

FOREIGN-FLAG CREWING PRACTICES



A Review of Crewing Practices in U.S. – Foreign Ocean Cargo Shipping

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Executive Summary

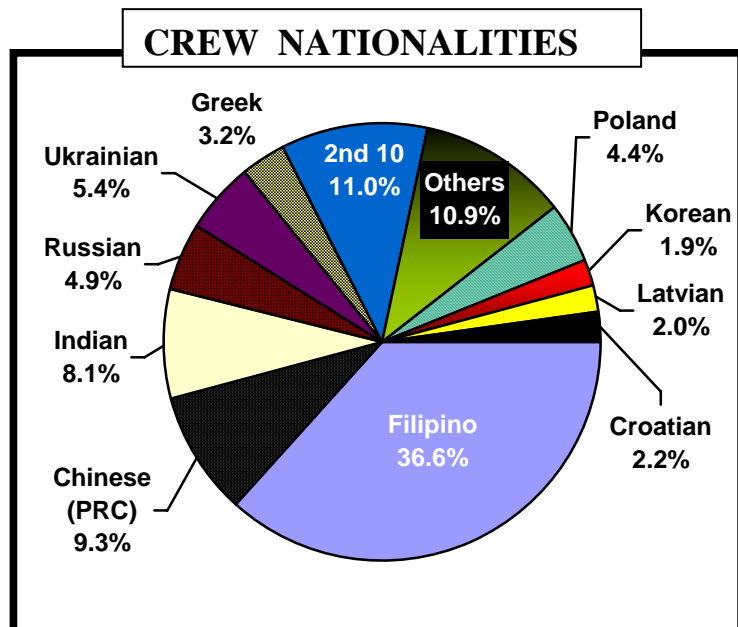
Introduction

Foreign-flag Crewing Practices is a comprehensive review of the nationalities and size of the crews of foreign-flag cargo vessels calling at ports in the United States. Several factors influence the nationalities of crewmembers on vessels calling at U.S. ports – the laws of the vessel’s flag country, overall crew competencies and training, ownership preferences, communications among crewmembers and costs. The report does not address all the variables affecting crew size, but centers on the impact of vessel type, size, age, and flag on crew size.

Data was derived from the “Crew List” form completed by the master of each vessel entering and exiting the U.S. and reported to the U.S. Department of Homeland Security (DHS) and Customs and Border Protection (CBP). The primary focus of this study is vessel entries during 2004. A total of 7,247 crew lists covering over 2,759 vessels and 149,327 individual crew entries from vessel visits to U.S. ports during 2004 were included in this study.

Major Findings

- Crewmembers from 123 different countries were found on foreign-flag vessels calling at U.S. ports.
- Only 10 nationalities made up the vast majority of crews, 77.9 percent, and all are considered moderate or low cost sources of crewing.
- There is little relationship between vessel flag and



nationality of crewmembers employed on the vessel.

- Asia, led by the Philippines (the world's largest supplier of seafarers) with 36.6 percent of total crew entries, is the leading region of crew supply for the U.S.-foreign trade.
- Overall, Asian countries supplied 59.4 percent of total crewmembers on foreign-flag vessels.
- Eastern European nations were the second greatest source of crewmembers at 22.1 percent of the total.
- Western European nations were an important source of command officers (master & chief engineer).
- The work force evident in the U.S.-foreign trade is more frequently from less developed nations and lower cost than the world supply data found in *BIMCO/ISF 2004 Manpower Update: The Worldwide Demand for and Supply of Seafarers*.
- Vessel Size, Age, and Type are important variables affecting crew size.
- Newer and smaller vessels had lower crew complements.
- Average crew size did not vary significantly among the largest registries but variations were observed among registries not in the top 5.
- Tankers had a higher average crew complement across all age groups.

Conclusions

- We continue to believe that once freed from legal restrictions, costs become the vessel owner's primary determinant of the nationality of the crew complement. With few exceptions, only the lowest cost nationalities were employed as unlicensed seafarers in the competitive U.S. trades. Officers from developed countries still were well represented in the command positions of master and chief engineer in 2004, but in lower numbers than in our previous study from 2000. The crew nationality data appears to confirm the greater use of officers from low cost crewing centers as the supply of top officers from developed countries struggles to replace itself. The BIMCO/ISF 2005 Manpower Update provides some data supporting this notion. According to the update,

“The OECD countries (North America, Western Europe, Japan, etc.) remain an important source of officers, although Eastern Europe has become increasingly significant with a large increase in officer numbers. The Far East and South East Asia (the “Far East”), and the Indian sub-continent remain the largest source for ratings and are rapidly becoming a key source of officers.”

While crew selection moves towards lower cost nationalities, improved vessel design has lowered the number of seafarers necessary to crew the newer vessels in the fleet. However, the growth in the sheer physical size of the new buildings may slow the movement towards smaller crew sizes in the foreseeable future.

The dual observations of smaller crew complements and lower cost crewing sources will continue to assure that foreign-flag competitors in the U.S. trades will be minimizing crewing costs in the future. Therefore it appears that U.S.-flag operators competing in the foreign trades will continue to be pressured by a large wage cost disadvantage.

Foreign-Flag Crewing Practices

Purpose: This analysis of foreign-flag crewing practices was undertaken to assess the competitive environment for crews on foreign-flag cargo vessels calling at U.S. ports. The study also provides a broad perspective of the myriad of different crews entering the United States on a regular basis. For most operators, the decisions concerning crew nationality and size represent the operators' largest significant controllable operating cost. The study of these costs and trends provide the U.S. Maritime Administration (MARAD) with insights into the difficulties facing U.S.-flag operators competing in a global marketplace. In the past, MARAD has made detailed studies of specific trades, trade routes and carriers for the specific purpose of calculating subsidy payments. This analysis is a broad and more complete look at the competitive crewing environment in which U.S.-flag vessel operators must compete.

Description of Data: The focus of this study is on cargo vessels – dry cargo, tanker, container and RORO/vehicle carriers - entering the above U.S. ports during 2004, the latest year for which data is available. The primary source of data was the “Crew List” form completed by the master of each vessel upon entering and exiting the U.S. and reported to the U.S. Department of Homeland Security (DHS) and Customs and Border Protection (CBP). Crew lists for calendar year 2004 were collected from the following major U.S. ports:

Houston, Texas

Los Angeles/Long Beach, California

Miami, Florida

Newark, New Jersey/New York, New York

New Orleans, Louisiana

Two additional ports included in our previous study, Savannah, Georgia and Seattle, Washington, were omitted due to a lack of data for these ports. The lack of data was a direct result of an interruption in the receipt of information due to administrative changes brought about by the absorption of the former Immigration and Naturalization Service (INS) into the newly created (DHS) during 2003.

Appendix I displays a summary of the crew lists by port and month. From the crew lists, the following data for each vessel was extracted and entered into a relational database:

Vessel Name

Port Name

Date of Arrival

For each crewmember on the vessel, the following data was collected and entered:

Position

Nationality

In addition, the data was linked to a database of vessel characteristics provided by *Lloyd's Register of Ships*. The list of data elements available from Lloyd's is extensive; however, the following data elements were primarily used in this study:

Official Number

Vessel Type

Year Built

Deadweight tons

TEU capacity

Data was entered for each vessel entry that required the filing of a crew list and was available at the specified ports during 2004. A total of 7,247 crew lists covering over 2,759 different vessels were included in the study, resulting in a total number of individual crewmember entries of 149,327.

Data Limitations: Crew list data collected for this study did not include the full universe of vessels entering U.S. ports. Overall, approximately 36 percent of port calls recorded were at the five study ports (see Appendix II for more detailed information). Crew lists were not available for all months, slightly lowering data representation. Given the geographical distribution of the ports, the spacing of data over a year's normal market gyrations, and the substantial percentage, we feel the data fairly represents the market for crews in the U.S.-foreign trade during 2004.

Crewing in the U.S.-Foreign Trades

Introduction

The analysis and discussion of crewing in the U.S.-foreign trades will be divided into three sections: 1. Nationalities, 2. Crew sizes, and 3. Actual crew complements. The first section will provide information concerning the predominant nationalities of seafarers serving the U.S. market. In the second section, data will be presented on the crewing levels of various vessel types and vessel ages. Finally, we will endeavor to tie the first two sections together by providing examples of actual crew complements.

Part 1. Crew Nationalities

Overview

Several factors influence the selection of crewmembers on vessels calling at U.S. ports – the laws of the vessel’s flag of registry, overall crew competencies and training, ownership preferences, communications among crewmembers and costs. Some flags of registry, like the United States, mandate or restrict seafarer nationality on vessels of its registry. In the U.S., only citizens can serve as master, chief engineer, radio officer, or officer in charge of a deck or engine watch.

In addition, each unlicensed seafarer must be a citizen or resident alien (no more than 25 percent may be resident aliens). We continue to believe that once freed from legal restrictions, costs become most vessel owner’s primary determinant of crew complement. Command positions (master and chief engineer) appear to be the only positions where cost is not a primary determinant of the owner’s crewing decisions.

Table 1

TOP 5 RANKINGS

<u>FLAG</u>	<u>CREW</u>
Panama	Philippines
Liberia	PRC
Cyprus	India
Malta	Ukraine
Bahamas	Russia

Source: Foreign-flag vessels calling selected U.S. ports during 2004.

Competitive pressures have forced most developed countries to witness a decline of their national flag registries and ships in international trade. Various strategies have been employed to address the decline including forming substitute or “International” flags, such as the Norwegian International Shipping registry (NIS), changing crewing requirements, or changing tax law. Open registries or “flags of convenience” (FOC) have long been havens for owners seeking lower taxes and operating costs.

Table 1 displays the top 5 rankings for vessel flag and crew nationalities derived from the crew list data. It continues to be obvious that there is little relationship between the top vessel flags and the nationalities of the crewmembers employed. This continues to suggest that wage cost, one of the largest components of vessel operating costs, is a significant determinant of crew-composition in the international trade.

In this study, crewmembers from 123 different countries were found on foreign-flag vessels calling at U.S. ports. However as low cost sources of crews have displaced most national crewmembers, just 10 nationalities made up the vast majority of crews, 78.1 percent, and all are considered moderate or low cost sources of crewing. Table 2 contains the top 10 ranking of crew nationalities for foreign-flag vessels calling the U.S. during 2004. Exhibits I and II contain a more detailed presentation of the overall Top 20 Crew Nationalities for 2004.

Table 2

**CREW NATIONALITIES (TOTAL CREWS)
ALL VESSEL TYPES (2004)**

NATIONALITY	RANK	TOTAL CREWS		TOTAL OFFICERS		TOTAL UNLICENSED	
		Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	1	54,823	36.6%	14,757	23.8%	40,066	45.8%
CHINESE (PRC)	2	13,881	9.3%	6,231	10.0%	7,650	8.7%
INDIAN	3	12,143	8.1%	6,378	10.3%	5,765	6.6%
UKRAINIAN	4	8,018	5.4%	3,322	5.4%	4,696	5.4%
RUSSIAN	5	7,316	4.9%	3,767	6.1%	3,549	4.1%
POLISH	6	6,591	4.4%	3,081	5.0%	3,510	4.0%
GREEK	7	4,789	3.2%	3,480	5.6%	1,309	1.5%
CROATIAN	8	3,275	2.2%	1,930	3.1%	1,345	1.5%
LATVIAN	9	2,961	2.0%	1,254	2.0%	1,707	1.9%
KOREAN-SOUTH	10	2,784	1.9%	1,946	3.1%	838	1.0%
TOP 10		116,581	77.9%	46,146	74.4%	70,435	80.4%
2ND 10		16,385	11.0%	6,741	10.9%	9,644	11.0%
TOP 20		132,966	88.9%	52,887	85.3%	80,079	91.5%
TOTAL		149,631	100.0%	62,001	100.0%	87,557	100.0%

The majority of the crew nationalities represented in our current study comes from the same countries as in our previous study with one exception. Myanmar has been replaced in the top 10 by crewmen from Latvia, further indication of the emergence of the Eastern European presence in the maritime industry. Another change worth noting is that there are a greater percentage of officers, 74.4 percent, represented among the top 10 nationalities. In our previous study only 68.1 percent of the officer ranks were in the top 10. The increased presence of the Chinese and Indian crewmembers account for much of this increase and is indicative of efforts by these countries to recruit better educated seamen throughout their ranks.

By region, Asia, led by the Philippines with 36.6 percent of total crew entries continues to be the leading region of crew supply for the U.S.-foreign trade. Overall, Asian countries supplied 59.5 percent of total crewmembers on foreign-flag vessels calling the U.S. study ports in 2004. The predominance of the Asian seamen is

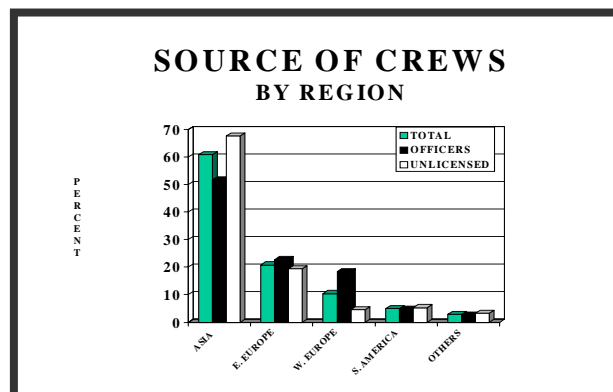


Figure 1

further demonstrated when composition by rank is tabulated. Asian countries supplied 66.5 percent of unlicensed crewmembers and 49.8 percent of officers.

Eastern European nations were the second greatest source of crewmembers at 22.1 percent of the total. By rank, Eastern Europeans represented 24.7 percent of officers and 19.9 percent of unlicensed seafarers. Western European nations were represented in the top 20 by Greece, Germany, Turkey and Denmark. However, the level of participation has declined from our previous review, falling to 6.3 percent in 2004 from 10.4 percent in 2000.

It is also worth noting that the make-up of the representation changed considerably as well. Officers constituted only 10.4 percent of the seamen from these countries, down significantly from CY 2000 when they represented 18.4 percent of the seamen.

Participation rates for officer and cadet billets can be found for the top nationalities on Page 2 of Exhibit I. Exhibits II - VII contain detailed distributions of the nationalities of seafarers by department, rank and vessel type. Appendix I - III detailed crew list distribution, vessel port call and region of crew supplies.

Sources of Crewing – Asia

The top suppliers of seafarers from Asia are spread across the coastal and island regions with the greatest concentration in nations bordering the North Pacific Ocean and its coastal seas. The top seafarer nationalities of Asia (with their corresponding rank overall in parenthesis) were:

<u>Summary of Region</u>	
Total:	59.5%
Officers:	49.8%
Unlicensed:	66.5%

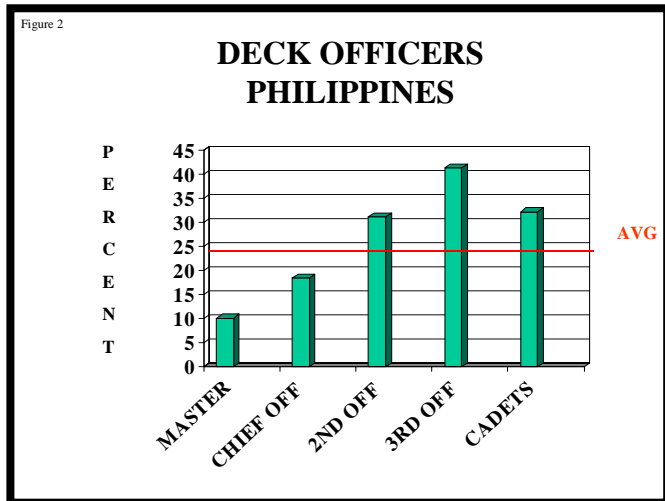
- (1) Philippines 36.6%**
- (2) People’s Republic of China (PRC) 9.3%**
- (3) India 8.1%**
- (10) South Korea 1.9%**
- (12) Myanmar 1.6%**
- (15) Chinese (Taiwanese) 1.2%**
- (18) Indonesia 0.7%**

Asia is clearly the primary source for crews in the U.S.-foreign trade. The top 3, and 7 of the top 20 countries supplying crewmembers for vessels serving the U.S.-foreign trade, are all found in Asia.

(1) Philippines

The Philippines is the dominant supplier of unlicensed crewmembers for the U.S.-foreign trades with 45.8 percent of the unlicensed crew entries. Unlicensed Filipino seafarers can be found sailing for nearly every major flag and most often are the largest national group on the vessel. Seafarers from the Philippines are reported to offer several advantages as contract crewmembers. On the whole, Filipino seafarers are low cost, there is a large supply and their English language skills make communication among all crewmembers easier.

Filipino officers were also widely used (23.8 percent) and made up the largest officer group. But as demonstrated in Figure 2, officers from the Philippines on average tended to be lower ranked.

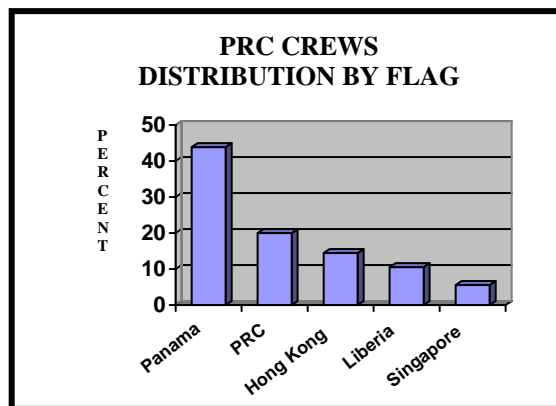


This was particularly true on vessels with a strong presence of national officers such as was found under the Greece, Japan, Germany and Norway (NIS) flags. Filipino officers found their greatest penetration of the higher officer ranks was when sailing on open registry vessels. For example, on Panamanian flag vessels, Filipino

masters (15.9 percent) and chief engineers (16.7 percent) were among the largest nationality groups. But even on Panamanian flag vessels (and other open registry vessels as well), penetration of the command positions was relatively low when compared to the overall Filipino officer representation on Panamanian flag vessels of 27.8 percent.

(2) People's Republic of China (PRC)

The PRC differs from other low cost crewing sources in that Chinese were less likely to sail as part of a crew of diverse nationalities. The Chinese continued to emerge in the international maritime community as reflected by the nearly 41 percent rise in the share of foreign crewman on board vessels calling at U.S. ports. In our previous report (CY2000 data), Chinese crewman represented 6.6 percent of the nationalities on board the vessels studied. In our current report they represent 9.3 percent of the crew nationalities. The majority of Chinese crew entries were from vessels that were



predominately crewed with Chinese. Crews from the PRC mostly worked for owners with direct or indirect connections with the PRC. As a result, most PRC crews sailed under a limited number of flags (see Figure 3). Crewing levels on PRC crewed vessels tended to be higher than most other vessels and included ratings not found on other vessels, such as doctor.

