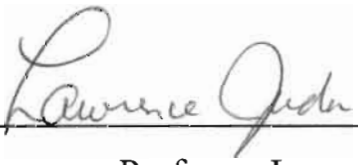
A paper submitted in partial fulfillment of the requirements for the degree of Master of Marine Affairs

University of Rhode Island

1995

Major Paper

Master of Marine Affairs

Approved 

Professor Lawrence Juda

University of Rhode Island

1995

ACKNOWLEDGMENTS

I would like to express my sincere gratitude to Professor Larry Juda for his guidance and support with this major paper. In spite of being very busy, he provided timely feedback and a quick turn around on my rough drafts, both of which were critical in completing my work. Professor Juda was also an exceptional instructor. I am indebted to him, and other members of the marine affairs department, for providing me with an improved understanding of marine affairs issues. I hope to walk away with an improved ability to serve the Coast Guard and the public, as a result of the education provided here at the University of Rhode Island.

I am also grateful to the Coast Guard for affording me the opportunity to break away after 15 years of service, and earn this marine affairs degree. In particular, I would like to thank Commander Joe Saboe of Coast Guard Headquarters Compliance and Enforcement Branch for all his help. He has done a tremendous job in developing the U.S. Coast Guard's Port State Control initiative, and in spite of his busy schedule, Joe was always willing to support me in my research.

Finally, I thank my family. My husband, Mark and my children, Michael and Katelyn who allowed me the time I needed for this project. They became accustomed to the many hours spent in study. They will be as happy as I am, to return to the "old routine."

TABLE OF CONTENTS

Acknowledgments.....iii

Table of Contents.....iv

List of Tables..... vi

List of Acronyms..... vii

Chapter 1 INTRODUCTION.....1

Chapter 2 THE LEGAL FRAMEWORK.....6

2.1 Maritime Claims to Ocean Space.....7

2.2 The Vessel as an Extension of Flag State Territory.....13

2.3 The Treaties and Conventions.....21

Chapter 3 THE ENFORCEMENT REGIME.....32

3.1 Flag State Control.....35

3.2 Port State Control.....44

3.2.1 Paris Memorandum on Port State Control.....48

3.2.2 Port State Control Committee in the Asia Pacific Region.....52

3.2.3 Latin American Agreement on Port State Control.....53

3.2.4 The United States System of Port State Control.....53

3.3 Classification Societies.....57

Chapter 4 TARGETING.....62

Chapter 5 THE ROLE OF INDUSTRY.....71

Chapter 6 ANALYSIS.....77

Chapter 7 CONCLUSIONS.....87

ATTACHMENTS

1-5. Sample Certificates; Safety Equipment, Safety Construction, International Oil Pollution Prevention Certificate.....90

6. Statistics from 1993 Paris MOU.....91

7. Tokyo MOU 1994 Results.....92

8. USCG Report to Congress, April 1995.....93

BIBLIOGRAPHY.....94

LIST OF TABLES

TABLE

1. True Nationality of Major Open Registry Fleets.....17

2. Tonnage Distribution of Major Open Registry Fleets.....18

3. Status of IMO Conventions, 1 May 1994.....24

4. Daily Running Expenses Under Different Flags.....40

5. Comparison of U.S. and Foreign Wage Costs.....41

LIST OF ACRONYMS

EEZ	Exclusive Economic Zone
FOIA	Freedom of Information Act
FOC	Flag of Convenience
GAO	General Accounting Office
IACS	International Association of Classification Societies
ICJ	International Court of Justice
ILM	International Legal Materials
ILO	International Labor Organization
IMCO	International Maritime Consultative Organization
IMO	International Maritime Organization
LLC	International Load Line Convention
MARPOL	International Convention on Prevention of Pollution from Ships
MEPC	Marine Environmental Protection Committee
MOU	Memorandum of Understanding
MSC	Marine Safety Committee
OCIMF	Oil Companies International Marine Forum
P & I	Protection and Indemnity
PSC	Port State Control
PSIX	Port Safety Information Exchange
SIRE	Ship Inspection Report Exchange
SIRENAC	Systeme d'Information Relatif auz Navires Controles
SOLAS	International Convention on Safety of Life at Sea
STCW	International Convention on Standards of Training, Certification and Watchkeeping for Seafarers
UNCLOS	United Nations Conference on Law of the Sea
UNTS	United Nations Treaty Series

WFFS	World Fleet Forecast Service

CHAPTER 1 INTRODUCTION

World seaborne trade is expected to grow from 4.3 billion tons in 1993 to 5.53 billion tons in 2004.[1] This will be the highest volume of international seaborne trade ever recorded. The World Fleet Forecast Service (WFFS) projects the world fleet deadweight tonnage will increase from 634.3 million dwt in 1994 to 817.4 million dwt by the year 2004.[2] This level of maritime transportation will pose a tremendous challenge for ensuring safety of life and property at sea, as well as for the protection of the marine environment. At the same time, maritime transportation is critical to the world economy. Management of this enterprise requires a balance to be struck between facilitating commerce and ensuring safety and environmental protection.

There is a comprehensive regime which attempts to strike this balance in regulating the many aspects of shipping in the maritime community. The regime involves many actors including the flag State which registers the ships for maritime trade, the port State which provides a key part of the infrastructure in support of this trade, and international organizations such as the International Maritime Organization (IMO) which provide a forum for setting international standards of safety and environmental protection. Other actors include the many shipping entities such as insurers, brokers, owners, operators, and classification societies which act on behalf of flag administrations in performing

---

[1]United Nations Conference on Trade and Development, Review of Maritime Transport 1993. Trade and Development Board, United Nations 1994, p 10.

[2]Ibid, p. 24.

necessary surveys. These actors operate under a system which could be described in terms of "checks and balances." Each participant has a certain authority it exercises, and some authority overlaps. As these members carry out their oversight they may find that other participants in the shipping community are operating under a different interpretation of the standards, or worse yet, not employing a proper level of oversight. This represents a weak link in the comprehensive regime set up to maintain and oversee maritime transportation. The shortcoming requires an adjustment to the system of checks and balances. This needed adjustment has taken place and represents a "shift in the balance" in recent years which is worthy of examination.

Historically, the flag State has enjoyed the exclusive right to prescribe and enforce safety and pollution prevention standards aboard vessels flying its flag on the high seas.[3] When the vessel is navigating through another State's internal waters or is calling on a port under the jurisdiction of another State, the flag administration exercises concurrent jurisdiction with the coastal or port State.[4] This concurrent jurisdiction operates as a form of "checks and balances" with the flag State issuing documents attesting to the vessel's compliance with applicable regulations, and the port or coastal State examining these documents and "spot-checking" the vessel to ensure adequacy. However, a shift in the balance is occurring away from the flag State, and in favor of port States. As international conventions begin to embody the treaty law prescribing expanded

[3]1958 Geneva Convention on the High Seas, 450 UNTS, Entered into force on 30 September 1962, Articles 6 and 10.

[4]United Nations, The Law of the Sea, Official Text of the United Nations Convention on the Law of the Sea with Annexes and Index, (1983). Jurisdiction of the coastal State is outlined in Art. 25 of this convention, and jurisdiction and obilgations of the flag State are as outlined in Article 94.

jurisdiction for port and coastal States, the maritime community is operationalizing the new leverage. This is evidenced in two ways. First, the port State is extending its jurisdiction with regard to the scope of the examination (spot check) and level of oversight being performed on foreign vessels. Secondly, the method of sanctioning these vessels for violations of regulations is increasingly being levied by port States under the expanding port state control regime, rather than by the flag State which is legally the primary authority.

The new enforcement mechanism being employed is "targeting." Targeting is a process whereby the port State establishes criteria associated with substandard performance. From this criteria, the port State evaluates past performance of vessels entering its jurisdiction, and develops a "hit list" for increased scrutiny of substandard vessels which enter into the port States' jurisdiction. The identification of substandard performance can be based on the flag of registry, the vessel owner or operator, the vessel itself, or the classification society associated with the vessel being evaluated as needing increased scrutiny. Regardless, once listed, the signal is sent that the vessel is more likely to be substandard. Targeted vessels can anticipate delays prior to being allowed to operate in a port States' jurisdiction. Under this practice, the pendulum may have shifted from the main oversight being performed by the flag administration which registered the vessel, to the port State where the vessel trades.

This study will examine two separate, but related matters; (1) expansion of port State control through new treaties and international practice, and (2) the port State's use of

targeting to focus its attention on substandard performance. It will also outline and clarify the practice of targeting which has been employed under several regional port State control agreements throughout the world. This study will examine targeting as an economic sanction; in essence, a coercive measure using financial disincentives to discourage substandard performance in the maritime community. Targeting was not designed or developed as an economic sanction. Rather, it was marketed as a "risk management" tool employed by the port State to preclude substandard actors from operating in the port States' territory. The truth though, is that its function as an economic sanction is the very reason it is proving to be so effective. The need for integrity, adherence to international laws and treaties, and proper behavior, (doing what is right) all seem obvious , but the reality is that unless the system incorporates appropriate incentives for compliance (or disincentives for noncompliance), the regime will be unsuccessful. In the words of Professor Richard Goss, Professor of Maritime Economics,[5] the comprehensive regime for overseeing maritime transportation must meet three conditions to be successful:

- appropriate institutions
- appropriate regulations
- appropriate levels of enforcement

[5]Goss, Richard, "The Future of Maritime Safety," a paper presented at the Eighth Chua Chor Teck Annual Memorial Lecture, Singapore, 12 January 1994, p 1.

Institutions are in place and regulations abound, but the appropriate level of enforcement, which has been primarily in the hands of the flag administration, has proven to be problematic. The port State control arm has expanded its oversight to compensate for the shortfall. An examination of the legal framework for this expanded jurisdiction is appropriate, prior to outlining the port State's new practice of targeting.

CHAPTER 2 THE LEGAL FRAMEWORK

Maritime Transportation by nature is an international business and governed by the rules of international law. International law is derived from four sources; (1) international conventions or treaties, (2) customary law as evidenced by accepted practice over time, (3) general principles of law as recognized by civilized nations, and (4) judicial decisions and the teachings of recognized scholars.[6] As the world community becomes more integrated through technology and communications, there is a growing movement through treaty law to clearly define the jurisdictional limits of, and activities within ocean space. Treaty law codifies customary law, and allows for a more solid basis of law than accepted practice over time. A number of treaties and conventions are in place which serve as a source of rules to govern the shipping community. [7] In the context of the port State control regime and targeting, it is important to examine these sources of rules which allow for the jurisdictional control exercised by the port state. The rules can first be examined in terms of territorial jurisdiction, or the port itself. Secondly, an examination of the activities which take place on the vessel, which is considered subject to the rules of the flag State by virtue of carrying its nationality, will be provided. Finally, the subject

---

[6] von Glahn, Gerhard, Law Among Nations, Macmillan Publishing Company, 1986, p. 12.

[7] Treaties governing maritime transportation include, but are not limited to the following:

Safety of Life at Sea Convention (SOLAS 74/78), 17 *ILM* 579 (1978); MARPOL 73/78, 12 *ILM* 1319 (1973), with Protocol 17 *ILM* 546 (1978); International Convention on Load Lines (LLC 66), 640 *UNTS* 133 (1966); and the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW 78), 1984 *UKTS* 40. Details of these conventions are provided in Chapter 2 of this report.

of the legal regime will be closed by examining the treaties and conventions themselves, which incorporate both territorial jurisdiction, and parameters for examining vessels.

Part 1 Maritime Claims to Ocean Space

"Wherefore on the whole it seems a better rule that the control of the land over the sea extend as far as cannon will carry; for that is as far as we seem to have both command and possession. I should have to say in general terms that the control from the land ends where the power of man's weapon ends."[8]

This quote serves as the basis from which the three-mile limit is believed to have derived. At this point in 1702, the cannon shot carried approximately three miles, as did the line of sight from the shoreline at sea level. The U. S. was the first to make the three mile limit part of its domestic law by an act executed on 5 June 1794.[9] Obviously, weapons technology progressed and allowed a longer range, but the three-mile limit prevailed as an acceptable delimitation in customary international law. After World War II, some coastal States and States newly emerging from colonial status, began to press for an expansion of the territorial sea. The expansion had implications for several issues with regard to the oceans, including claims to resources, mounting concern over marine pollution, national security matters, and maritime trade and navigation rights. There was general agreement that the minimum breadth of the territorial sea should be three

[8]von Bynkershoek, Cornelis, De dominio maris, (1702), quoted in Burdick H. Brittin, International Law for Seagoing Officers, Naval Institute Press, 1986, p 72.

[9]Ibid, p 73.

miles, but disagreement centered on what its maximum breadth should be. In June of 1956, the International Law Commission of the United Nations defined the problem concerning the conflict with regard to the territorial sea as follows:

> "The Commission recognizes that international practice is not uniform as regards to delimitation of the territorial sea.
>
> The Commission considers that international law does not permit an extension of the territorial sea beyond twelve miles.
>
> The commission, without taking any decision as to the breadth of the territorial sea up to that limit, notes on the one hand , that many States have fixed a breadth greater than three miles and , on the other hand, that many States do not recognize such a breadth when that of their own territorial sea is less.
>
> The Commission considers that the breadth of the territorial sea should be fixed by an international conference."[10]

It was from these recommendations that the United Nations Convention of the Law of the Sea (UNCLOS) had its roots. The first conference held in 1958 did not resolve the issue of territorial sea delimitation, nor did the second conference in 1960.[11] The third conference commenced in December 1973, but took until 30 April 1982 to adopt a convention[12], and until 1993 to finally gain enough ratifications to enter into force. The

---

[10]Burdick H. Brittin, International Law for Seagoing Officers, Naval Institute Press, 1986, p 77.

[11]von Glahn, Gerhard, Law Among Nations, Macmillan Publishing Company, 1986, p. 442.

[12]1982 United Nations Convention on Law of the Sea, 21 *ILM* 1261 (1982).

issue in major dispute was not the delimitation of the territorial sea, but deep sea bed mining. Regardless, the 1982 UN Convention on Law of the Sea did set the maximum limit of the territorial sea at twelve miles[13], and this convention is viewed as the most comprehensive regime dealing with matters of the ocean to be codified into treaty law. Several important elements concerning maritime shipping and Port State Control are incorporated into the text.

"The port State exercises full jurisdictional powers within its internal waters and its laws and regulations are fully enforceable."[14] Internal waters are defined by the 1982 UN Convention on Law of the Sea, Article 8 as those waters on the landward side of the baseline of the territorial sea.[15] When a foreign vessel is in the internal waters of a port State, it must not only conform to the rules of the international community, and those of the State which flag the vessel flies, but it must also comply with any applicable domestic laws of that port State. When the foreign vessel is outside the internal waters of the State, but within the twelve mile limit of their territorial sea, it has certain rights with regard to freedom of navigation. In particular, the vessel has the right of innocent passage through the territorial sea outlined as follows:

> "1. Passage means navigation through the territorial sea for the purpose of:

---

[13]Ibid, Part II, Section 2., Article 3, "*Breadth of the Territorial Sea.*"

[14]Kasoulides, George C., Port State Control and Jurisdiction: Evolution of the Port State Control Regime, Martinus Nijhoff Publishers, 1993, p 2.

[15]United Nations, The Law of the Sea, Official Text of the United Nations Convention on the Law of the Sea with Annexes and Index, (1983).

(a) traversing that sea without entering the internal waters or calling at a roadstead or port facility outside internal waters; or

(b) proceeding to or from internal waters or a call at such roadstead or port facility.

2. Passage shall be continuous and expeditious. However, passage includes stopping and anchoring, but only in so far as the same are incidental to ordinary navigation or are rendered necessary by force majeure or distress or for the purpose of rendering assistance to persons, ships or aircraft in danger or distress."[16]

However, the 1982 UN Convention on Law of the Sea has expanded the port States' right to protect itself from certain perils within the territorial sea. These rights include the obvious issues of national security, customs, and immigration, but also include an important element relating to maritime transportation; that of pollution. Under the convention, the port State does not have to consider that passage is innocent, if the vessel engages in any action which is contrary to "peace, good order or security of the coastal state if in the territorial sea it engages in ...any act of willful and serious pollution..."[17] In addition, the convention codifies the right of the coastal state to adopt laws and regulations relating to innocent passage through the territorial sea, with respect to the following:

---

[16]United Nations, The Law of the Sea, Official Text of the United Nations Convention on the Law of the Sea with Annexes and Index, (1983), Part II, Section 3, Article 18.

[17]Ibid, Article 19, (2)(h).

⇒ Safety of navigation and regulation of marine traffic

⇒ Protection of navigational aids and facilities

⇒ Conservation of living resources

⇒ Prevention of infringement of the fisheries laws and regulations

⇒ Preservation of the environment of the coastal State and the prevention, reduction and control of pollution[18]

The twelve mile territorial sea is now clearly established in treaty law.[19] The delimitation carries with it important legal parameters for the port State in exercising the port State control function. In striking the balance between facilitating maritime transportation, and promoting maritime safety and environmental protection, an important legal precedent was provided in the *Saudi Arabia vs Arabian American Oil Company (Aramco) Arbitration.*[20] The international law tribunal in this case stated that "according to a great principle of public international law, the ports of every State must be open to foreign merchant vessels and can only be closed when the vital interests of the State so require."[21] There is also support to the opinion that the 1923 Convention on the International Regime of Maritime Ports, together with past practice, establishes as

[18]Ibid, Article 21.

[19]Ibid, Article 3.

[20]27 International Law Reports 1963, p 117, 212.

[21]Kasoulides, p 3.

customary law the reciprocal right of access to maritime ports on a non-discriminatory basis. [22] In exercising port State control jurisdiction, and targeting certain flags, vessels, owners, operators, or class societies as "high risk," the port State must ensure it is not being over zealous in unduly impeding maritime transportation. This requires consistency, and proper assessment parameters which will be highlighted in *Chapter 4 , Targeting.*

Suffice it to say that when examining the legal framework which constitutes expanded port State jurisdiction in support of the Port State Control targeting system, the right of foreign vessels to participate in maritime trade must be sustained, unless a proper peril is identified. It is essential to the flow of international commerce to allow foreign vessels the right of freedom of navigation, and the right to call on ports to facilitate trade. These rights must be balanced against the right of the port State to protect itself.

One final delimitation which expands port State jurisdiction with regard to control of pollution, involves rights within the Exclusive Economic Zone (EEZ). Part XII of the 1982 UN Convention on Law of the Sea deals with protection and preservation of the marine environment, and outlines limited action the coastal state may take to protect the environment in not only the internal waters and territorial sea, but also within the EEZ. The EEZ is established in the 1982 convention as a zone which "shall not extend beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is

[22]Convention on the International Regime of Maritime Ports, 58 *LNTS* 285 No. 1379. For further legal rulings on the determination of the right of entry into ports see; Anderson , A.W. "National and Interntional Efforts to Prevent Traumatic Vessel Source Pollution," 30 University of Miami Law Review 985 (1976), p. 1001; and Lowe, A.V., "The Right of Entry into Maritime Ports in International Law," 14 San Diego Law Review 527, (1976), p. 622.

measured."[23] With the limit of the territorial sea standing at 12 miles, the remaining 188 nautical miles constitutes the EEZ.

Port State enforcement has undergone an innovative expansion of jurisdiction in international law as a result of the 1982 UN Convention on Law of the Sea. Prevention and punishment of marine pollution incidents formerly left to the discretion of the flag state, has now been delegated to the coastal state as well. The limits of that jurisdiction have been extended out to the limits of the EEZ.[24] It is now important to examine the legal parameters as they relate to the individual vessel. It is clear that the legal dominion over ocean space has been provided through treaty law, but can the port State force a vessel to acknowledge this jurisdiction, and accept any fines or sanctions as imposed by the port State?

Part 2 The Vessel As An Extension of Flag State Territory

"The flag determines the national law which governs the ship and how and where a right can be enforced in relation to that ship."[25] Vessels engaged in maritime transportation have the nationality of the State whose flag they are entitled to fly, and therefore, are subject to the laws of the flag of registry. However, the term "concurrent jurisdiction" is applicable when vessels are within the jurisdictional waters of the coastal

---

[23]United Nations, The Law of the Sea, Official Text of the United Nations Convention on the Law of the Sea with Annexes and Index, (1983), Part V, Article 57.

[24]Ibid, Part V, Articles 56, 211, and 220.

[25]Kasoulides, p 62. See also UN Convention on the Law of the Sea, Part VII, Articles 91, 92, and 94.

state. Concurrent jurisdiction implies that both the coastal State and the flag State share jurisdiction. This is aptly clarified by Kasoulides as stated:

> "The law of the flag state governs matters relating to internal affairs aboard a vessel...It is true that while in foreign waters , a ship owes what might be termed a limited allegiance to the foreign state in question; that is, it must obey the host country's navigation and similar regulations."[26]

The term "similar regulations" has been clarified in the 1982 UN Convention on Law of the Sea and relates to such categories as pollution prevention, conservation of resources, and safety.[27] Additionally, over time treaty law has more clearly defined what "limited allegiance" entails. Under the context of the port state control regime and targeting, the critical factor is how much "governing" the flag State is really exercising. The ability of the flag State to enforce the international standards to which it has agreed, and to develop and maintain the proper conditions for registration of a vessel, are the critical factors which have prompted clarification through treaty law of flag state responsibility. It is also understood that the reason the port state control regime has been expanded and applied in several regions of the world is because flag States have lacked the ability or the will to provide proper oversight. This will be explained further in Chapters 3 and 4. Nonetheless, "it is a long-accepted assumption that a State can ascribe its national character to vessels and apply its authority to events occurring upon such ships without

---

[26]von Glahn, p 439.

[27]United Nations, The Law of the Sea, Official Text of the United Nations Convention on the Law of the Sea with Annexes and Index, (1983), Part II, Article 19 clearly specifies categories in which passage by foreign ships is considered prejudicial to peace, good order and security. Additionally, Article 21 specifies categories for which the coastal State may adopt laws and regulations relating to innocent passage through the territorial sea.

interference by others."[28] However, as cited earlier, expanded jurisdiction of maritime space in favor of the coastal State has allowed the coastal State to assert more authority over ships of foreign registry.

Just as the sovereignty over maritime space was controlled by the reach of the cannon shell, the ability of the flag State to manage activities on board a vessel of its registry is subject to its reach. If a vessel flying the flag of a certain registry, never has occasion to pull into one of the flag State's ports, the ability for oversight is hampered. A ship owned in one country while it is registered in another for purposes of commercial or legal advantage sails under a commonly known term, "flag of convenience."[29] (The use of this term dates to the 1950's, but the practice of "flags of convenience" which is now referred to as "open registry" has its roots in the War of 1812 when American merchant vessels flew the flag of Portugal to evade American and British restrictions.) The issue of flags of convenience was further examined after the 1955 *Nottebohm* case ruling by the International Court of Justice (ICJ) which introduced a concept called "genuine link."[30] In 1956, the International Law Commission of the United Nations examined whether the

---

[28]Kasoulides, p 61, as taken from Rienow, The Test of Nationality of a Merchant Ship, Columbia University Press, NY, 1937, p 116 emphasizes that the role of the state is "to impress effectively its nationality on vessels and to be assured that such nationality will be respected , a state must take certain established steps intended to make other states cognizant of certain particulars: that the vessel has met to the satisfaction of the state all the statutory conditions; that the state considers the vessel one of its own.

[29]Carlisle, Rodney, Sovereignty for Sale: The Origins and Evolution of the Panamanian and Liberian Flags of Convenience, Naval Institute Press, 1981, Introduction.

[30]"Genuine link" was derived from, "I.C.J. Pleadings, *Nottebohm* Case (Liechtenstein v. Guatemala), Vol. I & II." Kurt Nottebohm, a German citizen resident in Guatemala, rapidly changed his citizenship to neutral Lichtenstein on the outbreak of World War II. Guatemala siezed Nottebohm's property as that of an enemy German, and Nottebohm obtained a diplomatic protest from Lichtenstein. The ICJ ruled in favor of Guatemala, citing no "genuine link" between Nottebohm and Lichtenstein in that he only briefly lived there, did no business there, and secured his citizenship to solely to avoid confiscation of property.

Nottebohm precedent should be applied to ships. The commission recommended text for consideration by the planned Law of the Sea Conference to be held in Geneva. The 1958 United Nations Convention on the High Seas provides:

> *"There must exist a genuine link between the State and the ship; in particular, the State must effectively exercise its jurisdiction and control in administrative, technical and social matters over ships that fly its flag."*[31]

This still left room for interpretation of "effectively," and the practice of open registry proliferated. "Till the 1950's FOCs (open registry) were relatively insignificant: today they represent over 35 percent of the deadweight tonnage of world shipping, and over 42 percent of the tankers."[32]

Later came the United Nations Convention on Conditions for Registration of Ships which was adopted on February 7, 1986.[33] The Convention stipulated that there should be a genuine link between the vessel and the flag it flies. By January 1991 the fleet of contracting parties to the Convention totaled 0.837% of world tonnage.[34] This low level of participation suggested that the liberal system of flags of convenience had strong supporters who did not intend to forgo the economic advantages offered by open registries. Open registries in shipping are highlighted in Tables 1 and 2, which show the

---

[31] 1958 Geneva Convention on the High Seas, 450 UNTS 82, Entered into force on 30 September 1962, Article 5(1).

[32] Goss, Richard, "Safety in Sea Transport," Journal of Transport Economics and Policy, Volume XXVIII No. 1, January 1994.

[33] United Nations Convention on Condition for Registration of Ships, TD/RS/CONF/232; 26 *ILM* 1229 (1987).

[34] Sletmo, Gunnar K., and Holste, Susanne, "Shipping and the Competitive Advantage of Nations: the Role of International Ship Registers." Maritime Policy Management, 1993, Vol. 20, No. 3, 243-255.

Table 1

True nationality of major open-registry fleets, as at 31 December 1993

Flag country / Country or territory of ownership	Liberia			Panama			Cyprus			Bahamas			Bermuda			Subtotal			Total foreign-flag fleet	
	Thousand dwt	No. of vessels	%	Thousand dwt	No. of vessels	%	Thousand dwt	No. of vessels	%	Thousand dwt	No. of vessels	%	Thousand dwt	No. of vessels	%	Thousand dwt	No. of vessels	%	Thousand dwt	No. of vessels
Greece	10 270	123	11.6	7 388	328	8.9	22 566	722	69.1	4 847	120	14.7	.		0.0	45 071	1 293	18.6	62 468	1 821
Japan	9 481	226	10.7	33 044	1 233	39.8	134	19	0.4	1 039	34	3.1		.	0.0	43 698	1 512	18.0	55 050	1 824
United States	18 755	227	21.2	2 188	119	2.6	25	7	0.1	8 189	120	24.8	996	6	19.5	30 153	479	12.5	37 806	676
Hong Kong	9 451	128	10.7	13 072	277	15.8	547	4	1.7	370	8	1.1			0.0	23 440	417	9.7	27 955	544
Norway	7 591	166	8.6	2 001	62	2.4	2 300	19	7.0	4 178	131	12.6	214	8	4.2	16 284	386	6.7	18 404	513
United Kingdom	4 522	78	5.1	919	56	1.1	330	14	1.0	2 193	100	6.6	2 085	31	40.9	10 049	279	4.2	17 594	462
Germany	4 283	113	4.9	1 497	30	1.8	2 177	199	6.7	359	12	1.1	54	1	1.1	8 370	355	3.5	10 975	681
Republic of Korea	1 717	22	1.9	6 531	163	7.9	.	.	0.0			0.0	.	.	0.0	8 248	185	3.4	8 711	217
Sweden	4 699	29	5.3	132	13	0.2		.	0.0	1 566	30	4.7	945	5	18.5	7 342	77	3.0	9 341	138
China	2 291	52	2.6	3 956	108	4.8	207	12	0.6	34	1	0.1		.	0.0	6 488	173	2.7	8 843	256
Russian Federation	2 752	45	3.1	275	30	0.3	1 371	46	4.2	70	4	0.2	.	.	0.0	4 418	125	1.8	5 128	274
Taiwan, Province of China	732	22	0.8	3 124	155	3.8	274	2	0.8			0.0	.	.	0.0	4 130	179	1.7	4 516	200
Saudi Arabia	2 335	8	2.6	153	15	0.2	.	.	0.0	510	2	1.5	.		0.0	2 998	25	1.2	3 274	41
France	617	4	0.7	892	19	1.1	53	5	0.2	1 259	36	3.8		.	0.0	2 821	64	1.2	3 608	101
Finland		.	0.0	23	6	0.0	254	1	0.8	2 169	38	6.6	.	.	0.0	2 446	45	1.0	2 589	57
Switzerland	386	10	0.4	866	57	1.0	170	9	0.5	693	17	2.1	.		0.0	2 115	93	0.9	3 205	148
Denmark	873	14	1.0	222	23	0.3	62	9	0.2	869	79	2.6	.	.	0.0	2 026	125	0.8	5 198	217
Italy	676	15	0.8	131	9	0.2	279	8	0.9	465	10	1.4	.	.	0.0	1 551	42	0.6	2 737	92
Singapore	348	13	0.4	702	81	0.9	.	.	0.0	395	5	1.2		.	0.0	1 445	99	0.6	2 609	192
Belgium	240	6	0.3	35	5	0.0	215	18	0.7	161	5	0.5	.	.	0.0	651	34	0.3	4 053	116
Subtotal	82 019	1 301	92.8	77 101	2 789	92.9	30 964	1 094	94.8	29 366	752	88.8	4 294	51	84.2	223 744	5 987	92.4	294 064	8 570
Others	6 334	160	7.2	5 891	362	7.1	1 706	136	5.2	3 697	169	11.2	804	27	15.8	18 432	854	7.6	30 662	1 572
TOTAL	88 353	1 461	100.0	82 992	3 151	100.0	32 670	1 230	100.0	33 063	921	100.0	5 098	78	100.0	242 176	6 841	100.0	324 726	10 142

Source: Based on data supplied by Lloyd's Maritime Information Services Ltd. (London).