(3) India

India was the second leading supplier of officers (10.3 percent) for vessels in the U.S.-foreign trades. Unlike the Philippines, Indian officers tended to be more evenly represented throughout officer ranks. Indian officers ranked highly, 2nd for both master and chief engineer, as well as 2nd or 3rd for all other officer positions. With a very small national flag presence in the U.S.-foreign trade, most Indian crewmembers sailed on ships under open registries and had a strong presence on vessels under the Bahamas, NIS and Singapore flags.

(10) Korea (South)

The overwhelming majority (73 percent) of Korean crewmember entries during 2004 were from seafarers on vessels under the Panamanian flag. An additional 17.9 percent entered on South Korean flag vessels. Exactly 93 percent of seafarers recorded on South Korean flag vessels were national crewmembers. Containerships were the type of vessel most frequently crewed by Korean seafarers (62 percent). More Korean officers entered the U.S. study ports than Korean unlicensed crewmembers. Typically, when a vessel was crewed by Korean seafarers, all the officers would be Korean and a majority of the unlicensed ratings were Korean as well.

(12) Myanmar (Burma)

As a source of crews, Myanmar seafarers played much the same role as those from the Philippines. Myanmar seafarers serve on a wide variety of vessels as lower ranking officers and unlicensed ratings. In fact, over 69 percent of Myanmar crewmembers were unlicensed seamen. For the most part, the Myanmar seafarers arriving at the U.S. study ports were crewing on open registry vessels. Less than one percent arrived on a Myanmar flag vessel, as only one Myanmar flag vessel called on the study ports during 2004.

(15) Taiwan

Taiwan is a highly developed but often politically isolated country with a strong maritime community. This fact impacts Taiwan as a source of crews. For the most part, Taiwanese crews are employed on vessels owned or controlled by Taiwanese companies. Nearly 28 percent of Taiwanese seafarers sailed on Panamanian flag vessels – another 23 percent were on Singapore flag vessels. Only 12.4 percent of Taiwanese crewmembers entered the U.S. study ports on Taiwanese flag vessels.

(18) Indonesia

Representation of Indonesian seamen was heavily concentrated (88.9 percent) in the unlicensed ranks in the U.S. trade. In our previous study, the majority (52 percent) of Indonesian crewmembers entering the U.S. study ports were sailing on bulk carriers during CY 2000. In CY 2004, only 26.8 percent were sailing on bulk carriers. The majority (49.6 percent) of Indonesian crewmembers entering the study ports during CY 2004 were sailing on container vessels. The most common flag on which Indonesian seafarers sailed was Dutch (34 percent), followed by Panamanian (30 percent). There were no Indonesian flag vessels in the study group during CY 2004.

Sources of Crewing – Eastern Europe

For purposes of this study, Eastern Europe is defined as newly independent states of the former USSR and adjacent Warsaw Pact member countries in continental Europe. The top sources of crewing in Eastern Europe in 2004 were:

Summary of Region	
Total:	22.1%
Officers:	24.7%
Unlicensed:	19.9%

- (4) **Ukraine 5.4%**
- (5) **Russia 4.9%**
- (6) **Poland 4.4%**
- (8) **Croatia 2.2%**
- (9) **Latvia 2.0%**
- (11) **Bulgaria 1.8%**
- (13) **Romania 1.4%**

The impact of the economic change following the demise of the former Soviet Union continues to affect the maritime industry in this region. The declining opportunities for Eastern European seafarers with their national flag fleets corresponded with the rising need for low cost and adequately trained seafarers elsewhere. Eastern Europeans are now found throughout the fleets of the world. In our data, the officers and unlicensed ratings were found in relatively equal proportions to the total. There were not the great disparities evident in the rating distribution of other large suppliers of seafarers, such as the Philippines, with a high bias towards the lower rating or the Western Europeans with a high bias towards the higher ranks.

(4) Ukraine

The Ukrainian presence on vessels in the U.S. trade was the most evenly distributed nationality represented in our study. Overall, Ukrainian seamen accounted for 5.4 percent of crewmember entries, 5.4 percent of all officers and 5.4 percent of all unlicensed. Although Ukrainian seafarers entering the U.S. sailed on various dry cargo vessels – the majority were found on bulkers (33 percent) and containerships (33 percent). Ukrainian seafarers were found on vessels of various flags, the open registries of which Liberia (21 percent), Malta (13 percent) and Cyprus (11 percent) were the most common.

(5) Russia

Russia continues to maintain a relatively large national-flag fleet crewed primarily with Russian nationals. In our data, nearly 100 percent of crewmembers on Russian-flag vessels were Russian. Overall, approximately 5 percent of the crewmember entries in the study were Russian nationals. Of this representation, the Russian seafarer is found in nearly equal proportions among the officer (51 percent) and unlicensed (49 percent) ranks. Russian seafarers also made up a significant fraction of the crews of vessels flying the flags of Liberia, Cyprus and Malta. Russian seafarers are found on all types of vessels – containerships were the most popular with 27 percent Russian seafarers arriving on this vessel type.

(6) Poland

Like Ukrainian seafarers, Polish crews are found in large numbers on dry cargo vessels (over 85 percent) under various flags. Where they differ is in the use of Polish seafarers by owners of RO/RO vessels. Approximately 16 percent of Polish entries were on RO/RO vessels where Polish officers are the 3rd most common nationality and unlicensed crewmembers are the 2nd most common. Additionally, Poland has a national flag presence in the U.S. foreign trade crewed by Polish seafarers. Overall, Polish flag vessels represented about 10 percent of Polish seafarer employment in the U.S.-foreign trade in 2004.

(8) Croatia

Seafarers from Croatia arrived in the U.S. on a wide variety of vessels under numerous flags. The Liberian flag was the major standout with 24 percent of Croatians in this study serving onboard vessels flying this flag. There were slightly more Croatian officer entries than unlicensed ratings making Croatia proportionately more important as an officer supply point. Only a few Croatian flag vessels called at the selected U.S. ports during 2004; those that did were crewed by an all-Croatian crew.

(9) Latvia

In contrast with other Eastern European seafarers, the Latvian seafarers in this study sailed predominantly on tanker vessels. Overall, Latvian seamen accounted for 2 percent of the crew entries reported in CY 2004. The entries were fairly evenly distributed throughout the billet ranks, with 2 percent of all officer entries and 1.9 percent of all unlicensed entries. Latvian seafarers sailed on vessels under a variety of flags with Liberia (36 percent) the only flag with a large number of crew entries. There were no Latvian flag vessels calling the U.S. study ports in 2004.

(11) Bulgaria

Bulgarian seafarers in this study were mostly found on bulk carriers (30 percent) and containerships (45 percent) under various open registries. The majority (61 percent) of the Bulgarian seamen found on vessels in the U.S. trade during CY 2004 were in the unlicensed ranks. On a percentage basis, however, they were evenly distributed throughout the billet ranks, with 1.5 percent employed in the officer ranks and 1.9 percent included in the unlicensed crew entries. There was also a small number of Bulgarian flag vessels that called at the U.S. ports during 2004 – these vessels were 100 percent crewed by Bulgarian seafarers.

(13) Romania

Romanian seafarers represented just 1.4 percent of crew entries in this study. The employment pattern for Romanian seafarers is very similar to that of Bulgarian crews, often sailing on the same vessel as Bulgarians. The Romanian crewmembers in this study served primarily on bulk carriers (17.8 percent) and containerships (43.1 percent) under several registries. Panama (14.7 percent) was the largest registry of employment for Romanian seafarers. There were no Romanian flag vessels calling at the U.S. study ports in 2004.

Sources of Crewing – Western Europe and the Mediterranean

Western Europe as a source of crews in this study includes all of the countries of continental Europe not included in the previous section. The top sources of seafarers from this region were:

Summary of Region

Total:	6.3%
Officers:	10.4%
Unlicensed:	3.2%

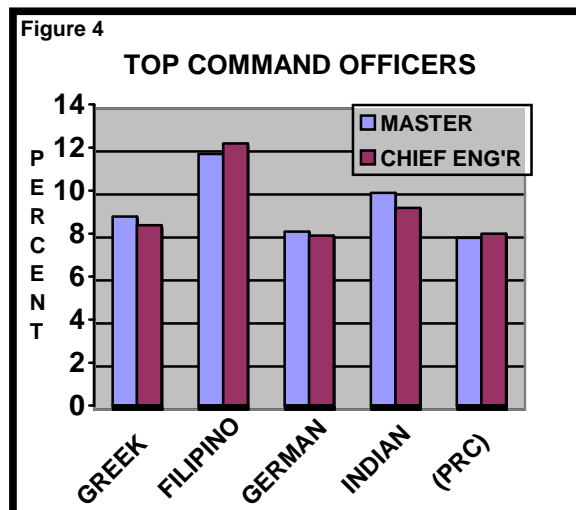
(7) Greece 3.2%

(14) Germany 1.4%

(16) Turkey 0.9%

(17) Denmark 0.8%

The nations of Western Europe continue to own and control large fleets but Western European seafarers, for the most part, occupy only high-ranking positions on vessels trading with the United States. Greek seafarers are the only significant exception, as their relatively modest wage costs and national flag crewing requirements resulted in a modest level of



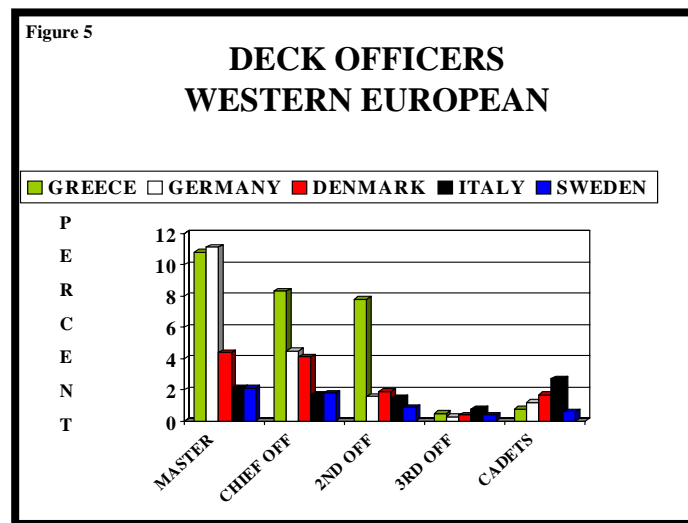
unlicensed employment.

Western European nations are among the top suppliers of command positions (master and chief engineer). In 2000, 37 percent of all Master entries were from Western European countries. In 2004, only 23.1 percent of all Master entries were from Western European countries. Additionally, the seafarers of Western European nations serve primarily on vessels under the national flag or the country's international registry (i.e., DIS, NIS). Specialization was found among certain Western European seafarers. For example, German and Danish seafarers sailed primarily on containerships while Swedish seafarers are found in high numbers on RORO vessels and car carriers. In the Mediterranean region the countries of Israel, Egypt and Turkey were the largest suppliers of crews. Israeli seafarers in this study served almost exclusively on containerships and under the Israeli flag – the majority were officers. The majority of both Egyptian and Turkish seafarers are employed on national flag vessels.

(7) Greece

Greek flag tankers and dry bulk vessels are still common sights in the oceans of the world as are Greek seafarers. As noted in Figure 4 above, we found that Greek masters and chief engineers were the 3rd most common nationality for each of these command positions. However, Greek officers were only the fifth most common overall nationality, as the lower the officers rank the lower the penetration (see figure 5). Other Western European nationalities have an even greater bias towards the higher officer ranks.

While common throughout the world fleets, 18.8 percent of Greek officers and 17.8 percent of Greek unlicensed



ratings in this study sailed on vessels under the Greek flag. However, this represents a decline from our previous study when their representation in the command positions totaled 19.7 percent and 25.9 percent respectively. When not sailing on a vessel under their national flag, Greek seafarers were primarily found crewing vessels under an open registry, primarily Cyprus (14%) and Panama (11%).

(14) Germany

While not a major source of seafarers, Germany is a leading source of masters and chief engineers on containerships. This could be expected since Germany is home to the world's largest owners of containerships. German masters and chief engineers represented 18.8 percent and 17.8 percent, respectively, of containership entries in this study – the largest of any nationality. However, this represents a decline from our previous study, when their representation totaled 25.7 percent and 19.9 percent, respectively. Overall, 80 percent of German crewmembers were onboard containerships. Over 50 percent of German seafarers were at the rank of master and chief engineer and over 83 percent were officers. Approximately 55 percent of German crewmembers in this study sailed on German flag vessels.

(16) Turkey

Turkey, one of the newest members of the top 20 nationalities in our study in 2004, ranked 16 overall with 1,325 crew entries. The ratio of unlicensed to officer representation was nearly 2 to 1. Containerships (77 percent) were the vessel type most commonly found with Turkish seamen onboard – 45 percent of the vessels were sailing under the Turkish flag. Other flags employing Turkish seamen included Panama and Liberia.

(17) Denmark

Danish crewmembers in our study were overwhelmingly officers (80.9 percent) with nearly 1/3 officers at the rank of master and chief engineer. Danish seafarers also sailed predominantly on dry cargo vessels – containerships (75 percent) and freighters

(16 percent). For the most part, Danish crewmembers entering the U.S. study ports were on vessels under the Danish International Shipping Registry (DIS). For vessels calling at the study ports in 2004, about 84 percent of Danish seafarers were onboard DIS flagged vessels with another 9 percent on Dutch vessels.

Sources of Crewing – Central & South America and the Caribbean

The Central & South American and Caribbean region includes all of the countries in the Americas except the United States and Canada. During 2004, for the first time since 1998 in our research, a country from this region ranked among the top 20 suppliers of crews. Although totaling less than 1.0% of the entries in our database, Honduras, with 915 entries ranked 19, among all crew nationalities. Other sources of crews from the region included: Chile, British Virgin Islands, Mexico and Nicaraguan. Seafarers whose nationality was reported to CBP, as British Virgin Islands (BVI) were among the top 20 suppliers of officers, most often high-ranking officers.

Sources of Crewing - Other Regions

This category encompasses Canada, Africa, Australia, and the Pacific Ocean Islands. The area with the most significant number of crewmembers from this region was the Republic of Kiribati and Tuvalu. The Republic of Kiribati and Tuvalu, both island groups, were formerly part of the Gilberts of the British Gilberts and Ellice Islands Colony. Surprisingly, this group of Pacific Islanders, with 898 crewmember entries ranked 20th overall among crew nationalities in this study. The overwhelming majority of these seamen were found on vessels flying the Liberian and German flags. These seamen continue to be almost exclusively unlicensed seafarers, comprising 1% of unlicensed crewmembers.

Other Crewing Studies

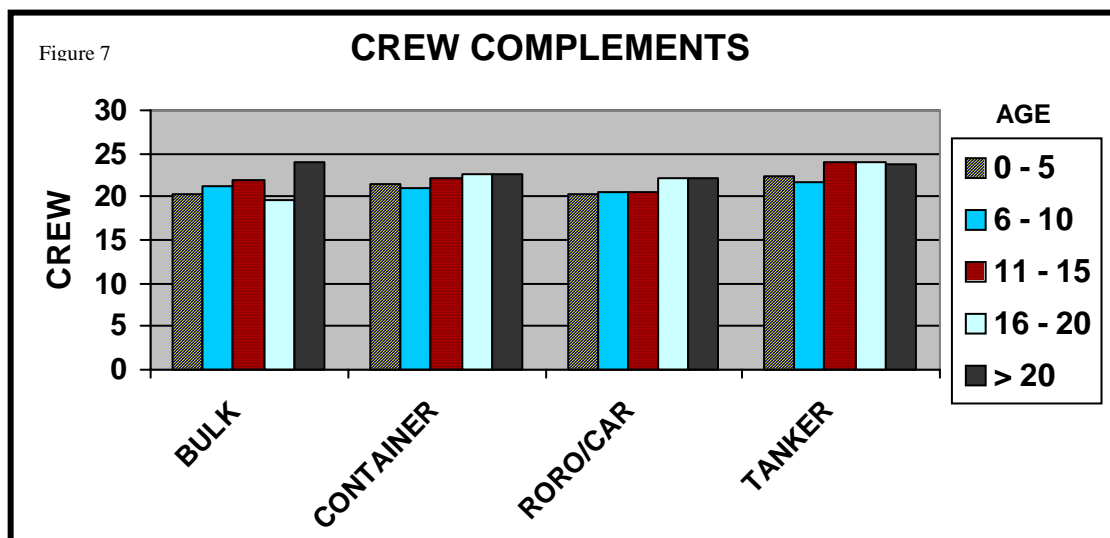
Other recent studies on crewing addressed the maritime workforce from a global perspective. The Baltic and International Maritime Council (BIMCO) and the International Shipping Federation (ISF) completed a report *BIMCO/ISF 2005 Manpower Update: The Worldwide Demand for and Supply of Seafarers* in December 2005. The BIMCO/ISF study assesses the supply of seafarers based on questionnaires from major labor supply countries on the country's current supply of qualified seafarers. The BIMCO/ISF study addresses the worldwide supply of seafarers while this study is centered solely on the crews of foreign-flag vessels in the U.S.-foreign cargo trades. The BIMCO/ISF report estimated the worldwide supply of seafarers in 2005 as 466,000 officers and 721,000 ratings. The crew nationality data appears to confirm the greater use of officers from low cost crewing centers as the supply of top officers from developed countries struggles to replace itself. The BIMCO/ISF 2005 Manpower Update provides some data supporting this notion. According to the update, "The OECD countries (North America, Western Europe, Japan, etc.) remain an important source of officers, although Eastern Europe has become increasingly significant with a large increase in officer numbers. The Far East and South East Asia (the "Far East"), and the Indian sub-continent remain the largest source for ratings and are rapidly becoming a key source of officers."(BIMCO, 2005)

Other crewing reports also provided valuable insight into trends unveiling among foreign maritime nations. These included *The Mapping of Career Paths in the Maritime Industries*, prepared by Southampton University for the European Community Shipowners' Association, during 2004-2005 and the report of the Proceedings of the Seafarers International Research Centre's Fourth International Symposium sponsored and published by the Seafarers International Research Centre (SIRC) at Cardiff University, July, 2005.

Part 2. Crew Sizes

Overview

As was stated earlier, 7,247 crew lists for vessels filed at the five study ports in 2004 were analyzed for this study. From the crew lists, total crew complements for 2,759 vessels were estimated. Many vessels enter the U.S. several times during the year while many others only once. For some vessels the total crew complement could not be reasonably estimated because crew repatriation obscured the actual crewing level. The crews of these vessels were included in the nationality section but not this section. Approximately, 50 percent of the crew complements estimated were for dry cargo bulk vessels (bulk carriers, freighters, reefers and OBOs), 25 percent were tanker vessels, 19 percent were containerships and 6 percent were ROROs or car carriers.