Tonnage distribution of major open-registry fleets a/ as at 31 December 1993

Country	Oil tankers		Dry bulk carriers		General cargo		Containerships		Others		1993 Total		1992 Total	
	Ships	Thousand dwt	Ships	Thousand dwt	Ships	Thousand dwt	Ships	Thousand dwt	Ships	Thousand dwt	Ships	Thousand dwt	Ships	Thousand dwt
Liberia	394	49 030	399	25 263	283	4 971	104	3 039	281	6 051	1 461	88 354	1 508	91 757
Panama	341	32 857	576	26 806	1 523	14 706	183	4 460	528	4 163	3 151	82 992	2 927	73 524
Cyprus	81	6 168	495	19 708	532	5 339	57	871	65	583	1 230	32 669	1 168	30 384
Bahamas	161	17 913	147	8 151	368	4 678	32	725	213	1 595	921	33 062	896	31 874
Bermuda	18	3 755	8	247	14	111	5	112	33	873	78	5 098	76	5 467
Total	995	109 723	1 625	80 175	2 720	29 805	381	9 207	1 120	13 265	6 841	242 175	6 575	233 006

Source: Based on data supplied by Lloyd's Maritime Information Services Ltd. (London).

a/ Ships of 1,000 grt and above. This table is not fully comparable with tables 7 and 9, which take ships of 100 grt and above as the base.

registration of ships in terms of true ownership, and tonnage distribution. The practice of open registry is now ingrained in the business of shipping. It is even considered improper etiquette to call the practice "flag of convenience" because of the negative connotation associated with the term. The practice is totally legal, and it has withstood the required legal scrutiny. More importantly, the higher casualty rate associated with open registry countries does not hold true for all open registry countries. This will be elaborated further in Chapter 3. What has evolved in treaty law, in response to a perceived "weak link" in the genuine link concept, is a clarification of the duties of the flag State with regard to the responsibility implied when registering a vessel.

The most comprehensive treatment of "genuine link" to date is outlined in the 1982 UNCLOS. Article 91 of this convention states:

> "Every State shall fix the conditions for the grant of its nationality to ships, for the registration of ships in its territory, and for the right to fly its flag. Ships have the nationality of the State whose flag they are entitled to fly. There must exist a genuine link between the State and the ship."[35]

While repeating the concept of genuine link directly from the 1958 UNCLOS convention, the 1982 convention takes the jurisdiction and responsibility of the flag State one step further. Article 94 codifies the obligations and duties of the flag State and elaborates upon State responsibilities to a greater degree than do earlier treaties.

---

[35]Official Text of The Law of the Sea, Convention: Article 91, *Nationality of Ships*.

"Such measures shall include those necessary to ensure:

(a) that each ship, before registration and at appropriate intervals, is surveyed by a qualified surveyor of ships, and has on board such charts, nautical publications and navigational equipment and instruments as are appropriate for the safe navigation of the ship;

(b) that each ship is in the charge of the master and officers who possess appropriate qualifications, in particular in seamanship, navigation, communications and marine engineering, and that the crew is appropriate in qualification and numbers for the type, size, machinery, and equipment of the ship;

(c) that the master, officers and, to the extent appropriate, the crew are fully conversant with and required to observe the applicable international regulations concerning the safety of life at sea, the prevention of collisions, the prevention, reduction and control of marine pollution, and the maintenance of communications by radio."[36]

Treaty law is now brought to a new level of detail. The attempt is to clearly elaborate obligations of the flag State of registry to address the issue of open registry countries which are not meeting these obligations. There is no established limitation to a State's right to continue the practice of open registry, indeed international law requires the compulsory attribution of a nationality to a ship. The conditions governing the grant of nationality and penalties to be applied in their nonfulfillment are determined by the

[36]United Nations, The Law of the Sea, Official Text of the United Nations Convention on the Law of the Sea with Annexes and Index, (1983), Part VII, Article 94, para 4.

domestic law of the State concerned. However, the important determination of "genuine link" which has eluded the maritime community for years, is no longer intangible. More importantly, the port state control regime is evaluating the extent to which the flag State is executing its obligations.

The vessel assumes the nationality of the flag State and thus, carries with it the obligations of that State. Not only must the vessel observe the rules of the flag State, and the coastal State when in its waters, but the flag State and through it the vessel is also bound to one of the oldest principles of international law, the doctrine of "pacta sunt servanda" (treaties must be observed).[37] Where the legal framework concerning jurisdiction of ocean space, and vessels has been cited, the port state control regime is not complete without understanding the treaties which are part of that framework.

Part 3 The Treaties and Conventions

Treaty law is an important source of international law. A law-making treaty is defined as "an instrument through which a substantial number of states declare their understanding of what is a particular rule of law; by which new general rules for the future conduct of the ratifying or adhering states are laid down; by which some existing customary or conventional rule of law is abolished, modified, or codified; or by which some new international agency is created."[38] Treaty law is only binding on those States which ratify the treaty. If a large number of States ratify treaty law, it may become part

[37]von Glahn, p. 182.

[38]Ibid, p 13.

of general international law. With regard to maritime shipping, it is important to understand that the maritime community is governed by several maritime-related treaties, to which most commercial vessels are bound. Most nations involved in maritime commerce have ratified the various maritime related treaties.

The key international organizations which sponsor and develop treaty law related to maritime shipping include the International Maritime Organization (IMO), and the International Labor Organization (ILO). The challenge of ensuring safety and marine environmental protection for the world shipping community, falls most heavily on the International Maritime Organization (IMO). [39]

The IMO is a Specialized Agency of the United Nations and defines its main objectives as follows:

> "To provide machinery for co-operation among Governments in the field of governmental regulation and practices relating to technical matters of all kinds affecting shipping engaged in international trade;
>
> To encourage and facilitate the general adoption of the highest practicable standards in matters concerning maritime safety, efficiency of navigation and prevention and control of marine pollution from ships; and

[39]For additional information about the IMO consult the following; IMO News, a quarterly publication of ongoing developments published by the IMO, C.P. Srivistava, "The Role of the International Maritime Organization," Marine Policy 243-246 (May 1990), Elisabeth Mann Borgese, "The IMO and the UN Convention on Law of the Sea," in Borgese, et. al., Ocean Yearbook 7 (Chicago: The Univeristy of Chicago Press, 1988) p 8-13, Lawrence Juda, "The Intergovernmental Maritime Consultive Organizaton and the Control of Pollution from Ships," 26 International and Comparative Law Quarterly, 558-584 (July 1977).

To deal with administrative and legal matters related to the purposes set out above."[40]

For the achievement of these objectives, the Organization formulates international conventions, codes of practice, and recommendations which provide a basis for legislation in Member States. IMO also undertakes various supporting activities aimed at achieving universal implementation of these standards. A history of the International Maritime Consultive Organization (IMCO), as it was known when it began operating in 1959, shows that the amendment to the original convention which added the goal of prevention and control of pollution from ships to its traditional concern with technical issues in international shipping, and safety of navigation, accompanied its name change in 1975, to the International Maritime Organization (IMO).

The current membership of IMO as of 16 July 1993 is 144 Member States and 2 Associate Members, and the agency boasts that some of its treaties have been ratified by so many countries that they apply to a large majority of the world's merchant ships. This is validated in Table 3 which highlights the various treaties and tonnage percentage party to those treaties. This high level of participation, and the premise that treaties are binding would mean that the majority of ships are in compliance with the international standards of safety and pollution prevention set by IMO. If such were the case, there would not be a need for expanding the port state control regime. In his remarks for World Maritime Day 1993, IMO's Secretary-General, Mr. William O'Neil expressed

[40]GOPHER Organizational Descriptions, "IMO: Organizational Descriptions"

Table 3

Status of Conventions

as at 5th May 1994

Convention	Entry into force date	Ratification number	Tonnage percent	Ratified IMO	Ratified non-IMO	Non-Ratified IMO
IMO CONVENTION	17/03/58	149	95.24	149	0	0
SOLAS 74	25/05/80	125	97.11	119	6	30
SOLAS PROT 78	01/05/81	83	91.46	80	3	69
SOLAS PROT 88	–	12	9.01	12	0	137
LL 66	21/07/68	134	98.02	126	8	23
LL PROT 88	–	14	9.48	14	0	135
TONNAGE 69	18/07/82	104	96.11	99	5	50
COLREG 72	15/07/77	123	95.81	116	7	33
CSC 72	06/09/77	58	63.91	54	4	95
SFV 77	–	18	12.21	17	1	132
SFV PROT 93	–	0	0.00	0	0	149
STCW 78	28/04/84	103	92.79	97	6	52
SAR 79	22/06/85	49	44.44	48	1	101
STP 71	02/01/74	15	25.75	15	0	134
SPACE STP 73	02/06/77	14	23.81	14	0	135
INMARSAT C 76	16/07/79	73	87.99	71	2	78
INMARSAT OA 76	16/07/79	73	85.73	71	2	78
FAL 65	05/03/67	71	55.90	70	1	79
MARPOL ANNEX I/II	02/10/83	85	92.01	80	5	69
MARPOL ANNEX III	01/07/92	62	58.05	58	4	91
MARPOL ANNEX IV	–	52	40.38	48	4	101
MARPOL ANNEX V	31/12/88	67	66.51	62	5	87
LDC 72	30/08/75	72	67.95	67	5	82
INTERVENTION 69	06/05/75	80	64.30	59	1	90
INTERVENTION PROT 73	30/03/83	30	44.48	30	0	119
CLC 69	19/06/75	85	85.46	82	3	67
CLC PROT 76	08/04/81	46	63.24	45	1	104
CLC PROT 84	–	9	4.36	8	1	141
CLC PROT 92	–	0	0.00	0	0	149
FUND 71	16/10/78	58	62.56	57	1	92
FUND PROT 76	–	24	46.28	24	0	125
FUND PROT 84	–	4	2.10	4	0	145
FUND PROT 92	–	0	0.00	0	0	149
NUCLEAR 71	15/07/75	14	24.41	14	0	135
PAL 74	28/04/87	16	32.72	15	1	134
PAL PROT 76	30/04/89	13	32.46	13	0	136
PAL PROT 90	–	2	0.73	2	0	147
LLMC 76	01/12/86	23	44.57	23	0	126
SUA 88	01/03/92	25	24.90	23	2	126
SUA PROT 88	01/03/92	23	24.72	21	2	128
SALVAGE 89	–	9	7.36	9	0	140
OPRC 90	–	14	11.85	14	0	135
INMARSAT C AMEND-89	–	27	31.36	26	1	123
INMARSAT OA AMEND-89	–	27	31.36	26	1	123
LDC AMEND-78	–	18	25.13	18	0	131
IMO AMEND-91	–	13	12.44	12	1	137

Source: IMO News

concern with implementation (or lack thereof) of the various conventions and protocols. He stated:

> "Implementation, according to the dictionary, means putting something into effect. Making sure that it gets done. And as far as IMO's twin targets of safer shipping and cleaner oceans are concerned, implementation is the key to success. It is a responsibility that no one who is involved in shipping can evade."[41]

IMO and the world shipping community are very concerned with implementation, and the ability to monitor compliance. The company, vessel, flag State of registry, or classification society which is following the rules and implementing the required standards is at an economic disadvantage over those who evade the rules. The expanding jurisdiction of the port State, and the role played out by targeting in the maritime community, offers an opportunity to make implementation more effective.

Although there have been more than 40 treaties adopted by IMO since 1959, the focus of port State control is embodied in four main treaties and conventions:

1) ***Safety of Life at Sea Convention (SOLAS 74/78)***[42] which contains technical standards for safety surveys and certificates; subdivision and stability; machinery and electrical installations; fire protection, detection, and extinction; life-saving appliances; radiotelegraphy and radiotelephone; safety of navigation; carriage of grain and dangerous goods.

---

[41]Remarks of IMO Secretary-General William O'Neil as published in IMO News, no.2, 1993.

[42]SOLAS 74/78. 17 *ILM* 579 (1978).

2) ***The International Convention on the Prevention of Pollution from Ships (MARPOL 73/78)***[43] which contains design, construction, equipment, and discharge standards for vessels carrying oil, noxious liquid substances, sewage, and garbage.

3) ***The 1966 Load Line Convention***[44] which contains standards for freeboard and load line assignment as well as standards for vessel strength and stability.

4) ***The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (STCW 78)***[45] which sets forth minimum standards for crew qualifications, persons in charge of navigational watches, engineering watches, and radio watch keeping and maintenance, and sets out special requirements for personnel on tankers and standards for proficiency in survival craft.

Regulation 19 of Chapter I of SOLAS expressly recognizes the right of port States to evaluate foreign ships visiting their ports.[46] While the inspector may examine the vessel's paperwork and certificates to ensure compliance with SOLAS regulations, the inspector is required to evaluate further if "there are clear grounds for believing that the condition of the ship or of its equipment does not correspond substantially with the particulars of that certificate."[47] In the context of port state control and targeting, an inspector is alerted to expect substandard performance on the part of the vessel, and will

---

[43]MARPOL 73/78, 12 *ILM* 1319 (1973), with Protocol 17 *ILM* 546 (1978).

[44]LLC 66. 640 UNTS 133.

[45]1984 UKTS 50.

[46]U. S. Coast Guard, COMDINST M16210.2, distribution of a copy of the International Convention on Safety of Life at Sea (SOLAS 74) and the Protocol of 1978 relating to SOLAS 74, hereinafter titled (SOLAS 74/78).

[47]Ibid, p 16.

go beyond examination of the certificates. This may translate to a delay as the vessel cannot engage in trade in the port until the inspector has finished his or her examination. The impact of this delay will be examined in further detail in Chapter 6. The important aspect here is to identify the legal premise under treaty law, whereby the port State inspector exercises expanded jurisdiction, and uses criteria to determine who is targeted.

MARPOL 73/78 offers the same leverage in Articles 5 and 7.[48] In particular Article 5(2) states that if "there are clear grounds for believing that the condition of the ship or its equipment does not correspond substantially with the particulars of the certificate...the ship shall not sail until it can proceed to sea without presenting an unreasonable threat of harm to the marine environment."[49]

Under the 1966 Load Line Convention all sea-going vessels above a certain tonnage are allowed a certain loading limit to prevent overloading of cargo which might lead to a casualty. Like the SOLAS stipulation, the port State inspector cannot allow the vessel to sail if it is in violation of its load line certificate. The STCW convention also permits a measure of port state enforcement for the purpose of verification of licenses or sailing papers. In this case, the inspector must suspect that the certificates were fraudulently obtained, or someone is misrepresenting himself. However, the only two grounds for detaining the ship are under Regulation I/4 and Article X(3), failure to correct

[48]MARPOL 73/38, 12 ILM 1319, with Protocol 17 ILM 546 (1978), Articles 5 and 7.

[49]Ibid, Article 5(2).

deficiencies in proper certification or in proper watch arrangements which must pose "a danger to persons, property, or the environment."[50]

In addition to these treaties, IMO has developed Resolutions which contain additional guidance on procedures for the control of ships, and allow for expanded oversight by the port State inspector. In particular, Resolution A.597(15) of 1987 provides guidance on control procedures under SOLAS and the Load Line Convention which allow an inspector to look beyond certificates if he is acting on reliable information from a crew member, a professional body or anyone else concerned with the safety of a particular ship, that the ship appears to be substandard. Resolution A.742(18) of 1993 provides parameters covering operational requirements including those covered by SOLAS, MARPOL, and STCW. If a port state control inspector has clear grounds for believing that the operational condition of the ship is inconsistent with the requirements of the conventions, he/she can check on-board procedures such as whether key crew members can adequately communicate with each other.

These conventions and resolutions reflect the emerging right of the port State to exercise jurisdiction beyond previous limits. There is a continuing effort with regard to treaty law, to specify clearly what is a necessary and proper level of oversight. Where previous practice involved merely examining the certificates on board the vessel, and expecting the integrity of the flag administration and its representatives to be sound, more and more attention is being given to looking beyond the piece of paper. Additionally, the

[50]IMO Publication, STCW 1978, 1993 Edition, London, p. 6 and 16.

practice of targeting ensures a more thorough examination will be carried out. The vessel is detained until deficiencies are corrected. This is known as an intervention.

The International Labor Organization (ILO) is another important international organization which has developed treaty law concerning merchant shipping.[51] This Specialized Agency was established in 1919 when its constitution was adopted as Part XIII of the Treaty of Versailles. In 1946, it became the first Specialized Agency associated with the United Nations.[52] The objectives of this organization are to raise working and living standards throughout the world. ILO' s work has carried over into the shipping community, and in particular, the port state control regime and its expanded jurisdiction.

Under provisions of the Merchant Shipping (Minimum Standards) Convention , 1976, commonly referred to as ILO 147, if a port State inspector "receives a complaint or obtains evidence that the ship does not conform to the standards of this convention...the port State may take measures necessary to rectify any conditions on board which are clearly hazardous to safety or health."[53] This is unique in that previously, port State inspectors had to respect the flag administration standards for safety and health, and the port State control regime was off limits in the area of health and living conditions on

---

[51]For additional information about the ILO consult the following; Robert Cox, "ILO," in Cox and Jacobson, The Anatomy of Influence, p 102-138, "The 74th (Maritime) Session of the International Labour Conference, September-October 1987," 147 International Labour Review 173-187 (1988), Ebere Osieke, "The International Labour Organisation and the Control of Substandard Merchant Vessels," 30 International and Comparative Law Quarterly p 497-512 (July 1981).

[52]GOPHER Organizational Descriptions, "ILO: Organizational Descriptions"

[53]International Labour Office Geneva, Inspection of Labour Conditions on Board Ship: Guide-lines for Procedure, 1990, Convention No. 147, Annex I, Article 4, p 68.

board a vessel. Another unique factor is that a port State which has ratified ILO 147, can apply the convention to ships calling in its ports, regardless of whether or not the vessel is flying the flag of ratifying nation.[54] In simple terms, the port State can enforce treaty law on a non-party State, by virtue of the fact that the vessel is in the port State's jurisdiction.[55]

Standards of living and health conditions vary greatly among many of the nations represented in the shipping community. The industrialized countries might tend to have a higher expectation of what the standard should be. ILO 147 allows the port State control regime access to this particular area of shipboard life. One might note that this is a fine line being walked by the port State inspector. The flag State generally exercises exclusive jurisdiction over shipboard matters relating to the internal order and economy of the vessel. ILO 147 is another example of expanded jurisdiction with regard to the ability of port States to examine areas previously off limits, or left to the sole discretion of the flag state. For example, the regional port State control regime titled the Paris MOU[56] identifies the areas of ILO 147 considered for enforcement under port State control as: minimum age, medical examination, food and catering, crew accommodation, accident prevention and occupational health, and officers' competency certificates.[57] A

---

[54]Ibid., p 4.

[55]There are 29 countries party ILO 147 including the United States and several European countries. Source: "List of Ratifications by Convention and by Country", Proceedings of 81st Session of the ILO 1994, Report 3, Part 5.

[56]Detailed information concerning the Paris MOU Regional Port State Control Program is provided in Chapter 3 of this report. The chapter is titled *The Enforcement Regime*.

[57]For details concerning the effectiveness of enforcing ILO 147 under the port State control regime consult: Peter Bautista Payoyo, "Implementation of International Conventions through Port State Control: an assessment," Marine

review of ILO deficiencies under the Paris MOU shows the total number to be on the rise. (see Attachment 6 to this report). This is possibly a reflection of the increased attention being given to substandard performance under the port state control regime. Regardless, international treaty law has codified and established minimum standards which will be applied to all ships around the world, and in so doing, has expanded port State jurisdiction.

In summary, not only has the 1982 UN Convention on Law of the Sea broadened the right of the port or coastal State to exercise expanded jurisdiction in examination of foreign vessels, but the treaties themselves reflect these broader rights with respect to their specific language. Now that the legal framework has been provided, it is necessary to further understand how the shipping community has operationalized the new leverage afforded to the port State. The umbrella of oversight and system of checks and balances has had to adapt to the new process called "targeting of substandard actors" in the maritime community. To understand this process, an examination of the role of enforcement and oversight will be provided in the context of activities of the flag State, the port State, and classification societies, all of which form the process of checks and balances. This will be followed with an analysis of the practice of targeting under the expanded port State control regime, and its impact on the shipping community.

Policy 1994 **18** (5) 379-392, or E. Osieke, "The International Labour Organization and the Control of Substandard Merchant Vessels," 30 International and Comparative Law Quarterly 497-512 (1981).

CHAPTER 3 THE ENFORCEMENT REGIME

The 1982 UN Convention on Law of the Sea provides an extensive legal framework which lends support to the many international treaties and conventions which govern maritime shipping. The system of checks and balances operates within this legal framework to regulate the maritime community. The enforcement mechanism is provided through three main oversight entities: (1) the flag of registry (flag State), (2) the port where the vessel trades (port State), and (3) the classification society which acts on behalf of the flag State in conducting surveys and issuing certificates of compliance. These three entities will be considered in the context of enforcement, but first, some problem areas will be examined as a backdrop to understanding how this comprehensive regime has been challenged.

The main problem areas include; (1) how to provide an accurate measurement of enforcement and compliance, (2) how to pinpoint which entity is at fault in noncompliance, the vessel owner or operator, the flag administration, the classification society, or some combination of the three, and finally (3) how to manage inconsistency in adherence to treaty law among State's which have ratified maritime related treaties.

The first area, providing an accurate measurement of enforcement and compliance, has been very problematic. The flag State and the port State are supposed to work in cooperation. If a foreign vessel is found by the port State to be in violation of any treaty or convention, the port State is required to bring the matter to the attention of the flag

State for appropriate remedial action.[58] As was pointed out earlier, the port State can require corrections prior to the vessel leaving port if the discrepancies pose a threat to the safety or environmental protection of the port. Additionally, flag States and port States, participating as parties to the various conventions, have reporting procedures to provide feedback to international organizations. From this feedback, the organizations are supposed to be able to evaluate the degree of compliance, and the enforcement actions taken. However, organizations such as IMO readily admit they do not always get the reports, and hence, cannot measure the degree of compliance, or the level of enforcement being applied.[59] More importantly, not all flag administrations have the appropriate institutions to handle the problem when non-compliance is reported by the port State.

One United States General Accounting Office (GAO) report on monitoring of International Agreements proposed that the level of compliance is difficult to assess; "GAO is not suggesting that incomplete reporting necessarily equates to less than full compliance but, rather, that the level of compliance is difficult to judge because of incomplete reporting."[60] Working with this unknown, the port State, through its control regime can examine foreign vessels calling on its ports, and provide feedback on the examples of non-compliance discovered. Accurate feedback on non-compliance is

---

[58]Examples of the requirement for the port State to notify the flag State when violations exist on a vessel of its registry include; with regard to ILO 147 see Annex I, Article 4, with regard to STCW 1978 see Article X, Control, with regard to SOLAS (74/78) see Chapter I, Regulation 19, with regard to MARPOL (73/78) see Article 4.

[59]An example of this is cited in International Maritime Organization correspondence to M. Landry dtd 29 April 1994 which revealed 85 parties to MARPOL 73/78 as of 6 April 1994, with only 17 parties submitting mandatory annual reports for 1991, and 19 parties submitting for 1992.

[60]United States General Accounting Office (GAO) Report to Congressional Requesters titled "International Environment; International Agreements Are Not Well Monitored," January 1992, Report # B-245764.

complicated by the second problem, an inability to pinpoint whether the fault lay with the vessel owner or operator, the flag administration, the classification society, or some combination of the three.

No international enforcement mechanism exists to monitor compliance with international treaties and conventions. Because of this, reports from port States and flag States form a "piece meal" picture of the true status of compliance. "A treaty, or convention, agreement, and so forth, is a legal instrument in which the parties define mutual obligations and rights according to international law...The degree of volunteerism on the part of the signatories can vary widely and therewith their intensity of adherence to the treaty."[61] This inconsistency in adherence to treaty law poses a third challenge to the port State control enforcement regime as they attempt to close the safety and environmental protection net.

Some detail is now provided on the day to day activity of the enforcement entities. Enforcement is based on an examination of the vessel to ensure compliance with applicable international laws and conventions. The flag State of registry (or class society acting on its behalf) issues the certificates attesting to compliance. The port States then examine the paperwork and the vessels' condition to ensure compliance. Particular items open for examination are outlined in the certificates held on board the vessel. Samples of these certificates which attest to compliance with international treaties and conventions are provided as attachments (1-5). These samples are provided by the U. S. Coast Guard,

[61]Levi, Werner, Law and Politics in the International Society, Sage Publications, Inc., 1976, p. 94-95

although the certificates of all countries have the same format and content. The creeping jurisdiction by the port State is exemplified in the fact that having the certificates on board no longer suffices as proof of compliance. Port State inspectors perform spot checks of areas previously not examined. Had flag administrations had the ability and the will to properly enforce treaties and conventions, this expanded jurisdiction by the port State would not have been necessary.

The port State plays a key, and expanding role in the enforcement regime. As a result of this expansion, many regional port State control systems are operating, or are being developed, to provide the necessary oversight. One can debate the reason for this expanded role, but it has its roots in the flag State not properly carrying out its administration and oversight.[62] An examination of the flag State, the port State, and Classification Societies will be considered in an effort to understand how each entity is, (or is not) playing its part in the system of checks and balances.

PART 1 Flag State Control

The traditional approach in enforcement of maritime shipping regulations has been to rely primarily on the flag of registry. The flag of registry oversees a number of technical matters including design and construction of the vessel, and installation and maintenance

[62]The problem of flag State control is being addressed by a subcommittee of the IMO titled the Flag State Implementation (FSI) Subcommittee. This subcommittee was designed to assist flag administrations in developing the capability to carry out the proper enforcement and oversight. For additional information on this subject refer to Ronald B. Mitchell, "Regime design matters: intentional oil pollution and treaty compliance," International Organization 48, 3, Summer 1994, p 425-58, or Abram Chayes and Antonia Handler Chayes, "On Compliance," International Organization 47, 2, Spring 1993, p 175-205.

of safety and pollution prevention equipment. In particular, the 1982 UN Convention on Law of the Sea specifies that the flag State,

> "shall take such measures for ships flying its flag as are necessary to ensure safety at sea with regard, *inter alia*, to:
>
> (a) the construction, equipment and seaworthiness of ships;
>
> (b) the manning of ships, labour conditions and the training of crews, taking into account the applicable international instruments;
>
> (c) the use of signals, the maintenance of communications and the prevention of collisions."[63]

The article continues to detail specific measures with regard to survey intervals, appropriate qualifications of crew, and observance of international regulations.

Often, the flag administration will allow a classification society to act on its behalf in surveying the vessel. Regardless, it is the flag of registry which has the enforcement responsibility. The port State merely spot checks the work performed by the flag State. Enforcement by the flag State attempts to guarantee compliance with any domestic laws of the flag State of registry, as well as any international agreements to which the flag State is bound and, therefore, with which ships flying its flag must comply.

This was not a problem when many of the international agreements, such as SOLAS, were drafted. At that point in history, most of the world's merchant fleet was owned by, and flew the flags of the world's major maritime and trading powers. As time went on,

---

[63]United Nations, The Law of the Sea, Official Text of the United Nations Convention on the Law of the Sea with Annexes and Index, (1983), Part VII, Article 94.

and open registries grew faster than their ability to develop enforcement and oversight capability, the problem of a proper level of enforcement surfaced. International organizations lacked an ability to correct the problem. Most international organizations have no enforcement capability or legislative capacity, and cannot enforce compliance of their conventions on any party states. As evidenced in the organizational description cited earlier, IMO merely provides a basis for legislation in member States. IMO can draft a treaty or convention that specifies conditions, but these conditions must then be codified into State law and regulation. Beyond this, once the laws and regulations are created, they must be enforced under flag State control procedures.

The onus for implementation and enforcement lies with the nation State, (flag state or state of registry). As described in Chapter 2, treaty law has elaborated on the obligations of the nation State. However, until some flag States which have lacked the ability to meet these obligations develop needed capability, there is a void which is being filled by the port State control regime. While lacking the ability to analyze the true extent of the problem, some available data clearly suggests that enforcement is problematic. With regard to pollution for example, one study showed that "out of over 1,000 alleged discharges from ships flying the flag of a party to the MARPOL Convention which have been reported to IMO, only in 206 cases were the flag States reported to have taken some action, and in only 77 cases (less than 8%) were fines imposed."[64]

[64]Nollkaemper, Andre, "Agenda 21 and Prevention of Sea-Based Marine Pollution," Marine Policy, November 1993, Volume 17, No.6, p 537-556.

An additional problem is that several nations operate as host states to what are known as "flags of convenience (FOCs)." As was described earlier, "a 'flag of convenience' can be defined as the flag of any country allowing the registration of foreign-owned and foreign-controlled vessels under conditions which, for whatever the reasons, are convenient and opportune for the persons who are registering the vessels."[65] These states may also be defined as "open registry" states and they offer less stringent requirements of operation or manning, and tax benefits which translate to operational cost savings as incentives to fly the flag. The States then benefit from the revenues for registration (which can be considerable amounts in terms of a country's sources of revenue and relative wealth), without necessarily conducting the proper oversight of the vessels and its operation. These vessels are operated by transnational corporations. This term has application in all areas of international business. These corporations "by combining flags of convenience with crews of convenience, have become entities with an existence above and beyond the nation-state in which they operate."[66] The use of these flags of convenience provides a weak link in the chain of enforcement of international treaties and standards.

Some of these FOC States which have ratified SOLAS and MARPOL "routinely experience higher than average delay/detention rates when compared to vessels registered in regulated or traditional maritime states...These open registry flags also suffer routinely

---

[65]Boczek, Boleslaw Adam, Flags of Convenience, Boston: Harvard University Press, (1962), p 29.

[66]Forsyth, C.J., "Transnational Corporations: Problems for Study in the New International Order of Maritime Shipping," Maritime Policy Management, 1993, Vol. 20, No. 3, p 207-214.

higher loss rates than vessels registered under traditional maritime flags."[67] An apt term being applied to these vessels is substandard ships, and the reason for this problem is tied to a substandard job being performed by the flag State which has the enforcement responsibility.

It is important to note that some open registry or "flag of convenience" States have a very good record, and have the appropriate level of enforcement and oversight. Liberia, for instance, which has long been termed an open registry State, prepares an annual report entitled "Selections from Historical Data."[68] The report is provided to present a long range evaluation of certain aspects of the safe operation and professional performance of the Liberian Registry. The 1994 report explains that "Liberia has demonstrated to the Maritime Community that it places great importance on Flag State Enforcement of and Compliance with International Conventions."[69] The Liberian registry boasts a decade of loss ratios lower than the world loss ratio[70], which the registry feels puts them at par with traditional maritime nations.

Many maritime companies which operated under the flag of traditional maritime nations made the decision to switch to flags of convenience out of economic necessity to

---

[67]Sarubbi, Jonathan D., "Marine Safety and Pollution Prevention: The Role of the Port State," Major Paper, University of Rhode Island, 1993. Also supported by port State control detention and intervention statistics provided in attachments 2 (Paris MOU) and 4 (US Report to Congress) to this report.

[68]International Registries, Inc., Republic of Liberia, Bureau of Maritime Affairs, "Selections from Historical Data 1994," Worldwide Corporate Headquarters, Reston, Virginia.

[69]Ibid, p 2.

[70]Source for the claim made by Liberia is provided in statistics compiled by the Institute of London Underwriters which tracks world loss ratios.

meet foreign competition. The economic advantage is there as evidenced in testimony before the U.S. Senate Committee on Foreign Commerce in 1957:

> "The fundamental reason for Gulf's operation of foreign-flag tankers is competition...We cannot remain competitive with [foreign-owned and controlled companies] by operating our tankers exclusively under the American flag, because our costs of operation under the United States flag would exceed their costs of operation under foreign flags by some 70%."[71]

In the years following this testimony, two open registry countries, Liberia and Panama, witnessed a growth in their registries from 12% of the total world tonnage in 1960, to 24.9% of total world tonnage in 1978. The comparison of costs provided in Table 4 sheds light on the reason for this increase in tonnage:

Table 4

Daily Running Expenses Under Different Flags in 1977/78

(U.S. $ per day)

Flag	200,000 ton tanker	60,000 ton bulker	25,000 ton spec.
Swedish	8,000	5,000	4,900
British	6,300	4,200	3,800
FoC	4,100	2,900	2,700

Source: S. Bergstrand and R. Doganis, "The Impact of Flags of Convenience"

[71] Boczek, p 29.

The trend continues to the present day, and a 1994 United States General Accounting Office (GAO) report provides more current information concerning crew costs under various registries.[72] Table 5 provides a comparison of United States and foreign wage costs for various types of vessels as of January 1993.

Table 5

Type of vessel	Nationality of vessel	Daily crew costs	Crew size
Large, modern containership	United States	$9,800 - 11,100	21
	European	2,200 - 3,100	16 - 18
	Asian	1,400 - 3,000	11 - 18
	Flag of convenience	1,400 - 2,100	18 - 23
Older containership	United States	13,200 - 13,300	35
	European	2,200 - 4,000	18 - 21
	Asian	1,200 - 2,000	17 - 26
	Flag of convenience	1,400 - 2,200	24 - 26
General cargo	United States	12,700 - 13,100	34
	European	2,500 - 4,000	21 - 26
	Asian	1,200 - 1,400	18 - 26
	Flag of convenience	1,200 - 2,100	25 - 26
Dry bulk	United States	6,400 - 6,500	21
	Flag of convenience	1,900	25
Tanker	United States	9,200 - 10,000	26
	Flag of convenience	1,900	26

Note. Wage rates are current as of January 1, 1993. "Flag of convenience" denotes registration of vessels in foreign countries that offer favorable tax structures and regulations. The leading flag of convenience countries are the Bahamas, Liberia, Panama, and Singapore.

Source: Maritime Administration

[72]United States General Accounting Office, Resources, Community, and Economic Development Division, "Cargo Preference Laws," GOA/RCED-95-34, B-257957, dated November 30, 1994.

Open registries offer financial benefits, and registration of ships is a competitive business. The benefits are derived from lower crew costs as a result of lower manning requirements and lower labor costs, lower insurance costs, very low or no corporate income tax, lower construction and operating costs, and greater operational freedom, and problem-less accumulation of surplus.[73]

Not only can the vessel owners clearly demonstrate economic incentives for "flagging out," but income from the registration of ships can be significant to an open registry country. Liberia, for example, generated only 10% of the Liberian budget from its maritime program when it began registering ships in 1948. Now, with the outbreak of civil war causing problems with other industries, the current revenue of $20 million a year represents 99% of official revenue.[74]

There are five major open-registry countries as highlighted in Table 2. These five States represent a considerable amount of tonnage, and in particular 45.3 % of the total deadweight tonnage of tankers.[75] (This is an important point to keep in mind for the analysis of the tanker charter industry, and the impact of targeting, which will be outlined in Chapter 6). Of these five States, three have been listed by the United States and the Paris MOU members in the context of port State control and targeting. In being listed,

---

[73]Madigan, Richard E., Taxation of the Shipping Industry, Second Edition, Cornell Maritime Press, Centreville, Maryland, 1982, p 69-74.

[74]McElroy, Claudia, "Liberian Shipping Fleet Grows in Spite of War," Journal of Commerce, March 3, 1995.

[75]United Nations Conference on Trade and Development, Review of Maritime Transport 1993. Trade and Development Board, United Nations 1994, p 24.

these open registry countries are suspected of lacking the appropriate enforcement and oversight capabilities required to execute their duties as a flag administration.

The international community is responding to the need for improving deficient flag administrations. To address the concern with Flag of Convenience and Open Registry practices, IMO has set up a sub-committee on Flag State Implementation. In February of 1992 five member states of IMO submitted a report that summarized reasons for lack of effective implementation of IMO conventions.[76] The reasons stated were:

- insufficient trained and experienced technical personnel within an Administration;
- lack of sufficient infrastructure to properly interpret and support application and enforcement international conventions;
- unclear delegation of authority and regulatory oversight when inspections and surveys are entrusted either to surveyors nominated for that purpose or to Organizations recognized by the Administration or the employment of insufficiently qualified and experienced surveyors under such arrangements;
- the absence of effective control or oversight programs to ensure that consistent and competent maritime safety actions are taken.

IMO's Marine Safety Committee (MSC) and the Marine Environmental Protection Committee (MEPC) have both established a sub-committee on flag state

[76]No author cited, "Flag State Compliance: new sub-committee is recommended," IMO News, no. 3, 1992, the five countries submitting the report inlcuded Canada, Norway, Sweden, United Kingdom, and the United States.

implementation.[77] It is hoped that these newly established sub-committees can make progress in providing measures necessary to ensure effective and consistent global enforcement of IMO initiatives. Particular attention will by paid to the needs of developing countries, and the committees will also address the issue of delegation of authority to bodies acting on behalf of the flag state. A back-up to the system of Flag State Control and working with nations in developing regimes to support implementation and enforcement, is Port State Control. Although the back up system is not meant to be the primary enforcement arm, the expanding role of the port State is evidence of its increased importance in overseeing maritime safety and environmental protection.

PART 2 Port State Control

Port States have a legitimate interest in the condition and operation of the ships coming into their ports. After all, if things go wrong in the port and the ship catches fire, explodes, capsizes or causes pollution, it is the port which faces the consequences. These are the "perils" the 1982 UN Convention on Law of the Sea has allowed the port or coastal State to protect itself from. The country where the ship calls (port State) can conduct its own ship examinations to verify compliance with international standards, and any higher standards the country may have for its own waters. The expanding jurisdiction of the port State has been continually noted in the preceding pages. If the flag administration lacks the ability to perform its job, the port State will clearly fill the void.

---

[77]No author cited, Feature "World Maritime Day," IMO News, no. 3, 1993.

The port State can do a pre-boarding at sea before the vessel comes into port and deny the vessel entry into port if standards are not met, or they can board the vessel in port and deny operations or departure from the port on finding violations of these standards. The history of port State control goes back many years, and was actually built into the 1929 Safety of Life at Sea Convention (SOLAS).[78] Regulation 19 of Chapter 1 of the 1960 Safety of Life at Sea Convention stipulates that "the port State could inspect a ship and detain it until that ship could proceed to sea without endangering passengers and crew."[79]

However, there has been renewed emphasis and a desire for more coordination in the use of Port State Control as a regional and international system of monitoring and enforcement of international standards of safety and pollution prevention. It is a logical progression as the port State is afforded expanded jurisdiction and authority. It is borne out of necessity as shipping becomes more integrated and complicated. The layers in shipping from flag State, to port State, to owner, to operator, to crew, to cargo importer or exporter, to insurer, make accountability and responsibility increasingly difficult to pin down. However, port State control is not meant as a substitute for flag State responsibility. The ultimate goal in the shipping community, is to have the proper "balance" in the system of checks and balances.

---

[78]International Convention on the Safety of Life at Sea, London, April 16-May31, 1929, Report of the Delegation of the United States of America and Appended Documents, Publication of Department of State, Conference Series, No. 1, Chapter VI, Article 54, "Control."

[79]Interternational Convention on the Safety of Life at Sea, (SOLAS 60), 536 UNTS 27 (1960), Entry into force May 26, 1965 .

The United States is a focal point for world trade. It is a major consumer of oil and petroleum products, and the largest distributor of manufactured and agricultural goods. The U. S. has a very advanced system of port State control, which includes a requirement that any vessel requesting entry into a U.S. port provide a 24-hour advance notice of arrival.[80] This advance notice allows the Coast Guard to go into their computer system and pull up a record of the vessel. If the vessel is not flying a flag of a party State to the SOLAS and MARPOL conventions, that vessel will be denied entry. If the flag of registry is a party State, the vessel's visit to other U.S. ports, and any problems or deficiencies that may have been encountered, will be provided. This record will also show the status of all certificates issued by the flag State which verify compliance with international standards. A vessel that is on a maiden voyage to a U.S. port will usually arrange for a vessel agent to provide the Coast Guard a copy of these certificates to act as an interim measure until the Coast Guard can board and verify compliance.

The international standard requires that these certificates be endorsed annually and an inspection is performed by the flag State prior to the endorsement. As stated before, a ship's flag State is responsible for certifying the vessel's compliance with safety and pollution prevention standards. Many States delegate this task to classification societies which perform the inspections and issue the certificates under contract. (Classifications societies will be discussed at greater length in the next section of the paper.) In terms of port state control, these certificates form the basis for ensuring compliance, and it is

[80]United States, Title 33, Code of Federal Regulations, Part 150.333, with authority from U.S. Code 1231, the Ports and Waterways Safety Act.

expected that the integrity of the flag State, and the classification society who may represent the flag administration, is sound. Thus, the high international standards of maritime safety and environmental protection are upheld.

In recent years however, some countries have found that the integrity of some flag States and classification societies may be in question. An example was provided in a 1993 United State General Accounting Office study entitled "Coast Guard: Additional Actions Needed to Improve Cruise Ship Safety." This report found that while the flag State, or the classification society who represents the flag State, should be the primary check to ensure standards are met, "the Coast Guard's port State examinations have identified instances in which flag nations or classification societies did not consistently identify or resolve problems that affect a ship's safety."[81] A tragic example of the impact this lack of oversight can have is the case of the cruise ship SCANDINAVIAN STAR, which in 1990 caught fire and some 158 people died because they did not hear fire alarms or were not alerted by the crew, or made aware of how to get out safely.[82] This vessel had been in Florida just weeks before. Even the Coast Guard system, which relies on the integrity of flag states and class societies, is not infallible.

It is incidents like this which have prompted the expansion of the role of the port State, and the desire to identify substandard actors. The spot checks on foreign vessels

---

[81]United States General Accounting Office, March 1993, Report to Congressional Requestors. "Coast Guard: Additional Actions Needed to Improve Cruise Ship Safety," Report # B-248714.

[82]National Transportation Safety Board, Special Investigation Report, "Accidents Involving Foreign Passenger Ships Operating from U.S. Ports 1990-1991," U.S.G.P.O.: 1993-341-835: 82061.

have been expanded to account for the higher number, and negative impact substandard foreign flag vessels have on international trade. It is noted, however, that implementation of port State control, like flag State control varies widely from country to country. Several regional port state control regimes have been established to provide some organized level of oversight. A brief description and status of each regional port state control program is provided to understand the organization behind the targeting system. "The chances of a sub-standard ship escaping detection are greatly reduced if several countries are involved in a regional port state control arrangement, under which inspections can be coordinated."[83]

Paris Memorandum on Port State Control (Paris MOU):

Since 1982 a number of countries have been operating a regional system of port state control established by the Paris Memorandum of Understanding on Port State Control.[84] The Paris MOU is defined as a "regional administrative agreement...where participating maritime authorities agree to establish in their ports a harmonized system of port State control with the aim of eliminating the operation of sub-standard ships."[85] These countries agreed to cooperate within the limits of enforcement action permitted by international law, in order to harmonize practice on checking that ships and their crews

[83]No author cited, "1994 Target for Port State Control Pact," IMO News, no.2, 1993

[84]Memorandum of Understanding on Port State Control (Paris MOU), Done at Paris, January 26, 1982, 21 ILM 1982.

[85]No author cited, The Memorandum of Understanding on Port State Control, "Annual Report 1993."

are covered by valid certificates under the relevant international conventions. The initial countries participating included: Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, and the United Kingdom. Poland was added in January, 1992, and is its newest member as of 5 May 1994 was Canada. Additionally, there are a number of cooperating partners which include the USA, Croatia, The Russian Federation, and Japan. Member countries perform port State inspections and feed results into a joint computer information system titled SIRENAC-E (Systeme d'Information Relatif auz Navires Controles). The goal of the program is to prevent the operation of substandard vessels in member States' waters.

The quantitative goal which the MOU prescribes for its members is as follows:

> "Each authority will achieve, within a period of three years from the coming into effect of the Memorandum, an annual total of inspections corresponding to 25 percent of the estimated number of individual foreign merchant ships...,

which entered the ports of its State during a recent representative period of 12 months."[86]

This goal does not translate to one in four vessels being boarded. Vessels which call at more than one European port are treated individually by each port. Additionally, vessels of member countries of the Paris MOU are still treated as foreign vessels when calling at other member countries' ports. Because of these criteria, and the normal trading patterns of vessels in Europe, the goal of 25% translates to roughly 85-90% of all vessels being boarded. The 1993 Annual Report of the Paris MOU reported the following results with respect to percentage of total number of foreign merchant ships calling at Paris MOU ports on an annual basis;[87]

⇒ 1993: 25.1%

⇒ 1992: 23.8%

⇒ 1991: 23.7%

⇒ 1990: 23.0%

⇒ 1989: 20.6%

[86]Kasoulides, p 159.

[87]Secretariat, The Memorandum of Understanding on Port State Control, "Annual Report 1993."

The 1993 results reflect the first year the Paris MOU has met its goal of 25% boarded. The number of detentions and deficiencies went up with this increased number of boardings. Attachment 6 provides statistics presented in the 1993 Annual Report.

The members of the Paris MOU are concerned with measuring the effectiveness of their port State control program, and harmonizing detention criteria to improve the groups' ability to target those ships in need of the most attention. One issue which was addressed and adopted in the course of 1993, was a change in detention criteria. Previously, if a vessel pulled into port and had deficiencies which merited detention and reporting as a "SOLAS Intervention" under Regulation I/19, SOLAS, the report would only be filed if deficiencies were not corrected during the course of the vessels' port call. Under the revised detention criteria, the ship will be officially "detained" if observed deficiencies warranted the criteria, regardless of whether or not they were corrected.[88]

Targeting under the Paris MOU system works from this detention criteria in that if a vessel flies a flag of a State which has shown an above rolling average detention record in the last three years, that flag State's vessels are assigned a priority for boarding. Work is being done to refine this "target factor" to include such elements as ship's age, classification of the ship, deficiency ratio for the flag State, training of seafarers, and the status of ratification of relevant instruments by the flag State. These additional criteria, along with being incorporated into the Paris MOU, are expected to be incorporated into

[88]Secretariat Memorandum of Understanding on Port State Control, Report on the twenty-fifth meeting of the Port State Control Committee, Livorno, 23-25 November 1994.

European Union regulations effective January 1, 1996.[89] The European Union countries comprise a delegation to the Paris MOU on Port State Control, and it is not guaranteed that EU law will automatically be part of Paris MOU practice, or vice-versa.

Port State Control Committee in the Asia-Pacific Region (Tokyo MOU):

Similar in design to the Paris MOU, the Tokyo MOU became effective in April of 1994 and lists as its members; Singapore, Australia, Canada, China, Hong Kong, Japan, Republic of Korea, Malaysia, New Zealand, Papua New Guinea, Russian Federation, and Vanuatu. (Canada submits data covering Pacific Ports only.) The Tokyo MOU group held its second official meeting from 16 to 19 January 1995 in Kuala Lumpur, Malaysia.[90] As is often the case at Paris MOU meetings, representatives of the International Maritime Organization (IMO), the International Labor Organization (ILO), and various regional shipping organizations were in attendance. Issues discussed included development of a standardized form for input of port State inspection results, publication of ship detentions, percentage of ships to be inspected by each authority, and the budget for funding the port State control functions. One preliminary proposal is to have a goal of achieving a total annual inspection rate of 75% of foreign merchant ships operating in the region by the year 2000.[91] Although, the Tokyo group is just getting off

[89]Porter, Janet, "Unsafe Ships Risk a Ban Under EU Draft Rules," Journal of Commerce, 2 November 1994, Front Page.

[90]Memorandum drafted by the Tokyo MOU Secretariat, dtd 6 February 1995.

[91]Pickthorne, Captain M., "Port State Control in the Asia-Pacific Region," Seaways, February 1994, p 11.

the ground, statistical data on port State inspections for 1994 was provided (see Attachment 7).

Latin American Agreement on Port State Control (Acuerdo de Vina del Mar):

Signed in 1992, the present parties to this agreement consist of Argentina, Brazil, Chile, Cuba, and Uruguay. The Vina del Mar Agreement convened its first committee meeting from 14 to 15 December 1994 in Montevideo, Uruguay.[92] Issues discussed included membership, interchange and publication of information and the adoption of a manual for surveyors, based on the Paris MOU manual. No statistics have been made available to date.

The United States System on Port State Control:

Although not a regional program, the U. S. Coast Guard has operated a system of port State control for many years. In 1994, however, a mandated shift in focus took place which has definitely influenced port State control enforcement in the international shipping community. U. S. Senate Report (103-150) on the 1994 Department of Transportation and Related Agencies Appropriations Bill tasked the Coast Guard with changing its approach to foreign ship boardings in order to eliminate the safety and environmental threat presented by substandard merchant ships operating in U.S. waters. Specifically, the Coast Guard was directed to target its boarding efforts at those most

[92]Status of Vina Del Mar Agreement as reported by the IMO Subcommittee on Flag State Implementation, 3rd session, Agenda item 7.1, report dated 23 December 1994.

responsible for substandard ships including owners, classification societies and flag states.[93]

In response, the Coast Guard developed a plan outlined in a report to Congress; titled "Port-State Control Initiative, Boarding Regime to Target Substandard Ships" dated April 8, 1994.[94] The goal of this initiative was to identify substandard foreign ships and eliminate them from U.S. waters. The plan proposed the following methods to accomplish this goal:

1) to identify high risk foreign merchant ships based upon the performance records of ships' owners, operators, classification societies and flag states;

2) to systematically target Coast Guard boardings at high risk foreign merchant ships;

3) to board ships suspected of presenting an imminent threat to life, the port, or the environment prior to entry into the port;

4) to work internationally to combat the problems posed by substandard ships;

5) to update guidance on specific documents, systems, and equipment to be checked during foreign ship boardings to ensure consistent and thorough application of international ship construction, equipment and operating standards throughout the U.S.; and

---

[93]Congress. Senate. Hearings before a subcommittee of the Committee on Appropriations, "Department of Transportation and Related Agencies Appropriations," 103rd Congress, Second Session, April 13, 1994, p2.

[94] Congress. Senate. Hearings before a subcommittee of the Committee on Appropriations, "Department of Transportation and Related Agencies Appropriations," 103rd Congress, Second Session, April 13, 1994, "Port-State Control Initiative, Boarding Regime to Target Substandard Ships." Also detailed in 59 FR 36826 dtd 19 July 1994.

6) to upgrade Coast Guard foreign ship boarding teams through the inclusion of marine inspectors.

Note that the Coast Guard began by including criteria based on performance records of not only flags, but also owners, operators, and classification societies. The Paris MOU states are now considering the addition of these criterion.

Congress required that the Coast Guard report back on the status of the program one year from its inception. A copy of the status report of the U. S. program, prepared by Coast Guard headquarters in preparation for reporting to Congress in May of 1995, is provided as Attachment 8. This attachment includes statistical data on detentions and deficiencies, as well as explanations of activities with regard to flag States, classification societies, and owners and operators.

The process of targeting is performed with analysis of a risk factor which includes points assigned on the basis of owner and operator, flag State, classification society, as well as boarding history, and ship type. A database is maintained by the Coast Guard, entitled the Port Safety Information Exchange system (PSIX).[95] This database has been made available to other port State control regimes, but is not linked to SIRENAC. IMO is pursuing an international database for information sharing, and whether or not it will be compatible with the U. S. or Paris MOU systems remains to be seen.[96]

---

[95]Kline, Jack, LCDR, USCG, "Information Sharing Identifies Weak Safety Nets," Proceedings of the Marine Safety Council, U.S. DOT, USCG, May/June 1994, p.25-26.

[96]No author cited, IMO News, No2, 1994, p 13.

In 1991 the IMO Assembly adopted resolution A.682(17), calling for establishment of more regional arrangements like the Paris MOU model. Along with the above mentioned port State control regional programs and the U. S. program, IMO is presently involved in promotion of a port State control region in the South-East Mediterranean, which could include 11 countries.[97] IMO also held a meeting at its 18th session with delegations from Central, East, and West Africa to discuss the possibility of a PSC Agreement for their region. Some countries of the wider Indian Ocean region are considering a program. Additionally, the Caribbean Memorandum of Understanding on Port State Control (Caribbean MOU) is set to be signed at the December 1995 meeting in Barbados.[98] These regional programs are in consonance with IMO's goal of improved international implementation and offer an excellent opportunity for cooperation, but port State control is not a replacement for flag State control. It is meant to lend support to the existing system, with enforcement remaining primarily in the hands of the flag administration. However, as will be evidenced in the analysis of targeting, the port State control system supported by targeting, has really had a significant impact on the enforcement regime.

The correction of problems in a port State will most often involve a classification society which performs inspections on behalf of the flag State. The Classification Societies, as the flag State representatives, are another important element in enforcement.

---

[97]Status as reported by the IMO Subcommittee on Flag State Implementation, 3rd session, Agenda item 7.1, report dated 23 December 1994. Also reported in Secretariat Memorandum of Understanding on Port State Control, Report on the twenty-fifth meeting of the Port State Control Committee, Livorno, 23-25 November 1994.

[98]Ibid.

PART 3 Classification Societies

Classification societies are organizations staffed by marine surveyors who act for flag States, ship owners, and underwriters in developing and enforcing standards of design, construction, and maintenance.[99] These societies are hired to perform what are known as "statutory surveys" on behalf of the flag administration. These statutory surveys are separate from classification surveys of "Hull" and "Machinery" which are required for insurance purposes. Statutory surveys involve requirements for compliance with international conventions such as SOLAS and MARPOL. These surveys are done at required intervals and translate to the vessel being examined at least annually.

Classification Societies have come under increasing scrutiny in recent years. Like open registry countries, classification societies must compete for business against other societies, and there number has increased to 49.[100] Inevitably, the quality and expertise is not always of the highest standards. In the United States, the Coast Guard has documented problems with classification society oversight in their Control Verification program. This program is used to ensure passenger ships that are calling on U.S. ports and carrying U.S. passengers meet international standards of safety. Passenger ships are held to higher standards of lifesaving and firefighting because it is understood that the business involves having many people onboard a vessel who have little or no seagoing

---

[99]For further information regarding Classification Societies refer to: Surveyor, a quarterly publication of the American Bureau of Shipping, also Philippe Boisson, "Classification Societies and Safety at Sea," **18** Marine Policy p363-377 (1994), and no author cited, "Under Attack," Lloyd's Ship Manager, March 1994, p 67-69.

[100]Report of Lord Donaldson's Inquiry into the Prevention of Pollution from Merchant Shipping, "Safer Ships, Cleaner Seas," dtd 8 April 1994.

experience or training. The potential for catastrophic loss of life is considered. A few examples of what the Coast Guard found concerning cruise ship safety are documented in a 1993 GAO report and are as follows:

> "In October 1991 the Coast Guard examined the Bahamian-flagged VERA CRUZ I and found some fire screen doors that would not close, deteriorated lifeboat equipment, poor engine room maintenance, and a possible leak in the hull. Six days before, the classification society has issued a certificate of compliance.
>
> In November 1991 on the Bahamian-flagged OCEAN PRINCESS, the Coast Guard found problems with fire screen doors...In a December 1991 memorandum to Coast Guard headquarters, the Chief of Marine Inspection in Miami said the deficiencies were "of such a fundamental nature that doubts exist as to the adequacy of flag administration/class society oversight." In August 1991 the classification society had issued a certificate of compliance.
>
> In February 1992 on the German-flagged BERLIN, the Coast Guard found that numerous fire screen doors were inoperable, combustives were stored improperly, and some crew members lacked firefighting training. Just 3 days earlier, the classification society had issued a certificate of compliance."[101]

Situations such as those outlined in the GAO report on the cruise ship industry are becoming all too common. Suspicions were raised in both Sweden, where it was believed that an exchange of money in Poland was sufficient to procure clean certificates

[101]United States General Accounting Office, Report to Congressional Requestors. "Coast Guard: Additional Actions Needed to Improve Cruise Ship Safety," 1993.

from a major society for a couple of seriously flawed tankers, as well as in Scandinavia, where the class society certificating the *ESTONIA* which resulted in the loss of over 900 people, was being investigated.[102] Again, the issue of integrity comes to the surface. Class societies are contracted to perform surveys and when there are a number of companies to choose from, some owners will opt for the agency which will cost them the least amount of money. The same factors which encourage the use of flags of convenience, influence the choice of classification society. It is an economic issue.

Many in the shipping industry are calling for a need to restore confidence in these agencies. In February 1994 IMO's sub-committee on flag State control provided a list of organizations or classification societies which are registered with IMO to issue certificates and act on behalf of the flag State. The 49 acknowledged societies are said to be in the process of review for compliance with IMO Resolution A.739(18), and to date the U.S. Coast Guard has already identified 11 societies which meet this standard.[103] The requirements for compliance are (1) extensive experience, (2) publication of rules in English, (3) significant technical staff, (4) qualified professional staff, (5) a written code of ethics, (6) written policy and objectives, (7) an internal audit system based on an internationally recognized quality management system such as ISO 9000, and (8) be subject to certification of its quality system by independent auditors recognized by the appropriate flag administration. It is estimated that approximately 15 of the 49

---

[102]Editorial, "Class Act," Lloyd's List, 18 November 1994.

[103]U.S. Coast Guard Media Advisory, "U.S. Coast Guard Recognizes Classification Societies," dated 1 November 1994. The 11 recognized societies include; American Bureau of Shipping, Bureau Veritas, China Classification Society, Det Norske Veritas, Germanischer Lloyd, Korean Register of Shipping, Lloyds Register of Shipping, Nippon Kaiji Kyokai, Polski Rejestr Statkow, Registro Italiano Navale, and Russian Register.

organizations will meet the requirements, and the list will include a majority of the 11 Classification Societies which are members of the International Association of Classification Societies (IACS)[104]. IACS members survey over 90% of the world's merchant shipping tonnage which bodes well for proper enforcement of standards.[105]

This certification of classification societies offers an additional criterion to determine substandard performance, and provides a mechanism for ensuring improved enforcement. The pressure through targeting substandard performance will weed out the societies which do not have the credibility, and do not apply the stringent standards. Classification societies welcome the targeting, as long as there is a proper application of criterion. Some societies point out that deficiencies may have developed between survey intervals, or are a result of areas of oversight beyond their responsibility. Regardless, targeting of substandard classification societies is part of the formula, as they are an integral part of the enforcement regime.