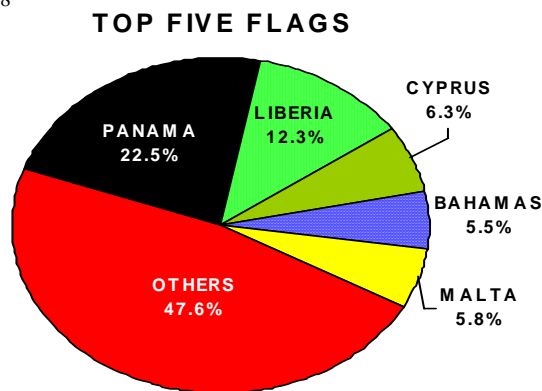


Generally, the data showed that newer vessels and smaller vessels have lower crew complements. Conversely, the older or larger vessels have higher crew complements. From the data analyzed, it appears that size matters the most at the extremes. The smallest vessels often had substantially smaller crew sizes. On closer review, the sharp reductions in crew size associated with the smallest size vessels may be more a reflection of a reduced crewing requirement for the coastal/near sea trading range than merely size. The largest vessels

also tended to have slightly larger crew complements; this was particularly evident for tankers. Vessel age would appear to be a more important variable than vessel size. Newer vessels (10 years old and less) had obviously lower crew complements than older (11-20 years old) vessels and the oldest vessels (>20 years old) tended to have crewing levels that were even larger. Differences in automation would appear to be the primary reason newer vessels are able to operate at reduced crewing levels.

As is also evident in Figure 7, vessel type appears to have had an impact on crew levels as tankers had a higher crew complement across all age groups. Each vessel type will be discussed in more detail later in this section.

Figure 8



The flag of a vessel may have an impact on the make-up of the crew complement, but does not appear relevant in the size of the crew. We continue to observe that average crew complements did not vary significantly when the top flags were compared.

Since dry cargo bulk vessels represented over 50 percent of the vessel crew complements, it is not surprising that the top five flags¹ overall and the top five flags for dry cargo bulk vessels are the same, though slightly rearranged. As can be seen in Table 3, open registries dominate the list of the most common foreign flags on vessels that called U.S. ports in 2004. Only the Greek and German (with containerships) flags had significant national flag presence in the U.S. trades.

¹ The top five is based on the number of individual vessels (each vessel is counted once even if it entered several times), rather than the number of vessel entries.

Table 3

TOP FIVE FLAGS BY VESSEL TYPE

<u>RANK</u>	<u>OVERALL</u>	<u>BULKER</u>	<u>TANKER</u>	<u>CONTAINER</u>	<u>RORO/CAR</u>
1	PANAMA	PANAMA	LIBERIA	PANAMA	PANAMA
2	LIBERIA	CYPRUS	NIS*	LIBERIA	NIS*
3	CYPRUS	MALTA	PANAMA	GERMANY	LIBERIA
4	MALTA	LIBERIA	BAHAMAS	ABB**	SINGAPORE
5	BAHAMAS	BAHAMAS	GREECE	DIS***	SWEDEN

* NIS = Norwegian International Shipping Registry

** ABB = Antigua and Barbuda

*** DIS = Danish International Shipping Registry

Bulk Vessel

The dry cargo bulk vessel category is comprised of barge, bulk, general cargo and assorted other bulk vessels. The average crew complement for these vessels was approximately 22 billets. Exhibit VII presents a more detailed synopsis of average crew complements by vessel type, vessel size and vessel age. As discussed earlier, the information generally support the notion that younger-smaller vessels have lower crew complements than older-larger vessels.

Tanker Vessel

The tanker vessel category is composed of three primary subgroups: tankers, chemical tankers and LPG tankers. The synopsis of the average tanker crew complement by vessel type, vessel size and vessel age is found in Exhibit VII. Tanker crew complements on average

Table 4

TANKER DISTRIBUTION BY FLAG TOP 10 FLAGS

	CALLING U.S.		WORLD
	<u>NUMBER</u>	<u>PERCENT</u>	<u>FLEET*</u>
LIBERIA	133	19.3%	7.6%
NIS	83	12.0%	3.8%
PANAMA	72	10.4%	15.1%
GREECE	62	9.0%	4.0%
BAHAMAS	51	7.4%	3.3%
SINGAPORE	39	5.7%	5.9%
MALTA	38	5.5%	3.2%
MARSHALL ISLANDS	31	4.5%	3.1%
CYPRUS	28	4.1%	1.9%
CAYMAN ISLANDS	27	3.9%	N/A
OTHER FLAGS	134	19.4%	52.1%
TOP 5	401	58.1%	33.8%
TOP 10	556	80.6%	47.9% **
ALL FLAGS	690	100.0%	100%

* Source: Merchant Fleets of the World, July 1, 2004

were higher across-the-board than the other vessel categories. This appears to be due to the requirements of the cargo for additional personnel such as tankerman and pumpman. The differences in average crew complements between tanker subgroups appear to be mostly size related as the three subgroups had significantly different size characteristics.

By a wide margin, the Liberian flag was the most common flag of foreign tankers calling at U.S. ports. This was the only vessel type where the Panamanian flag was not the most common flag. As is evident from Table 4, the Liberian, NIS, Greek, Bahamian and Marshall Islands flags were considerably over-represented in the U.S. trades as compared to their proportion of the world fleet.

Containerships

With the rapid expansion of the world container fleet during the 1990s, it is easy to understand that in 2004 containerships calling at U.S. ports would have the lowest median age and the lowest average and median crew complements of the four general vessel types. The impact of age is most evident for the largest (>4,000 TEU) containerships. With a median age of only four years, the average crew compliment of 20.7 is lower than the overall category average – the opposite of what would be expected when age is not a factor. While age may appear to be a better potential indicator of crew complements than size, crewing levels still show the tendency to increase with size within each age bracket. The synopsis of the average containership crew complements by vessel size (TEU) and vessel age can be found in Exhibit VII.

RORO and Vehicle Carriers

While both RORO and vehicle carriers have roll-on, roll-off vessel capabilities, they are dealt with separately since they service distinct markets. Vehicle carriers offer a more specialized service of the bulk movement of new cars and light trucks to market. The RORO vessel generally carries a greater variety of cargoes that may include cars and light trucks but also oversized vehicles, such as construction and farming equipment as well as other types of freight and containers.

The average crew complement information for both RORO vessels and vehicle carriers can be found in Exhibits VII. Panama was by far the largest registry for vehicle carriers included in this study with over 44 percent of the vessels in the group. NIS was a distant second with slightly over 10 percent of the vessels. Singapore, Sweden and Liberia with a combined 19.6 percent gave the top five ranked flags 74.2 percent of the vehicle carriers calling at the U.S. study ports.

Part 3. Actual Crew Complements

There is a myriad of possible crewing combinations for vessels working in the U.S.-foreign trades. To provide perspective to the statistics presented in the first two parts, we have compiled, in Exhibit VIII, actual crew complements for each of the major subgroups for the four vessel types highlighted. Three crew complements are displayed for each vessel type/subgroup – low, median and high. The median category generally reflects a crew on a vessel near the median age, size and crew complement previously presented. The low and high are not the lowest or highest crew complement but are representative of the lower and higher ranges. Also, no attempt was made to always display the most common crew nationality combinations for each vessel type, though many are represented. Instead, our intention is to present a perspective for the wide variety of crew sizes and compositions on vessels calling at U.S. ports and some of the major trends in vessel crewing.

Conclusions

Seafarers from moderate or low cost areas of the world continue to fill the vast majority of billets on foreign-flag vessels in the U.S.-foreign trade during 2004. Among the unlicensed ratings, with few exceptions only the lowest cost nationalities were employed in the competitive U.S. trades. The top five crew nationalities on vessels in our study were the Philippines, PRC, India, Ukraine and Russia.

Overall, Asian countries supplied approximately 59 percent of the total crewmembers on foreign-flag vessels calling at U.S. ports. The Philippines continue to provide the bulk of the seamen on these vessels, accounting for nearly 37 percent of the total crew entries. Eastern European nationalities, with more than 22 percent of total crew entries, represented the second greatest source of crewmembers. This region of supply continues to trend upwards as their expertise and lower costs becomes more attractive to ship owners.

Officers from developed countries were still well represented in the command positions of master and chief engineer in 2004 but decidedly less so in lesser officer ranks. At the same time, officers from developing countries were filling the lower officer ranks and pushing into the highest levels. The crew nationality data appears to portend the greater use of officers from low cost crewing centers even as the supply of top officers from developed countries struggles to replace itself.

While crew selection moves towards lower cost nationalities, vessel design has lowered the number of seafarers necessary to crew the newer vessels in the fleet. Average crew sizes will continue to decrease slightly as newer vessels are added to the fleet to meet growing demand and replace older vessels that are scrapped, the increasing size of many of the new buildings may slow this trend somewhat due to increased safety concerns.

The dual observations of smaller crew complements and lower cost crewing sources will continue to assure that foreign-flag competitors in the U.S. trades will be minimizing crewing costs in the future. As a result, U.S.-flag operators competing in the foreign trades will continue to be pressured by a wage cost disadvantage.

EXHIBITS

**CREW NATIONALITIES (TOTAL CREWS)
ALL VESSEL TYPES (2004)**

NATIONALITY	RANK	TOTAL CREWS		TOTAL OFFICERS*		TOTAL UNLICENSED	
		Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	1	54,823	36.6%	14,757	23.8%	40,066	45.8%
CHINESE (PRC)	2	13,881	9.3%	6,231	10.0%	7,650	8.7%
INDIAN	3	12,143	8.1%	6,378	10.3%	5,765	6.6%
UKRAINIAN	4	8,018	5.4%	3,322	5.4%	4,696	5.4%
RUSSIAN	5	7,316	4.9%	3,767	6.1%	3,549	4.1%
POLAND	6	6,591	4.4%	3,081	5.0%	3,510	4.0%
GREEK	7	4,789	3.2%	3,480	5.6%	1,309	1.5%
CROATIAN	8	3,275	2.2%	1,930	3.1%	1,345	1.5%
LATVIAN	9	2,961	2.0%	1,254	2.0%	1,707	1.9%
KOREAN-SOUTH	10	2,784	1.9%	1,946	3.1%	838	1.0%
TOP 10		116,581	77.9%	46,146	74.4%	70,435	80.4%
BULGARIAN	11	2,652	1.8%	958	1.5%	1,694	1.9%
MYANMAR	12	2,342	1.6%	721	1.2%	1,621	1.9%
ROMANIAN	13	2,068	1.4%	984	1.6%	1,084	1.2%
GERMANY	14	2,022	1.4%	1,646	2.7%	376	0.4%
CHINESE (TAI)	15	1,809	1.2%	736	1.2%	1,073	1.2%
TURKISH	16	1,325	0.9%	459	0.7%	866	1.0%
DANISH	17	1,242	0.8%	1,005	1.6%	237	0.3%
INDONESIAN	18	1,112	0.7%	123	0.2%	989	1.1%
HONDURAN	19	915	0.6%	72	0.1%	843	1.0%
KIRIBATI	20	898	0.6%	37	0.1%	861	1.0%
2ND 10		16,385	11.0%	6,741	10.9%	9,644	11.0%
TOP 20		132,966	88.9%	52,887	85.3%	80,079	91.5%
TOTAL*		149,631	100.0%	62,001	100.0%	87,557	100.0%

* As future Officers, Cadets are included in Officer Totals

**CREW NATIONALITIES (OFFICERS)
ALL VESSEL TYPES (2004)**

NATIONALITY	TOTAL OFFICERS		DECK OFFICERS		ENGINE OFFICERS		OTHER OFFICERS		CADETS	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	14,757	23.8%	7,160	24.7%	6,003	21.9%	6	3.1%	1,588	29.5%
INDIAN	6,378	10.3%	2,718	9.4%	2,857	10.4%	50	25.8%	753	14.0%
CHINESE (PRC)	6,231	10.0%	2,828	9.7%	2,737	10.0%	112	57.7%	554	10.3%
RUSSIAN	3,767	6.1%	1,838	6.3%	1,782	6.5%	6	3.1%	141	2.6%
GREEK	3,480	5.6%	1,724	5.9%	1,564	5.7%	-	0.0%	192	3.6%
UKRAINIAN	3,322	5.4%	1,452	5.0%	1,631	6.0%	1	0.5%	238	4.4%
POLISH	3,081	5.0%	1,235	4.3%	1,701	6.2%	10	5.2%	135	2.5%
KOREAN-SOUTH	1,946	3.1%	969	3.3%	964	3.5%	1	0.5%	12	0.2%
CROATIAN	1,930	3.1%	888	3.1%	904	3.3%	-	0.0%	138	2.6%
GERMANY	1,646	2.7%	887	3.1%	686	2.5%	-	0.0%	73	1.4%
Top 10	46,538	75.1%	21,699	74.7%	20,829	76.0%	186	95.9%	3,824	71.1%
LATVIAN	1,254	2.0%	498	1.7%	661	2.4%	-	0.0%	95	1.8%
DENMARK	1,005	1.6%	473	1.6%	400	1.5%	-	0.0%	132	2.5%
ROMANIAN	984	1.6%	444	1.5%	492	1.8%	-	0.0%	48	0.9%
BULGARIAN	958	1.5%	487	1.7%	395	1.4%	2	1.0%	74	1.4%
CHINESE (TAI)	736	1.2%	297	1.0%	331	1.2%	3	1.5%	105	2.0%
MYANMAR	721	1.2%	278	1.0%	338	1.2%	-	0.0%	105	2.0%
NORWEGIAN	592	1.0%	328	1.1%	217	0.8%	-	0.0%	47	0.9%
BRITISH VIRGIN ISLANDERS	579	0.9%	257	0.9%	232	0.8%	-	0.0%	90	1.7%
UNITED KINGDOM	520	0.8%	269	0.9%	186	0.7%	-	0.0%	65	1.2%
YUGOSLAVIAN	516	0.8%	240	0.8%	245	0.9%	-	0.0%	31	0.6%
2ND 10	7,865	12.7%	3,571	12.3%	3,497	12.8%	5	2.6%	792	14.7%
TOP 20	54,403	87.7%	25,270	87.0%	24,326	88.8%	191	98.5%	4,616	85.8%
TOTAL	62,001	100.0%	29,036	100.0%	27,391	100.0%	194	100.0%	5,380	100.0%

* As future Officers, Cadets are included in Officer Totals

**CREW NATIONALITIES (DECK OFFICERS)
ALL VESSEL TYPES (2004)**

NATIONALITY	DECK OFFICERS		MASTERS		CHIEF OFFICERS		2ND OFFICER		3RD OFFICER		4TH OFFICER		RADIO OFFICERS	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	7,160	24.7%	816	11.7%	1,425	18.8%	2,403	31.4%	2,361	38.3%	62	35.0%	93	19.9%
CHINESE (PRC)	2,828	9.7%	548	7.8%	640	8.5%	706	9.2%	705	11.4%	28	15.8%	201	42.9%
INDIAN	2,718	9.4%	691	9.9%	657	8.7%	710	9.3%	606	9.8%	9	5.1%	45	9.6%
RUSSIAN	1,838	6.3%	393	5.6%	512	6.8%	497	6.5%	398	6.5%	1	0.6%	37	7.9%
GREEK	1,724	5.9%	615	8.8%	535	7.1%	559	7.3%	4	0.1%	-	0.0%	11	2.4%
UKRAINIAN	1,452	5.0%	331	4.7%	430	5.7%	437	5.7%	253	4.1%	1	0.6%	-	0.0%
POLISH	1,235	4.3%	332	4.7%	419	5.5%	274	3.6%	200	3.2%	5	2.8%	5	1.1%
KOREAN-SOUTH	969	3.3%	313	4.5%	270	3.6%	205	2.7%	172	2.8%	-	0.0%	9	1.9%
CROATIAN	888	3.1%	222	3.2%	301	4.0%	202	2.6%	157	2.5%	2	1.1%	4	0.9%
GERMANY	887	3.1%	568	8.1%	212	2.8%	62	0.8%	42	0.7%	3	1.7%	-	0.0%
TOP 10	21,699	74.7%	4,829	69.0%	5,401	71.4%	6,055	79.0%	4,898	79.4%	111	62.7%	405	86.5%
LATVIAN	498	1.7%	122	1.7%	143	1.9%	103	1.3%	125	2.0%	4	2.3%	1	0.2%
BULGARIAN	487	1.7%	67	1.0%	117	1.5%	144	1.9%	148	2.4%	11	6.2%	-	0.0%
DENMARK	473	1.6%	176	2.5%	158	2.1%	110	1.4%	20	0.3%	9	5.1%	-	0.0%
ROMANIAN	444	1.5%	82	1.2%	173	2.3%	100	1.3%	76	1.2%	-	0.0%	13	2.8%
NORWEGIAN	328	1.1%	151	2.2%	119	1.6%	28	0.4%	27	0.4%	-	0.0%	3	0.6%
CHINESE (TAI)	297	1.0%	33	0.5%	72	1.0%	95	1.2%	93	1.5%	-	0.0%	4	0.9%
MYANMAR	278	1.0%	34	0.5%	63	0.8%	106	1.4%	69	1.1%	-	0.0%	6	1.3%
UNITED KINGDOM	269	0.9%	106	1.5%	62	0.8%	59	0.8%	41	0.7%	1	0.6%	-	0.0%
BRITISH VIRGIN ISLANDERS	257	0.9%	138	2.0%	37	0.5%	49	0.6%	33	0.5%	-	0.0%	-	0.0%
YUGOSLAVIAN	240	0.8%	26	0.4%	84	1.1%	74	1.0%	56	0.9%	-	0.0%	-	0.0%
2ND 10	3,571	12.3%	935	13.4%	1,028	13.6%	868	11.3%	688	11.2%	25	14.1%	27	5.8%
TOP 20	25,270	87.0%	5,764	82.3%	6,429	85.0%	6,923	90.3%	5,586	90.6%	136	76.8%	432	92.3%
TOTAL	29,036	100.0%	7,000	100.0%	7,562	100.0%	7,663	100.0%	6,166	100.0%	177	100.0%	468	100.0%