An examination of the practice of targeting, the impact it has had on industry, and an analysis of the economic impact of targeting will now be provided. The legal regime for expanded port State jurisdiction has been provided. Also explained was how the enforcement system relies on checks and balances with the flag State, the port State, and classification societies working together on oversight of the vessels which provide this vital transportation link. Weaknesses in the system have been identified. Targeting is the

---

[104]The International Association of Class Societies (IACS) is a professional organization whose membership is predicated on a society having an internal quality management system in place. The design of the quality system is prescibed by IACS, and audited on both a scheduled and unscheduled basis.

[105]Lord Donaldson Report, p77.

newest tool being employed to compensate for this weakness which threatens maritime safety and environmental protection. It has proven to be quite controversial, but is showing early signs of tremendous success.

CHAPTER 4 TARGETING

Targeting, which is a relatively new methodology, results from an evolution of practice under treaty law operating under the premise of port State intervention. Countries have exercised port State jurisdiction for many years, and information on results of deficiencies and detentions was supplied to international organizations through reporting procedures outlined in the treaties themselves. International organizations would attempt to analyze the data, and propose new or modified standards or procedures aimed at improving safety or environmental protection. The new targeting system goes beyond the reporting of incidents to the respective international organizations. Targeting, as it is being designed and implemented, is a systematic and integrated approach to intervention based on assessment of risk. The port State's emerging right to protect itself against certain "perils" is the fundamental principle behind the methodology. The expanding jurisdictional right of the port State is being operationalized by targeting and identifying the risk posed by substandard performance.

The actual practice of targeting substandard performers began in earnest in the summer of 1994.[106] It was at this point in time, that the U. S. and several European countries developed lists of "bad actors." Various maritime trade journals, such as the Journal of Commerce, and Lloyd's List requested information concerning the lists, and subsequently published articles which alerted the maritime community to substandard

[106]The United States program commenced on May 1st, 1994 as was arranged in the April 1994 Report to Congress, see footnote #92 of this report.

performance. Background on the formula being used by the U. S. and the Paris MOU member States to target substandard performance was supplied in the previous chapter (see Part 2, *Port State Control*). It is now important to provide details of the targeting program and its results.

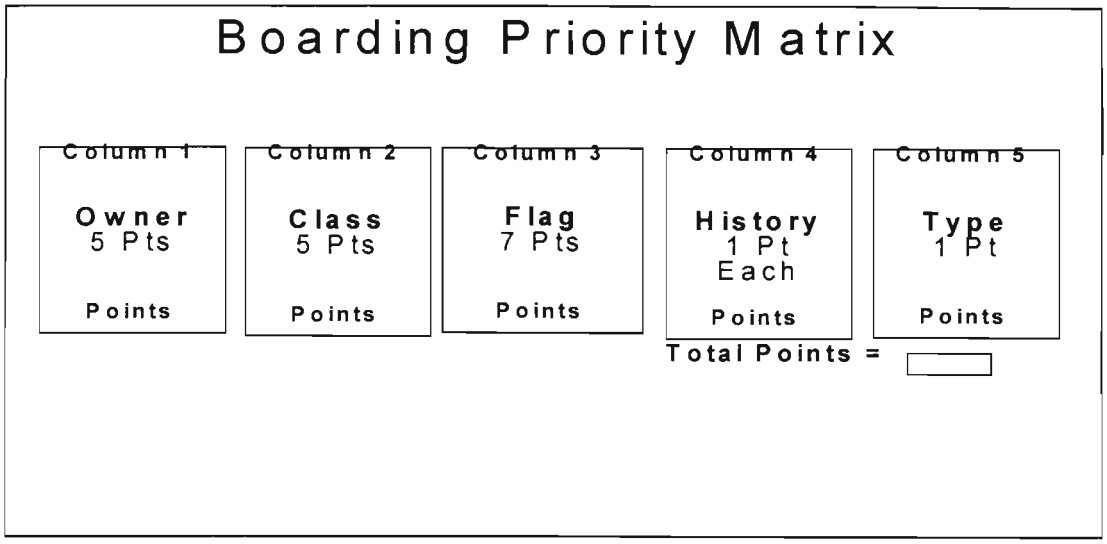
The U. S. program defines a ship as substandard "if its hull, crew, machinery, or lifesaving, firefighting, or pollution prevention equipment is substantially below the standards required by U. S. laws or international conventions due to:

1) the absence of principal equipment or arrangements required by U. S. laws or international conventions;
2) gross noncompliance with equipment standards or arrangements under U. S. laws or international conventions;
3) substantial deterioration of the ship's structure or its essential equipment;
4) noncompliance with the operational and/or manning standards required by U. S. laws or international conventions;
5) clear lack of appropriate certification; or
6) demonstrated lack of competence on the part of the crew."[107]

Risk factors are developed as previously described, and four boarding priorities are established based on the risk factor.

[107]Department of Transportation, Maritime Administration, Report on Port and Shipping Safety and Environmental Protection, October, 1994

Figure 1



From the point formula in Figure 1, port State inspectors assign a boarding priority as follows:

⇒ **Priority I Vessels** (17 or more points); Targeted for boarding prior to port entry.

⇒ **Priority II Vessels** (7 to 16 points); Targeted for boarding prior to embarking passengers or commencing cargo operations.

⇒ **Priority III Vessels** (4 to 6 points); May be boarded during a port visit.

⇒ **Priority IV Vessels** (3 or less points); Not targeted for boarding.

The Coast Guard has developed a monthly listing of substandard vessels since commencement of the program. The name of any marine owner or operating company appearing on the list indicates that in the last twelve months, a U. S. or foreign flagged

vessel owned or operated by that person or entity was identified as substandard. The list has grown from 100 companies in May 1994, to 361 companies in December 1994. Additionally, the number of companies associated with more than a single substandard ship has grown in the same period from one in May 1994, to 35 in December 1994. Five companies have been associated with more than 2 interventions (See Attachment 8, Report to Congress).

The list of flag States with lower than average performance records based on the percentage of their ships operating in U. S. waters, which were detained by the Coast Guard, is found using a three year rolling average. This is similar to the Paris MOU system for targeting flag States, and will undoubtedly be used by other port State control regimes. The 1994 list is detailed in Attachment 8. The 1995 list of targeted flag States, prepared by the Coast Guard and based on data from 1992, 1993, and 1994, is provided as follows:

- ***Antigua & Barbuda***
- ***Argentina***
- ***Bahamas***
- ***Belize***
- ***Columbia***
- ***Cyprus***
- ***Honduras***
- ***India***
- ***Italy***
- ***Malta***
- ***Panama***
- ***Romania***
- ***Russia***
- ***St. Vincent & Gren.***
- ***Turkey***
- ***Ukraine***
- ***Venezuela***

It is important to note that this list includes Cyprus, Panama, and Bahamas which are three of the top five major open registry countries listed in Table 2 (see page 17).

Classification Societies are accepted as not being a risk if they have quality systems complying with International Maritime Organization (IMO) Resolution A.739(18), "Guidelines for the Authorization of Organizations Acting on Behalf of Administrations." Figure 2 provides the current societies recognized by the Coast Guard.

Figure 2

This resolution is an internationally accepted standard for classification societies which has been adopted as an initial basis for determining which class societies are at the least risk of association with substandard ships. Class societies not conforming to this resolution are considered higher risk. The Coast Guard is in the process of collecting data

on classification societies to properly assess performance records. Once the data base is established a list of targeted classification societies will be developed.

Information concerning the targeting activities of the Coast Guard can be obtained by anyone under the Freedom of Information Act.[108] The Coast Guard has responded to numerable requests from trade publications, charterers, professional groups, flag administrations, and other maritime related agencies.[109] This was the method employed by reporters, which allowed publications such as the Journal of Commerce and Lloyd's List to provide media coverage of the targeting practice.[110]

Paris MOU member countries have operated under a different system of targeting based on a three year rolling average of detentions by flag of registry. The present policy is a quarterly publication of detained ships based on this process. Some Paris MOU countries are operating independently, such as the European Community delegation which will work from the new law of targeting criterion becoming effective in January of 1996. Whether of not the Paris MOU countries will have adopted this criterion by then remains to be seen. The revised target factor is being experimented with presently by the Paris MOU countries, and is being designed to be incorporated into the existing SIRENAC database.

---

[108]Enacted in 1966, The Freedom of Information Act (5 U.S.C. 552) generally provides that any person has a right, enforceable in court, of access to federal agency records, except with certain exemptions. For further details consult U.S. Department of Justice, Office of Information and Privacy, Freedom of Information Act Guide and Privacy Act Overview, September 1994 Edition, ISBN 0-16-045344-5.

[109]Interview with CDR Joseph Saboe, Coast Guard Office of Merchant Vessel Inspection, Coast Guard Headquarters, Washington, DC, 15 March 1995.

[110]For particular articles on targeting from these particular journals see bibliography. Also consult both newspapers from June of 1994 through March of 1995 when activities under port State control were given routine coverage.

The 1993 Annual Report of the Paris MOU on Port State Control listed the flag States with detention ratios exceeding average detention percentages. The results are provided in Attachment 6. It is important to note that of the 23 flags listed, Cyprus and Panama made the list again, as they had done in the United States. Once more, major open registry countries are singled out. Other open registry countries are on both the U. S. and the Paris MOU list, and therefore deserve watching as they compete for the top open registry positions in terms of tonnage.

Along with the Paris MOU listing, member countries such as France and the United Kingdom have published their own list of "bad actors."[111] It is clearly within their sovereign right to employ their own system of port State control as long as it does not conflict with the regional agreement. Both France and the United Kingdom not only spotlighted the flag of registry, but provided the name of the vessel, the owner/operator, the classification society, and details of the grounds for detention. Their activity more closely parallels the U. S. system, and once the target criterion are refined by the EC and the Paris MOU member States, it is likely there will be more international consistency in the program.

Other port State control regional programs are not far enough along to evaluate the targeting practice and provide data. It is important to note that simultaneous with these regional programs coming on line, the IMO is developing an international database for collation of port State control information. Undoubtedly, the U. S. and Paris MOU

[111]Patel, Tara, "France Publishes List of Rogue Ships," Journal of Commerce, July 5, 1994, p 8B, and Janet Porter, "UL Cites Faulty Equipment in Detentions," Journal of Commerce, August 25, 1994, 8B.

systems have led the way, and the international database will conform to these programs. Additional attention at the international level is being placed on standardization of port State Control procedures. IMO's Flag State Implementation (FSI) subcommittee is drafting training and qualification requirements for Port State Control officers.[112] This subcommittee is also working to review and amalgamate existing resolutions and documents on port State control into a single comprehensive document. In the meantime, targeting is becoming institutionalized.

The reaction to targeting outside the enforcement regime was swift and emotional. Companies took offense to being "labeled," flag administrations defended their reputations, even classification societies have begun to examine the way they perform their business. Chapter 6 will outline some notable occurrences in the maritime community which have resulted as a reaction to targeting. Additionally, the possible impact on the tanker charter industry, and a possible methodology for quantitatively analyzing targeting will be addressed. At this point in time the practice of targeting is relatively new, and an economic analysis of its impact is rudimentary at best. However, the assessment of economic impact with the anecdotal information available to date provides a framework which can be used in the future in evaluating the true economic consequences of targeting. An understanding of the economic implications is crucial to evaluating the potential success of the practice of targeting. The incentive for compliance with the rules and regulations must be greater than the financial benefits derived from

[112]No author cited, "Frustration at the IMO," Lloyd's Ship Manager, April 1994, p 11-13.

non-compliance. Prior to this economic examination, information will be provided about the role of industry, to better understand how targeting might influence industry decisions.

CHAPTER 5 THE ROLE OF THE SHIPPING INDUSTRY

The enforcement regime has been highlighted as a system of checks and balances, with flag States, port States, and classification societies all participating in oversight. Another key player is the owner or operator of the vessel. Shipping is a capital intensive business. It is costly to operate a vessel in compliance with domestic and international standards. There are some who take cost-cutting measures which adversely effect safety and environmental protection. It is hoped that targeting will weed out those owners and operators who are cost cutting in the wrong areas. The attitude of many owners and operators in industry towards port State control and targeting is positive for the mere reason that removing sub-standard performers from the competition, benefits the more safety and environmentally conscious owners and operators who are at a competitive disadvantage. One industry official's remarks sum up the reaction appropriately:

> "Moreover, there is certainly reason to believe that marginal operators are naturally attracted to certain registries because of perceived laxity on the part of the maritime administrators, while first rate owners are generally attracted to registries which seem to be making a good faith effort to upgrade their maritime programs. To the extent that marginal owners go in one direction and good owners go in another, the flag States attracting the former deserve the poor reputation that they have earned because of the correlation of casualty and pollution statistics. And they will

consequently earn the special attention of port State inspectors and the problem that attention entails."[113]

Indeed, the goal of port State control was to separate those who do execute their duties properly, from those who do not. The financial penalty for substandard performance is greater under the targeting regime, and the special attention referred to by Mr. Loree will be examined in economic terms in the next chapter.

In the meantime, many companies have taken the initiative to adopt safety management codes.[114] Fortunately, the trend is to reward these companies with financial incentives. For instance, the Port of Rotterdam Authority rewarded a Swedish-owned supertanker with lower harbor dues as a reward for its superior safety standards.[115] The award was introduced last year to reward shipowners who have invested extra money in the quality of the ship and its crew. The Dutch pilots are also providing a 25% discount to the winner, and other ports of the world are considering similar measures.

Major reductions in insurance and labor costs have been secured by a number of shipowners who were among the early converts to safety management certification. "Reports from Det Norsek Veritas (DNV) suggest that reductions in hull and machinery premiums of up to 15% and in protection and indemnity costs of between 6-10% have

---

[113]Statement made by Mr. Philip J. Loree, Chairman of the Federation of American Controlled Shipping (FACS), participating in a 2 day conference held in London, England on 1 and 2 December 1994. Conference was held to consider the various aspects of Lord Donaldson's report, "Safer Ships, Cleaner Seas."

[114]IMO Resolution A.741(18), The Intennational Management Code for the Safe Operation of Ships and for Pollution Prevention (ISM Code), adopted in November 1993, provides guidelines for the safe management of vessels and for pollution prevention. The ultimate aim of the Code is to ensure vessel owners/operators assume resonsibility for the safety and maintenance of their fleets. It becomes mandatory in 1998.

[115]Barnard, Bruce, "Rotterdam Rewards Swedish Tanker with Discount for Safety Measures," Journal of Commerce, 13 February 1995.

been achieved by the 51 companies with Safety and Environmental Protection Certification."[116] Other industry success stories are being communicated, with some citing a reduction in port State control inspections as an added benefit of safety management. This 'return on investment' is the bottom line for many companies. There is to be a cost benefit associated with compliance. With industry providing financial incentives for improved safety, and port State control providing financial disincentives for substandard performance, the competitive nature of shipping can be more fairly balanced in favor of good performance.

One group which is still particularly vulnerable is the tanker charter industry. With today's pollution liability risks, and increasing operating expenses many in the shipping community are also becoming more "risk conscious."[117] Just as the port States are protecting themselves against certain "perils" or risks, so to are the cargo owners and charterers which hire the vessels. Charterers are a particularly susceptible group because they do not always operate effective control of the vessel as an owner would. Tankers have been under increasing scrutiny in light of the aging fleet, and incidents such as the *Exxon Valdez* and the *Braer*.[118]

---

[116]No author cited, "Safety Management 'positive benefit'," Lloyd's List, 2 February 1995.

[117]In the aftermath of the *Exxon Valdez* oil spill, the United States passed into law the Oil Pollution Act of 1990 which requires oil tankers operating in U. S. waters to provide proof of insurance for a catastrophic oil spill. The contentious issue of "unlimited liability" in the case of a spill caused by negligence, failure to report, or violation of regulation has proven difficult for the insurance industry. An interesting article concerning this issue is provided by Jason A. Garick. See "Crisis in the Oil Industry, Certificates of Financial Responsibility and the Oil Pollution Act of 1990," Marine Policy, July, 1993, p 272-293.

[118]On March 24, 1989, the tanker *Exxon Valdez* struck Bligh Reef in Prince William Sound, Alaska, and released about 260,000 barrels of crude oil into the sea. On January 5, 1993, the tanker *Braer* went aground off the Shetland Islands, and broke up a week later, spilling all her 84,700 tons of crude oil, and 1,600 tons of bunker fuel into the sea.

There are three types of charters used in the tanker charter industry:

1) demise or bareboat
2) time
3) spot or voyage

In a demise or bareboat charter, the charterer leases the ship, provides his own crew and assumes responsibility for the operations, maintenance and management of the vessel. The role of the demise charterer very much parallels that of the owner of the vessel. It is in the other two categories of vessels where the vulnerability is greater. Time charters and spot or voyage charters involve the charterer contracting the vessel for a certain amount of time, or for a particular voyage. With these two charters, the charterer exercises no operational control of the vessel.

The tanker charter industry has attempted to protect itself from the "perils" of substandard ships by performing pre-charter surveys. A system termed "vetting" is employed by charterer's to weed out unacceptable risk. Vetting, as defined by Webster's dictionary, means "to appraise or examine expertly."[119] These vetting programs are designed to combine an extensive physical examination of the vessel, with a review of its ownership history and casualty record. It is not clear yet, just how much use is made of port State control and targeting results. Targeting is fairly new, and still being refined in terms of how to assign a risk factor. Also, the distribution of results is not formalized. In the U. S., for example, a Freedom of Information Act (FOIA) request must be made, and attempts at being put on some sort of automatic mailing lists have been discouraged. However, with the goal of IMO to develop an international data base, and many regional

[119]Webster's II New Riverside University Dictionary, The Riverside Publishing Company, 1984, p 1285.

programs coming on line, it is only a matter of time before the results are provided in a more systematic fashion. As the targeting system becomes more refined and institutionalized, charterers will undoubtedly make use of the information. After all, vetting surveys are costly and targeted vessels are subject to delays.

There are several professional organizations which offer vetting, or rating services which avoid companies having to hire individual surveyors, and duplicating efforts of other companies. One such program, sponsored by the Oil Companies International Marine Forum (OCIMF), is the Ship Inspection Report Program (SIRE). SIRE maintains a readily accessible pool of technical information concerning the condition and operational procedures of tankers.[120] The information is available to OCIMF members, and may be accessed by potential charterers. SIRE was brought about to reduce duplication of effort by several surveyors considering the same vessel, and to avoid unnecessary burden on the tankers' crews. The official position of OCIMF members concerning port State control is as follows:

> "The beneficial impact of PSC upon maritime safety would be greatly enhanced if such reports of each State's individual ship inspections were made available to other States and relevant interested parties. This is a step which should be taken immediately.
>
> Longer-term, computer based information systems should be used to enhance the transfer of information."[121]

---

[120]OCIMF/SIRE brochure, no date provided, published by OCIMF, London, England.

[121]OCIMF, "Tanker Safety and Pollution Prevention, The OCIMF View on the Issues," September, 1993.

Another tool used by charterers is published by the Tanker Advisory Center in New York. Titled "Guide to the Selection of Tankers," it is now in its thirteenth year of publication.[122] The purpose of the publication is to give tanker charterers, cargo owners, insurers, and others involved with tankers, up-to-date information to assist them in selection of tank vessels 10,000 deadweight metric tons and over. It is recommended that the user select tankers with higher ratings to avoid casualties and total losses.[123] Tankers are rated based on criterion which include casualty data, oil spills, and detentions. Mr. McKenzie, like OCIMF, has gone on record as desiring the publication of PSC results in a more systematic fashion.[124]

Information will now be provided which demonstrates some use is being made of targeting results. One cannot pick up a maritime trade publication of late which does not comment on some aspect of port State control and targeting. It has gotten the attention of the industry, and is forcing sweeping changes in the way the system of checks and balances is operating. Additionally, an attempt will be made to quantitatively assess how this new practice of targeting has had success at forcing more members of the shipping community to own up to their responsibilities. In particular, implications for the flag of registry will be discussed, a possible formula for use in evaluating the trend in penalty assessments in the U. S. will be examined, and an attempt to translate the impact of delays on the tanker charter industry will be provided. A disclaimer must be made to the

---

[122]McKenzie, Arthur, Director and Publisher, 1995 Guide for the Selection of Tankers, Compiled by Tanker Advisory Center, Inc., New York.

[123]Ibid, Introduction, p 1.

[124]Telephone interview Mr. Arthur McKenzie, 13 March 1995.

effect that any analysis at this point in time is rudimentary and anecdotal at best. However, this analysis does provide areas worthy of monitoring in the years ahead.

CHAPTER 6 ANALYSIS OF ECONOMIC IMPACT

An important element in evaluating port State control and the practice of targeting, is recognizing the responsibility of the port State not to impede maritime transportation. The 1982 UN Convention on the Law of the Sea, while expanding the rights of the port State to protect itself from certain perils, also provided parameters for exercising this expanded jurisdiction. Part XII, Section 7 is aptly titled "Safeguards."[125] Article 226, *Investigation of foreign vessels* reads as follows:

"1. (a) States shall not delay a foreign vessel longer than is essential for purposes of investigations provided for in articles 216, 218, and 220."

The article goes on to explain the allowable delays which have been detailed earlier in this paper. Article 227, Non-discrimination with respect to foreign vessels further states as follows:

"In exercising their rights and performing their duties under this Part, States shall not discriminate in form or fact against vessels of any other State."

When targeted, vessels have experienced delays. These delays are warranted in that the port State is clearly exercising its legal right to take precautions prior to allowing the vessel to operate in its waters. However, if taken in the context of merely 'differentiating,' then targeting certain flag States as substandard could be perceived as

[125]Official Text of the Third UN Convention on Law of the Sea, Part XII, Protection and Preservation of the Marine Environment.

discriminating. This is the fine line being walked by the port State control regime. One that requires consistency in applying standards, and fairness in evaluation of target criterion.

Interestingly, to date no flag State has made an attempt to legally challenge this practice. Undoubtedly, the port State could, in turn, challenge the flag administrations' lack of oversight of the vessel as outlined in treaty law. Provisions for settlement of disputes such as this are provided in Part XV of the 1982 UN Convention on Law of the Sea.[126] Settlement of disputes by peaceful means is encouraged.

The Coast Guard does provide an appeal process for contesting being identified as substandard. The Republic of Vanuatu successfully appealed its target factor, which had a favorable result for vessels of that flag.[127] Vanuatu was given a lower priority for boarding which translated to fewer vessel delays. Targeting is described as a risk based methodology to rid a port States waters of substandard shipping, and is never defined by its administrators as discriminating.

Another way of looking at the practice of targeting is its function as a financial deterrent. Targeting can be interpreted as an economic sanction.

---

[126]Ibid, Part XV.

[127]On June 2, 1994 the Deputy Commissioner of Maritime Affairs for the Republic of Vanuatu petitioned the Coast Guard via a letter to the Office of Compliance and Enforcement, Coast Guard headquarters to reconsider a detention of the Vanuatu flag vessel *Carib Dawn*. The vessel was detained in a U. S. port for a lifeboat grab rail which was loose, but repaired on the spot, prior to the vessel's departure. The Coast Guard agreed with the petition to repeal the incident as an intervention for the purpose of the Port State Control initiative, thus reducing the three year rolling average for Vanuatu to .47%, and removing the country from the list of targeted flags of registry.

> "Economic sanctions (coercion) are actions initiated by one or more international actors (the 'senders') against one or more others (the 'targets') with either or both of two purposes: to punish the targets by depriving them of some source of value and/or to make the 'targets' comply with certain norms the sender deems important."[128]

The port State control regime and targeting involves party States to IMO and ILO conventions (the 'international actors') initiating action against targets (substandard ships, flag States, or classification societies) with both the intended purpose of punishing through fines, detention, and publicity, and to coerce compliance with domestic and treaty law governing maritime transportation. "The effectiveness of sanctions depends on their ability to impose economic costs on targets (i.e. the recipient of the sanctions)."[129]

It is clear that there have been economic impacts as a result of targeting. Loss of revenue to flag administrations in the business of registering ships, changes in the way classification societies are doing business, delays caused by targeted vessels being held up from commencing cargo operations, and increased fines as a result of improving the probability of detection are all worthy of examination. Other costs, such as lost business that might have come the way of the flag of registry, or vessel chartering had their reputation not been tainted, is much harder to measure.

---

[128]Daoudi, M. S. and Dajani, M.S., Economic Sanctions: Ideals and Experience, (Boston: Routeledge & Kegan Paul, 1983) p 7.

[129]Mansfield, Edward D., " Alliances, Preferential Trading Arrangements and Sanctions," Journal of International Affairs, Summer 1994.

Flag of Registry:

Panama, with the largest amount of registered tonnage as of 1994 is a 'targeted' flag of registry. In reaction to being targeted, Panama canceled licenses from eight classification societies.[130] The registry explained their actions are an attempt to reduce the number of societies performing statutory responsibilities on their behalf from 30 to 15. Of the 15 remaining societies allowed to perform the functions on behalf of Panama, 11 will be member societies of the International Association of Classification Societies. Panama representatives stated the register was determined to improve its safety record. Another change in policy was a requirement that all vessels in the registry be classed. Currently 90% of vessels in the registry are classed. (This refers to the classification of Hull and Machinery mentioned in Chapter 3).

Cyprus, another targeted open registry flag, announced it was establishing a worldwide network of independent surveyors to augment its own team of surveyors, which is now deemed insufficient to keep proper tabs on its 2,500 ships around the globe.[131] The Cyprus Shipping Council helped the maritime administration draft the program which will cost an additional $1 million annually. Additionally, the Head of the Ministry of Transport in Cyprus invited the Commandant of the Coast Guard to visit the country, and the Cyprus representatives in Washington D. C. have paid visits to the State

[130]Moloney, Sean, "Panama Rejects Eight Classification Societies," Lloyd's List, 21 August 1994.

[131]Lowry, Nigel, "Green Light for Cyprus Global Ship Surveyors," Lloyd's List, January 27, 1995.

Department Transportation Affairs Office. One member of this office noted this was the first time in his eight years with the State Department that the representatives of these open registry countries are bringing port State control issues to the table.[132] The concerns are generally being raised by industry to the flag administration, who, in turn, is bringing the matter to the U. S. State Department. Mostly general concerns have been raised to date, and no specific details of economic impact or repercussions have been addresses.

The economic impact of targeting is not yet clear with regard to flag administrations. Major open registry countries derive considerable revenue from registration of vessels. An example is Liberia, which boasts its maritime program as the most successful program in the country in spite of the ongoing civil war. "From the registration of the first ship under Liberian flag in 1948 up to the outbreak of civil war, revenue generated by the maritime program accounted for less than 10% of the Liberian budget. Now at more than $20 million a year, it makes up 99% of official revenue."[133] With 1,800 registered ships this translates to approximately $1,100. per ship in revenue. Until the economic impact of targeting is fully realized, with flag administrations being able to evaluate a few years of fluctuations in their registry, the true financial implications can only be estimated.

---

[132]Interview held at State Department Transporation Affairs Office, 14 March 1995, in attendance; LCDR M. Landry, USCG, Mr. Charles Mast, Director of Office of Maritime and Land Transport, and Mr. Steve Miller, Deputy Director of Office of Maritime and Land Transport.

[133]McElroy, Claudia, "Liberian Shipping Fleet Grows in Spite of War," The Journal of Commerce, 3 March 1995.

Classification Societies:

In the Classification Society arena, Bureau Veritas, a French classification society announced in December of 1994 that it was changing the rule allowing its surveyors to visit ships without a request from a shipowner. This is a major departure from industry practice where the vessel always requested the visit. "The decision to introduce unrequested ship visits was an indication of how seriously Bureau Veritas viewed quality, said Gilberto Chaves, the society's director of ships in service. He said that three years ago Bureau Veritas may have been open to criticism and its association with a number of sub-standard ships may have damaged its credibility."[134]

The Coast Guard report to Congress (Attachment 8) noted several classification societies have improved their accountability and oversight of surveyors who fail to perform to their satisfaction. Disciplinary action which was rarely used, is now more frequently applied. Additionally, the IACS referred to earlier, established a permanent secretariat in 1992 to reestablish classification credibility and serve as a focal point for serious, unified action on behalf of its members.[135] Formerly, the Secretariat was an honorary office, held by a different member every two years.

---

[134]Mulrenan, Jim, "Bureau Vertitas to check ships without request," Lloyd's List, 16 December 1994.

[135]No author cited, "Raising Issues, Raising Standards," Surveyor, American Bureau of Shipping publication, September 1994.

In the meantime, additional oversight is being provided through underwriter's surveys. The London insurance market is using a Structural Condition Survey Warranty carried out by a Salvage Association. The Institute of London Underwriters (ILU) reports this survey is "for use by underwriters when they feel the need for verification of the condition of a particular vessel."[136] By the end of 1992, 133 vessels had been examined, however only 21 passed. The additional vessels had to undergo much needed repair work. Classification societies took offense to this additional oversight, their credibility already in question, but the ILU has stated they will pull back when vessels are not failing at such a high rate.

Shipping Industry:

In industry, an interview with an official of Stolt Parcel Tankers revealed that the company had reflagged two Bahamian flag vessels to Liberia, because of delays experienced as a result of Bahamas being targeted.[137] One vessel came into a U. S. port and was delayed twelve hours before cargo operations could commence. This was translated by the company to roughly to a twelve thousand dollar loss. Indeed the Coast Guard report to Congress (Attachment 8) reports a number of owners reflagging their ships, as well as charterers paying increased attention to the performance records of ships.

The cost of delays can further be translated by examination of the tanker charter industry. The tanker industry is fundamentally international in nature. There are over

[136]No author cited, "Safety, What's Going Right?," Marine Log, March 1993

[137]Telephone interview Mr. Jim Varley, Stolt Parcel Tankers, 26 January 1995.

3000 oceangoing tankers in the world today. The industry consists of over 2,000 owners whose ships are run by over 600 operators.[138] There has been a long-standing surplus of tanker capacity, and there is also an increase in ownership by speculators and asset players. These entities are regrettably cited as "more interested in a quick financial return than in a long-term commitment to quality operations in the marine industry."[139] Improvements are being made in the industry, but there is still room for improvement. This is exactly why targeting is welcomed by the quality operators in shipping.

The delays associated with substandard shipping translate to increased costs to the owner or operator of the vessel. Depending on how the charter is arranged, the cost of delays might be billed to the charterer, rather than the owner or operator. A review of ship fixtures for 23 March 1995 quotes daily rates on time charters of tankers, a sample of which include; (1)$9,750.00 daily for a Cypriot flagged, 31,738 metric dwt tanker, and (2) $13,250.00 daily rate for a Panama flagged, 45,720 metric dwt tanker. Both flags of registry are targeted and can anticipate delays which will translate to $400./hr and $552./hr respectively. Add to the cost of the delay, the increased probability of having a deficiency cited for which a penalty will be assessed, and there is definitely an economic disadvantage to chartering a targeted vessel.

[138]OCIMF, "Tanker Safety and Pollution Prevention, The OCIMF View on the Issues," September, 1993.

[139]Ibid, p 6.

U.S. Civil Penalty Process:

An evaluation of U. S. civil penalty assessments in maritime shipping could provide another example of the economic cost of targeting. Targeting is a new operational measure being exercised by the port State, and is actually in addition to the existing system which penalizes owners or operators for violation of domestic laws of the nation State. These domestic laws, for the most part, are the same as the international laws and regulations cited in treaties and conventions. As stated earlier, the effectiveness of a sanction lies in its ability to impose economic costs on targets.

One economist, Clifford S. Russell provides a theory in which compliance behavior is influenced by the economic value of compliance.[140] In business terms, there must be a financial incentive for compliance which is greater than the financial benefits derived from non-compliance. The probability of detection is a critical factor which influences this theory. Targeting has improved the probability that the substandard performer (i.e. the non-compliance operator) will be caught. Coast Guard marine inspector boardings on foreign ships increased from 1288 in 1993 to 2473 in 1994- a 92% increase.[141] The fines assessed in U. S. Coast Guard civil penalty procedures as a result of these boardings could be evaluated to determine any increase in fines assessed. The cumulative cost of

---

[140]Russell, Clifford S., "Economics and Technology in the Design of Monitoring and Enforcement Policies for Point Source Pollution," A Report to the National Science Foundation on Grant No. PRA 8696055, Vanderbilt Institute for Public Policy Studies, June 1988. Although the report analyzes the economic value of compliance vs. non-compliance as it relates to point source pollution regulations, the concept of improving the probability of detection to increase the economic value of compliance, and thus the incentive for compliance, is an important aspect related to the success of targeting in the port State control initiative.

[141]U. S. Coast Guard Report to Congress on Port State Control Initiative, "Targeting Substandard Ships," prepared by Coast Guard Headquarters in April 1995. At the time of completion of this study, the report had not yet been officially provided to Congress.

increased probability of detection coupled with increased fines provides a higher economic cost of non-compliance.

Along with a higher economic cost of non-compliance, there is a tarnished image because the cases themselves have become less transparent. In the past, an owner or operator of the vessel was assessed a penalty which was processed between that owner or operator and the Coast Guard. The practice now, of having the incident leading to the civil penalty case be part of a track record which translates to a risk factor, carries more weight as a deterrent. Not only has the owner or operator undergone an increased penalty assessment, but in being targeted the owner or operator increases the likelihood of having additional penalties assessed, as well as the added cost of operational delays.

These cases are examples of how targeting can operate as an economic sanction, imposed by the port State control regime, on substandard entities in the shipping community. Targeting, and the subsequent publicity in maritime trade publications, goes beyond the simple transaction cost of a violation between the vessel owner or operator found in non-compliance, and the port State imposing the penalty. The system expands the economic cost in several directions and offers the best opportunity to date, for ensuring sanctions are felt by their target.

CHAPTER 7 CONCLUSIONS

Targeting under the port State control regime is a method of operationalizing expanded jurisdiction afforded to the port State, and codified into treaty law. "Whether a treaty elicits compliance of other desired behavioral changes depends on identifiable characteristics of the regime's compliance systems."[142] Targeting is continually being refined, and is becoming part of the fabric of the port State control regime. As regional programs continue to develop, and international standards are established, the process of targeting will become standard procedure. Ongoing port State control measures offer great support to the goal of ridding the shipping community of substandard performance. The focus on substandard ships, flags of registry, and classification societies will hopefully provide the needed "watchdog" approach in returning to a more evenly distributed system of checks and balances. There are still hurdles to achieving this goal.

One area which is ripe for improvement is the human factor. This part of the formula is a subject in itself, and undoubtedly the hardest to control. Although the human element in incidents is very considerable, the chain of factors can be complex and remedies can be difficult to determine. Targeting can focus attention on substandardness, and assessment of risk, but the casualty figures cannot be ignored. The United Kingdom P & I club published an analysis of 1,380 major claims (over $100,000.) which showed human error as the cause of 90% of collisions, 80% of property damage, 65% of personal injuries, half

[142]Mitchell, Ronald B., "Regime Design Matters: International Oil Pollution and Treaty Compliance," International Organization, Summer 1994.

the cargo claims and half the pollution claims.[143] Australia also performed a study in 1992 which showed 75% of accidents at sea were caused by human error, with mechanical or structural failure accounting for the rest.[144] The movement afoot is to now conduct operational tests of the crew along with the physical examination of the vessel and its systems. This is the element of expanded port State control oversight which will bring the goals of safer shipping and improved environmental protection full circle. IMO has accelerated the procedure to have the International Convention on Standards of Training, Certification and Watchkeeping for seafarers (STCW, 1978) updated and ready for adoption in 1995. Flag States, vessel owners and operators, and classification societies have all been addressed in the context of port State control and targeting. The newest expansion of jurisdiction, observing the crew in operation, can only enhance an already successful system.

It is obvious that the system of checks and balances, and oversight is necessary. The flag State, the port State, the class society, the owners, the operators, the crew, the underwriters, the international organizations can all perform their tasks, but if there is any hope of simplifying the system, and improving the safety and environmental protection measures necessary to guarantee safe shipping, there must be a means of sharing information. The concern with the activity of targeting must be balanced with the ability to achieve the goal of safe shipping. Faith in the old system has died, but the new system

[143]No author cited, IMO News, No.2, 1993.

[144]Ibid.

discussed in the preceding pages has great potential for success. Targeting under the evolving port State control regime will act as the impetus for change.

ATTACHMENTS 1 - 5

SAMPLE CERTIFICATES

Cargo Ship
Safety Equipment Certificate

UNITED STATES OF AMERICA

ISSUED UNDER THE PROVISIONS OF THE

International Convention for the Safety of Life at Sea, 1974

NAME OF SHIP	DISTINCTIVE NUMBER OR LETTERS	PORT OF REGISTRY	GROSS TONNAGE	DATE ON WHICH KEEL WAS LAID (See note below)

THE GOVERNMENT OF THE UNITED STATES OF AMERICA CERTIFIES:

I. That the above-mentioned ship has been duly inspected in accordance with the provisions of the Convention referred to above.

II. That the inspection showed that the life-saving appliances provide for a total number of ..... persons and no more, viz.:

..... lifeboats on port side capable of accommodating ..... persons;

..... lifeboats on starboard side capable of accommodating ..... persons;

..... motor lifeboats (included in the total lifeboats shown above), including ..... motor lifeboats fitted with radio-telegraph installation and searchlight, and ..... motor lifeboats fitted with searchlight only;

..... liferafts, for which approved launching devices are required, capable of accommodating ..... persons; and

..... liferafts, for which approved launching devices are not required, capable of accommodating ..... persons;

..... lifebuoys;

..... lifejackets.

III. That the lifeboats and liferafts were equipped in accordance with the provisions of the Regulations annexed to the Convention.

IV. That the ship was provided with a line-throwing apparatus and portable radio apparatus for survival craft in accordance with the provisions of the Regulations.

V. That the inspection showed that the ship complied with the requirements of the said Convention as regards fire-extinguishing appliances and fire control plans, echo-sounding device and gyro-compass and was provided with navigation lights and shapes, pilot ladder, and means of making sound signals and distress signals, in accordance with the provisions of the Regulations and the International Regulations for Preventing Collisions at Sea in force.

VI. That in all other respects the ship complied with the requirements of the Regulations so far as these requirements apply thereto.

THIS CERTIFICATE is issued under the authority of the GOVERNMENT OF THE UNITED STATES OF AMERICA. It will remain in force until .....

Issued at ..... the ..... day of ....., 19...

THE UNDERSIGNED DECLARES that he is duly authorized by the said Government to issue this certificate.

NOTE. It will be sufficient to indicate the year on which the keel was laid or when the ship was at a similar stage of construction except for 1972, 1983 and 1990, in which cases the actual date should be given.

.....
Officer-in-Charge, Marine Inspection, U.S. Coast Guard.

DEPT. OF TRANSP., USCG, CG-1347 (Rev. 3-80)

GPO 313-311

Attachment to the Cargo Ship Safety Equipment Certificate

UNITED STATES OF AMERICA

Name of Ship _____ Length (reg. III/3.10) _____

1. The life-saving appliances provided for a total of ..... persons and no more, viz:

..... lifeboats on port side accommodating ..... persons including ..... self-righting partially enclosed lifeboats (reg. III/43), ... totally enclosed lifeboats (reg. III/44), ... lifeboats with a self-contained air support (reg. III/45), ... fire-protected lifeboats (reg. III/46), ... other lifeboats, type .....;

..... lifeboats on starboard side accommodating ..... persons including ..... self-righting partially enclosed lifeboats (reg. III/43), ... totally enclosed lifeboats (reg. III/44), ... lifeboats with a self-contained air support system (reg. III/45), ... fire-protected lifeboats (reg. III/46), ... other lifeboats, type .....;

..... free-fall lifeboats accommodating ..... persons including ..... totally enclosed lifeboats (reg. III/44), ... lifeboats with a self-contained air support system (reg. III/45), ... fire-protected lifeboats (reg. III/46);

..... motor lifeboats (included in the total lifeboats shown above) including ..... motor lifeboats fitted with radiotelegraph installation and searchlight, and ..... motor lifeboats fitted with searchlight only;

..... rescue boats ..... included in the total lifeboats shown above;

..... liferafts, for which approved launching appliances are required, accommodating ..... persons;

..... liferafts, for which approved launching appliances are not required, accommodating ..... persons;

..... liferafts required by regulations III/26.1.4;

..... lifebuoys;

..... life-jackets;

..... immersion suits including ..... complying with the requirements for life-jackets;

..... thermal protective aids;

and the lifeboats, liferafts and rescue boats were equipped in accordance with the requirements of the Convention.

2. The ship operates in accordance with regulations III/26.1.1.1 within the limits of the trade area .....

3. This attachment shall expire on the same day as the Certificate to which it is attached.

.....
Date

.....
Officer-in-Charge, Marine Inspection, U.S. Coast Guard.

DEPT. OF TRANSP., USCG, CG-3347B (6-86)

GPO 515-211

Cargo Ship
Safety Construction Certificate

UNITED STATES OF AMERICA

ISSUED UNDER THE PROVISIONS OF THE

International Convention for the Safety of Life at Sea, 1974

NAME OF SHIP	DISTINCTIVE NUMBER OR LETTERS	PORT OF REGISTRY	GROSS TONNAGE	DATE ON WHICH KEEL WAS LAID (See note below)

THE GOVERNMENT OF THE UNITED STATES OF AMERICA CERTIFIES:

That the above-mentioned ship has been duly surveyed in accordance with the provisions of Regulation 10 of Chapter I of the Convention referred to above, and that the survey showed that the condition of the hull, machinery and equipment, as defined in the above Regulation, was in all respects satisfactory and that the ship complied with the applicable requirements of Chapter II-1 and Chapter II-2 (*other than that relating to fire-extinguishing appliances and fire control plans*).

THIS CERTIFICATE is issued under the authority of the GOVERNMENT OF THE UNITED STATES OF AMERICA. It will remain in force until .....

Issued at ..... the ..... day of ....., 19...

THE UNDERSIGNED DECLARES that he is duly authorized by the said Government to issue this certificate.

NOTE: It will be sufficient to indicate the year in which the keel was laid or when the ship was at a similar stage of construction except for 1932, 1965, and 1980, in which cases the actual date should be given.

.....
Officer-in-Charge, Marine Inspection, U.S. Coast Guard.

CG-4379 (Rev. 3-80)

GPO 916-336

Supplement to the Cargo Ship Safety Construction Certificate

UNITED STATES OF AMERICA

ISSUED UNDER THE PROVISIONS OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974

NAME OF SHIP	DISTINCTIVE NUMBER OR LETTERS	PORT OF REGISTRY	Deadweight of Ship (metric tons)	Year of Build

Type of ship:

Tanker engaged in the trade of carrying crude oil*

Tanker engaged in the trade of carrying oil other than crude oil*

Tanker engaged in the trade of carrying crude/other oil*

Cargo ship other than a tanker engaged in the trade of carrying oil*

**Delete as appropriate.*

Date of contract for building or alteration or modification of a major character .....

Date on which keel was laid or ship was at a similar state of construction or on which an alteration or modification of major character was commenced .....

Date of delivery or completion of an alteration or modification of a major character .....

THIS IS TO CERTIFY:

That the ship has been surveyed in accordance with Regulation 10 of Chapter I of the Protocol of 1978 Relating to the International Convention for the Safety of Life at Sea, 1974; and

that the survey showed that the condition of the hull, machinery and equipment as defined in the above Regulation was in all respects satisfactory and that the ship complied with the requirements of that Protocol.

This certificate is valid until ..... subject to intermediate survey(s) at intervals of .....

Issued at .....

..... 19 .....

Officer-in-Charge, Marine Inspection, U.S. Coast Guard

DEPT. OF TRANSP., USCG, CG-4359-A (2-81)

This Supplement shall be permanently attached to the Cargo Ship Safety Construction Certificate.

7530-01-GF2-9780

Department
Transportation
United States
Coast Guard

International Oil Pollution Prevention Certificate

ISSUED UNDER THE PROVISIONS OF THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973, AS MODIFIED BY THE PROTOCOL OF 1978 RELATING THERETO *(hereinafter referred to as the Convention")*

Under the authority of the Government of the *United States of America*

by the *United States Coast Guard*

NAME OF SHIP	DISTINCTIVE NUMBER OR LETTERS	PORT OF REGISTRY	GROSS TONNAGE

TYPE OF SHIP:

* Oil tanker *(Form B Supplement attached)*
* Ship other than an oil tanker with cargo tanks coming under Regulation 2(2) of Annex I of the Convention *(Form B Supplement attached)*
* Ship other than any of the above *(Form A Supplement attached)*

---

* Delete as appropriate

THIS IS TO CERTIFY:

1. That the ship has been surveyed in accordance with Regulation 4 of Annex I of the Convention; and
2. That the survey shows that structure, equipment, systems, fittings, arrangement and material of the ship and the condition thereof are in all respects satisfactory and that the ship complies with the applicable requirements of Annex I of the Convention.

This Certificate is valid until _____ subject to surveys in accordance with Regulation 4 of Annex I of the Convention.

Issued at _____

_____ 19__ _____
Issuing Officer

SN 7530-01-GF3-0540

ATTACHMENT 6

1993 PARIS MOU STATISTICS

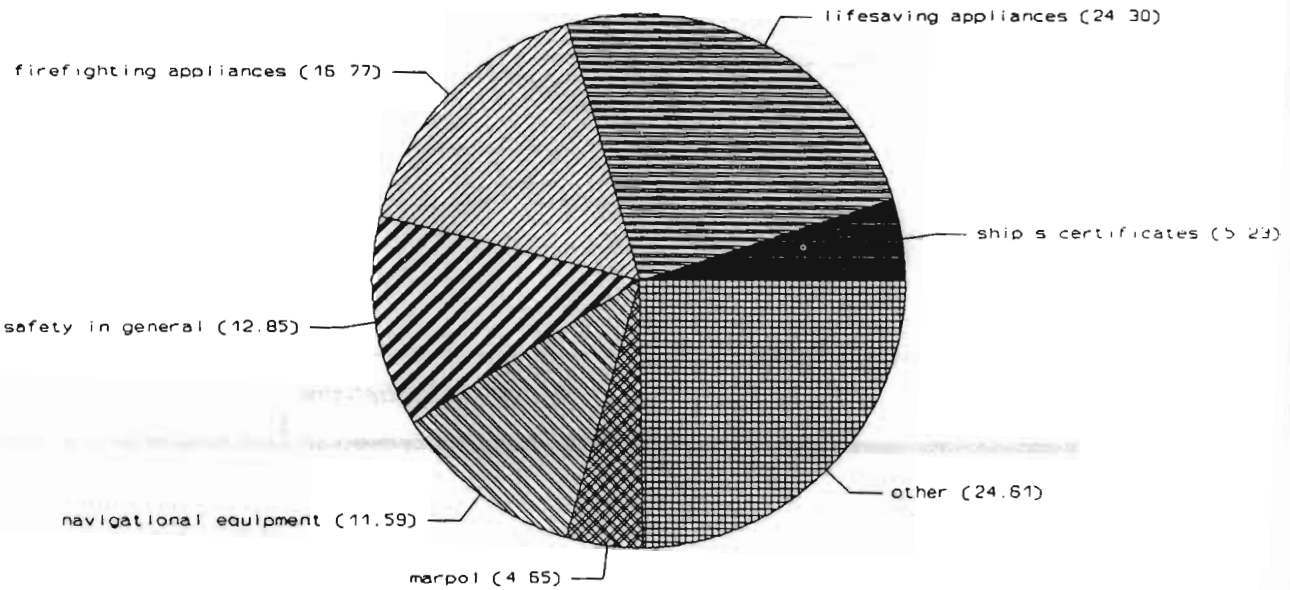
Status of relevant instruments for the purposes of the Memorandum of Understanding on Port State Control. *(information as of 31-12-1993)*

AUTHORITY:	CONVENTIONS:								
	LOADL.'66	LOADL. PROT.'88	SOLAS'74	SOLAS PROT.'78	SOLAS PROT.'88	MARPOL 73/78	STCW'78	COLREG'72	ILO 147
BELGIUM	22-01-69	---	24-09-79	24-09-79	---	06-03-84	14-09-82	22-12-75	16-09-82
DENMARK	28-06-67	02-12-91	08-03-78	27-11-80	02-12-91	27-11-80	20-01-81	24-01-74	28-07-80
FINLAND	15-05-68	---	21-11-80	30-04-81	---	20-09-83	27-01-84	16-02-77	02-10-78
FRANCE	30-11-66	05-10-90	25-05-77	21-12-79	28-02-92	25-09-81	11-07-80	10-05-74	02-05-78
GERMANY	09-04-69	---	26-03-79	06-06-80	---	21-01-82	28-05-82	14-07-76	14-07-80
GREECE	12-06-68	---	12-05-80	17-07-81	---	23-09-82	22-03-83	17-12-74	18-09-79
IRELAND	28-08-68	---	29-11-83	29-11-83	---	---	11-09-84	19-12-77	15-12-92
ITALY	19-04-68	14-02-91	11-06-80	01-10-82	03-03-92	01-10-82	26-08-87	11-01-79	23-06-81
NETHERLANDS	21-07-67	22-02-91	10-07-78	08-07-80	22-02-91	30-06-83	26-07-85	04-02-76	25-01-79
NORWAY	18-03-68	---	15-02-77	25-03-81	---	15-07-80	18-01-82	13-08-74	24-01-79
POLAND	28-05-69	---	15-03-84	15-03-84	---	01-04-86	27-04-83	14-12-76	---
PORTUGAL	22-12-69	---	07-11-83	07-11-83	---	22-10-87	30-10-85	17-10-78	02-05-85
SPAIN	01-07-68	07-07-93	05-09-78	30-04-80	---	06-07-84	21-10-80	31-05-74	28-04-78
SWEDEN	28-07-67	04-02-93	07-07-78	21-12-79	04-02-93	09-06-80	08-01-81	28-04-75	20-12-78
UNITED KINGDOM	11-07-67	---	07-10-77	05-11-79	---	22-05-80	28-11-80	28-06-74	28-11-80
CANADA	14-01-70	---	08-05-78	---	---	16-11-92	06-11-87	07-03-75	01-06-93
CROATIA	08-10-91	---	08-10-91	08-10-91	---	08-10-91	08-10-91	08-10-91	---
JAPAN	15-05-68	---	15-05-80	15-08-80	---	09-06-83	27-05-82	21-06-77	31-05-83
RUSSIAN FEDERAT.	04-07-66	---	09-01-80	12-05-81	---	03-11-83	09-10-79	09-11-73	07-05-91
USA	17-11-66	01-07-91	07-09-78	12-08-80	01-07-91	12-08-80	01-07-91	23-11-76	15-06-88
DATE OF ENTRY INTO FORCE	21-07-68	---	25-05-80	01-05-81	---	02-10-83	28-04-84	15-07-77	28-11-81

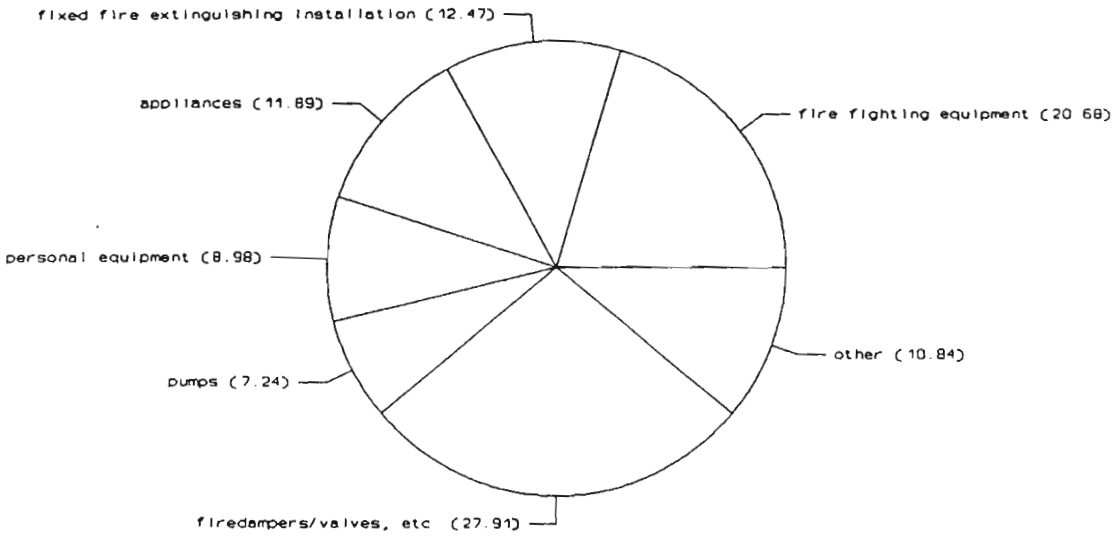
Acceptance chart of the optional Annexes to the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (MARPOL 73/78).

AUTHORITY:	BECAME A PARTY TO MARPOL 73/78	ACCEPTED OPTIONAL ANNEXES:		
		III	IV	V
BELGIUM	06-03-84	27-10-88	—	27-10-88
DENMARK	27-11-80	27-11-80	27-11-80	27-11-80
FINLAND	20-09-83	20-09-83	20-09-83	20-09-83
FRANCE	25-09-81	25-09-81	25-09-81	25-09-81
GERMANY	21-01-82	21-01-82	21-01-82	21-01-82
GREECE	23-09-82	23-09-82	23-09-82	23-09-82
IRELAND	—	—	—	—
ITALY	01-10-82	01-10-82	01-10-82	01-10-82
NETHERLANDS	30-06-83	19-04-88	—	19-04-88
NORWAY	15-07-80	15-07-80	—	15-07-80
POLAND	01-04-86	01-04-86	01-04-86	01-04-86
PORTUGAL	22-10-87	22-10-87	22-10-87	22-10-87
SPAIN	06-07-84	21-01-91	21-01-91	21-01-91
SWEDEN	09-06-80	09-06-80	09-06-80	09-06-80
UNITED KINGDOM	22-05-80	27-05-86	—	27-05-86
CANADA	16-11-92	—	—	—
CROATIA	08-10-91	08-10-91	08-10-91	08-10-91
JAPAN	09-06-83	09-06-83	09-06-83	09-06-83
RUSSIAN FEDERATION	03-11-83	14-08-87	14-08-87	14-08-87
USA	12-08-80	01-07-91	---	30-12-87
DATE OF ENTRY INTO FORCE:	02-10-83	01-07-92	---	31-12-88

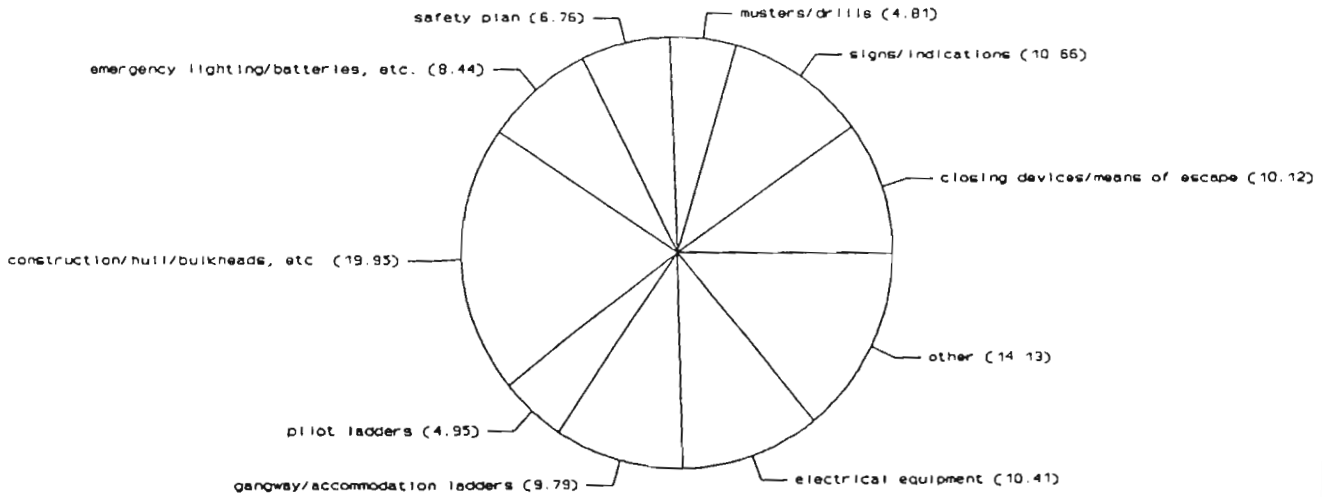
Major categories of deficiencies in % of total number of deficiencies.



fire fighting equipment.

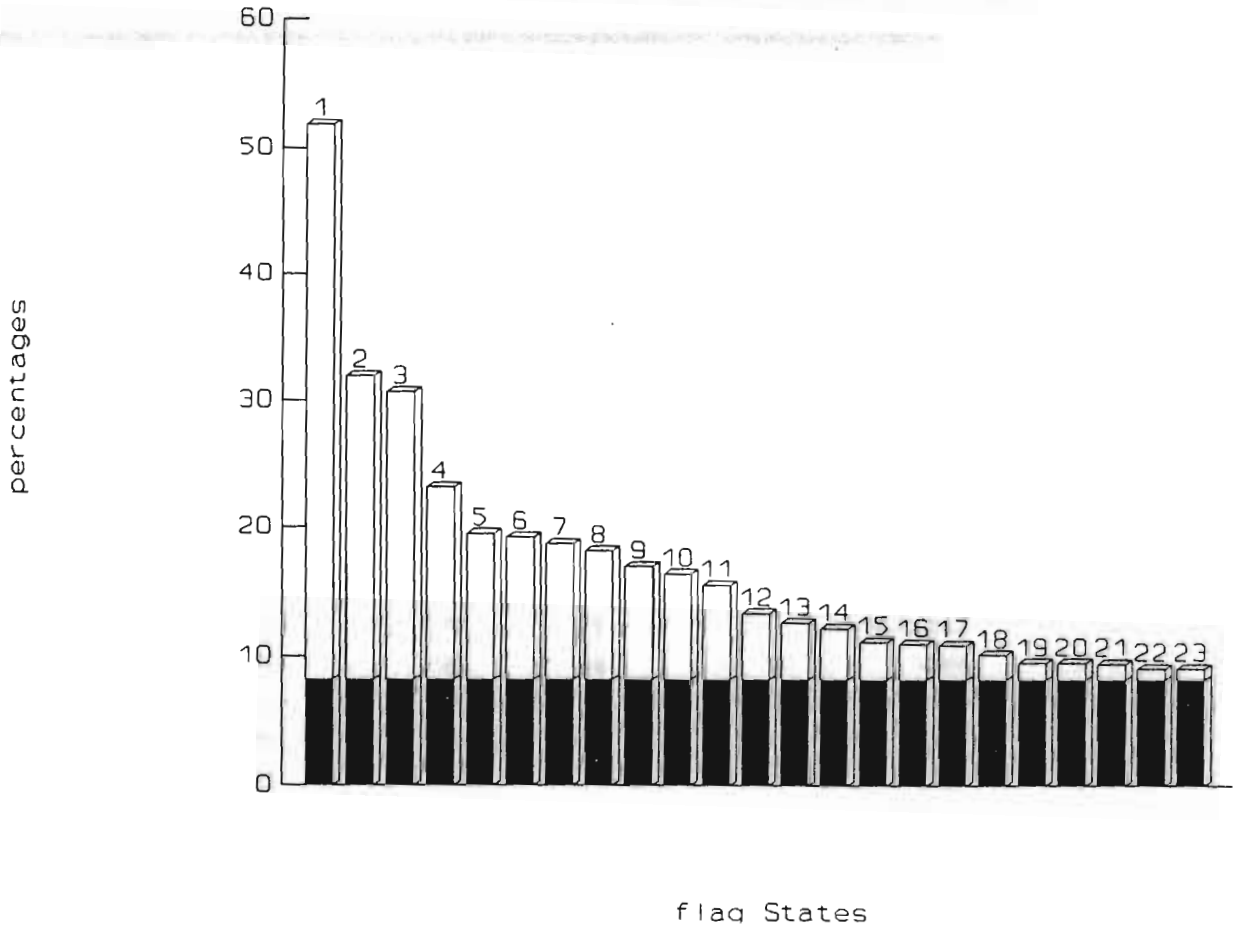


safety in general.