**CREW NATIONALITIES (ENGINE OFFICERS)
ALL VESSEL TYPES (2004)**

NATIONALITY	ENGINE OFFICERS		CHIEF ENGINEERS		1ST ENGINEERS		2ND ENGINEERS		3RD ENGINEERS		4TH ENGINEERS		5TH ENGINEERS		ELECT. ENGINEERS	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	6,003	21.9%	879	12.2%	504	19.9%	1,719	25.0%	1,816	30.0%	864	29.8%	29	14.5%	192	10.6%
INDIAN	2,857	10.4%	665	9.2%	271	10.7%	609	8.9%	595	9.8%	421	14.5%	110	55.0%	186	10.3%
CHINESE (PRC)	2,737	10.0%	577	8.0%	208	8.2%	585	8.5%	587	9.7%	406	14.0%	31	15.5%	343	19.0%
RUSSIAN	1,782	6.5%	418	5.8%	169	6.7%	415	6.0%	401	6.6%	102	3.5%	-	0.0%	277	15.4%
GREEK	1,564	5.7%	607	8.4%	79	3.1%	425	6.2%	444	7.3%	7	0.2%	-	0.0%	2	0.1%
UKRAINIAN	1,631	6.0%	471	6.5%	58	2.3%	453	6.6%	292	4.8%	148	5.1%	-	0.0%	209	11.6%
POLISH	1,701	6.2%	593	8.2%	112	4.4%	429	6.2%	273	4.5%	224	7.7%	-	0.0%	70	3.9%
KOREAN-SOUTH	964	3.5%	322	4.5%	251	9.9%	177	2.6%	207	3.4%	1	0.0%	-	0.0%	6	0.3%
CROATIAN	904	3.3%	257	3.6%	137	5.4%	279	4.1%	161	2.7%	50	1.7%	1	0.5%	19	1.1%
GERMANY	686	2.5%	432	6.0%	10	0.4%	187	2.7%	44	0.7%	3	0.1%	-	0.0%	10	0.6%
TOP 10	20,829	76.0%	5,221	72.3%	1,799	71.1%	5,278	76.8%	4,820	79.5%	2,226	76.7%	171	85.5%	1,314	72.8%
LATVIAN	661	2.4%	120	1.7%	88	3.5%	162	2.4%	113	1.9%	87	3.0%	-	0.0%	91	5.0%
ROMANIAN	492	1.8%	137	1.9%	52	2.1%	116	1.7%	89	1.5%	7	0.2%	-	0.0%	91	5.0%
DENMARK	400	1.5%	152	2.1%	21	0.8%	133	1.9%	65	1.1%	2	0.1%	1	0.5%	26	1.4%
BULGARIAN	395	1.4%	65	0.9%	38	1.5%	97	1.4%	98	1.6%	48	1.7%	-	0.0%	49	2.7%
MYANMAR	338	1.2%	30	0.4%	21	0.8%	101	1.5%	107	1.8%	32	1.1%	4	2.0%	43	2.4%
CHINESE (TAI)	331	1.2%	80	1.1%	18	0.7%	51	0.7%	69	1.1%	72	2.5%	12	6.0%	29	1.6%
YUGOSLAVIAN	245	0.9%	57	0.8%	60	2.4%	64	0.9%	63	1.0%	-	0.0%	-	0.0%	1	0.1%
BRITISH VIRGIN ISLANDERS	232	0.8%	116	1.6%	19	0.8%	49	0.7%	37	0.6%	7	0.2%	1	0.5%	3	0.2%
NORWEGIAN	217	0.8%	126	1.7%	28	1.1%	30	0.4%	26	0.4%	2	0.1%	-	0.0%	5	0.3%
UNITED KINGDOM	186	0.7%	109	1.5%	12	0.5%	28	0.4%	27	0.4%	6	0.2%	-	0.0%	4	0.2%
2ND 10	3,497	12.8%	992	13.7%	357	14.1%	831	12.1%	694	11.5%	263	9.1%	18	9.0%	342	19.0%
TOP 20	24,326	88.8%	6,213	86.0%	2,156	85.2%	6,109	88.9%	5,514	91.0%	2,489	85.7%	189	94.5%	1,656	91.8%
TOTAL	27,391	100.0%	7,225	100.0%	2,530	100.0%	6,869	100.0%	6,060	100.0%	2,903	100.0%	200	100.0%	1,804	100.0%

**CREW NATIONALITIES (UNLICENSED)
ALL VESSEL TYPES (2004)**

NATIONALITY	TOTAL UNLICENSED		DECK UNLICENSED		ENGINE UNLICENSED		STEWARD	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	40,066	45.8%	20,349	48.4%	13,020	42.3%	6,697	45.6%
CHINESE (PRC)	7,650	8.7%	4,320	10.3%	1,982	6.4%	1,348	9.2%
INDIAN	5,765	6.6%	2,357	5.6%	2,512	8.2%	896	6.1%
UKRAINIAN	4,696	5.4%	2,222	5.3%	1,851	6.0%	623	4.2%
RUSSIAN	3,549	4.1%	1,695	4.0%	1,298	4.2%	556	3.8%
POLAND	3,510	4.0%	941	2.2%	2,081	6.8%	488	3.3%
LATVIAN	1,707	1.9%	821	2.0%	606	2.0%	280	1.9%
BULGARIAN	1,694	1.9%	710	1.7%	612	2.0%	372	2.5%
MYANMAR	1,621	1.9%	828	2.0%	504	1.6%	289	2.0%
CROATIAN	1,345	1.5%	573	1.4%	594	1.9%	178	1.2%
TOP 10	71,603	81.8%	34,816	82.8%	25,060	81.3%	11,727	79.8%
GREEK	1,309	1.5%	541	1.3%	357	1.2%	411	2.8%
ROMANIAN	1,084	1.2%	374	0.9%	575	1.9%	135	0.9%
CHINESE (TAI)	1,073	1.2%	463	1.1%	324	1.1%	286	1.9%
INDONESIAN	989	1.1%	417	1.0%	364	1.2%	208	1.4%
TURKISH	866	1.0%	371	0.9%	350	1.1%	145	1.0%
KIRIBATI	861	1.0%	555	1.3%	207	0.7%	99	0.7%
HONDURAN	843	1.0%	495	1.2%	183	0.6%	165	1.1%
KOREAN-SOUTH	838	1.0%	254	0.6%	447	1.5%	137	0.9%
THAILAND	712	0.8%	393	0.9%	276	0.9%	43	0.3%
NICARAGUAN	380	0.4%	211	0.5%	117	0.4%	52	0.4%
2ND 10	8,955	10.2%	4,074	9.7%	3,200	10.4%	1,681	11.4%
TOP 20	80,558	92.0%	38,890	92.5%	28,260	91.7%	13,408	91.2%
TOTAL	87,557	100.0%	42,052	100.0%	30,810	100.0%	14,695	100.0%

**CREW NATIONALITIES (UNLICENSED DECK)
ALL VESSEL TYPES (2004)**

NATIONALITY	TOTAL DECK		BOSUN		AB SEAMAN		ORDINARY SEAMAN		GENERAL PURPOSE		OTHER DECK	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	21,924	52.1%	2,845	47.5%	10,732	49.6%	5,745	55.0%	428	25.0%	2,174	29.5%
CHINESE (PRC)	4,869	11.6%	478	8.0%	1,942	9.0%	902	8.6%	608	35.5%	939	12.7%
INDIAN	3,077	7.3%	292	4.9%	1,143	5.3%	595	5.7%	173	10.1%	874	11.9%
UKRAINIAN	2,459	5.8%	307	5.1%	1,269	5.9%	515	4.9%	10	0.6%	358	4.9%
RUSSIAN	1,836	4.4%	301	5.0%	884	4.1%	449	4.3%	23	1.3%	179	2.4%
BULGARIAN	933	2.2%	91	1.5%	442	2.0%	274	2.6%	2	0.1%	124	1.7%
LATVIAN	914	2.2%	127	2.1%	395	1.8%	197	1.9%	87	5.1%	108	1.5%
POLAND	902	2.1%	101	1.7%	397	1.8%	213	2.0%	11	0.6%	180	2.4%
MYANMAR	782	1.9%	109	1.8%	344	1.6%	213	2.0%	5	0.3%	111	1.5%
CROATIAN	733	1.7%	263	4.4%	236	1.1%	25	0.2%	-	0.0%	209	2.8%
TOP 10	38,429	91.4%	4,914	82.0%	17,784	82.2%	9,128	87.3%	1,347	78.7%	5,256	71.3%
GREEK	711	1.7%	100	1.7%	309	1.4%	118	1.1%	17	1.0%	167	2.3%
ROMANIAN	568	1.4%	54	0.9%	217	1.0%	127	1.2%	49	2.9%	121	1.6%
TURKISH	568	1.4%	60	1.0%	342	1.6%	133	1.3%	-	0.0%	33	0.4%
HONDURAN	496	1.2%	67	1.1%	339	1.6%	69	0.7%	2	0.1%	19	0.3%
KIRIBATI	436	1.0%	78	1.3%	219	1.0%	49	0.5%	-	0.0%	90	1.2%
INDONESIAN	426	1.0%	47	0.8%	258	1.2%	84	0.8%	18	1.1%	19	0.3%
CHINESE (TAI)	422	1.0%	37	0.6%	196	0.9%	121	1.2%	10	0.6%	58	0.8%
THAILAND	418	1.0%	17	0.3%	167	0.8%	9	0.1%	176	10.3%	49	0.7%
KOREAN-SOUTH	266	0.6%	128	2.1%	44	0.2%	80	0.8%	-	0.0%	14	0.2%
NICARAGUAN	175	0.4%	6	0.1%	17	0.1%	71	0.7%	4	0.2%	77	1.0%
2ND 10	4,486	10.7%	594	9.9%	2,108	9.7%	861	8.2%	276	16.1%	647	8.8%
TOP 20	42,915	102.1%	5,508	91.9%	19,892	92.0%	9,989	95.6%	1,623	94.9%	5,903	80.1%
TOTAL	42,052	100.0%	5,995	100.0%	21,630	100.0%	10,450	100.0%	1,711	100.0%	7,373	100.0%

**CREW NATIONALITIES (UNLICENSED ENGINE)
ALL VESSEL TYPES (2004)**

NATIONALITY	TOTAL ENGINE		J.ENG/OMED		ELECTRICIANS		PUMP/FITTER/MECH		OILER/MOTOR		WIPER/DEU		OTHER ENGINE	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	11,106	36.0%	184	19.4%	843	24.2%	656	30.8%	6,933	49.6%	2,331	64.9%	2	11.8%
CHINESE (PRC)	1,756	5.7%	96	10.1%	53	1.5%	77	3.6%	1,335	9.6%	188	5.2%	-	0.0%
INDIAN	2,046	6.6%	154	16.3%	415	11.9%	366	17.2%	838	6.0%	156	4.3%	9	52.9%
UKRAINIAN	1,266	4.1%	-	0.0%	308	8.9%	37	1.7%	722	5.2%	138	3.8%	3	17.6%
RUSSIAN	1,154	3.7%	-	0.0%	210	6.0%	156	7.3%	716	5.1%	39	1.1%	-	0.0%
POLAND	1,004	3.3%	22	2.3%	595	17.1%	20	0.9%	305	2.2%	32	0.9%	-	0.0%
GREEK	499	1.6%	4	0.4%	204	5.9%	118	5.5%	119	0.9%	51	1.4%	-	0.0%
LATVIAN	479	1.6%	15	1.6%	27	0.8%	107	5.0%	302	2.2%	23	0.6%	-	0.0%
KOREAN-SOUTH	446	1.4%	236	24.9%	1	0.0%	5	0.2%	194	1.4%	10	0.3%	-	0.0%
BULGARIAN	431	1.4%	34	3.6%	15	0.4%	9	0.4%	318	2.3%	54	1.5%	-	0.0%
TOP 10	20,187	65.5%	745	78.7%	2,671	76.8%	1,551	72.8%	11,782	84.3%	3,022	84.1%	14	82.4%
MYANMAR	343	1.1%	1	0.1%	25	0.7%	19	0.9%	252	1.8%	20	0.6%	-	0.0%
CROATIAN	328	1.1%	17	1.8%	114	3.3%	93	4.4%	46	0.3%	16	0.4%	-	0.0%
CHINESE (TAI)	322	1.0%	1	0.1%	123	3.5%	18	0.8%	154	1.1%	18	0.5%	-	0.0%
ROMANIAN	282	0.9%	39	4.1%	12	0.3%	18	0.8%	136	1.0%	76	2.1%	-	0.0%
THAILAND	256	0.8%	22	2.3%	-	0.0%	2	0.1%	65	0.5%	167	4.6%	-	0.0%
INDONESIAN	255	0.8%	26	2.7%	8	0.2%	3	0.1%	98	0.7%	119	3.3%	-	0.0%
KIRIBATI	253	0.8%	-	0.0%	47	1.4%	31	1.5%	156	1.1%	19	0.5%	-	0.0%
NICARAGUAN	198	0.6%	-	0.0%	72	2.1%	107	5.0%	4	0.0%	2	0.1%	-	0.0%
TURKISH	184	0.6%	2	0.2%	3	0.1%	-	0.0%	175	1.3%	2	0.1%	-	0.0%
HONDURAN	155	0.5%	20	2.1%	5	0.1%	6	0.3%	104	0.7%	16	0.4%	-	0.0%
2ND 10	2,576	8.4%	128	13.5%	409	11.8%	297	13.9%	1,190	8.5%	455	12.7%	2	11.8%
TOP 20	22,763	73.9%	873	92.2%	3,080	88.5%	1,848	86.7%	12,972	92.8%	3,477	96.8%	16	94.1%
TOTAL	30,810	100.0%	947	100.0%	3,479	100.0%	2,131	100.0%	13,974	100.0%	3,593	100.0%	17	100.0%

**CREW NATIONALITIES (UNLICENSED STEWARD)
ALL VESSEL TYPES (2004)**

NATIONALITY	TOTAL STEWARD		CHIEF STEWARD/COOK		COOKS		STEWARDS		MESSMEN/BOYS	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	4,167	28.4%	1,605	24.3%	-	0.0%	2,306	64.9%	256	7.9%
CHINESE (PRC)	726	4.9%	527	8.0%	-	0.0%	98	2.8%	101	3.1%
UKRAINIAN	525	3.6%	339	5.1%	-	0.0%	162	4.6%	24	0.7%
INDIAN	480	3.3%	296	4.5%	-	0.0%	145	4.1%	39	1.2%
RUSSIAN	447	3.0%	383	5.8%	-	0.0%	55	1.5%	9	0.3%
POLAND	434	3.0%	273	4.1%	-	0.0%	157	4.4%	4	0.1%
CROATIAN	381	2.6%	363	5.5%	-	0.0%	16	0.5%	2	0.1%
MYANMAR	311	2.1%	254	3.8%	-	0.0%	22	0.6%	35	1.1%
LATVIAN	246	1.7%	222	3.4%	-	0.0%	19	0.5%	5	0.2%
ROMANIAN	231	1.6%	118	1.8%	-	0.0%	79	2.2%	34	1.1%
TOP 10	7,948	54.1%	4,380	66.2%	-	0.0%	3,059	86.1%	509	15.8%
BULGARIAN	228	1.6%	151	2.3%	-	0.0%	51	1.4%	26	0.8%
INDONESIAN	163	1.1%	78	1.2%	-	0.0%	65	1.8%	20	0.6%
HONDURAN	154	1.0%	112	1.7%	-	0.0%	38	1.1%	4	0.1%
KIRIBATI	143	1.0%	133	2.0%	-	0.0%	10	0.3%	-	0.0%
GREEK	138	0.9%	108	1.6%	-	0.0%	19	0.5%	11	0.3%
CHINESE (TAI)	122	0.8%	106	1.6%	-	0.0%	9	0.3%	7	0.2%
TURKISH	93	0.6%	88	1.3%	-	0.0%	5	0.1%	-	0.0%
KOREAN-SOUTH	75	0.5%	65	1.0%	-	0.0%	9	0.3%	1	0.0%
NICARAGUAN	63	0.4%	30	0.5%	-	0.0%	30	0.8%	3	0.1%
THAILAND	37	0.3%	34	0.5%	-	0.0%	3	0.1%	-	0.0%
2ND 10	1,216	8.3%	905	13.7%	-	0.0%	239	6.7%	72	2.2%
TOP 20	9,164	62.4%	5,285	79.9%	-	0.0%	3,298	92.9%	581	18.0%
TOTAL	14,695	100.0%	6,616	100.0%	3,348	100.0%	3,551	100.0%	3,228	100.0%

**CREW NATIONALITIES (OFFICERS)
BULKERS* (2004)**

NATIONALITY	TOTAL OFFICERS		** DECK OFFICERS		ENGINE OFFICERS		OTHER OFFICERS		CADETS	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	3,708	28.8%	1,769	29.6%	1,490	28.9%	-	0.0%	449	43.5%
CHINESE (PRC)	2,239	17.4%	1,054	17.6%	945	18.3%	26	72.2%	214	20.7%
GREEK	1,302	10.1%	652	10.9%	589	11.4%	-	0.0%	61	5.9%
UKRAINIAN	967	7.5%	488	8.2%	447	8.7%	-	0.0%	32	3.1%
INDIAN	757	5.9%	364	6.1%	283	5.5%	7	19.4%	103	10.0%
POLISH	615	4.8%	312	5.2%	277	5.4%	-	0.0%	26	2.5%
CROATIAN	278	2.2%	130	2.2%	129	2.5%	-	0.0%	19	1.8%
KOREAN-SOUTH	272	2.1%	138	2.3%	134	2.6%	-	0.0%	-	0.0%
BULGARIAN	268	2.1%	132	2.2%	131	2.5%	-	0.0%	5	0.5%
ROMANIAN	227	1.8%	102	1.7%	120	2.3%	-	0.0%	5	0.5%
Top 10	10,633	82.6%	5,141	85.9%	4,545	88.1%	33	91.7%	914	88.6%
RUSSIAN	201	1.6%	95	1.6%	99	1.9%	3	8.3%	4	0.4%
TURKISH	178	1.4%	90	1.5%	70	1.4%	-	0.0%	18	1.7%
THAILAND	104	0.8%	42	0.7%	29	0.6%	-	0.0%	33	3.2%
MYANMAR	99	0.8%	43	0.7%	46	0.9%	-	0.0%	10	1.0%
PANAMANIAN	95	0.7%	67	1.1%	21	0.4%	-	0.0%	7	0.7%
CHINESE (TAI)	84	0.7%	47	0.8%	32	0.6%	-	0.0%	5	0.5%
EGYPTIAN	80	0.6%	39	0.7%	31	0.6%	-	0.0%	10	1.0%
INDONESIAN	55	0.4%	29	0.5%	22	0.4%	-	0.0%	4	0.4%
CHILEAN	48	0.4%	25	0.4%	22	0.4%	-	0.0%	1	0.1%
BANGLADESH	41	0.3%	25	0.4%	16	0.3%	-	0.0%	-	0.0%
2ND 10	985	7.6%	502	8.4%	388	7.5%	3	8.3%	92	8.9%
TOP 20	11,618	90.2%	5,643	94.3%	4,933	95.7%	36	100.0%	1,006	97.5%
TOTAL	12,878	100.0%	5,984	100.0%	5,156	100.0%	36	100.0%	1,032	100.0%

* Includes dry bulk carriers, freighters, ore carriers and OBOS.

** As future Officers, Cadets are included in Officer Totals

**CREW NATIONALITIES (DECK OFFICERS)
BULKERS* (2004)**

NATIONALITY	DECK OFFICERS		MASTERS		CHIEF OFFICERS		2ND OFFICERS		3RD OFFICERS		4TH OFFICERS		RADIO OFFICERS	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	1,769	29.6%	277	19.4%	456	29.6%	522	32.4%	511	39.9%	3	9.4%	-	0.0%
CHINESE (PRC)	1,054	17.6%	186	13.0%	236	15.3%	297	18.4%	260	20.3%	21	65.6%	54	58.7%
GREEK	652	10.9%	277	19.4%	199	12.9%	166	10.3%	2	0.2%	-	0.0%	8	8.7%
UKRAINIAN	488	8.2%	96	6.7%	125	8.1%	149	9.2%	118	9.2%	-	0.0%	-	0.0%
INDIAN	364	6.1%	114	8.0%	78	5.1%	83	5.1%	78	6.1%	3	9.4%	8	8.7%
POLISH	312	5.2%	104	7.3%	80	5.2%	61	3.8%	67	5.2%	-	0.0%	-	0.0%
KOREAN-SOUTH	138	2.3%	68	4.8%	27	1.8%	22	1.4%	21	1.6%	-	0.0%	-	0.0%
BULGARIAN	132	2.2%	33	2.3%	30	2.0%	34	2.1%	35	2.7%	-	0.0%	-	0.0%
CROATIAN	130	2.2%	30	2.1%	38	2.5%	29	1.8%	30	2.3%	-	0.0%	3	3.3%
ROMANIAN	102	1.7%	20	1.4%	39	2.5%	24	1.5%	19	1.5%	-	0.0%	-	0.0%
TOP 10	5,141	85.9%	1,205	84.3%	1,308	85.0%	1,387	86.0%	1,141	89.1%	27	84.4%	73	79.3%
RUSSIAN	95	1.6%	18	1.3%	20	1.3%	33	2.0%	19	1.5%	-	0.0%	5	5.4%
TURKISH	90	1.5%	22	1.5%	25	1.6%	22	1.4%	20	1.6%	-	0.0%	1	1.1%
PANAMANIAN	67	1.1%	-	0.0%	24	1.6%	38	2.4%	5	0.4%	-	0.0%	-	0.0%
CHINESE (TAI)	47	0.8%	5	0.3%	15	1.0%	12	0.7%	15	1.2%	-	0.0%	-	0.0%
MYANMAR	43	0.7%	6	0.4%	8	0.5%	15	0.9%	14	1.1%	-	0.0%	-	0.0%
THAILAND	42	0.7%	2	0.1%	14	0.9%	16	1.0%	9	0.7%	-	0.0%	-	0.0%
EGYPTIAN	39	0.7%	7	0.5%	8	0.5%	7	0.4%	11	0.9%	1	3.1%	-	0.0%
INDONESIAN	29	0.5%	1	0.1%	2	0.1%	18	1.1%	5	0.4%	3	9.4%	-	0.0%
CHILEAN	25	0.4%	3	0.2%	18	1.2%	2	0.1%	2	0.2%	-	0.0%	-	0.0%
BANGLADESH	25	0.4%	5	0.3%	13	0.8%	3	0.2%	4	0.3%	-	0.0%	-	0.0%
2ND 10	502	8.4%	69	4.8%	147	9.6%	166	10.3%	104	8.1%	4	12.5%	12	13.0%
TOP 20	5,643	94.3%	1,274	89.2%	1,455	94.6%	1,553	96.3%	1,245	97.3%	31	96.9%	85	92.4%
TOTAL	5,984	100.0%	1,429	100.0%	1,538	100.0%	1,613	100.0%	1,280	100.0%	32	100.0%	92	100.0%

* Includes dry bulk carriers, freighters, ore carriers and OBOs.

**CREW NATIONALITIES (ENGINE OFFICERS)
BULKERS* (2004)**

NATIONALITY	ENGINE OFFICERS		CHIEF ENGINEERS		1ST ENGINEERS		2ND ENGINEERS		3RD ENGINEERS		4TH ENGINEERS		5TH ENGINEERS		ELECT. ENGINEERS	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	1,490	28.9%	347	23.3%	174	36.3%	456	31.8%	456	33.6%	-	0.0%	12	34.3%	45	12.4%
CHINESE (PRC)	945	18.3%	201	13.5%	121	25.2%	230	16.0%	237	17.5%	-	0.0%	12	34.3%	144	39.7%
GREEK	589	11.4%	254	17.1%	17	3.5%	162	11.3%	156	11.5%	-	0.0%	-	0.0%	-	0.0%
UKRAINIAN	447	8.7%	110	7.4%	6	1.3%	139	9.7%	127	9.4%	-	0.0%	-	0.0%	65	17.9%
INDIAN	283	5.5%	104	7.0%	8	1.7%	82	5.7%	61	4.5%	-	0.0%	7	20.0%	21	5.8%
POLISH	277	5.4%	116	7.8%	40	8.3%	57	4.0%	50	3.7%	-	0.0%	-	0.0%	14	3.9%
KOREAN-SOUTH	134	2.6%	66	4.4%	24	5.0%	22	1.5%	22	1.6%	-	0.0%	-	0.0%	-	0.0%
BULGARIAN	131	2.5%	34	2.3%	-	0.0%	36	2.5%	30	2.2%	-	0.0%	-	0.0%	31	8.5%
CROATIAN	129	2.5%	42	2.8%	30	6.3%	30	2.1%	26	1.9%	-	0.0%	-	0.0%	1	0.3%
ROMANIAN	120	2.3%	57	3.8%	7	1.5%	37	2.6%	16	1.2%	-	0.0%	-	0.0%	3	0.8%
TOP 10	4,545	88.1%	1,331	89.4%	427	89.0%	1,251	87.2%	1,181	87.1%	-	0.0%	31	88.6%	324	89.3%
RUSSIAN	99	1.9%	23	1.5%	11	2.3%	30	2.1%	27	2.0%	-	0.0%	-	0.0%	8	2.2%
TURKISH	70	1.4%	22	1.5%	9	1.9%	20	1.4%	16	1.2%	-	0.0%	-	0.0%	3	0.8%
MYANMAR	46	0.9%	4	0.3%	6	1.3%	11	0.8%	18	1.3%	-	0.0%	1	2.9%	6	1.7%
CHINESE (TAI)	32	0.6%	6	0.4%	2	0.4%	12	0.8%	9	0.7%	-	0.0%	-	0.0%	3	0.8%
EGYPTIAN	31	0.6%	7	0.5%	1	0.2%	8	0.6%	10	0.7%	-	0.0%	-	0.0%	5	1.4%
THAILAND	29	0.6%	5	0.3%	-	0.0%	10	0.7%	14	1.0%	-	0.0%	-	0.0%	-	0.0%
CHILEAN	22	0.4%	2	0.1%	2	0.4%	15	1.0%	3	0.2%	-	0.0%	-	0.0%	-	0.0%
INDONESIAN	22	0.4%	2	0.1%	-	0.0%	4	0.3%	14	1.0%	-	0.0%	2	5.7%	-	0.0%
PANAMANIAN	21	0.4%	-	0.0%	-	0.0%	1	0.1%	20	1.5%	-	0.0%	-	0.0%	-	0.0%
BANGLADESH	16	0.3%	8	0.5%	1	0.2%	7	0.5%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
2ND 10	388	7.5%	79	5.3%	32	6.7%	118	8.2%	131	9.7%	-	0.0%	3	8.6%	25	6.9%
TOP 20	4,933	95.7%	1,410	94.8%	459	95.6%	1,369	95.5%	1,312	96.8%	-	0.0%	34	97.1%	349	96.1%
TOTAL	5,156	100.0%	1,488	100.0%	480	100.0%	1,434	100.0%	1,356	100.0%	35	100.0%	35	100.0%	363	100.0%

* Includes dry bulk carriers, freighters, ore carriers and OBOS.

**CREW NATIONALITIES (UNLICENSED)
BULKERS* (2004)**

<u>NATIONALITY</u>	<u>TOTAL UNLICENSED</u>		<u>DECK UNLICENSED</u>		<u>ENGINE UNLICENSED</u>		<u>STEWARD</u>	
	<u>Entries</u>	<u>Percent</u>	<u>Entries</u>	<u>Percent</u>	<u>Entries</u>	<u>Percent</u>	<u>Entries</u>	<u>Percent</u>
FILIPINO	7,031	37.1%	3,735	36.8%	2,358	31.9%	937	29.7%
CHINESE (PRC)	3,749	19.8%	2,095	20.6%	1,012	13.7%	637	20.2%
UKRAINIAN	1,684	8.9%	684	6.7%	753	10.2%	247	7.8%
INDIAN	1,190	6.3%	543	5.3%	461	6.2%	185	5.9%
POLAND	759	4.0%	333	3.3%	264	3.6%	161	5.1%
GREEK	581	3.1%	302	3.0%	111	1.5%	168	5.3%
BULGARIAN	540	2.9%	222	2.2%	221	3.0%	97	3.1%
TURKISH	388	2.0%	186	1.8%	142	1.9%	60	1.9%
CROATIAN	363	1.9%	184	1.8%	115	1.6%	64	2.0%
MYANMAR	320	1.7%	176	1.7%	96	1.3%	48	1.5%
TOP 10	16,605	87.7%	8,460	83.3%	5,533	74.9%	2,604	82.4%
EL SALVADORIAN	304	1.6%	200	2.0%	70	0.9%	34	1.1%
CHINESE (TAI)	296	1.6%	160	1.6%	86	1.2%	50	1.6%
RUSSIAN	283	1.5%	120	1.2%	126	1.7%	37	1.2%
INDONESIAN	243	1.3%	109	1.1%	86	1.2%	48	1.5%
HONDURAN	238	1.3%	124	1.2%	50	0.7%	64	2.0%
ROMANIAN	197	1.0%	44	0.4%	136	1.8%	17	0.5%
THAILAND	196	1.0%	90	0.9%	74	1.0%	32	1.0%
NICARAGUAN	195	1.0%	108	1.1%	41	0.6%	46	1.5%
MALDIVE ISLANDS	147	0.8%	87	0.9%	38	0.5%	22	0.7%
MEXICAN	138	0.7%	91	0.9%	40	0.5%	7	0.2%
2ND 10	2,237	11.8%	1,133	11.2%	747	10.1%	357	11.3%
TOP 20	18,842	99.5%	9,593	94.4%	6,280	85.0%	2,961	93.7%
TOTAL	18,930	100.0%	10,159	100.0%	7,391	100.0%	3,160	100.0%

* Includes dry bulk carriers, freighters, ore carriers and OBOs.

**CREW NATIONALITIES (UNLICENSED DECK)
BULKERS* (2004)**

NATIONALITY	TOTAL DECK		BOSUN		AB SEAMAN		ORDINARY SEAMAN		GENERAL PURPOSE		OTHER DECK	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	3,735	36.8%	454	33.8%	1,664	35.0%	954	43.1%	46	32.2%	617	36.3%
CHINESE (PRC)	2,099	20.7%	261	19.4%	1,010	21.2%	447	20.2%	5	3.5%	376	22.1%
UKRAINIAN	684	6.7%	100	7.4%	398	8.4%	110	5.0%	5	3.5%	71	4.2%
INDIAN	543	5.3%	51	3.8%	202	4.2%	104	4.7%	63	44.1%	123	7.2%
POLAND	333	3.3%	50	3.7%	162	3.4%	90	4.1%	-	0.0%	31	1.8%
GREEK	302	3.0%	103	7.7%	120	2.5%	7	0.3%	-	0.0%	72	4.2%
BULGARIAN	222	2.2%	34	2.5%	107	2.2%	60	2.7%	-	0.0%	21	1.2%
TURKISH	186	1.8%	33	2.5%	94	2.0%	20	0.9%	-	0.0%	39	2.3%
CROATIAN	184	1.8%	23	1.7%	85	1.8%	41	1.9%	4	2.8%	31	1.8%
MYANMAR	176	1.7%	21	1.6%	87	1.8%	54	2.4%	-	0.0%	14	0.8%
TOP 10	8,464	83.3%	1,130	84.1%	3,929	82.5%	1,887	85.3%	123	86.0%	1,395	82.0%
EL SALVADORIAN	200	2.0%	15	1.1%	102	2.1%	27	1.2%	-	0.0%	56	3.3%
CHINESE (TAI)	160	1.6%	22	1.6%	85	1.8%	44	2.0%	1	0.7%	8	0.5%
HONDURAN	124	1.2%	16	1.2%	68	1.4%	39	1.8%	-	0.0%	1	0.1%
RUSSIAN	120	1.2%	17	1.3%	58	1.2%	36	1.6%	-	0.0%	9	0.5%
INDONESIAN	109	1.1%	17	1.3%	45	0.9%	33	1.5%	9	6.3%	5	0.3%
NICARAGUAN	108	1.1%	4	0.3%	96	2.0%	-	0.0%	-	0.0%	8	0.5%
MEXICAN	91	0.9%	2	0.1%	40	0.8%	1	0.0%	1	0.7%	47	2.8%
THAILAND	90	0.9%	12	0.9%	31	0.7%	9	0.4%	-	0.0%	38	2.2%
MALDIVE ISLANDS	87	0.9%	14	1.0%	55	1.2%	5	0.2%	-	0.0%	13	0.8%
ROMANIAN	44	0.4%	6	0.4%	17	0.4%	14	0.6%	-	0.0%	7	0.4%
2ND 10	1,133	11.2%	125	9.3%	597	12.5%	208	9.4%	11	7.7%	192	11.3%
TOP 20	9,597	94.5%	1,255	93.4%	4,526	95.1%	2,095	94.8%	134	93.7%	1,587	93.2%
TOTAL	10,159	100.0%	1,343	100.0%	4,760	100.0%	2,211	100.0%	143	100.0%	1,702	100.0%

* Includes dry bulk carriers, freighters, ore carriers and OBOS.

**CREW NATIONALITIES (UNLICENSED ENGINE)
BULKERS* (2004)**

NATIONALITY	TOTAL ENGINE		J-ENG/QMED		ELECTRICIANS		PUMP/FITTER/MECH		OILER/MOTOR		WIPER/DEU		OTHER ENGINE	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	2,358	31.9%	5	4.6%	181	25.4%	216	10.9%	1,562	42.7%	394	48.9%	-	0.0%
CHINESE (PRC)	1,012	13.7%	5	4.6%	36	5.0%	116	5.9%	741	20.2%	114	14.1%	-	0.0%
UKRAINIAN	753	10.2%	-	0.0%	93	13.0%	309	15.6%	299	8.2%	50	6.2%	2	1.7%
INDIAN	461	6.2%	28	25.7%	91	12.8%	131	6.6%	169	4.6%	35	4.3%	7	5.9%
POLAND	264	3.6%	-	0.0%	52	7.3%	120	6.1%	88	2.4%	4	0.5%	-	0.0%
BULGARIAN	221	3.0%	-	0.0%	3	0.4%	89	4.5%	112	3.1%	16	2.0%	1	0.8%
TURKISH	142	1.9%	-	0.0%	20	2.8%	25	1.3%	71	1.9%	11	1.4%	15	12.6%
ROMANIAN	136	1.8%	1	0.9%	37	5.2%	77	3.9%	18	0.5%	3	0.4%	-	0.0%
RUSSIAN	126	1.7%	-	0.0%	45	6.3%	20	1.0%	58	1.6%	3	0.4%	-	0.0%
CROATIAN	115	1.6%	-	0.0%	26	3.6%	30	1.5%	34	0.9%	17	2.1%	8	6.7%
TOP 10	5,588	75.6%	39	35.8%	584	81.9%	1,133	57.2%	3,152	86.1%	647	80.3%	33	27.7%
GREEK	111	1.5%	10	9.2%	40	5.6%	31	1.6%	19	0.5%	11	1.4%	-	0.0%
MYANMAR	96	1.3%	3	2.8%	8	1.1%	9	0.5%	63	1.7%	13	1.6%	-	0.0%
CHINESE (TAI)	86	1.2%	1	0.9%	10	1.4%	4	0.2%	48	1.3%	23	2.9%	-	0.0%
INDONESIAN	86	1.2%	24	22.0%	-	0.0%	9	0.5%	42	1.1%	11	1.4%	-	0.0%
THAILAND	74	1.0%	22	20.2%	-	0.0%	7	0.4%	42	1.1%	3	0.4%	-	0.0%
EL SALVADORIAN	70	0.9%	-	0.0%	1	0.1%	9	0.5%	39	1.1%	21	2.6%	-	0.0%
HONDURAN	50	0.7%	7	6.4%	-	0.0%	4	0.2%	22	0.6%	17	2.1%	-	0.0%
NICARAGUAN	41	0.6%	-	0.0%	1	0.1%	-	0.0%	40	1.1%	-	0.0%	-	0.0%
MEXICAN	40	0.5%	-	0.0%	2	0.3%	17	0.9%	17	0.5%	4	0.5%	-	0.0%
MALDIVE ISLANDS	38	0.5%	-	0.0%	-	0.0%	2	0.1%	28	0.8%	8	1.0%	-	0.0%
2ND 10	485	6.6%	54	49.5%	14	2.0%	52	2.6%	278	7.6%	87	10.8%	-	0.0%
TOP 20	6,073	82.2%	93	85.3%	598	83.9%	1,185	59.8%	3,430	93.7%	734	91.1%	33	27.7%
TOTAL	7,391	100.0%	109	100.0%	713	100.0%	1,982	100.0%	3,662	100.0%	806	100.0%	119	100.0%

* Includes dry bulk carriers, freighters, ore carriers and OBOs.

**CREW NATIONALITIES (UNLICENSED STEWARD)
BULKERS* (2004)**

<u>NATIONALITY</u>	<u>TOTAL STEWARD</u>		<u>CHIEF STEWARD/COOK</u>		<u>COOKS</u>		<u>STEWARDS</u>		<u>MESSMEN/BOYS</u>	
	<u>Entries</u>	<u>Percent</u>	<u>Entries</u>	<u>Percent</u>	<u>Entries</u>	<u>Percent</u>	<u>Entries</u>	<u>Percent</u>	<u>Entries</u>	<u>Percent</u>
FILIPINO	937	29.7%	315	24.1%	187	22.3%	156	17.3%	279	46.0%
CHINESE (PRC)	637	20.2%	243	18.6%	93	11.1%	224	24.8%	77	12.7%
UKRAINIAN	247	7.8%	38	2.9%	86	10.3%	57	6.3%	66	10.9%
INDIAN	185	5.9%	66	5.0%	30	3.6%	48	5.3%	41	6.8%
POLAND	161	5.1%	6	0.5%	56	6.7%	98	10.9%	1	0.2%
GREEK	168	5.3%	11	0.8%	131	15.6%	25	2.8%	1	0.2%
BULGARIAN	97	3.1%	14	1.1%	37	4.4%	44	4.9%	2	0.3%
CROATIAN	64	2.0%	18	1.4%	16	1.9%	24	2.7%	6	1.0%
HONDURAN	64	2.0%	8	0.6%	29	3.5%	3	0.3%	24	4.0%
TURKISH	60	1.9%	1	0.1%	24	2.9%	35	3.9%	-	0.0%
TOP 10	2,620	82.9%	720	55.1%	689	82.2%	714	79.1%	497	81.9%
CHINESE (TAI)	50	1.6%	22	1.7%	4	0.5%	24	2.7%	-	0.0%
INDONESIAN	48	1.5%	9	0.7%	13	1.6%	19	2.1%	7	1.2%
MYANMAR	48	1.5%	10	0.8%	10	1.2%	13	1.4%	15	2.5%
NICARAGUAN	46	1.5%	-	0.0%	20	2.4%	6	0.7%	20	3.3%
RUSSIAN	37	1.2%	4	0.3%	14	1.7%	12	1.3%	7	1.2%
EL SALVADORIAN	34	1.1%	-	0.0%	5	0.6%	16	1.8%	13	2.1%
THAILAND	32	1.0%	2	0.2%	15	1.8%	15	1.7%	-	0.0%
ROMANIAN	17	0.5%	1	0.1%	7	0.8%	3	0.3%	6	1.0%
MALDIVE ISLANDS	22	0.7%	-	0.0%	12	1.4%	1	0.1%	9	1.5%
MEXICAN	7	0.2%	-	0.0%	2	0.2%	-	0.0%	5	0.8%
2ND 10	195	6.2%	7	0.5%	75	8.9%	53	5.9%	60	9.9%
TOP 20	2,815	89.1%	727	55.6%	764	91.2%	767	84.9%	557	91.8%
TOTAL	3,160	100.0%	1,307	100.0%	838	100.0%	903	100.0%	607	100.0%

* Includes dry bulk carriers, freighters, ore carriers and OBOs.