Delays/detentions per flag State, exceeding average percentage.

(expressed in % of respective individual ships involved)



Note 1.

Each bar diagram represents the detention percentage of individual flag States. The numbers of the bar diagrams correspond with the numbers used in the table reproduced on the opposite page, in which figures in more detail have been given.

The shaded area at the bottom of each bar diagram represents the level of average detention percentage (= 8.23 %).

Note 2.

In this diagram only those flag States have been included of which 20 individual ships or more were involved in a port State control inspection. This diagram does not reflect the total number of calls at region ports by individual ships. A complete summary of detentions per flag State, irrespective of the number of individual ships involved, has been given in the table on pages 50-53 of this annual report.

Summary of delays/detentions per flag State, related to individual ships involved.

flag State *)	number of detentions			number of individual ships involved		
	1991	1992	1993	1991	1992	1993
ALBANIA	0	1	1	2	1	2
ALGERIA	2	5	5	33	40	46
ANGOLA	2	1	1	7	6	3
ANTIGUA & BARBUDA	13	15	27	202	239	285
ANTILLES, NETHERLANDS'	3	6	3	63	76	83
ARGENTINA	2	1	0	17	10	8
AUSTRIA	0	0	1	31	27	27
AZERBAIDZHAN	-	-	2	-	-	16
BAHAMAS	28	31	26	438	503	601
BARBADOS	1	0	0	1	1	2
BELGIUM	0	1	0	22	10	10
BELIZE	0	0	3	0	0	5
BERMUDA	0	1	0	22	19	20
BRAZIL	2	1	4	30	35	30
BULGARIA	1	4	7	57	56	63
CANADA	0	0	1	2	2	3
CAPE VERDE	1	2	1	7	3	6
CAYMAN ISLANDS	2	3	1	8	10	13
CHILE	0	0	1	4	5	5
CHINA, PEOPLE'S REPUBLIC	2	6	7	121	106	122
COLOMBIA	1	3	0	6	7	4
COSTA RICA	2	2	0	2	1	0
CUBA	4	4	8	19	20	25
CYPRUS	57	68	139	745	796	896
DENMARK	3	5	9	343	363	351
EGYPT	4	8	9	61	53	53
EQUATORIAL GUINEE	0	0	1	0	0	1

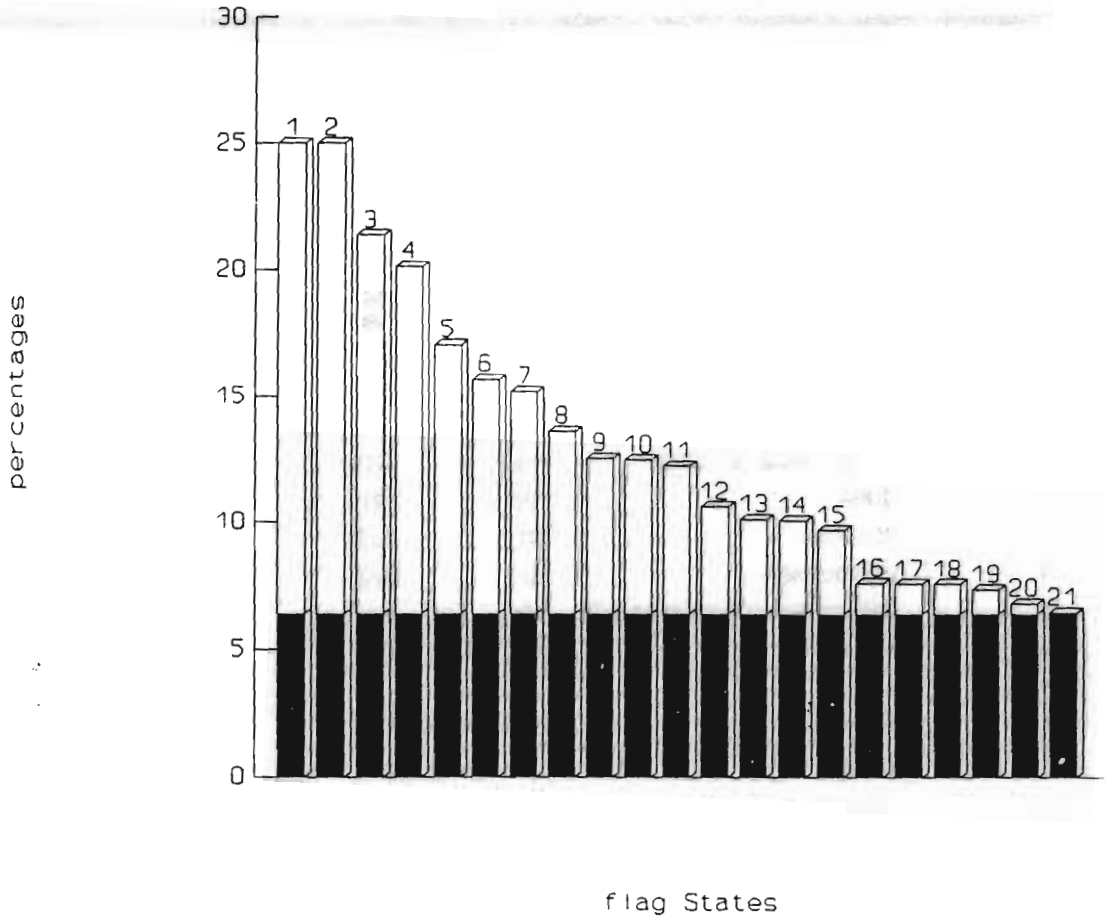
*) Flag States not mentioned in these tables had no ships involved in a detention during the period 1991-1993.

Summary of delays/detentions per flag State, related to individual ships involved.

flag State *)	number of detentions			number of individual ships involved		
	1991	1992	1993	1991	1992	1993
MALDIVES	0	1	0	0	1	0
MALTA	55	29	68	344	355	541
MAN, ISLE OF	2	2	0	32	38	46
MARSHALL ISLANDS	1	1	0	6	11	25
MAURITIUS	0	1	2	0	2	2
MEXICO	0	0	1	6	2	3
MOROCCO	1	6	8	33	36	41
MYANMAR, UNION OF	2	1	2	27	18	21
NETHERLANDS	8	12	13	344	377	346
NIGERIA	2	7	12	8	10	12
NORWAY	25	20	26	673	657	673
PAKISTAN	1	1	1	8	8	9
PANAMA	65	70	92	693	741	906
PERU	1	1	1	4	2	2
PHILIPPINES	3	8	7	109	102	145
POLAND	2	3	6	246	218	184
PORTUGAL	0	3	4	32	27	33
ROMANIA	28	22	19	122	119	82
RUSSIAN FEDERATION (1991: USSR)	-	30	71	-	1190	946
SENEGAL	0	0	1	0	0	2
SINGAPORE	1	2	4	86	84	89
SPAIN	7	3	4	105	86	72
SRI LANKA	1	0	1	11	11	10
ST. VINCENT & GRENADINES	27	41	42	167	247	231
SUDAN	1	0	1	4	4	6
SWEDEN	4	5	13	211	225	208

*) Flag States not mentioned in these tables had no ships involved in a detention during the period 1991-1993.

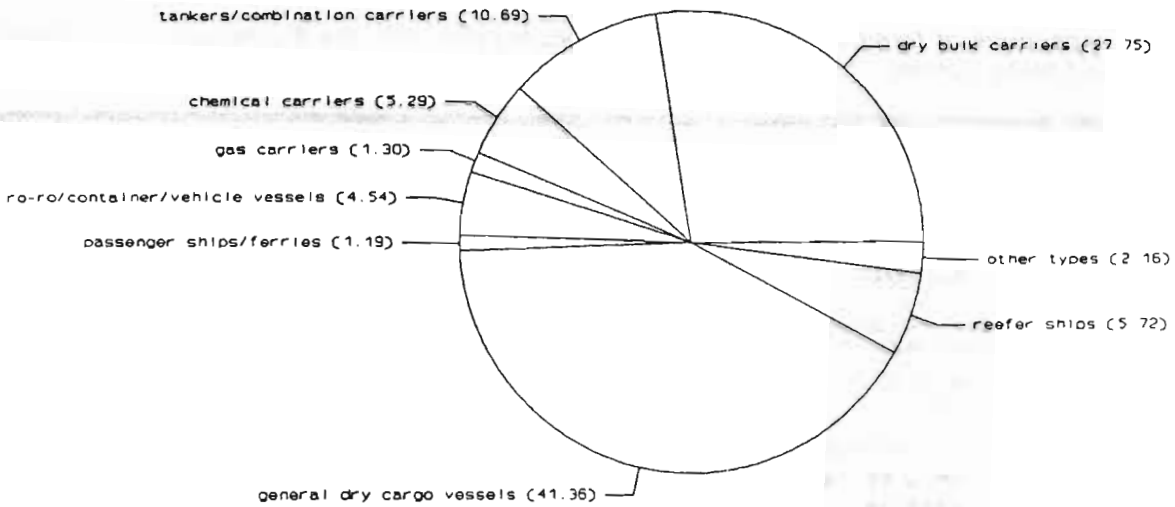
Flag States with detention percentages exceeding 3-year rolling average detention percentage, to be targeted as priority cases for inspection in 1994/1995.
(detentions expressed in % of 3-year total of respective individual ships involved)



Note 1.
Each bar diagram represents the 3-year rolling detention percentage (1991-1993) of individual flag States. The numbers of the bar diagrams correspond with the numbers used in the table reproduced on the opposite page, in which figures in more detail have been given.
The shaded area at the bottom of each bar diagram represents the level of the 3-year rolling average detention percentage over the years 1991-1993 (= 6.41 %).

Note 2.
In this diagram only those flag States have been included of which 60 individual ships or more were involved in a port State control inspection in the period 1991-1993. This diagram does not reflect the total number of calls at region ports by individual ships. A complete summary of detentions per flag State, irrespective of the number of individual ships involved, has been given in the table on pages 50-53 of this annual report.

Delays/detentions per ship's type in % of total number of delays/detentions.



Delays/detentions per ship's type in % of individual ships of respective types involved.

ship types	number of inspections	number of individual ships	number of detentions	detentions in % of individual ships
general dry cargo ships	5326	3286	383	11.66
bulk carriers	5018	3222	257	7.98
tankers/combination carriers	1928	1352	99	7.32
gas tankers	304	195	12	6.15
chemical tankers	965	596	49	8.22
passenger ships/ferries	659	406	11	2.71
refrigerated cargo ships	853	612	53	8.66
ro-ro/container/vehicle ships	1745	1191	42	3.53
other ship types	496	392	20	5.10
totals	17294	11252	926	8.23

flag States	inspections:		
	1991	1992	1993
CZECHIAN REPUBLIC	19	13	22
DENMARK	488	496	533
ECUADOR	20	21	15
EGYPT	88	79	98
EQUATORIAL GUINEE	0	0	2
ESTONIA	1	70	127
ETHIOPIA	8	16	13
FAEROER ISLANDS	25	25	19
FIJI	0	1	0
FINLAND	107	119	144
FRANCE	110	109	100
GABON	3	4	3
GERMANY, FEDERAL REPUBLIC OF	1080	937	839
GHANA	9	7	6
GIBRALTAR	10	13	15
GREECE	535	491	760
GUATEMALA	2	0	0
HONDURAS	205	236	256
HONGKONG	80	102	150
HUNGARY	18	20	12
ICELAND	22	12	11
INDIA	95	89	115
INDONESIA	7	5	9
IRAN	29	31	53
IRELAND	136	121	137
ISRAEL	22	24	28
ITALY	216	195	264
IVORY COAST	9	11	19
JAPAN	82	79	96
JORDAN	4	2	0
KOREA, DEMOCRATIC REPUBLIC OF	2	0	0
KOREA, REPUBLIC OF	43	36	62
KUWAIT	8	9	17
LATVIA	-	76	129
LEBANON	29	23	37
LIBERIA	647	706	969
LIBYAN ARAB YAMAHIRYIA	30	22	31
LITHUANIA	-	79	64
LUXEMBOURG	34	39	55
MADAGASCAR	2	4	0

flag States	Inspections:		
	1991	1992	1993
TOGO	4	2	5
TUNISIA	19	21	22
TURKEY	221	237	270
TURKS & CAICOS ISLANDS	0	2	0
TUVALU	0	4	11
UKRAINE	-	10	264
UNITED ARAB EMIRATES	11	20	7
UNITED KINGDOM	272	246	249
URUGUAY	3	3	4
USA	63	69	77
USSR (1992/1993: RUSSIAN FEDERATION)	1599	-	-
VANUATU	56	53	70
VENEZUELA	14	8	8
VIET NAM	3	2	1
YEMEN, DEMOCRATIC PEOPLE'S REP. OF	0	2	0
YUGOSLAVIA	184	32	6
ZAIRE	3	1	0
TOTALS	14379	14783	17294

Inspections per flag State. Annex 3

flag States	number of inspections	number of individual ships	inspections WITHOUT deficiencies	inspections WITH deficiencies	% of inspections with deficiencies
CZECHIAN REPUBLIC	22	13	18	4	18.18
DENMARK	533	351	354	179	33.58
ECUADOR	15	11	8	7	46.66
EGYPT	98	53	40	58	59.18
EQUATORIAL GUINEE	2	1	0	2	100.00
ESTONIA	127	86	74	53	41.73
ETHIOPIA	13	7	6	7	53.84
FAEROER ISLANDS	19	11	6	13	68.42
FINLAND	144	98	86	58	40.27
FRANCE	100	77	43	57	57.00
GABON	3	1	1	2	66.66
GERMANY, FEDERAL REPUBLIC OF	839	537	588	251	29.91
GHANA	6	4	1	5	83.33
GIBRALTAR	15	12	10	5	33.33
GREECE	760	498	339	421	55.39
HONDURAS	256	140	102	154	60.15
HONG KONG	150	99	96	54	36.00
HUNGARY	12	9	11	1	8.33
ICELAND	11	7	6	5	45.45
INDIA	115	73	38	77	66.95
INDONESIA	9	4	2	7	77.77
IRAN	53	32	11	42	79.24
IRELAND	137	58	72	65	47.44
ISRAEL	28	18	21	7	25.00
ITALY	264	197	139	125	47.34
IVORY COAST	19	7	3	16	84.21
JAPAN	96	85	66	30	31.25
KOREA, REPUBLIC OF	62	51	22	40	64.51
KUWAIT	17	12	10	7	41.17
LATVIA	129	84	68	61	47.28
LEBANON	37	26	11	26	70.27
LIBERIA	969	688	513	456	47.05
LIBYAN ARAB YAMAHIRYIA	31	20	16	15	48.38
LITHUANIA	64	44	41	23	35.93
LUXEMBOURG	55	40	39	16	29.09

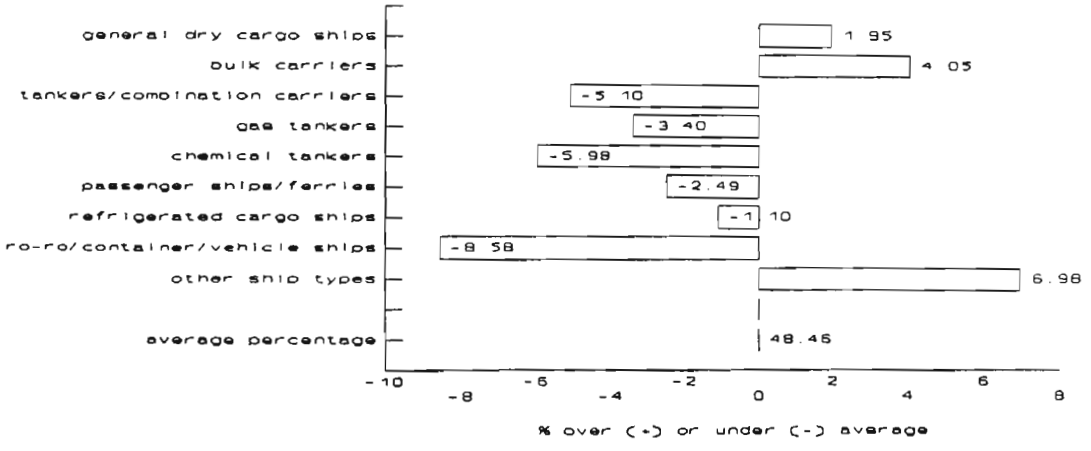
Inspections per flag State. *Annex 3*

flag States	number of inspections	number of individual ships	inspections WITHOUT deficiencies	inspections WITH deficiencies	% of inspections with deficiencies
TOGO	5	2	2	3	60.00
TUNISIA	22	13	7	15	68.18
TURKEY	270	189	108	162	60.00
TUVALU	11	4	4	7	63.63
UKRAINE	264	202	167	97	36.74
UNITED ARAB EMIRATES	7	5	6	1	14.28
UNITED KINGDOM	249	175	174	75	30.12
URUGUAY	4	3	4	0	00.00
USA	77	61	48	29	37.66
VANUATU	70	50	32	38	54.28
VENEZUELA	8	5	2	6	75.00
VIET NAM	1	1	1	0	00.00
YUGOSLAVIA	6	5	2	4	66.66
TOTALS	17294	11252	8913	8381	48.46

Inspections with deficiencies in % of total number of inspections (per ship's type).

ship types	number of inspections	number of individual ships	inspections WITHOUT deficiencies	inspections WITH deficiencies	% of inspections with deficiencies
general dry cargo ships	5326	3286	2641	2685	50.41
bulk carriers	5018	3222	2383	2635	52.51
tankers/combination carriers	1928	1352	1092	836	43.36
gas tankers	304	195	167	137	45.06
chemical tankers	965	596	555	410	42.48
passenger ships/ferries	659	406	356	303	45.97
refrigerated cargo ships	853	612	449	404	47.36
ro-ro/container/vehicle ships	1745	1191	1049	696	39.88
other ship types	496	392	221	275	55.44
totals	17294	11252	8813	8381	48.46

Percentages of inspections with deficiencies, per ship's type, over or under average percentage.



flag States	number of inspections	number of individual ships	inspections WITHOUT deficiencies	inspections WITH deficiencies	% inspecti with deficien
MALAYSIA	31	22	16	15	48
MALTA	903	541	389	514	56
MAN, ISLE OF	64	46	45	19	29
MARSHALL ISLANDS	37	25	17	20	54
MAURITIUS	5	2	1	4	80
MEXICO	4	3	3	1	25
MOROCCO	70	41	25	45	64
MYANMAR, UNION OF	31	21	14	17	54
NETHERLANDS	568	346	367	201	35
NIGERIA	23	12	3	20	86
NORWAY	1024	673	580	444	43
PAKISTAN	19	9	3	16	84
PANAMA	1344	906	607	737	54
PERU	2	2	0	2	100
PHILIPPINES	192	145	64	128	66
POLAND	281	184	175	106	37
PORTUGAL	51	33	22	29	56
QATAR	9	7	6	3	33
ROMANIA	104	82	21	83	79
RUSSIAN FEDERATION	1305	946	735	570	43
SAINT VINCENT & GRENADINES	390	231	138	252	64
SAUDI ARABIA	21	16	13	8	38
SENEGAL	5	2	2	3	60
SINGAPORE	124	89	79	45	36
SOMALIA	2	1	1	1	50
SOUTH AFRICA	5	4	4	1	20
SPAIN	101	72	57	44	43
SRI LANKA	14	10	5	9	64
SUDAN	10	6	0	10	100
SWEDEN	321	208	222	99	30
SWITZERLAND	27	17	18	9	33
SYRIAN ARAB REPUBLIC	42	27	10	32	76
TAIWAN	53	41	32	21	39
THAILAND	9	6	4	5	55

Inspections with deficiencies in % of total number of inspections (per flag State).

flag States	number of inspections	number of individual ships	inspections WITHOUT deficiencies	inspections WITH deficiencies	% of inspections with deficiencies
ALBANIA	3	2	0	3	100.0
ALGERIA	84	46	17	67	79.8
ANGOLA	5	3	0	5	100.0
ANTIGUA & BARBUDA	556	285	297	259	46.6
ANTILLES, NETHERLANDS'	124	83	74	50	40.3
ARGENTINA	15	8	3	12	80.0
AUSTRALIA	4	3	4	0	00.0
AUSTRIA	52	27	38	14	26.9
AZERBAIDZHAN	23	16	12	11	47.8
BAHAMAS	1009	601	522	487	48.3
BAHRAIN	5	2	4	1	20.0
BANGLADESH	6	3	1	5	83.3
BARBADOS	2	2	2	0	00.0
BELGIUM	13	10	3	10	76.9
BELIZE	6	5	1	5	83.3
BERMUDA	27	20	19	8	29.6
BOLIVIA	3	1	0	3	100.0
BRAZIL	47	30	18	29	61.7
BULGARIA	87	63	45	42	48.3
CAMEROON, UNITED REPUBLIC OF	4	2	1	3	75.0
CANADA	3	3	0	3	100.0
CAPE VERDE	7	6	1	6	85.7
CAYMAN ISLANDS	17	13	12	5	29.4
CHILE	5	5	0	5	100.0
CHINA, PEOPLE'S REPUBLIC OF	177	122	60	117	66.1
COLOMBIA	9	4	6	3	33.3
CROATIA	30	21	21	9	30.0
CUBA	41	25	7	34	82.9
CYPRUS	1535	896	649	886	57.7

flag States	inspections:		
	1991	1992	1993
MALAYSIA	11	18	31
MALDIVES	0	1	0
MALTA	557	669	903
MAN, ISLE OF	43	48	64
MARSHALL ISLANDS	8	11	37
MAURITANIA	0	1	0
MAURITIUS	0	3	5
MEXICO	10	3	4
MOROCCO	54	69	70
MYANMAR, UNION OF	36	22	31
NETHERLANDS	551	558	568
NEW ZEALAND	1	0	0
NIGERIA	21	26	23
NORWAY	949	885	1024
PAKISTAN	15	12	19
PANAMA	979	1056	1344
PERU	7	3	2
PHILIPPINES	133	132	192
POLAND	350	317	281
PORTUGAL	48	43	51
QATAR	7	13	9
ROMANIA	161	154	104
RUSSIAN FEDERATION (1991: USSR)	-	1558	1305
SAUDI ARABIA	21	10	21
SENEGAL	0	0	5
SINGAPORE	119	113	124
SOMALIA	0	3	2
SOUTH AFRICA	7	6	5
SPAIN	150	114	101
SRI LANKA	16	14	14
ST. VINCENT & GRENADINES	244	375	390
SUDAN	6	7	10
SWEDEN	303	318	321
SWITZERLAND	23	24	27
SYRIAN ARAB REPUBLIC	25	35	42
TAIWAN	52	50	53
THAILAND	4	6	9

Inspections per flag State. — *Annex 3*

Inspections of foreign merchant ships in accordance with the Memorandum of Understanding on Port State Control.

flag States	inspections:		
	1991	1992	1993
ALBANIA	3	1	3
ALGERIA	43	67	84
ANGOLA	12	11	5
ANTIGUA & BARBUDA	355	408	556
ANTILLES, NETHERLANDS'	101	124	124
ARGENTINA	27	18	15
AUSTRALIA	3	6	4
AUSTRIA	57	43	52
AZERBAIDZHAN	0	0	23
BAHAMAS	651	775	1009
BAHRAIN	2	0	5
BANGLADESH	6	4	6
BARBADOS	2	3	2
BELGIUM	26	12	13
BELIZE	0	0	6
BERMUDA	27	29	27
BOLIVIA	0	3	3
BRAZIL	40	53	47
BULGARIA	80	76	87
CAMEROON, UNITED REPUBLIC OF	3	3	4
CANADA	3	2	3
CAPE VERDE	11	4	7
CAYMAN ISLANDS	14	16	17
CHANNEL ISLANDS	1	0	0
CHILE	7	8	5
CHINA, PEOPLE'S REPUBLIC OF	155	141	177
COLOMBIA	10	13	9
COSTA RICA	6	2	0
CROATIA	-	1	30
CUBA	20	24	41
CYPRUS	1126	1225	1535

Flag States with detention percentages exceeding 3-year rolling average percentage, to be targeted as priority cases for inspection in 1994/1995.
(detentions expressed in % of 3-year total of respective individual ships involved)

number of bar diagram	flag State	number of detentions 1991-1993	total number of individual ships involved 1991-1993	detention percentage 1991-1993	average detention percentage 1991-1993	excess of average percentage 1991-1993
1	SYRIAN ARAB REPUBLIC	18	72	25.00	6.41	18.59
2	CUBA	16	64	25.00	6.41	18.59
3	ROMANIA	69	323	21.36	6.41	14.95
4	HONDURAS	87	432	20.14	6.41	13.73
5	ST.VINCENT AND GRENADINES	110	645	17.05	6.41	10.64
6	INDIA	32	204	15.69	6.41	9.28
7	IRAN	12	79	15.19	6.41	8.78
8	MOROCCO	15	110	13.64	6.41	7.23
9	EGYPT	21	167	12.57	6.41	6.16
10	LEBANON	9	72	12.50	6.41	6.09
11	MALTA	152	1240	12.26	6.41	5.85
12	CYPRUS	264	2437	10.83	6.41	4.22
13	TURKEY	55	542	10.15	6.41	3.74
14	ALGERIA	12	119	10.08	6.41	3.67
15	PANAMA	227	2340	9.70	6.41	3.29
16	PORTUGAL	7	92	7.61	6.41	1.20
17	ANTIGUA & BARBUDA	55	726	7.58	6.41	1.17
18	MYANMAR, UNION OF	5	66	7.58	6.41	1.17
19	BRAZIL	7	95	7.37	6.41	0.96
20	BULGARIA	12	176	6.82	6.41	0.41
21	LITHUANIA	6	93	6.45	6.41	0.04

Summary of delays/detentions per flag State, related to individual ships involved.

flag State *)	number of detentions			number of individual ships involved		
	1991	1992	1993	1991	1992	1993
SWITZERLAND	0	0	1	15	13	17
SYRIAN ARAB REPUBLIC	2	2	14	20	25	27
TAIWAN	0	0	1	43	42	41
THAILAND	0	1	0	3	4	6
TUNISIA	0	2	1	11	11	13
TURKEY	9	15	31	175	178	189
TUVALU	0	0	1	0	4	4
UKRAINE	-	-	9	-	8	202
UNITED KINGDOM	6	6	4	205	189	175
USA	2	1	0	52	52	61
USSR (1992/1993: RUSSIAN FEDERATION)	15	-	-	1216	-	-
VANUATU	0	1	4	43	37	50
VENEZUELA	1	0	2	7	6	5
VIET NAM	2	1	0	2	2	1
YUGOSLAVIA	6	0	0	149	25	5
TOTAL DETENTIONS VS. INDIVIDUAL SHIPS	525	588	926	10101	10455	11252

*) Flag States not mentioned in these tables had no ships involved in a detention during the period 1991-1993.

Summary of delays/detentions per flag State, related to individual ships involved.

flag State *)	number of detentions			number of individual ships involved		
	1991	1992	1993	1991	1992	1993
ESTONIA	0	1	7	1	63	86
ETHIOPIA	0	2	0	5	9	7
FAEROER ISLANDS	0	1	1	16	18	11
FINLAND	3	2	2	77	81	98
FRANCE	2	1	3	83	82	77
GABON	0	0	1	2	2	1
GERMANY, FEDERAL REPUBLIC OF	15	6	18	698	650	537
GHANA	1	1	1	4	6	4
GREECE	19	18	41	408	390	498
HONDURAS	16	28	43	136	156	140
HONG KONG	2	1	1	63	75	99
ICELAND	0	1	2	12	8	7
INDIA	7	17	8	70	61	73
INDONESIA	1	0	2	4	3	4
IRAN	3	3	6	24	23	32
IRELAND	0	0	1	63	60	58
ITALY	5	7	10	173	155	197
JAPAN	2	1	2	60	64	85
KOREA, REPUBLIC OF	1	0	4	36	28	51
LATVIA	-	1	8	-	62	84
LEBANON	3	1	5	25	21	26
LIBERIA	35	27	28	490	538	688
LIBYAN ARAB YAMAHIRYIA	0	0	1	22	16	20
LITHUANIA	-	2	4	-	49	44
LUXEMBOURG	0	1	1	27	26	40
MALAYSIA	1	1	2	10	15	22

*) Flag States not mentioned in these tables had no ships involved in a detention during the period 1991-1993.