**CREW NATIONALITIES (OFFICERS)
CONTAINERS (2004)**

NATIONALITY	TOTAL OFFICERS		* DECK OFFICERS		ENGINE OFFICERS		OTHER OFFICERS		CADETS	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
CHINESE (PRC)	3,083	16.8%	1,478	17.4%	1,324	16.4%	81	84.4%	200	11.6%
FILIPINO	2,771	15.1%	1,335	15.8%	1,152	14.3%	3	3.1%	281	16.4%
INDIAN	1,628	8.9%	625	7.4%	827	10.3%	-	0.0%	176	10.3%
GERMANY	1,311	7.1%	647	7.6%	603	7.5%	-	0.0%	61	3.6%
KOREAN-SOUTH	1,118	6.1%	542	6.4%	564	7.0%	1	1.0%	11	0.6%
CROATIAN	813	4.4%	363	4.3%	367	4.6%	-	0.0%	83	4.8%
UKRAINIAN	649	3.5%	255	3.0%	274	3.4%	-	0.0%	120	7.0%
POLISH	595	3.2%	265	3.1%	251	3.1%	10	10.4%	69	4.0%
DANISH	576	3.1%	267	3.2%	241	3.0%	-	0.0%	68	4.0%
RUSSIAN	499	2.7%	220	2.6%	259	3.2%	-	0.0%	20	1.2%
Top 10	13,043	71.1%	5,997	70.8%	5,862	72.8%	95	99.0%	1,089	63.4%
GREEK	482	2.6%	236	2.8%	236	2.9%	-	0.0%	10	0.6%
CHINESE (TAI)	431	2.4%	192	2.3%	185	2.3%	-	0.0%	54	3.1%
ISRAEL	423	2.3%	195	2.3%	191	2.4%	-	0.0%	37	2.2%
ROMANIAN	416	2.3%	177	2.1%	215	2.7%	-	0.0%	24	1.4%
YUGOSLAVIAN	367	2.0%	161	1.9%	184	2.3%	-	0.0%	22	1.3%
BRITISH VIRGIN ISLANDERS	317	1.7%	118	1.4%	126	1.6%	-	0.0%	73	4.3%
BULGARIAN	317	1.7%	142	1.7%	136	1.7%	-	0.0%	39	2.3%
UNITED KINGDOM	295	1.6%	173	2.0%	79	1.0%	-	0.0%	43	2.5%
MYANMAR	281	1.5%	109	1.3%	136	1.7%	-	0.0%	36	2.1%
PANAMANIAN	222	1.2%	51	0.6%	84	1.0%	-	0.0%	87	5.1%
2ND 10	3,551	19.4%	1,554	18.3%	1,572	19.5%	-	0.0%	425	24.8%
TOP 20	16,594	90.5%	7,551	89.1%	7,434	92.3%	95	99.0%	1,514	88.2%
TOTAL	18,339	100.0%	8,470	100.0%	8,056	100.0%	96	100.0%	1,717	100.0%

* As future Officers, Cadets are included in Officer Totals

**CREW NATIONALITIES (DECK OFFICERS)
CONTAINERS (2004)**

NATIONALITY	DECK OFFICERS		MASTERS		CHIEF OFFICERS		2ND OFFICERS		3RD OFFICERS		4TH OFFICERS		RADIO OFFICERS	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
CHINESE (PRC)	1,478	17.4%	315	16.0%	339	15.5%	329	14.6%	358	19.5%	6	15.8%	131	67.9%
FILIPINO	1,335	15.8%	46	2.3%	189	8.7%	570	25.3%	506	27.5%	10	26.3%	14	7.3%
GERMANY	647	7.6%	369	18.8%	194	8.9%	43	1.9%	38	2.1%	3	7.9%	-	0.0%
INDIAN	625	7.4%	171	8.7%	165	7.6%	146	6.5%	141	7.7%	-	0.0%	2	1.0%
KOREAN-SOUTH	542	6.4%	150	7.6%	164	7.5%	121	5.4%	99	5.4%	-	0.0%	8	4.1%
CROATIAN	363	4.3%	92	4.7%	128	5.9%	76	3.4%	66	3.6%	1	2.6%	-	0.0%
DANISH	267	3.2%	87	4.4%	83	3.8%	74	3.3%	14	0.8%	9	23.7%	-	0.0%
POLISH	265	3.1%	55	2.8%	100	4.6%	66	2.9%	42	2.3%	1	2.6%	1	0.5%
UKRAINIAN	255	3.0%	35	1.8%	75	3.4%	94	4.2%	50	2.7%	1	2.6%	-	0.0%
GREEK	236	2.8%	73	3.7%	67	3.1%	96	4.3%	-	0.0%	-	0.0%	-	0.0%
TOP 10	6,013	71.0%	1,393	70.9%	1,504	68.9%	1,615	71.7%	1,314	71.5%	31	81.6%	156	80.8%
RUSSIAN	220	2.6%	32	1.6%	65	3.0%	57	2.5%	56	3.0%	-	0.0%	10	5.2%
ISRAEL	195	2.3%	63	3.2%	56	2.6%	37	1.6%	38	2.1%	1	2.6%	-	0.0%
CHINESE (TAI)	192	2.3%	18	0.9%	42	1.9%	68	3.0%	64	3.5%	-	0.0%	-	0.0%
ROMANIAN	177	2.1%	22	1.1%	65	3.0%	46	2.0%	32	1.7%	-	0.0%	12	6.2%
UNITED KINGDOM	173	2.0%	40	2.0%	50	2.3%	49	2.2%	33	1.8%	1	2.6%	-	0.0%
YUGOSLAVIAN	161	1.9%	14	0.7%	50	2.3%	54	2.4%	43	2.3%	-	0.0%	-	0.0%
BULGARIAN	142	1.7%	18	0.9%	30	1.4%	44	2.0%	50	2.7%	-	0.0%	-	0.0%
BRITISH VIRGIN ISLANDERS	118	1.4%	32	1.6%	26	1.2%	34	1.5%	26	1.4%	-	0.0%	-	0.0%
MYANMAR	109	1.3%	14	0.7%	21	1.0%	44	2.0%	29	1.6%	-	0.0%	1	0.5%
PANAMANIAN	51	0.6%	1	0.1%	2	0.1%	18	0.8%	30	1.6%	-	0.0%	-	0.0%
2ND 10	1,538	18.2%	254	12.9%	407	18.6%	451	20.0%	401	21.8%	33	86.8%	23	11.9%
TOP 20	7,551	89.1%	1,647	83.8%	1,911	87.5%	2,066	91.7%	1,715	93.4%	64	168.4%	179	92.7%
TOTAL	8,470	100.0%	1,966	100.0%	2,184	100.0%	2,252	100.0%	1,837	100.0%	38	100.0%	193	100.0%

CREW NATIONALITIES (ENGINE OFFICERS)
CONTAINERS (2004)

NATIONALITY	ENGINE OFFICERS		CHIEF ENGINEERS		1ST ENGINEERS		2ND ENGINEERS		3RD ENGINEERS		4TH ENGINEERS		5TH ENGINEERS		ELECT. ENGINEERS	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
CHINESE (PRC)	1,324	16.4%	320	15.6%	54	7.4%	294	14.7%	281	14.8%	194	27.2%	12	17.1%	169	25.8%
FILIPINO	1,152	14.3%	58	2.8%	69	9.4%	341	17.0%	434	22.8%	142	19.9%	10	14.3%	98	15.0%
INDIAN	827	10.3%	170	8.3%	97	13.2%	155	7.7%	186	9.8%	107	15.0%	35	50.0%	77	11.8%
GERMANY	603	7.5%	364	17.8%	9	1.2%	174	8.7%	44	2.3%	3	0.4%	-	0.0%	9	1.4%
KOREAN-SOUTH	564	7.0%	156	7.6%	153	20.8%	102	5.1%	152	8.0%	1	0.1%	-	0.0%	-	0.0%
CROATIAN	367	4.6%	106	5.2%	34	4.6%	115	5.7%	77	4.0%	30	4.2%	-	0.0%	5	0.8%
UKRAINIAN	274	3.4%	57	2.8%	12	1.6%	80	4.0%	63	3.3%	2	0.3%	-	0.0%	60	9.2%
RUSSIAN	259	3.2%	43	2.1%	22	3.0%	67	3.3%	66	3.5%	15	2.1%	-	0.0%	46	7.0%
POLISH	251	3.1%	97	4.7%	12	1.6%	72	3.6%	42	2.2%	2	0.3%	-	0.0%	26	4.0%
DANISH	241	3.0%	89	4.3%	2	0.3%	79	3.9%	45	2.4%	-	0.0%	-	0.0%	26	4.0%
TOP 10	5,862	72.8%	1,460	71.3%	464	63.2%	1,479	73.8%	1,390	73.0%	496	69.6%	57	81.4%	516	78.9%
GREEK	236	2.9%	78	3.8%	5	0.7%	67	3.3%	84	4.4%	-	0.0%	-	0.0%	2	0.3%
ROMANIAN	215	2.7%	26	1.3%	25	3.4%	54	2.7%	45	2.4%	2	0.3%	-	0.0%	63	9.6%
ISRAEL	191	2.4%	60	2.9%	45	6.1%	52	2.6%	32	1.7%	-	0.0%	-	0.0%	2	0.3%
CHINESE (TAI)	185	2.3%	50	2.4%	5	0.7%	29	1.4%	39	2.0%	38	5.3%	6	8.6%	18	2.8%
YUGOSLAVIAN	184	2.3%	31	1.5%	50	6.8%	50	2.5%	53	2.8%	-	0.0%	-	0.0%	-	0.0%
BULGARIAN	136	1.7%	14	0.7%	30	4.1%	38	1.9%	47	2.5%	-	0.0%	-	0.0%	7	1.1%
MYANMAR	136	1.7%	5	0.2%	2	0.3%	43	2.1%	60	3.1%	12	1.7%	2	2.9%	12	1.8%
BRITISH VIRGIN ISLANDERS	126	1.6%	39	1.9%	16	2.2%	32	1.6%	34	1.8%	4	0.6%	1	1.4%	-	0.0%
PANAMANIAN	84	1.0%	3	0.1%	-	0.0%	1	0.0%	13	0.7%	67	9.4%	-	0.0%	-	0.0%
UNITED KINGDOM	79	1.0%	37	1.8%	5	0.7%	15	0.7%	21	1.1%	1	0.1%	-	0.0%	-	0.0%
2ND 10	1,572	19.5%	343	16.8%	183	24.9%	381	19.0%	428	22.5%	124	17.4%	9	12.9%	104	15.9%
TOP 20	7,434	92.3%	1,803	88.1%	647	88.1%	1,860	92.9%	1,818	95.4%	620	87.0%	66	94.3%	620	94.8%
TOTAL	8,056	100.0%	2,047	100.0%	734	100.0%	2,003	100.0%	1,905	100.0%	713	100.0%	70	100.0%	654	100.0%

* Includes dry bulk carriers, freighters, ore carriers and OBOs.

**CREW NATIONALITIES (UNLICENSED)
CONTAINERS (2004)**

<u>NATIONALITY</u>	<u>TOTAL UNLICENSED</u>		<u>DECK UNLICENSED</u>		<u>ENGINE UNLICENSED</u>		<u>STEWARD</u>	
	<u>Entries</u>	<u>Percent</u>	<u>Entries</u>	<u>Percent</u>	<u>Entries</u>	<u>Percent</u>	<u>Entries</u>	<u>Percent</u>
FILIPINO	10,258	36.6%	5,319	38.7%	3,228	35.5%	1,708	38.8%
CHINESE (PRC)	3,396	12.1%	2,149	15.6%	669	7.4%	575	13.1%
INDIAN	1,317	4.7%	665	4.8%	475	5.2%	153	3.5%
UKRAINIAN	1,010	3.6%	573	4.2%	351	3.9%	86	2.0%
MYANMAR	910	3.2%	470	3.4%	279	3.1%	161	3.7%
BULGARIAN	900	3.2%	460	3.3%	201	2.2%	237	5.4%
KIRIBATI	811	2.9%	522	3.8%	191	2.1%	98	2.2%
POLISH	764	2.7%	146	1.1%	296	3.3%	167	3.8%
CROATIAN	665	2.4%	341	2.5%	265	2.9%	59	1.3%
CHINESE (TAI)	633	2.3%	262	1.9%	174	1.9%	197	4.5%
TOP 10	20,664	73.7%	10,907	79.4%	6,129	67.4%	3,441	78.2%
KOREAN-SOUTH	600	2.1%	146	1.1%	369	4.1%	85	1.9%
INDONESIAN	552	2.0%	200	1.5%	235	2.6%	117	2.7%
ROMANIAN	499	1.8%	216	1.6%	203	2.2%	80	1.8%
THAILAND	431	1.5%	270	2.0%	146	1.6%	1	0.0%
GERMANY	396	1.4%	150	1.1%	178	2.0%	66	1.5%
RUSSIAN	334	1.2%	151	1.1%	126	1.4%	57	1.3%
YUGOSLAVIAN	274	1.0%	130	0.9%	123	1.4%	21	0.5%
TUVALU	267	1.0%	175	1.3%	61	0.7%	31	0.7%
DANISH	246	0.9%	101	0.7%	39	0.4%	100	2.3%
TURKISH	196	0.7%	102	0.7%	62	0.7%	32	0.7%
2ND 10	3,795	13.5%	1,641	11.9%	1,542	16.9%	590	13.4%
TOP 20	24,459	87.3%	12,548	91.4%	7,671	84.3%	4,031	91.6%
TOTAL	28,019	100.0%	13,733	100.0%	9,099	100.0%	4,403	100.0%

**CREW NATIONALITIES (UNLICENSED DECK)
CONTAINERS (2004)**

NATIONALITY	TOTAL DECK		BOSUN		AB SEAMAN		ORDINARY SEAMAN		GENERAL PURPOSE		OTHER DECK	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	5,321	38.7%	743	45.2%	3,034	49.3%	1,177	45.4%	23	2.6%	344	15.3%
CHINESE (PRC)	2,150	15.7%	156	9.5%	652	10.6%	342	13.2%	596	67.1%	404	18.0%
INDIAN	689	5.0%	68	4.1%	258	4.2%	125	4.8%	10	1.1%	228	10.2%
UKRAINIAN	573	4.2%	82	5.0%	238	3.9%	88	3.4%	-	0.0%	165	7.3%
KIRIBATI	522	3.8%	53	3.2%	316	5.1%	120	4.6%	-	0.0%	33	1.5%
MYANMAR	470	3.4%	45	2.7%	249	4.0%	137	5.3%	-	0.0%	39	1.7%
BULGARIAN	462	3.4%	62	3.8%	216	3.5%	126	4.9%	-	0.0%	58	2.6%
CROATIAN	341	2.5%	58	3.5%	147	2.4%	34	1.3%	10	1.1%	92	4.1%
POLISH	301	2.2%	4	0.2%	48	0.8%	18	0.7%	1	0.1%	230	10.2%
THAILAND	284	2.1%	-	0.0%	102	1.7%	-	0.0%	167	18.8%	15	0.7%
TOP 10	11,113	80.9%	1,271	77.3%	5,260	85.5%	2,167	83.6%	807	90.9%	1,608	71.6%
CHINESE (TAI)	262	1.9%	21	1.3%	79	1.3%	52	2.0%	47	5.3%	63	2.8%
ROMANIAN	216	1.6%	19	1.2%	120	2.0%	50	1.9%	2	0.2%	25	1.1%
INDONESIAN	200	1.5%	18	1.1%	139	2.3%	32	1.2%	-	0.0%	11	0.5%
TUVALU	175	1.3%	51	3.1%	101	1.6%	23	0.9%	-	0.0%	-	0.0%
GERMANY	150	1.1%	2	0.1%	12	0.2%	68	2.6%	3	0.3%	65	2.9%
RUSSIAN	151	1.1%	19	1.2%	52	0.8%	51	2.0%	4	0.5%	25	1.1%
KOREAN-SOUTH	146	1.1%	80	4.9%	3	0.0%	52	2.0%	-	0.0%	11	0.5%
YUGOSLAVIAN	130	0.9%	8	0.5%	60	1.0%	10	0.4%	1	0.1%	51	2.3%
DANISH	106	0.8%	-	0.0%	12	0.2%	-	0.0%	8	0.9%	86	3.8%
TURKISH	102	0.7%	16	1.0%	46	0.7%	19	0.7%	-	0.0%	21	0.9%
2ND 10	484	3.5%	104	6.3%	121	2.0%	81	3.1%	9	1.0%	169	7.5%
TOP 20	11,597	84.4%	1,375	83.6%	5,381	87.5%	2,248	86.7%	816	91.9%	1,777	79.1%
TOTAL	13,733	100.0%	1,644	100.0%	6,152	100.0%	2,592	100.0%	888	100.0%	2,246	100.0%