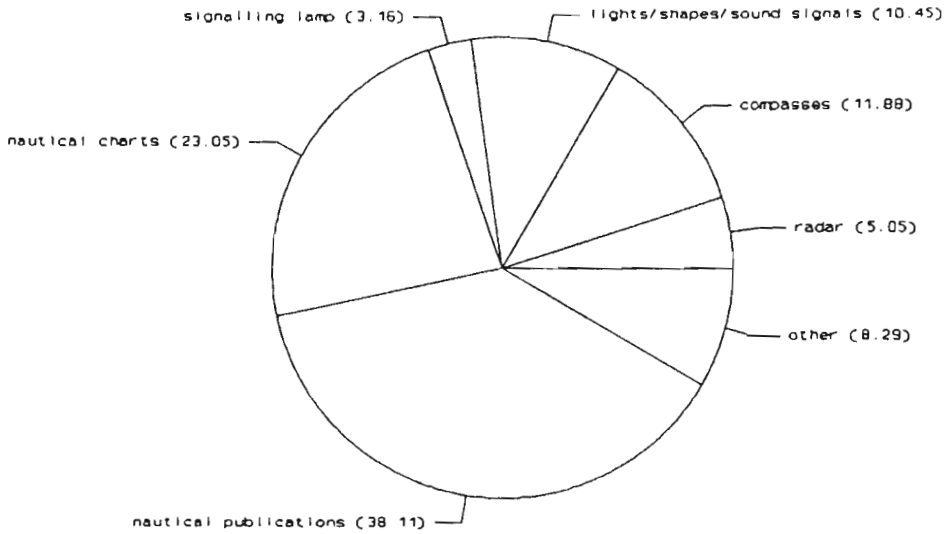
Charts of inspection results. Annex 2

Delays/detentions per flag State, exceeding average percentage.

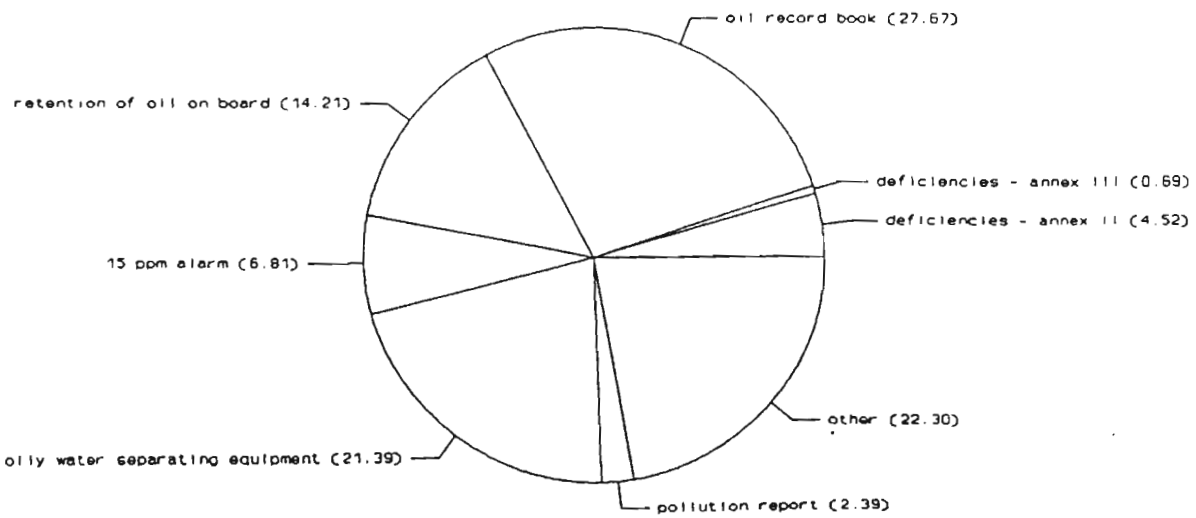
(expressed in % of respective individual ships involved)

number of bar diagram	flag State	number of detentions	number of individual ships involved	detention percentage	average detention percentage	excess of average percentage
1	SYRIAN ARAB REPUBLIC	14	27	51.85	8.23	43.62
2	CUBA	8	25	32.00	8.23	23.77
3	HONDURAS	43	140	30.71	8.23	22.48
4	ROMANIA	19	82	23.17	8.23	14.94
5	MOROCCO	8	41	19.51	8.23	11.28
6	LEBANON	5	26	19.23	8.23	11.00
7	IRAN	6	32	18.75	8.23	10.52
8	ST. VINCENT AND GRENADINES	42	231	18.18	8.23	9.95
9	EGYPT	9	53	16.98	8.23	8.75
10	TURKEY	31	189	16.40	8.23	8.17
11	CYPRUS	139	896	15.51	8.23	7.28
12	BRAZIL	4	30	13.33	8.23	5.10
13	MALTA	68	541	12.57	8.23	4.34
14	PORTUGAL	4	33	12.12	8.23	3.89
15	BULGARIA	7	63	11.11	8.23	2.88
16	INDIA	8	73	10.96	8.23	2.73
17	ALGERIA	5	46	10.87	8.23	2.64
18	PANAMA	92	906	10.15	8.23	1.92
19	LATVIA	8	84	9.52	8.23	1.29
20	MYANMAR, UNION OF	2	21	9.52	8.23	1.29
21	ANTIGUA AND BARBUDA	27	285	9.47	8.23	1.24
22	LITHUANIA	4	44	9.09	8.23	0.86
23	MALAYSIA	2	22	9.09	8.23	0.86

navigation.

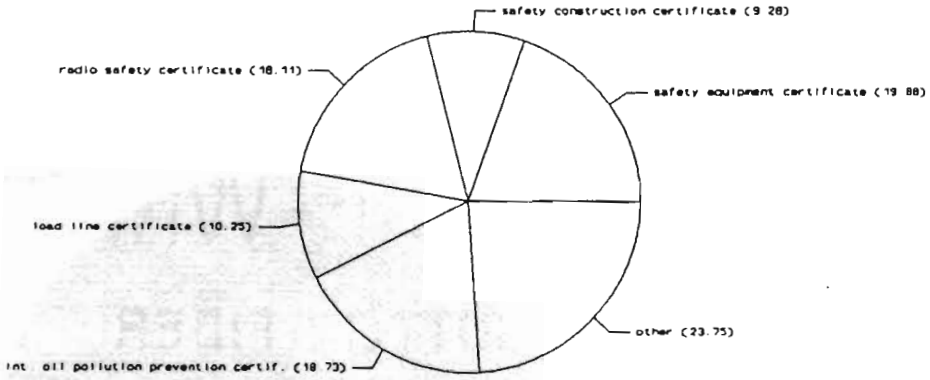


marine pollution.

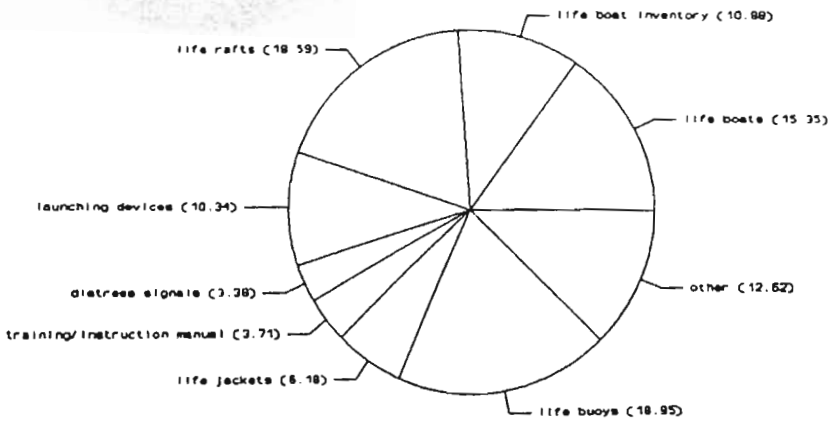


Breakdown of most common deficiencies, observed in most significant major categories of deficiencies *(expressed in % of total deficiencies in each category).*

ship's certificates.

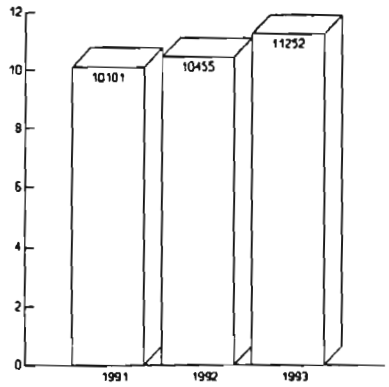


life saving appliances.

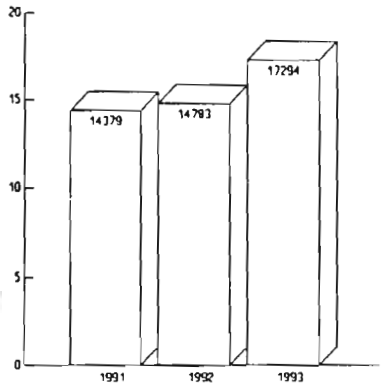


Summary of port State control results.

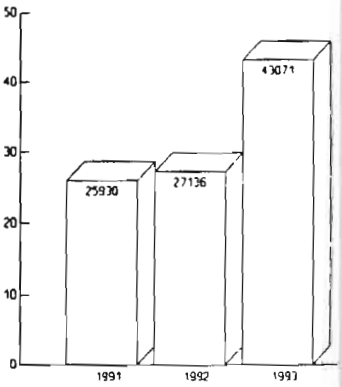
number of individual ships



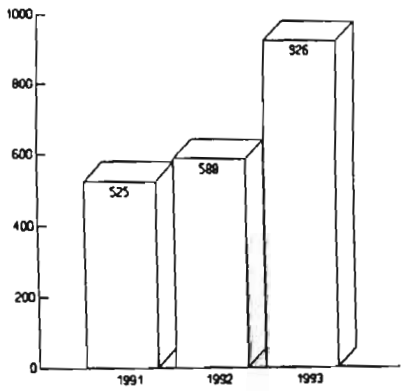
number of inspections



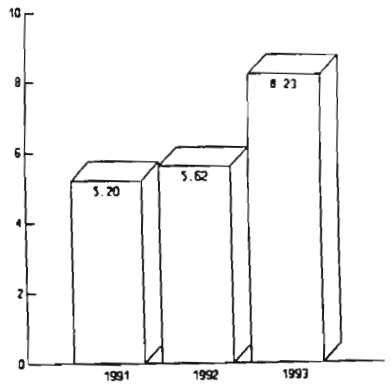
number of deficiencies



number of delays/detentions



delays/detentions in % of individual ships



TITLE: **International Pollution Prevention (IOPP) Certificate**

REFERENCES: 33 USC 1903 (Act to Prevent Pollution from Ships)
MARPOL 73/78 (International Convention for the Prevention of Pollution from Ships
33CFR 151, 155, and 157
NVIC's 9-86 and 8-83

REQUIRED ON: U.S. oil tankers of at least 150 GT and other U.S. inspected ships of at least 400 GT that engage in voyages to a port or terminal under the jurisdiction of other parties signatory to MARPOL 73/78. Should also be found on foreign vessels of countries signatory to MARPOL 73/78 which visit the U.S.

PURPOSE: Indicates vessel is equipped with the oil pollution prevention equipment required by U.S. law/regulation and or MARPOL 73/78. Required equipment includes, but is not limited to Crude Oil Washing, Segregated, Protectively Located, or Clean Ballast Tanks, Oil-water Separators, bilge monitors/alarms, Oil Record Books and a method of discharging slops to a facility.

This certificate will be issued with one of two supplements:

Supplement B; used on tankships and cargo vessels with cargo tanks coming under regulation 2(2) of Annex I of the convention.

Supplement A; used on vessels other than those noted above.

VALIDITY: Four years for U.S. Inspected vessels and five years for U.S. uninspected vessels. In order to maintain the vessel's certificate, an annual inspection, with certificate endorsement, must be made.

ISSUER: USCG (OCMI)

TITLE: **Supplement to the Cargo Ship Safety Construction Certificate**

REFERENCES: MSM VOL II, 9.F.2, and 19.B.3

REQUIRED ON: U.S. Tankships (**not cargo vessels**) of certain gross/deadweight tonnages and those over 10 years of age which engage in international voyages.

PURPOSE: Indicates the vessel complies with the 1978 protocol to SOLAS 1974.

VALIDITY: Four years. Expires same date as Certificate of Inspection.

ISSUER: USCG (OCMI) or ABS

TITLE: **Cargo Ship Safety Construction Certificate**

REFERENCES: MSM VOL II, 3.X.3, and 9.F.2

REQUIRED ON: U.S. Cargo and Tankships of 500 gross tons and more engaged on international voyages.

PURPOSE: Indicates the vessel complies with the 1974 SOLAS requirements concerning hull construction, electrical installations, as well as subdivision and stability.

VALIDITY: Four years (five years if issued by ABS). Expires same date as Certificate of Inspection.

ISSUER: USCG (OCMI) or ABS

TITLE:	Attachment to the Cargo Ship Safety Equipment Certificate
REFERENCES:	MSM VOL II, 3.X.6, and 9.F.2
REQUIRED ON:	U.S. Cargo and Tankships of 500 gross tons and mor engaged on international voyages.
PURPOSE:	Indicates that the vessel complies with the 1983 amendments to SOLAS 74/78.
VALIDITY:	Two years. Expires on same date as the Safety Equipment Certificate.
ISSUER:	USCG (OCMI)

IN IMPLEMENTATION OF REGULATION 6 (B) OF CHAPTER I OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, THE GOVERNMENT OF THE UNITED STATES OF AMERICA HAS INSTITUTED MANDATORY ANNUAL SURVEYS.

SIGNED: _____

PLACE: _____

DATE: _____

TITLE: Cargo Ship Safety Equipment Certificate

REFERENCES: MSM VOL II, 3.X, and 9.F.2

REQUIRED ON: U.S. Cargo and Tankships of 500 gross tons and more engaged in international voyages

PURPOSE: Indicates vessel compliance with the 1974 SOLAS requirements for safety equipment.

VALIDITY: Two years to expire same day as Certificate of Inspection.

ISSUER: USCG (OCMI)

Major categories of deficiencies. Annex 4

Major categories of deficiencies in relation to inspections/ships.

major categories of deficiencies	number of deficiencies			deficiencies in % of total number of deficiencies			deficiencies in % of number of inspections			deficiencies in % of number of individual ships		
	1991	1992	1993	1991	1992	1993	1991	1992	1993	1991	1992	1993
SHIPS' CERTIFICATES	1548	1760	2253	5.97	6.34	5.23	10.76	11.91	13.02	15.33	16.83	20.02
CREW	900	948	1461	3.47	3.50	3.39	6.26	6.41	8.45	8.91	9.07	12.98
ACCOMMODATION	502	545	828	1.94	2.02	1.92	3.49	3.69	4.79	4.97	5.21	7.36
FOOD AND CATERING	206	236	381	0.79	0.87	0.88	1.43	1.60	2.20	2.04	2.26	3.39
WORKING SPACES	140	124	240	0.54	0.46	0.55	0.97	0.84	1.39	1.39	1.19	2.13
LIFE SAVING APPLIANCES	8089	7550	10468	31.12	27.84	24.30	56.12	51.07	60.53	79.88	72.21	93.03
FIRE FIGHTING APPLIANCES	4060	4307	7226	15.66	15.89	16.77	28.24	29.13	41.78	40.19	41.20	64.22
ACCIDENT PREVENTION	215	185	337	0.83	0.68	0.78	1.50	1.25	1.95	2.13	1.77	3.00
SAFETY IN GENERAL	2929	3142	5535	11.29	11.60	12.85	20.37	21.25	32.01	29.00	30.05	49.19
ALARM SIGNALS	75	99	194	0.29	0.36	0.45	0.52	0.67	1.12	0.74	0.95	1.72
CARGO	198	254	419	0.76	0.94	0.97	1.38	1.72	2.42	1.96	2.43	3.72
LOAD LINES	1075	1230	2165	4.15	4.54	5.02	7.48	8.32	12.52	10.64	11.77	19.24
MOORING ARRANGEMENTS	167	170	293	0.64	0.63	0.68	1.16	1.15	1.69	1.65	1.63	2.60
PROPULSION/AUX. MACHINERY	963	1090	1828	3.71	4.03	4.24	6.70	7.37	10.57	9.53	10.43	16.25
NAVIGATION	2807	2840	4993	10.83	10.49	11.59	19.52	19.21	28.87	27.79	27.18	44.37
RADIO	625	652	1631	2.41	2.41	3.78	4.35	4.41	9.43	6.19	6.24	14.49
MARINE POLLUTION - ANNEX I	1120	1368	1781	4.32	5.05	4.13	7.79	9.25	10.30	11.09	13.08	15.83
DEFIC. SPECIFIC FOR TANKERS	173	219	205	0.67	0.81	0.47	1.20	1.48	1.19	1.72	2.09	1.82
MARINE POLLUTION - ANNEX II	68	79	85	0.25	0.29	0.19	0.46	0.53	0.49	0.65	0.76	0.76
OPERATIONAL DEFIC. - SOLAS	-	265	512	-	0.98	1.18	-	1.79	2.96	-	2.53	4.55
OPERATIONAL DEFIC. - MARPOL	-	10	130	-	0.04	0.30	-	0.07	0.75	-	0.10	1.16
MARINE POLLUTION - ANNEX III	-	-	13	-	0.00	0.03	-	0.00	0.08	-	0.00	0.12
ALL OTHER DEFICIENCIES	54	38	50	0.21	0.14	0.11	0.38	0.26	0.29	0.53	0.36	0.44
DEF. NOT CLEARLY HAZARDOUS	38	25	43	0.15	0.09	0.09	0.26	0.17	0.25	0.38	0.24	0.38
TOTALS	25930	27136	43071	25830	27136	43071	14379	14783	17294	10101	10455	11252
	deficiencies			deficiencies			inspections			individual ships		

ATTACHMENT 7

1994 TOKYO MOU STATISTICS

STATISTICAL DATA ON PORT STATE INSPECTION RESULTS IN THE ASIA-PACIFIC REGION (year 1994)

Authority	No of ships visits	No of Inspections	No of deficiencies	No of detentions	No of ships visits (LMIS)[1]
Australia	9,656[2]	1,949	7,464[2]	129	2,743
Canada	1,453[3]	450[3]	1,762	33[3]	1,382[4]
China	17,445	1,041	1,508	2	5,281
Hong Kong	26,000	70	658	13	4,630
Japan	47,319[5]	2,582	694[5]	41	7,244
Korea	17,417	198	55	0	5,196
Malaysia	11,995	58	63	2	3,589
New Zealand	2,239[6]	1,155	477[7]	8	805
PNG					412
Singapore	47,310[8]	57	55	1	8,214
Vanuatu	89	4	0	0	37
Total	180,923	7,564	12,736	229	35,646
Regional total[9]					

1 1993 data provided by LMIS.

2 The number of individual foreign ship visiting is 1,996. The number of ships with deficiencies is 1,422.

3 The number of individual ship visits for west coast in 1994 is a estimated number. The number of inspections and number of detentions are based on individual ships.

4 Pacific ports only. Number for all ports is 2,802.

5 The number of ship visit is a estimated number. The number of deficiencies is the number of ships with deficiencies.

6 The number of ships eligible for inspection is 1,263.

7 This number is the number of ships with deficiencies.

8 Number of individual ships visits is 10,004.

9 Number of individual foreign ships which entered the ports within the above eleven Authorities as a whole.

ATTACHMENT 8

USCG REPORT TO CONGRESS, APRIL 1995

Report to Congress on the Coast Guard's Port-State Control Initiative Targeting Substandard Ships

EXECUTIVE SUMMARY

In accordance with Senate Report (103-310) on the 1995 Department of Transportation and Related Agencies Appropriations Bill regarding port-state control inspection activities, the enclosed report describes the status of implementation of program changes mandated by Congress in Senate Report (103-150) on the 1994 Department of Transportation and Related Agencies Appropriations Bill.

The Coast Guard's report to Congress of April 8, 1994, outlined the implementation of a risk-based boarding regime which would focus Coast Guard foreign ship boarding activities on those most responsible for substandard ships including owners, classification societies and flag states.

This report measures and compares data collected since the program's implementation on May 1, 1994, to relevant data prior to the initiative.

Among other things, the report measures the changes in the frequency of enforcement actions taken against foreign merchant ships, and boarding, casualty and pollution statistics related to foreign ship activities in U.S. waters.

Data provided within this report indicates a dramatic increase in Coast Guard enforcement actions undertaken under the authority provided in various international agreements concerning the safe operation, construction and manning of ships. Boarding efforts have been focused upon the high risk ships identified utilizing targeting criteria established under this initiative, while oversight of low risk ships has been reduced.

Insufficient data is available at this time to assess the effects of the port-state control initiative on casualty and pollution rates. The number of collisions, allisions, groundings, fires, explosions, pollution incidents and personnel injuries have remained relatively constant. However, reports of equipment failure have increased substantially as a result of the attention now placed on examining and testing critical machinery. Therefore, a higher percentage of failures are being discovered and reported.

EXECUTIVE SUMMARY
(Continued)

This reports includes the following major impacts of this initiative:

- The initial list of approximately 100 foreign ship owners and operators associated with substandard ships has been updated monthly, and has grown to 361 companies as of December 1, 1994.

- Analysis indicates that 35 of these companies have been associated with two interventions, and five companies with more than two interventions.

- Annually approximately 8,500 individual foreign ships call at U.S. ports.

- The Coast Guard conducted 6942 boardings on 5857 individual ships during the first five months of this initiative. Deficiencies were identified during 27% of these boardings.

- The deficiencies identified during boardings were serious enough to require 159, or 2.7% of the individual ships entering U.S. ports during the period to be detained under the authority of an international convention.

- Coast Guard Marine Inspector boardings on foreign ships increased from 1288 in 1993 to 2473 in 1994 - a 92% increase.

- Marine Inspectors boarded over ten times more foreign freight ships in 1994 than 1993.

- Approximately 87% of interventions involve foreign freight ships.

- 285 less significant Control Actions, including Captain of the Port Orders and U.S. Customs holds were recorded during the first five months of the program. This is compared to only 217 such actions during the same period in 1993 - a 31% increase.

Section I

Background

Senate Report (103-150) on the 1994 Department of Transportation and Related Agencies Appropriations Bill tasked the Coast Guard with changing its approach to foreign ship boardings in order to eliminate the safety and environmental threat presented by substandard merchant ships operating in U.S. waters. Specifically, the Coast Guard was directed to target its boarding efforts at those most responsible for substandard ships including owners, classification societies and flag states. Thirty three billets were provided to assist in the implementation of this initiative.

In response, the Coast Guard developed a plan outlined in a report to Congress titled "Port-State Control Initiative, Boarding Regime to Target Substandard Ships" dated April 8, 1994. The goal of this initiative was to identify substandard foreign ships and eliminate them from U.S. waters. The plan proposed the following methods to accomplish this goal:

1. **to identify high risk foreign merchant ships based upon the performance records of ships' owners, operators, classification societies and flag states;**

2. **to systematically target Coast Guard boardings at high risk foreign merchant ships;**

3. **to board ships suspected of presenting an imminent threat to life, the port, or the environment prior to entry into the port;**

4. **to work internationally to combat the problems posed by substandard ships;**

5. **to update guidance on specific documents, systems, and equipment to be checked during foreign ship boardings to ensure consistent and thorough application of international**

ship construction, equipment and operating standards throughout the U.S.; and

6. **to upgrade Coast Guard foreign ship boarding teams through the inclusion of marine inspectors.**

Page 33 of Senate Report (103-310) on the 1995 Department of Transportation and Related Agencies Appropriations Bill requested "*the Commandant to submit a report to the House and Senate Appropriations Committees no later than March 1, 1995, regarding the early implementation of the new targeted boarding regime. This report should discuss any and all anticipated or executed changes in billet assignments resulting from implementation of the targeting plan, and other domestic and international initiatives intended to augment the targeting plan. The report should include copies of all directives to field commands regarding the implementation of the targeting plan, as well as summary data of boardings, deficiencies, number of interventions and other COTP controls/actions, related casualty and oil spill incidents , as well as other measures of the effectiveness of the targeting program.*"

At the time of the current report's preparation, foreign ship boarding data was available for activities occurring from the inception of the program until the end of fiscal year 1995, i.e. September 30, 1994. Since field implementation of the targeted boarding regime occurred on May 1, 1994, only five months of data is available to measure the effectiveness of this program. Nevertheless, the plan has produced changes of such a nature, that even with the limited data available, some significant trends are apparent.

Section II

Status of the Assignment of Billets

The 33 port-state control billets provided by Congress in Senate Report 103-150 on the 1994 Department of Transportation and Related Agencies Appropriations Bill were filled during the 4th Quarter of Fiscal Year 1994. Billet allocations were made in accordance with

the Coast Guard's Report to Congress on the Allocation, Rate and Rank of 33 Port-State Control Billets dated March 14, 1994. No additional reallocation of billets is planned at this time. However, 69 of the 80 additional billets provided in Senate Report 103-310 on the 1995 Department of Transportation and Related Agencies Appropriations Bill have been designated as Port/Flag State Enforcement (inspector/investigator) billets which will be assigned duties related to this initiative. These billets are expected to be filled by the 4th Quarter of Fiscal Year 1995. The allocation of these billets will be determined based on a risk assessment and analysis of foreign ship arrival data. The allocation of these billets will be discussed in greater detail in a separate report required to be submitted in June 1995.

Section III

Implementation of the Initiative

Since May 1, 1994, the Coast Guard has prioritized foreign ship boardings based upon risk factors which include a ship's owner and operator, flag state, classification society, boarding history, and ship type. Four boarding priorities have been established based upon the points assigned using the matrix shown in Figure (1). Priority I Vessels (17 or more points) are targeted for boarding prior to port entry; Priority II Vessels (7 to 16 points) are targeted for boarding prior to embarking passengers or commencing cargo operations; Priority III Vessels (4 to 6 points) may be boarded during a port visit; and Priority IV Vessels (3 or less points) are not targeted for

Boarding Priority Matrix

Column 1	Column 2	Column 3	Column 4	Column 5
Owner 5 Pts	Class 5 Pts	Flag 7 Pts	History 1 Pt Each	Type 1 Pt
Points	Points	Points	Points	Points

Total Points = ☐

Figure (1)

To ensure program consistency and to make the best use of limited resources, this matrix has been used by Coast Guard field units to prioritize foreign ships for boarding.

boarding. When used in accordance with the policy guidance and with the lists of owners, operators, classification societies and flag states provided to Coast Guard field units, the matrix provides an easily followed method of establishing boarding priorities based on the level of risk the ship presents.

1. Identification of high risk foreign merchant ships based upon the performance records of ships' owners, operators, classification societies and flag states

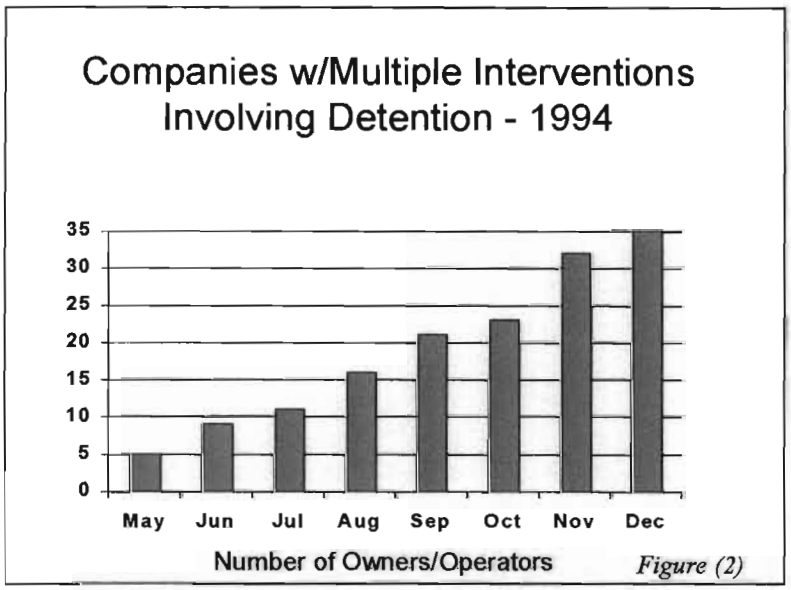


Figure (2)

A growing number of owners and operators have been associated with more than a single substandard ship.

The Coast Guard maintains a monthly listing of ship owners and operators associated with ships detained under the authority of an international convention while in U.S. waters during the preceding 12 months. Ships controlled in this manner are considered substandard in that such detentions are effected only when a ship is found to be unsafe to proceed to sea, or when it presents an unreasonable risk to the environment as a result of substantial noncompliance with internationally accepted ship construction, equipment, manning or operating safety standards.

The list of owners and operators has grown from 100 companies in May 1994, to 361 companies in December 1994. As illustrated by figure (2), the number of companies associated with more than a single substandard ship has also grown during the period from one company in May 1994, to 35 in December 1994. Five companies

have now been associated with more than 2 interventions. The association of 9.5% of the listed owners and operators with more than one substandard ship tends to validate the effectiveness of the targeting plan given that only 3% of foreign ships were subject to intervention during this period. The Coast Guard expects to further modify its procedures to focus greater attention on the ships of those owners and operators associated with multiple substandard ships.

A listing of flag states with lower than average performance records based on the percentage of their ships operating in U.S. waters which were detained by the Coast Guard under the authority of an international convention over a three year period has also been developed.

1994 Flag List

- Argentina
- Bahamas
- Belize
- Cyprus
- Dominican Republic
- Ecuador
- Honduras
- India
- Malta
- Paraguay
- Peru
- St. Vincent / Grenadines
- United Arab Emirates
- Venezuela

Figure (3)

The initial listing included these 14 flag states. A revised list will be published in April 1995, based on 1992, 1993 and 1994 data.

The Coast Guard has also compiled a listing of classification societies it recognizes as having quality systems complying with International Maritime Organization (IMO), Resolution A.739(18), "Guidelines for the Authorization of Organizations Acting on Behalf of Administrations". See also Annex I.

Recognized Classification Societies

- American Bureau of Shipping
- Bureau Veritas
- China Classification
- Det Norske Veritas
- Germanischer Lloyds
- Korean Register
- Lloyds Register
- Nippon Kaiji Kyokai
- Polish Register
- Registro Italiano Navale
- Russian Register

Figure (4)

These are the classification societies which the Coast Guard recognizes as complying with IMO Resolution A.739(18).

As discussed in the Coast Guard's report of April 8, 1994, this resolution is an internationally accepted standard for classification societies which has been adopted as an initial basis for determining which classification societies are at greatest risk of association with substandard ships. Ships classed or issued international safety certificates by classification societies that do not comply with the resolution present a greater risk.

Since May 1, 1994, data needed to measure the performance records of classification societies is being collected during boardings. This data had not been collected previously. Therefore, the Coast Guard lacked information needed to properly assess the performance records of classification societies. Once a sufficient data base has been established, the Coast Guard will compile a list of classification societies with unacceptable performance records similar to the flag state list, and further focus foreign ship boarding activities accordingly.

2. Systematic targeting of Coast Guard boardings at high risk foreign merchant ships

Using these lists and the boarding matrix, foreign ship boardings have been focused on those ships believed to present the greatest risk of being substandard. An analysis of reported ship arrivals for December 1994, indicates 92% of Priority I, 73% of Priority II, 34% of Priority III and 11% of Priority IV Vessel port calls resulted in boardings.

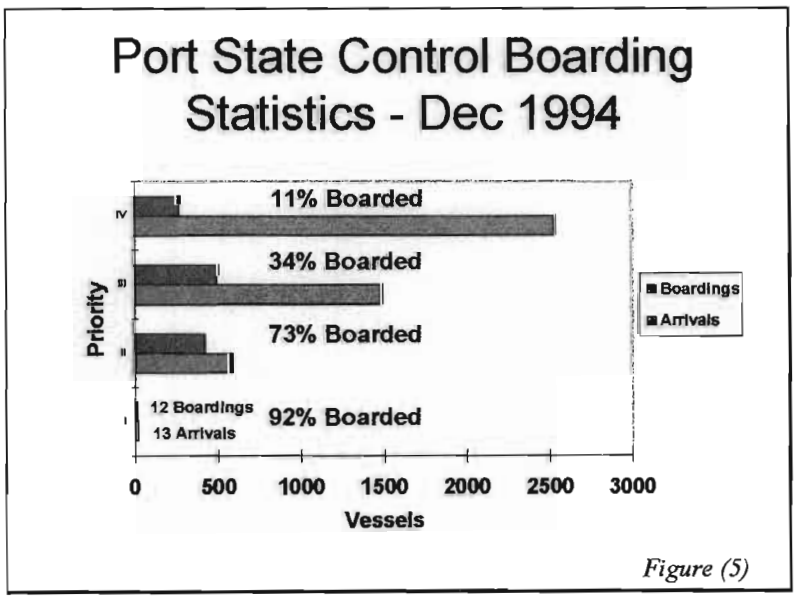


Figure (5)

Coast Guard boarding efforts are focused on those ships assigned the highest boarding priorities. Priority I vessels were boarded during 92% of their U.S. port calls.

Overall 2.7% of all foreign ship boardings resulted in the ship being detained under the authority of an international convention during December 1994. Approximately 8% of Priority II, 2% of Priority III, and only 1% Priority I, 5% of Priority IV Vessel boardings resulted in detentions.

3. Boarding ships suspected of presenting an imminent threat to life, the port, or the environment prior to entry into the port;

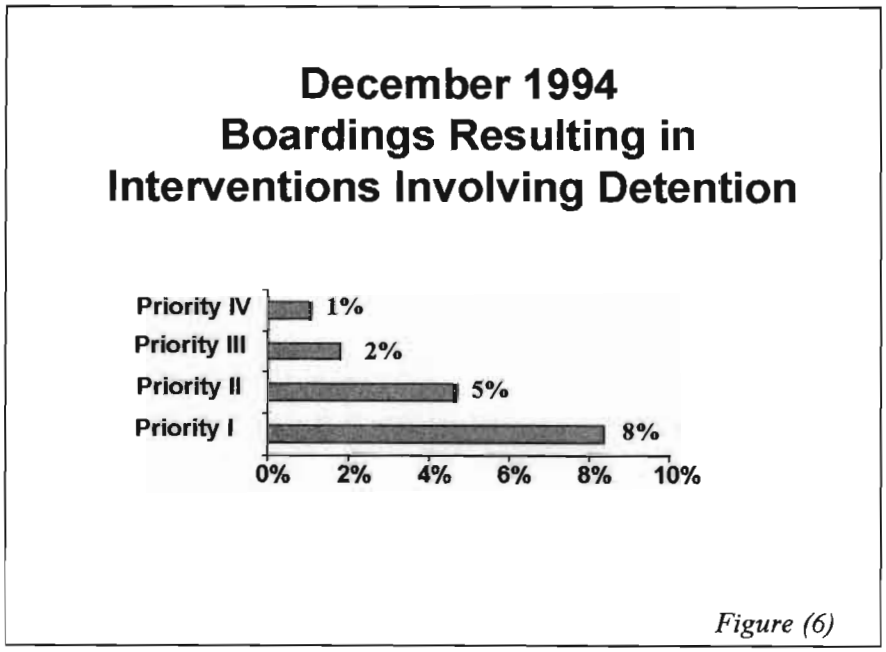


Figure (6)

Ships assigned the higher boarding priorities present greater probability of being found substandard.

Priority I Vessels are considered to present the greatest threat to life, the port, or the environment. Consequently these ships are targeted for boarding prior to port entry, (i.e. "at-sea"). Initial logistical difficulties prevented early implementation of this aspect of the initiative. Guidance reinforcing the need for at-sea boardings was included within a December 15, 1994, message to Coast Guard field units. The first at-sea boarding of a Priority I Vessel was conducted on a Maltese flagged freight ship (AURORA) by the Coast Guard at Gravesend Bay, New York on January 4, 1995. This exam resulted in three deficiencies and a Captain of the Port order being issued. The Coast Guard boarding team in New York included members from both the Captain of the Port/Group and the Marine Inspection Office. Since these personnel did not normally work together prior to this program's inception, policy is being developed to better facilitate this type of inter-program coordination and streamlining.

Section IV

International Initiatives

4. Working internationally to combat the problems posed by substandard ships

The Coast Guard continues to aggressively pursue action at the IMO to (1) Establish standards for flag states, as outlined in Annex I, the recently passed Assembly Resolution A.740(18) on Interim Guidelines for Flag States; (2) Establish standards for classification societies and other organizations, as outlined in Annex II, Assembly Resolution A.739(18) on Guidelines for the Authorization of Organizations Acting on Behalf of the Administration, and (3) Establish guidelines for port-state control examinations, as outlined in Annex III, the documents generated by the Coast Guard led Correspondence Group from the IMO Flag State Implementation (FSI) Subcommittee.

Each of these international initiatives continues to progress. The resolutions were approved at the 18th Assembly. The port-state control guidelines were submitted to the 3rd session of the FSI Subcommittee, were reviewed, and were approved for forwarding to the 19th Assembly in November for adoption as an assembly resolution. This paper has formed the basis of Coast Guard policy on port-state control and is being prepared for distribution as field guidance.

Section V

Field Guidance

5. Updating guidance on specific documents, systems, and equipment to be checked during foreign ship boardings to ensure consistent and thorough application of international ship construction, equipment and operating standards throughout the U.S.

Field implementation of the Port-State Control initiative described in the Coast Guard's Report to Congress of April 8, 1994, occurred on May 1, 1994. On April 19, 1994, a letter from the Chief, Office of Marine Safety, Security and Environmental Protection to all flag rank officers within the Coast Guard directed the implementation of this initiative, and enclosed necessary background information including the original owners list. See Annex IV.

Additional guidance distributed to Coast Guard field units included:

1. Change 8 to the Coast Guard Marine Safety Manual Volume I (COMDTINST M16000.6) Chapter 4 of February 22, 1994, providing general guidance on enforcement objectives and principles; pertinent definitions; enforcement policy; and policy on intragovernmental and international enforcement coordination. Applicable sections are enclosed as Annex V.

2. Change 8 to the Coast Guard Marine Safety Manual Volume II (COMDTINST M16000.7) Chapters 19 and 20 of July 13, 1994, which updated guidance regarding foreign passenger ship examinations. Applicable sections are enclosed as Annex VI.

A draft Merchant Vessel Inspection Policy Letter with Proposed Change 9 to the Coast Guard Marine Safety Manual Volume II (COMDTINST M16000.7) is under development. This letter is based on policy being developed at IMO, and will provide guidance on boarding and intervention procedures, along with revised boarding check sheets for use aboard foreign freight, passenger and tank ships.

Policy guidance has also been communicated through various Coast Guard messages as an expedient mechanism through which policy is passed, until such guidance may be incorporated into the Marine Safety Manual. Annex VII contains the two primary policy guidance messages disseminated to field units. Annex VIII contains two of the monthly messages disseminated between April 25, 1994 to December 15, 1994. Although the monthly messages primarily update targeting information, they have also been used to communicate minor policy clarifications.

Section VI

Boarding Statistics

6. Upgrading Coast Guard foreign ship boarding teams through the inclusion of marine inspectors

The personnel assigned by the Coast Guard to board foreign ships are designated either as boarding officers, who are generally petty officers with limited training and qualifications; or marine inspectors, who are generally commissioned or warrant officers with a higher level of training and a broader range of experience. Prior to this initiative, foreign freight ships were examined by petty officers, while the higher risk foreign passenger and tank ships were examined by marine inspectors. Under this initiative, the Coast Guard has expanded the role of marine inspectors by incorporating them into foreign freight ship boarding teams.

Available data from May 1, 1994, to September 30, 1994, indicates virtually no change in the total number of individual foreign ships which entered U.S. ports over the same period of the preceding year. The total number of foreign ship boardings carried out by boarding teams which included a marine inspector increased from 1288 in 1993 to 2473 in

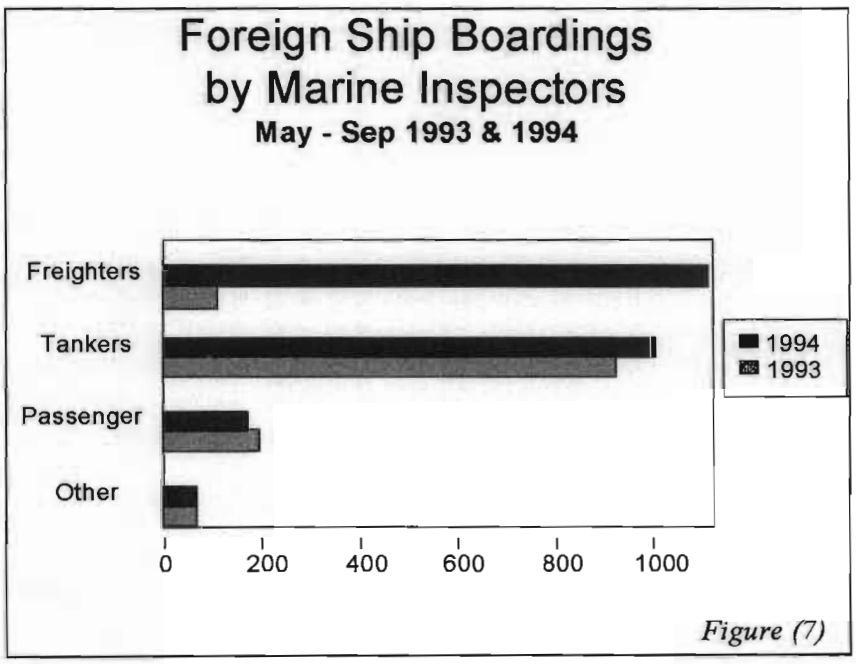


Figure (7)

Marine Inspectors boarded over 10 times more foreign freight ships in the past year due to this initiative.

1994. The total number of foreign freight ships examined by Coast Guard marine inspectors increased by more than tenfold from 99 boardings in 1993, to 1170 boardings for the same period in 1994. This increase is consistent with the program objective of incorporating the Coast Guard's more highly trained boarding personnel, (i.e. marine inspectors) into the existing foreign ship boarding teams. Little change was experienced in regards to foreign tank and passenger ship boarding activities in that these types of ships had previously been boarded primarily by marine inspectors, and continue to be boarded in the same manner under the revised boarding program. Significantly, approximately 87% of interventions involve freight ships.

Section VII

Deficiency Statistics

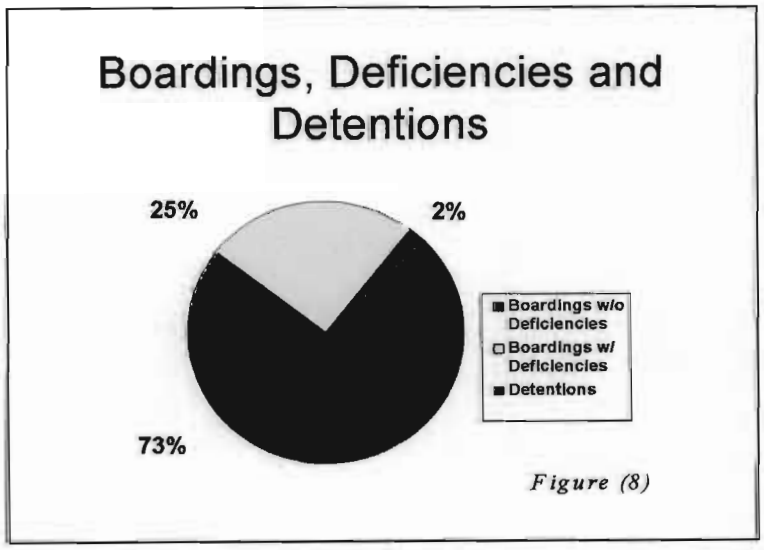


Figure (8)

Discrepancies were discovered in 27% of boardings. Detention was warranted in 2%.

The Coast Guard boarded 6942 foreign ships during the five month period between May 1, 1994 and September 30, 1994. As illustrated by figure (8), deficiencies were discovered during 27% of these boardings. 2% of the boardings resulted in the identification of deficiencies serious enough to warrant detention of the ship.

Prior to implementation of this initiative, detailed examinations of firefighting and lifesaving equipment were not conducted during

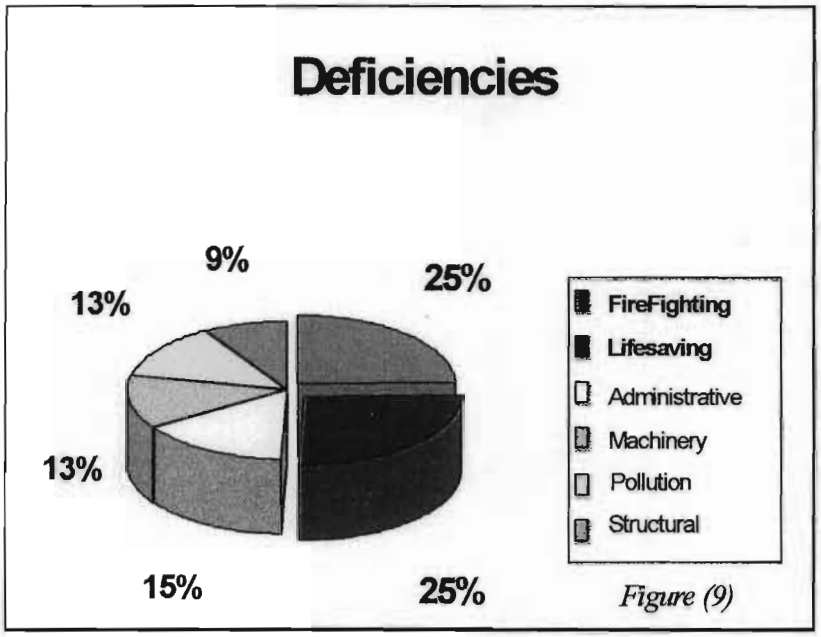


Figure (9)

foreign freight ship boardings. However, figure (9) illustrates that nearly 50% of the deficiencies identified since this program was initiated are the result of noncompliance with internationally accepted standards for firefighting and lifesaving.

Firefighting and Lifesaving deficiencies account for half of all of those identified.

Section VIII

Interventions Leading to Detention

Since implementation, a significant increase in interventions leading to detention has occurred. During the 5 month period between program implementation on May 1, 1994, and September 30, 1994, the Coast Guard has detained 159 ships under the authority of various international safety conventions because the ship was found to be unsafe to proceed to sea, or presented an unreasonable threat to the marine environment. As illustrated by Figure (9), during the same period in 1993, the Coast Guard detained only 19 such ships under similar circumstances. Overall this represents an increase in ship detentions under the authority of an international convention from 0.32% of the individual foreign ships entering U.S. waters in 1993 to 2.7% in 1994.

The Coast Guard recognizes that given the program goal of eliminating substandard ships from U.S. waters, the number of

interventions does not provide a meaningful measure of the effectiveness of the program.

However, the dramatic increase is indicative of the increased attention and emphasis given to this initiative by the Coast Guard since implementation of the program changes. The current intervention figure also provides a more realistic measure of the scope of the substandard ship problem than had previously existed. It is anticipated that the number of interventions will continue to increase for a period of time. Once the effects of the increased emphasis are fully realized, the number of interventions is expected to level off and eventually decline as the number of substandard ships operating in U.S. waters is reduced.

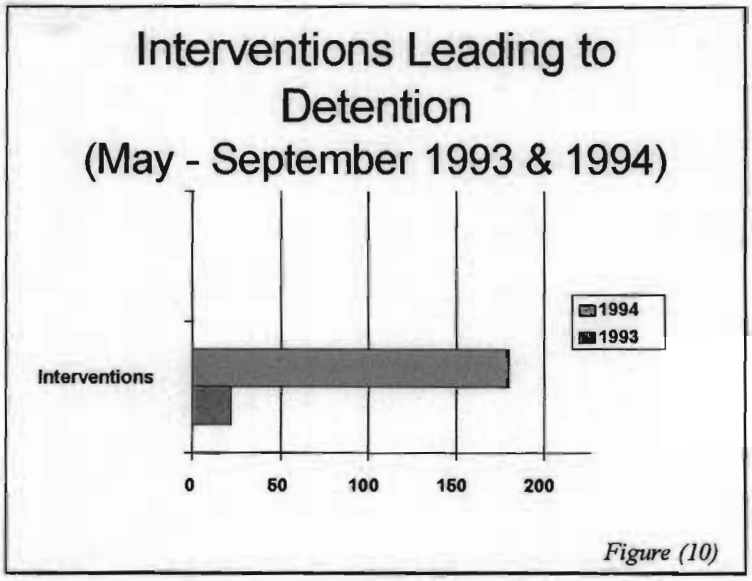


Figure (10)

The Coast Guard detained over eight times more foreign ships over the previous year.

Section IX

Other Control Actions

The Coast Guard can detain ships to enforce safety and environmental standards through various mechanisms or controls including detentions authorized under any of several international conventions, Captain of the Port Orders under the Ports and Waterways Safety Act, or by placing a ship on a U.S. Customs hold. Under international agreement interventions leading to the detention of a ship are reported to IMO. Therefore, to bring substandard ships to the attention of the IMO and call worldwide attention to this problem, the Coast Guard has relied more heavily on the intervention authority

vested in international conventions as its primary enforcement tool since May 1, 1994. The new emphasis on foreign ship boardings has caused a general increase in all types of Coast Guard control actions since the initiative was implemented. Between May 1, 1994, and September 30, 1994, 559 control actions were recorded, including Captain of the Port Orders, U.S. Customs holds, and interventions. During the same period in 1993, only 272 such actions were recorded.

Section X

Casualty and Pollution Statistics

Insufficient casualty and pollution data is available to assess the effects of the port-state control initiative. The number of foreign ships involved in collisions, allisions, groundings, fires, explosions, and personnel injuries remained relatively constant in 1994 compared to 1993. 105 casualty incidents were reported between May 1 and September 30, 1994 compared to 93 incidents which occurred during the same period in 1993.

Notably, reports of equipment failure have increased substantially with 84 incidents reported in 1994, and 45 in 1993. This increase may be a result of the attention now placed on foreign ship boardings and in particular the increased emphasis on examining and testing critical machinery during these boardings. As a result a higher percentage of failures are being discovered and reported by the Coast Guard boarding teams. Previously, these equipment failures would have remained undetected and unreported by the ship's owner or operator.

It is difficult to accurately compare the 1994 data with the data from the same period in 1993. This is due to the fact that the investigations have not yet been completed in over 16% of the foreign ship casualties which occurred between May 1 and September 30, 1994. Typically over 30% of these investigations result in the case being closed to file either because the incident did not constitute a reportable marine casualty, or due to lack of evidence.

Pollution incidents occurring between May 1, 1994 , and September 30, 1994, attributable to foreign ships decreased by 12% when

compared to the same period in 1993. During the 5 month period in 1994, 128 pollution incidents were reported compared to 145 incidents in 1993.

Section XI

Summary

This Congressionally mandated initiative has had a significant impact, catching the attention of the maritime shipping industry worldwide, and bringing the U.S. to the forefront of international efforts to eliminate substandard ships. The publication and/or listing of the names of those associated with substandard ships has received considerable coverage within the international maritime trade papers. This coverage has caused a number of flag administrations and shipping companies to reexamine the way they do business.

1. Charterers are paying increased attention to the performance records of ships prior to entering into business relationships. Several ship owners have reflagged their ships to disassociate themselves with listed flag states.

2. Communications between the Coast Guard and classification societies has improved dramatically as a direct result of the initiative. Several classification societies have initiated major changes in an effort to improve their performance records. Classification Society accountability and disciplinary action, which was seldom exercised prior to this initiative, has been taken on a much more frequent basis by classification societies against their surveyors, who fail to perform to their satisfaction.

3. One flag administration, the Republic of Cyprus has initiated major changes in an attempt to improve its performance as a flag state. The United Kingdom and other countries have emulated the U.S. efforts by publishing lists of ships, owners, and classification societies associated with substandard ships, and targeting their boardings in a similar manner.

Section XII

Program Improvements

The Coast Guard continues to make program improvements based upon the experience gained since the Port-state Control Initiative was implemented. Improvements that have been made include:

1. Establishment of procedures to ensure timely written notification of ship owners, operators and classification societies of ships subjected to interventions to provide ample opportunity for response, and to advise them of the consequences;

2. Modification of boarding policies to prevent unwarranted delays to the start of cargo operations or passenger embarkation of Priority II Vessels; and

3. Modification of boarding policies to ensure the at sea boarding of Priority I Vessels.

The Coast Guard expects to make additional improvements. Currently the procedures for listing owners and operators are being examined and may be modified to focus greater attention on those associated with multiple substandard ships, and those associated with ships found to be in particularly egregious condition. At the same time, the points assigned to a ship as a result of an intervention may be increased to reflect the risks associated with the ship. These future changes will better focus boarding efforts on those most responsible for substandard ships, while eliminating an existing system bias favoring single-ship owners.

Section XIII

Conclusions

The Port-state Control initiative is focusing greater attention on the condition of ships worldwide. The Coast Guard will continue to

aggressively pursue this initiative, and is committed to the continued improvement of this program. We are confident that this initiative has had, and will continue to have a significant effect on the elimination of substandard ships worldwide.

Selected Bibliography

Books:

Boczek, Boleslaw Adam, Flags of Convenience, Boston Harvard University Press, 1962.

Brittin, Burdick H., International Law for Seagoing Officers, Naval Institute Press, 1986.

Carlisle, Rodney, Sovereignty for Sale; The Origins and Evolution of the Panamanian and Liberian Flags of Convenience, Naval Institute Press, 1981.

Daoudi, M.S., and M.S. Danjani, Economic Sanctions; Ideals and Experience, Boston: Routeledge & Kegan Paul, 1983.

International Labour Office, Inspection of Labour Conditions on Board Ship: Guide-lines for Procedure, Geneva, 1990.

IMO Publication, STCW 1978, 1993 Edition, London.

Kasoulides, George C., Port State Control and Jurisdiction; Evolution of the Port State Control Regime, Martinus Nijhoff Publishers, 1993.

Levi, Werner, Law and Politics in the International Society, Sage Publications, Inc., 1976.

von Glahn, Gerhard, Law Among Nations, Macmillan Publishing Company, 1986.

Articles:

Bergstrand, S. and R. Doganis, "The Impact of Flags of Convenience," The Law of the Sea and International Shipping, Oceana Publications Inc., 1985.

Cline, Jack, LCDR, USCG, "Information Sharing Identifies Weak Safety Nets," Proceedings of the Marine Safety Council, May-June 1994.

Garick, Jason A., "Crisis in the Oil Industry," Marine Policy, July 1993.

Forsyth, C.J., "Transnational Corporations: Problems for Study in the New International Order of Maritime Shipping," Maritime Policy Management, 1993.

Mansfield, Edward D., "Alliances, Preferential Trading Arrangements and Sanctions," Journal of International Affairs, Summer 1994.

Mitchell, Ronald B., "Regime Design Matters: International Oil Pollution and Treaty Compliance," International Organization, Summer 1994.

No author cited, "Frustration at the IMO," Lloyd's Ship Manager, April 1994.

No author cited, "Raising Issues, Raising Standards," Surveyor, American Bureau of Shipping Publication, September 1994.

No author cited, "Safety, What's Going Right?," Marine Log, March 1993.

Nollkaemper, Andre, "Agenda 21 and Prevention of Sea-based Marine Pollution," Marine Policy, November 1993.

Pickthorne, Captain M., "Port State Control in the Asia-Pacific Region," Seaways, February 1994.

Sletmo, Gunnar K and Susanne Holste, "Shipping and the Competitive Advantage of Nations: The Role of International Ship Registers," Maritime Policy Management, 1993, Vol. 20, No. 3.

Various articles, no author cited, IMO News, quarterly publication, 1992-1994.

Newspapers:

Journal of Commerce. 5 July, 25 August, 2 November 1994, 13 February, 3 March 1995

Lloyd's List. 21 August, 18 November, 16 December 1994, 27 January, 2 February 1995

Published Reports and Proceedings:

Goss, Richard, "The Future of Maritime Safety," a paper presented at the Eighth Chua Chor Teck Memorial Lecture, Singapore, January 12, 1994.

International Registries, Inc., "Selections from Historical Data 1994," Republic of Liberia, Bureau of Maritime Affairs, Worldwide Corporate Headquarters, Reston, Virginia.

Lord Donaldson, "Safer Ships, Cleaner Seas," Report of Lord Donaldson's inquiry into the prevention of pollution from merchant shipping, dated 8 April 1994.

McKenzie, Arthur, 1995 Guide for the Selection of Tankers, Compiled by Tanker Advisory Center, N.Y., N.Y.

Sarubbi, Jonathan D., "Marine Safety and Pollution Prevention: The Role of the Port State," Major Paper, University of Rhode Island, 1993.

Official Government Documents:

Department of Transportation, Maritime Administration, "Report on Port and Shipping Safety and Environmental Protection," October 1994.

National Transportation Safety Board, Special Investigation Report, "Accidents Involving Foreign Passenger Ships Operating from U.S. Ports 1990-1991," U.S. G.P.O.: 1993-341-835: 82061.

United States General Accounting Office (GAO) Report to Congressional Requestors titled "Coast Guard: Additional Actions Needed to Improve Cruise Ship Safety."

United States General Accounting Office (GAO) Report to Congressional Requestors titled "International Environment; International Agreements are Not Well Monitored," January 1992.

United States General Accounting Office (GAO), Resources, Community, and Economic Development Division, Report titled "Cargo Preference Laws," November 1994.

United Nations Documents:

United Nations Conference on Trade and Development, Review of Maritime Transport 1993, Trade and Development Board, 1994.

United Nations, The Law of the Sea, Official Text of the United Nations Convention on Law of the Sea with Annexes and Index, 1983.

United Nations Treaty Series, 1958 Geneva Convention on the High Seas, 450 UNTS 82, Entered into force on 30 September 1962.

United Nations Treaty Series, International Convention on Load Lines, 640 UNTS 133, Entered into force on 21 July 1968.

· Series, International Convention on Standards of Training,
Watchkeeping for Seafarers, Entered into force on 28 April 1984.

roceedings:

ehohm Case (Liechtenstein v. Guatemala), Vol. I & II.

ports; (27)1963,

laterials (ILM); (6)1967, (12)1973, (17)1978, (21)1982,

ts and Correspondence:

ork under Kermit program, URI Kingston Campus server provided
anization descriptions.

rman of the Federation of American Controlled Shipping (FACS),
y conference considering results of Lord Donaldson inquiry,
. 1-2 December 1994.

re published by Oil Companies International Marine Forum
e.

ational Marine Forum, "Tanker Safety and Pollution Prevention,
the Issues," September 1993.

dum of Understanding on Port State Control (Paris MOU), 1993

emorandum of Understanding on Port State Control, text of MOU,
95.

uard, Report to Congress on Port State Control Initiative,
ndard Ships," draft dtd April 1995.