**CREW NATIONALITIES (UNLICENSED ENGINE)
CONTAINERS (2004)**

NATIONALITY	TOTAL ENGINE		J.ENG/QMED		ELECTRICIANS		PUMP/FITTER/MECH		OILER/MOTOR		WIPER/DEU		OTHER ENGINE	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	3,228	35.5%	128	21.7%	242	22.7%	566	21.7%	1,741	47.0%	550	52.1%	1	1.4%
CHINESE (PRC)	669	7.4%	89	15.1%	7	0.7%	126	4.8%	398	10.7%	49	4.6%	-	0.0%
INDIAN	475	5.2%	28	4.8%	119	11.1%	111	4.3%	194	5.2%	23	2.2%	-	0.0%
KOREAN-SOUTH	369	4.1%	235	39.9%	-	0.0%	1	0.0%	128	3.5%	5	0.5%	-	0.0%
UKRAINIAN	351	3.9%	-	0.0%	60	5.6%	100	3.8%	119	3.2%	72	6.8%	-	0.0%
POLISH	296	3.3%	13	2.2%	180	16.9%	87	3.3%	13	0.4%	3	0.3%	-	0.0%
MYANMAR	279	3.1%	7	1.2%	6	0.6%	39	1.5%	197	5.3%	30	2.8%	-	0.0%
CROATIAN	265	2.9%	-	0.0%	94	8.8%	92	3.5%	63	1.7%	13	1.2%	3	4.1%
INDONESIAN	235	2.6%	2	0.3%	8	0.7%	86	3.3%	54	1.5%	85	8.1%	-	0.0%
ROMANIAN	203	2.2%	-	0.0%	51	4.8%	77	3.0%	73	2.0%	2	0.2%	-	0.0%
TOP 10	6,370	70.0%	502	85.2%	767	71.8%	1,285	49.3%	2,980	80.4%	832	78.9%	4	5.4%
BULGARIAN	201	2.2%	-	0.0%	14	1.3%	73	2.8%	110	3.0%	4	0.4%	-	0.0%
KIRIBATI	191	2.1%	2	0.3%	3	0.3%	20	0.8%	161	4.3%	3	0.3%	2	2.7%
GERMANY	178	2.0%	-	0.0%	65	6.1%	108	4.1%	3	0.1%	2	0.2%	-	0.0%
CHINESE (TAI)	174	1.9%	34	5.8%	2	0.2%	44	1.7%	47	1.3%	47	4.5%	-	0.0%
THAILAND	146	1.6%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	146	13.8%	-	0.0%
RUSSIAN	126	1.4%	-	0.0%	49	4.6%	9	0.3%	68	1.8%	-	0.0%	-	0.0%
YUGOSLAVIAN	123	1.4%	3	0.5%	29	2.7%	44	1.7%	39	1.1%	5	0.5%	3	4.1%
TURKISH	62	0.7%	-	0.0%	14	1.3%	16	0.6%	28	0.8%	4	0.4%	-	0.0%
TUVALU	61	0.7%	-	0.0%	-	0.0%	7	0.3%	53	1.4%	1	0.1%	-	0.0%
DANISH	39	0.4%	24	4.1%	3	0.3%	3	0.1%	8	0.2%	1	0.1%	-	0.0%
2ND 10	1,301	14.3%	63	10.7%	179	16.8%	324	12.4%	517	14.0%	213	20.2%	5	6.8%
TOP 20	7,671	84.3%	565	95.9%	946	88.6%	1,609	61.7%	3,497	94.4%	1,045	99.1%	9	12.2%
TOTAL	9,099	100.0%	589	100.0%	1,068	100.0%	2,608	100.0%	3,705	100.0%	1,055	100.0%	74	100.0%

**CREW NATIONALITIES (UNLICENSED STEWARD)
CONTAINERS (2004)**

NATIONALITY	TOTAL STEWARD		CHIEF STEWARD/COOK		COOKS		STEWARDS		MESSMEN/BOYS	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	1,708	38.8%	406	20.8%	480	36.7%	321	16.0%	501	66.4%
CHINESE (PRC)	575	13.1%	271	13.9%	94	7.2%	185	9.2%	25	3.3%
BULGARIAN	237	5.4%	45	2.3%	49	3.7%	108	5.4%	35	4.6%
CHINESE (TAI)	197	4.5%	21	1.1%	52	4.0%	89	4.4%	35	4.6%
POLISH	167	3.8%	35	1.8%	4	0.3%	128	6.4%	-	0.0%
MYANMAR	161	3.7%	15	0.8%	67	5.1%	45	2.2%	34	4.5%
INDIAN	153	3.5%	71	3.6%	17	1.3%	59	2.9%	6	0.8%
INDONESIAN	117	2.7%	13	0.7%	39	3.0%	27	1.3%	38	5.0%
DANISH	100	2.3%	40	2.1%	-	0.0%	60	3.0%	-	0.0%
KIRIBATI	98	2.2%	6	0.3%	30	2.3%	62	3.1%	-	0.0%
TOP 10	3,513	79.8%	923	47.3%	832	63.7%	1,084	54.1%	674	89.4%
UKRAINIAN	86	2.0%	4	0.2%	45	3.4%	19	0.9%	18	2.4%
KOREAN-SOUTH	85	1.9%	32	1.6%	36	2.8%	16	0.8%	1	0.1%
ROMANIAN	80	1.8%	6	0.3%	18	1.4%	54	2.7%	2	0.3%
GERMANY	66	1.5%	9	0.5%	13	1.0%	38	1.9%	6	0.8%
CROATIAN	59	1.3%	5	0.3%	28	2.1%	25	1.2%	1	0.1%
RUSSIAN	57	1.3%	8	0.4%	29	2.2%	20	1.0%	-	0.0%
TURKISH	32	0.7%	-	0.0%	20	1.5%	12	0.6%	-	0.0%
TUVALU	31	0.7%	-	0.0%	8	0.6%	23	1.1%	-	0.0%
YUGOSLAVIAN	21	0.5%	2	0.1%	9	0.7%	10	0.5%	-	0.0%
THAILAND	1	0.0%	1	0.1%	-	0.0%	-	0.0%	-	0.0%
2ND 10	432	9.8%	63	3.2%	161	12.3%	198	9.9%	10	1.3%
TOP 20	3,945	89.6%	986	50.5%	993	76.0%	1,282	63.9%	684	90.7%
TOTAL	4,403	100.0%	1,951	100.0%	1,307	100.0%	2,005	100.0%	754	100.0%

**CREW NATIONALITIES (OFFICERS)
TANKERS (2004)**

NATIONALITY	TOTAL OFFICERS		* DECK OFFICERS		ENGINE OFFICERS		OTHER OFFICERS		CADETS	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	2,494	22.5%	1,194	23.5%	1,061	21.4%	1	5.0%	238	23.0%
INDIAN	2,050	18.5%	881	17.3%	938	18.9%	17	85.0%	214	20.7%
GREEK	1,382	12.5%	690	13.6%	596	12.0%	-	0.0%	96	9.3%
RUSSIAN	803	7.2%	405	8.0%	360	7.3%	-	0.0%	38	3.7%
LATVIAN	499	4.5%	191	3.8%	268	5.4%	-	0.0%	40	3.9%
CROATIAN	439	4.0%	204	4.0%	217	4.4%	-	0.0%	18	1.7%
POLISH	289	2.6%	137	2.7%	139	2.8%	-	0.0%	13	1.3%
UKRAINIAN	269	2.4%	122	2.4%	143	2.9%	-	0.0%	4	0.4%
CHINESE (PRC)	257	2.3%	78	1.5%	98	2.0%	-	0.0%	81	7.8%
MALAYSIAN	218	2.0%	108	2.1%	73	1.5%	-	0.0%	37	3.6%
Top 10	8,700	78.4%	4,010	78.8%	3,893	78.6%	18	90.0%	779	75.4%
KOREAN-SOUTH	210	1.9%	113	2.2%	97	2.0%	-	0.0%	-	0.0%
NORWEGIAN	199	1.8%	108	2.1%	80	1.6%	-	0.0%	11	1.1%
ITALIAN	164	1.5%	97	1.9%	55	1.1%	-	0.0%	12	1.2%
ECUADOR	130	1.2%	64	1.3%	52	1.0%	-	0.0%	14	1.4%
CHINESE (TAI)	128	1.2%	32	0.6%	57	1.2%	-	0.0%	39	3.8%
DANISH	122	1.1%	51	1.0%	38	0.8%	-	0.0%	33	3.2%
UNITED KINGDOM	111	1.0%	46	0.9%	56	1.1%	-	0.0%	9	0.9%
BRITISH VIRGIN ISLANDERS	106	1.0%	45	0.9%	54	1.1%	-	0.0%	7	0.7%
MYANMAR	106	1.0%	42	0.8%	45	0.9%	-	0.0%	19	1.8%
BELARUS	89	0.8%	52	1.0%	30	0.6%	-	0.0%	7	0.7%
2ND 10	1,365	12.3%	650	12.8%	564	11.4%	-	0.0%	151	14.6%
TOP 20	10,065	90.7%	4,660	91.6%	4,457	90.0%	18	90.0%	930	90.0%
TOTAL	11,093	100.0%	5,087	100.0%	4,953	100.0%	20	100.0%	1,033	100.0%

* As future Officers, Cadets are included in Officer Totals

**CREW NATIONALITIES (DECK OFFICERS)
TANKERS (2004)**

NATIONALITY	DECK OFFICERS		MASTERS		CHIEF OFFICERS		2ND OFFICERS		3RD OFFICERS		4TH OFFICERS		RADIO OFFICERS	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	1,194	23.5%	94	8.4%	154	12.5%	433	28.2%	472	41.7%	-	60.0%	32	62.7%
INDIAN	881	17.3%	208	18.5%	194	15.8%	282	18.4%	196	17.3%	-	0.0%	1	2.0%
GREEK	690	13.6%	201	17.9%	226	18.4%	258	16.8%	2	0.2%	-	0.0%	3	5.9%
RUSSIAN	405	8.0%	79	7.0%	100	8.1%	114	7.4%	109	9.6%	-	0.0%	3	5.9%
CROATIAN	204	4.0%	49	4.4%	63	5.1%	56	3.6%	34	3.0%	1	6.7%	1	2.0%
LATVIAN	191	3.8%	54	4.8%	46	3.7%	41	2.7%	47	4.1%	3	20.0%	-	0.0%
POLISH	137	2.7%	37	3.3%	35	2.8%	37	2.4%	27	2.4%	-	0.0%	1	2.0%
UKRAINIAN	122	2.4%	24	2.1%	32	2.6%	38	2.5%	28	2.5%	-	0.0%	-	0.0%
KOREAN-SOUTH	113	2.2%	25	2.2%	33	2.7%	26	1.7%	29	2.6%	-	0.0%	-	0.0%
CHINESE (PRC)	78	1.5%	8	0.7%	14	1.1%	19	1.2%	35	3.1%	-	0.0%	2	3.9%
TOP 10	4,015	78.9%	779	69.4%	897	72.9%	1,304	84.9%	979	86.4%	13	86.7%	43	84.3%
MALYSIAN	108	2.1%	3	0.3%	47	3.8%	47	3.1%	11	1.0%	-	0.0%	-	0.0%
NORWEGIAN	108	2.1%	57	5.1%	44	3.6%	5	0.3%	2	0.2%	-	0.0%	-	0.0%
ITALIAN	97	1.9%	35	3.1%	22	1.8%	24	1.6%	14	1.2%	-	0.0%	2	3.9%
ECUADOR	64	1.3%	13	1.2%	28	2.3%	11	0.7%	12	1.1%	-	0.0%	-	0.0%
BELARUS	52	1.0%	22	2.0%	18	1.5%	10	0.7%	2	0.2%	-	0.0%	-	0.0%
DANISH	51	1.0%	19	1.7%	16	1.3%	11	0.7%	5	0.4%	-	0.0%	-	0.0%
UNITED KINGDOM	46	0.9%	30	2.7%	9	0.7%	3	0.2%	4	0.4%	-	0.0%	-	0.0%
BRITISH VIRGIN ISLANDERS	45	0.9%	31	2.8%	7	0.6%	3	0.2%	4	0.4%	-	0.0%	-	0.0%
MYANMAR	42	0.8%	2	0.2%	14	1.1%	20	1.3%	6	0.5%	-	0.0%	-	0.0%
CHINESE (TAI)	32	0.6%	7	0.6%	7	0.6%	6	0.4%	10	0.9%	-	0.0%	2	3.9%
2ND 10	645	12.7%	219	19.5%	212	17.2%	140	9.1%	70	6.2%	-	0.0%	4	7.8%
TOP 20	4,660	91.6%	998	88.9%	1,109	90.2%	1,444	94.0%	1,049	92.6%	13	86.7%	47	92.2%
TOTAL	5,087	100.0%	1,122	100.0%	1,230	100.0%	1,536	100.0%	1,133	100.0%	15	100.0%	51	100.0%

CREW NATIONALITIES (ENGINE OFFICERS)
TANKERS (2004)

NATIONALITY	ENGINE OFFICERS		CHIEF ENGINEERS		1ST ENGINEERS		2ND ENGINEERS		3RD ENGINEERS		4TH ENGINEERS		5TH ENGINEERS		ELECT. ENGINEERS	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	1,061	21.4%	111	9.6%	75	14.1%	281	24.2%	367	32.1%	205	30.6%	7	9.0%	15	5.2%
INDIAN	938	18.9%	173	15.0%	105	19.7%	169	14.6%	181	15.8%	188	28.1%	51	65.4%	71	24.5%
GREEK	596	12.0%	212	18.3%	53	10.0%	159	13.7%	168	14.7%	4	0.6%	-	0.0%	-	0.0%
RUSSIAN	360	7.3%	73	6.3%	33	6.2%	65	5.6%	90	7.9%	36	5.4%	-	0.0%	63	21.7%
LATVIAN	268	5.4%	54	4.7%	42	7.9%	70	6.0%	51	4.5%	27	4.0%	-	0.0%	24	8.3%
CROATIAN	217	4.4%	61	5.3%	38	7.1%	65	5.6%	34	3.0%	10	1.5%	1	1.3%	8	2.8%
UKRAINIAN	143	2.9%	34	2.9%	7	1.3%	38	3.3%	25	2.2%	18	2.7%	-	0.0%	21	7.2%
POLISH	139	2.8%	53	4.6%	19	3.6%	28	2.4%	21	1.8%	9	1.3%	-	0.0%	9	3.1%
CHINESE (PRC)	98	2.0%	15	1.3%	12	2.3%	10	0.9%	16	1.4%	34	5.1%	7	9.0%	4	1.4%
KOREAN-SOUTH	97	2.0%	25	2.2%	29	5.5%	27	2.3%	15	1.3%	-	0.0%	-	0.0%	1	0.3%
TOP 10	3,917	79.1%	811	70.1%	413	77.6%	912	78.6%	968	84.5%	531	79.4%	66	84.6%	216	74.5%
NORWEGIAN	80	1.6%	49	4.2%	12	2.3%	9	0.8%	8	0.7%	1	0.1%	-	0.0%	1	0.3%
MALAYSIAN	73	1.5%	15	1.3%	-	0.0%	35	3.0%	17	1.5%	4	0.6%	1	1.3%	1	0.3%
CHINESE (TAI)	57	1.2%	9	0.8%	5	0.9%	5	0.4%	10	0.9%	18	2.7%	6	7.7%	4	1.4%
UNITED KINGDOM	56	1.1%	33	2.9%	5	0.9%	8	0.7%	5	0.4%	4	0.6%	-	0.0%	1	0.3%
ITALIAN	55	1.1%	19	1.6%	15	2.8%	14	1.2%	7	0.6%	-	0.0%	-	0.0%	-	0.0%
BRITISH VIRGIN ISLANDERS	54	1.1%	37	3.2%	1	0.2%	9	0.8%	3	0.3%	2	0.3%	-	0.0%	2	0.7%
ECUADOR	52	1.0%	13	1.1%	12	2.3%	13	1.1%	14	1.2%	-	0.0%	-	0.0%	-	0.0%
MYANMAR	45	0.9%	8	0.7%	2	0.4%	20	1.7%	6	0.5%	3	0.4%	1	1.3%	5	1.7%
DANISH	38	0.8%	16	1.4%	7	1.3%	12	1.0%	2	0.2%	-	0.0%	1	1.3%	-	0.0%
BELARUS	30	0.6%	14	1.2%	-	0.0%	10	0.9%	5	0.4%	-	0.0%	-	0.0%	1	0.3%
2ND 10	540	10.9%	213	18.4%	59	11.1%	135	11.6%	77	6.7%	32	4.8%	9	11.5%	15	5.2%
TOP 20	4,457	90.0%	1,024	88.5%	472	88.7%	1,047	90.3%	1,045	91.3%	563	84.2%	75	96.2%	231	79.7%
TOTAL	4,953	100.0%	1,157	100.0%	532	100.0%	1,160	100.0%	1,145	100.0%	669	100.0%	78	100.0%	290	100.0%

**CREW NATIONALITIES (UNLICENSED)
TANKERS (2004)**

<u>NATIONALITY</u>	<u>TOTAL UNLICENSED</u>		<u>DECK UNLICENSED</u>		<u>ENGINE UNLICENSED</u>		<u>STEWARD</u>	
	<u>Entries</u>	<u>Percent</u>	<u>Entries</u>	<u>Percent</u>	<u>Entries</u>	<u>Percent</u>	<u>Entries</u>	<u>Percent</u>
FILIPINO	8,948	51.8%	4,455	56.7%	2,907	46.8%	1,584	58.1%
INDIAN	1,653	9.6%	758	9.7%	640	10.3%	252	9.2%
RUSSIAN	865	5.0%	407	5.2%	324	5.2%	134	4.9%
GREEK	655	3.8%	306	3.9%	183	2.9%	166	6.1%
LATVIAN	618	3.6%	296	3.8%	225	3.6%	96	3.5%
UKRAINIAN	513	3.0%	184	2.3%	256	4.1%	71	2.6%
CHINESE (PRC)	318	1.8%	211	2.7%	72	1.2%	35	1.3%
POLISH	305	1.8%	83	1.1%	199	3.2%	23	0.8%
ECUADORIAN	253	1.5%	95	1.2%	108	1.7%	50	1.8%
ROMANIAN	216	1.3%	75	1.0%	127	2.0%	14	0.5%
TOP 10	14,344	83.1%	6,870	87.5%	5,041	81.2%	2,425	88.9%
CROATIAN	202	1.2%	72	0.9%	104	1.7%	26	1.0%
CHINESE (TAI)	140	0.8%	89	1.1%	30	0.5%	21	0.8%
INDONESIAN	132	0.8%	73	0.9%	30	0.5%	27	1.0%
ITALIAN	130	0.8%	68	0.9%	37	0.6%	25	0.9%
HONDURAN	129	0.7%	68	0.9%	39	0.6%	22	0.8%
SINGAPOREAN	128	0.7%	84	1.1%	2	0.0%	42	1.5%
SRI LANKA	124	0.7%	69	0.9%	30	0.5%	25	0.9%
TURKISH	83	0.5%	24	0.3%	42	0.7%	15	0.6%
BULGARIAN	71	0.4%	24	0.3%	36	0.6%	11	0.4%
MYANMAR	53	0.3%	37	0.5%	11	0.2%	5	0.2%
2ND 10	1,192	6.9%	608	7.7%	361	5.8%	219	8.0%
TOP 20	15,536	90.0%	7,478	95.2%	5,402	87.0%	2,644	97.0%
TOTAL	17,264	100.0%	7,853	100.0%	6,206	100.0%	2,727	100.0%

**CREW NATIONALITIES (UNLICENSED DECK)
TANKERS (2004)**

NATIONALITY	TOTAL DECK		BOSUN		AB SEAMAN		ORDINARY SEAMAN		GENERAL PURPOSE		OTHER DECK	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	4,457	56.8%	542	53.8%	2,259	63.6%	1,284	68.2%	35	21.1%	337	27.1%
INDIAN	759	9.7%	60	6.0%	258	7.3%	147	7.8%	40	24.1%	254	20.4%
RUSSIAN	407	5.2%	56	5.6%	186	5.2%	111	5.9%	10	6.0%	44	3.5%
GREEK	306	3.9%	112	11.1%	77	2.2%	17	0.9%	-	0.0%	100	8.0%
LATVIAN	297	3.8%	48	4.8%	123	3.5%	46	2.4%	34	20.5%	46	3.7%
CHINESE (PRC)	211	2.7%	13	1.3%	77	2.2%	34	1.8%	1	0.6%	86	6.9%
UKRAINIAN	185	2.4%	20	2.0%	112	3.2%	41	2.2%	2	1.2%	10	0.8%
ECUADORIAN	95	1.2%	13	1.3%	39	1.1%	29	1.5%	-	0.0%	14	1.1%
CHINESE (TAI)	89	1.1%	6	0.6%	30	0.8%	12	0.6%	-	0.0%	41	3.3%
SINGAPOREAN	84	1.1%	29	2.9%	37	1.0%	6	0.3%	-	0.0%	12	1.0%
TOP 10	6,890	87.7%	899	89.3%	3,198	90.0%	1,727	91.7%	122	73.5%	944	75.9%
POLISH	83	1.1%	10	1.0%	46	1.3%	12	0.6%	-	0.0%	15	1.2%
INDONESIAN	75	1.0%	10	1.0%	43	1.2%	14	0.7%	3	1.8%	5	0.4%
ROMANIAN	75	1.0%	5	0.5%	28	0.8%	20	1.1%	7	4.2%	15	1.2%
CROATIAN	72	0.9%	7	0.7%	31	0.9%	13	0.7%	-	0.0%	21	1.7%
SRI LANKA	69	0.9%	11	1.1%	22	0.6%	15	0.8%	16	9.6%	5	0.4%
HONDURAN	68	0.9%	6	0.6%	43	1.2%	19	1.0%	-	0.0%	-	0.0%
ITALIAN	68	0.9%	8	0.8%	28	0.8%	9	0.5%	-	0.0%	23	1.9%
MYANMAR	37	0.5%	2	0.2%	6	0.2%	6	0.3%	-	0.0%	23	1.9%
TURKISH	25	0.3%	9	0.9%	10	0.3%	2	0.1%	-	0.0%	4	0.3%
BULGARIAN	24	0.3%	1	0.1%	9	0.3%	11	0.6%	-	0.0%	3	0.2%
2ND 10	363	4.6%	44	4.4%	149	4.2%	75	4.0%	16	9.6%	79	6.4%
TOP 20	7,253	92.4%	943	93.6%	3,347	94.2%	1,802	95.7%	138	83.1%	1,023	82.3%
TOTAL	7,853	100.0%	1,007	100.0%	3,554	100.0%	1,883	100.0%	166	100.0%	1,243	100.0%

**CREW NATIONALITIES (UNLICENSED ENGINE)
TANKERS (2004)**

NATIONALITY	TOTAL ENGINE		J.ENG/QMED		ELECTRICIANS		PUMP/FITTER/MECH		OILER/MOTOR		WIPER/DEU		OTHER ENGINE	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	2,907	46.8%	15	15.0%	187	29.6%	882	34.4%	1,218	59.8%	605	81.9%	-	0.0%
INDIAN	640	10.3%	34	34.0%	79	12.5%	333	13.0%	158	7.8%	36	4.9%	-	0.0%
RUSSIAN	324	5.2%	-	0.0%	35	5.5%	122	4.8%	150	7.4%	17	2.3%	-	0.0%
UKRAINIAN	256	4.1%	-	0.0%	89	14.1%	95	3.7%	65	3.2%	7	0.9%	-	0.0%
LATVIAN	225	3.6%	13	13.0%	13	2.1%	99	3.9%	95	4.7%	5	0.7%	-	0.0%
POLISH	199	3.2%	1	1.0%	49	7.8%	115	4.5%	29	1.4%	5	0.7%	-	0.0%
GREEK	183	2.9%	6	6.0%	52	8.2%	94	3.7%	25	1.2%	4	0.5%	-	1.5%
ROMANIAN	127	2.0%	-	0.0%	20	3.2%	70	2.7%	24	1.2%	13	1.8%	-	0.0%
ECUADORIAN	108	1.7%	2	2.0%	13	2.1%	35	1.4%	58	2.8%	-	0.0%	-	0.0%
CROATIAN	104	1.7%	2	2.0%	46	7.3%	33	1.3%	13	0.6%	7	0.9%	-	2.2%
TOP 10	5,073	81.7%	73	73.0%	583	92.2%	1,878	73.3%	1,835	90.1%	699	94.6%	5	3.6%
CHINESE (PRC)	72	1.2%	2	2.0%	3	0.5%	15	0.6%	47	2.3%	5	0.7%	-	0.0%
TURKISH	42	0.7%	-	0.0%	-	0.0%	33	1.3%	9	0.4%	-	0.0%	-	0.0%
HONDURAN	39	0.6%	7	7.0%	1	0.2%	12	0.5%	14	0.7%	5	0.7%	-	0.0%
ITALIAN	37	0.6%	-	0.0%	6	0.9%	17	0.7%	14	0.7%	-	0.0%	-	0.0%
BULGARIAN	36	0.6%	-	0.0%	4	0.6%	22	0.9%	10	0.5%	-	0.0%	-	0.0%
CHINESE (TAI)	30	0.5%	4	4.0%	-	0.0%	4	0.2%	19	0.9%	3	0.4%	-	0.0%
INDONESIAN	30	0.5%	-	0.0%	-	0.0%	13	0.5%	-	0.0%	17	2.3%	-	0.0%
SRI LANKA	30	0.5%	-	0.0%	1	0.2%	9	0.4%	20	1.0%	-	0.0%	-	0.0%
MYANMAR	11	0.2%	4	4.0%	1	0.2%	2	0.1%	4	0.2%	-	0.0%	-	0.0%
SINGAPOREAN	2	0.0%	-	0.0%	-	0.0%	2	0.1%	-	0.0%	-	0.0%	-	0.0%
2ND 10	329	5.3%	17	17.0%	16	2.5%	129	5.0%	137	6.7%	30	4.1%	-	0.0%
TOP 20	5,402	87.0%	90	90.0%	599	94.8%	2,007	78.4%	1,972	96.8%	729	98.6%	5	3.6%
TOTAL	6,206	100.0%	100	100.0%	632	100.0%	2,561	100.0%	2,037	100.0%	739	100.0%	137	100.0%

**CREW NATIONALITIES (UNLICENSED STEWARD)
TANKERS (2004)**

<u>NATIONALITY</u>	<u>TOTAL STEWARD</u>		<u>CHIEF STEWARD/COOK</u>		<u>COOKS</u>		<u>STEWARDS</u>		<u>MESSMEN/BOYS</u>	
	<u>Entries</u>	<u>Percent</u>	<u>Entries</u>	<u>Percent</u>	<u>Entries</u>	<u>Percent</u>	<u>Entries</u>	<u>Percent</u>	<u>Entries</u>	<u>Percent</u>
FILIPINO	1,584	58.1%	408	51.3%	331	39.9%	220	42.4%	625	77.8%
INDIAN	252	9.2%	87	10.9%	80	9.6%	56	10.8%	29	3.6%
GREEK	166	6.1%	13	1.6%	117	14.1%	31	6.0%	5	0.6%
RUSSIAN	134	4.9%	13	1.6%	51	6.1%	41	7.9%	29	3.6%
LATVIAN	96	3.5%	5	0.6%	48	5.8%	36	6.9%	7	0.9%
UKRAINIAN	71	2.6%	10	1.3%	24	2.9%	13	2.5%	24	3.0%
ECUADORIAN	50	1.8%	8	1.0%	17	2.0%	-	0.0%	25	3.1%
SINGAPOREAN	42	1.5%	30	3.8%	12	1.4%	-	0.0%	-	0.0%
CHINESE (PRC)	35	1.3%	13	1.6%	10	1.2%	4	0.8%	8	1.0%
INDONESIAN	27	1.0%	5	0.6%	4	0.5%	17	3.3%	1	0.1%
TOP 10	2,457	90.1%	592	74.5%	694	83.6%	418	80.5%	753	93.8%
CROATIAN	26	1.0%	7	0.9%	5	0.6%	7	1.3%	7	0.9%
ITALIAN	25	0.9%	1	0.1%	15	1.8%	8	1.5%	1	0.1%
SRI LANKA	25	0.9%	-	0.0%	11	1.3%	11	2.1%	3	0.4%
POLISH	23	0.8%	-	0.0%	10	1.2%	9	1.7%	4	0.5%
HONDURAN	22	0.8%	-	0.0%	6	0.7%	5	1.0%	11	1.4%
CHINESE (TAI)	21	0.8%	5	0.6%	2	0.2%	11	2.1%	3	0.4%
TURKISH	15	0.6%	-	0.0%	5	0.6%	10	1.9%	-	0.0%
ROMANIAN	14	0.5%	-	0.0%	8	1.0%	4	0.8%	2	0.2%
BULGARIAN	11	0.4%	-	0.0%	2	0.2%	9	1.7%	-	0.0%
MYANMAR	5	0.2%	1	0.1%	1	0.1%	2	0.4%	1	0.1%
2ND 10	187	6.9%	14	1.8%	65	7.8%	76	14.6%	32	4.0%
TOP 20	2,644	97.0%	606	76.2%	759	91.4%	494	95.2%	785	97.8%
TOTAL	2,727	100.0%	795	100.0%	830	100.0%	519	100.0%	803	100.0%

**CREW NATIONALITIES (OFFICERS)
RO RO'S AND VEHICLE CARRIERS (2004)**

<u>NATIONALITY</u>	<u>TOTAL OFFICERS</u>		<u>* DECK OFFICERS</u>		<u>ENGINE OFFICERS</u>		<u>OTHER OFFICERS</u>		<u>CADETS</u>	
	<u>Entries</u>	<u>Percent</u>	<u>Entries</u>	<u>Percent</u>	<u>Entries</u>	<u>Percent</u>	<u>Entries</u>	<u>Percent</u>	<u>Entries</u>	<u>Percent</u>
FILIPINO	928	45.4%	447	46.8%	417	45.0%	1	9.1%	63	41.7%
SWEDISH	327	16.0%	152	15.9%	149	16.1%	-	0.0%	26	17.2%
INDIAN	237	11.6%	96	10.1%	113	12.2%	8	72.7%	20	13.2%
JAPANESE	87	4.3%	49	5.1%	38	4.1%	-	0.0%	-	0.0%
KOREAN-SOUTH	87	4.3%	43	4.5%	43	4.6%	-	0.0%	1	0.7%
BULGARIAN	63	3.1%	20	2.1%	27	2.9%	2	18.2%	14	9.3%
MYANMAR	61	3.0%	25	2.6%	34	3.7%	-	0.0%	2	1.3%
CHINESE (PRC)	48	2.3%	23	2.4%	20	2.2%	-	0.0%	5	3.3%
CHILEAN	31	1.5%	15	1.6%	16	1.7%	-	0.0%	-	0.0%
CHINESE (TAI)	29	1.4%	9	0.9%	14	1.5%	-	0.0%	6	4.0%
Top 10	1,898	92.9%	879	92.0%	871	94.0%	11	100.0%	137	90.7%
BANGLADESH	28	1.4%	15	1.6%	11	1.2%	-	0.0%	2	1.3%
ITALIAN	23	1.1%	12	1.3%	1	0.1%	-	0.0%	10	6.6%
FINLAND	20	1.0%	6	0.6%	13	1.4%	-	0.0%	1	0.7%
UKRAINIAN	16	0.8%	7	0.7%	9	1.0%	-	0.0%	-	0.0%
SINGAPOREAN	12	0.6%	4	0.4%	8	0.9%	-	0.0%	-	0.0%
GREEK	9	0.4%	5	0.5%	4	0.4%	-	0.0%	-	0.0%
YUGOSLAVIAN	8	0.4%	3	0.3%	4	0.4%	-	0.0%	1	0.7%
NORWEGIAN	5	0.2%	5	0.5%	-	0.0%	-	0.0%	-	0.0%
BURMESE	4	0.2%	2	0.2%	2	0.2%	-	0.0%	-	0.0%
POLISH	4	0.2%	3	0.3%	1	0.1%	-	0.0%	-	0.0%
2ND 10	129	6.3%	62	6.5%	53	5.7%	-	0.0%	14	9.3%
TOP 20	2,027	99.2%	941	98.5%	924	99.7%	11	100.0%	151	100.0%
TOTAL	2,044	100.0%	955	100.0%	927	100.0%	11	100.0%	151	100.0%

* As future Officers, Cadets are included in Officer Totals

**CREW NATIONALITIES (DECK OFFICERS)
RO RO'S AND VEHICLE CARRIERS (2004)**

NATIONALITY	DECK OFFICERS		MASTERS		CHIEF OFFICERS		2ND OFFICERS		3RD OFFICERS		4TH OFFICERS		RADIO OFFICERS	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	447	46.8%	48	22.1%	81	33.5%	146	57.9%	139	67.1%	-	0.0%	25	86.2%
SWEDISH	152	15.9%	53	24.4%	61	25.2%	30	11.9%	8	3.9%	-	0.0%	-	0.0%
INDIAN	96	10.1%	26	12.0%	24	9.9%	25	9.9%	21	10.1%	-	0.0%	-	0.0%
JAPANESE	49	5.1%	24	11.1%	16	6.6%	4	1.6%	4	1.9%	-	0.0%	1	3.4%
KOREAN-SOUTH	43	4.5%	28	12.9%	12	5.0%	2	0.8%	-	0.0%	-	0.0%	1	3.4%
BULGARIAN	20	2.1%	2	0.9%	4	1.7%	7	2.8%	7	3.4%	-	0.0%	-	0.0%
MYANMAR	25	2.6%	1	0.5%	8	3.3%	12	4.8%	2	1.0%	-	0.0%	2	6.9%
CHINESE (PRC)	23	2.4%	5	2.3%	5	2.1%	6	2.4%	7	3.4%	-	0.0%	-	0.0%
CHILEAN	15	1.6%	3	1.4%	3	1.2%	3	1.2%	6	2.9%	-	0.0%	-	0.0%
CHINESE (TAI)	9	0.9%	2	0.9%	4	1.7%	2	0.8%	1	0.5%	-	0.0%	-	0.0%
TOP 10	879	92.0%	192	88.5%	218	90.1%	237	94.0%	195	94.2%	8	100.0%	29	100.0%
BANGLADESH	15	1.6%	2	0.9%	9	3.7%	3	1.2%	1	0.5%	-	0.0%	-	0.0%
ITALIAN	12	1.3%	5	2.3%	-	0.0%	3	1.2%	4	1.9%	-	0.0%	-	0.0%
FINLAND	6	0.6%	2	0.9%	1	0.4%	-	0.0%	3	1.4%	-	0.0%	-	0.0%
UKRAINIAN	7	0.7%	-	0.0%	6	2.5%	1	0.4%	-	0.0%	-	0.0%	-	0.0%
SINGAPOREAN	4	0.4%	3	1.4%	-	0.0%	1	0.4%	-	0.0%	-	0.0%	-	0.0%
GREEK	5	0.5%	5	2.3%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
YUGOSLAVIAN	3	0.3%	2	0.9%	-	0.0%	-	0.0%	1	0.5%	-	0.0%	-	0.0%
NORWEGIAN	5	0.5%	4	1.8%	-	0.0%	1	0.4%	-	0.0%	-	0.0%	-	0.0%
BURMESE	2	0.2%	-	0.0%	-	0.0%	1	0.4%	1	0.5%	-	0.0%	-	0.0%
POLISH	3	0.3%	-	0.0%	2	0.8%	-	0.0%	1	0.5%	-	0.0%	-	0.0%
2ND 10	62	6.5%	23	10.6%	18	7.4%	10	4.0%	11	5.3%	-	0.0%	-	0.0%
TOP 20	941	98.5%	215	99.1%	236	97.5%	247	98.0%	206	99.5%	8	100.0%	29	100.0%
TOTAL	955	100.0%	217	100.0%	242	100.0%	252	100.0%	207	100.0%	8	100.0%	29	100.0%

CREW NATIONALITIES (ENGINE OFFICERS)
RO RO'S AND VEHICLE CARRIERS (2004)

NATIONALITY	ENGINE OFFICERS		CHIEF ENGINEERS		1ST ENGINEERS		2ND ENGINEERS		3RD ENGINEERS		4TH ENGINEERS		5TH ENGINEERS		ELECT. ENGINEERS	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	417	45.0%	51	22.7%	49	37.4%	134	56.5%	131	67.9%	38	49.4%	-	0.0%	14	21.9%
SWEDISH	149	16.1%	50	22.2%	36	27.5%	35	14.8%	10	5.2%	1	1.3%	-	0.0%	17	26.6%
INDIAN	113	12.2%	31	13.8%	11	8.4%	24	10.1%	25	13.0%	9	11.7%	6	100.0%	7	10.9%
JAPANESE	38	4.1%	25	11.1%	11	8.4%	2	0.8%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
KOREAN-SOUTH	43	4.6%	28	12.4%	13	9.9%	2	0.8%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
BULGARIAN	27	2.9%	3	1.3%	1	0.8%	3	1.3%	2	1.0%	12	15.6%	-	0.0%	6	9.4%
MYANMAR	34	3.7%	2	0.9%	-	0.0%	6	2.5%	6	3.1%	7	9.1%	-	0.0%	13	20.3%
CHINESE (PRC)	20	2.2%	5	2.2%	1	0.8%	5	2.1%	5	2.6%	3	3.9%	-	0.0%	1	1.6%
CHILEAN	16	1.7%	4	1.8%	3	2.3%	4	1.7%	4	2.1%	-	0.0%	-	0.0%	1	1.6%
CHINESE (TAI)	14	1.5%	6	2.7%	2	1.5%	1	0.4%	3	1.6%	-	0.0%	-	0.0%	2	3.1%
TOP 10	871	94.0%	205	91.1%	127	96.9%	216	91.1%	186	96.4%	70	90.9%	6	100.0%	61	95.3%
BANGLADESH	11	1.2%	1	0.4%	1	0.8%	6	2.5%	3	1.6%	-	0.0%	-	0.0%	-	0.0%
ITALIAN	1	0.1%	1	0.4%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
FINLAND	13	1.4%	10	4.4%	1	0.8%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	2	3.1%
UKRAINIAN	9	1.0%	4	1.8%	-	0.0%	3	1.3%	1	0.5%	1	1.3%	-	0.0%	-	0.0%
SINGAPOREAN	8	0.9%	1	0.4%	-	0.0%	7	3.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
GREEK	4	0.4%	2	0.9%	-	0.0%	1	0.4%	1	0.5%	-	0.0%	-	0.0%	-	0.0%
YUGOSLAVIAN	4	0.4%	1	0.4%	1	0.8%	1	0.4%	1	0.5%	-	0.0%	-	0.0%	-	0.0%
NORWEGIAN	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
BURMESE	2	0.2%	-	0.0%	-	0.0%	1	0.4%	1	0.5%	-	0.0%	-	0.0%	-	0.0%
POLISH	1	0.1%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1	1.6%
2ND 10	53	5.7%	20	8.9%	3	2.3%	19	8.0%	7	3.6%	1	1.3%	-	0.0%	3	4.7%
TOP 20	924	99.7%	225	100.0%	130	99.2%	235	99.2%	193	100.0%	71	92.2%	6	100.0%	64	100.0%
TOTAL	927	100.0%	225	100.0%	131	100.0%	237	100.0%	193	100.0%	77	100.0%	6	100.0%	64	100.0%

**CREW NATIONALITIES (UNLICENSED)
RO RO'S AND VEHICLE CARRIERS (2004)**

<u>NATIONALITY</u>	<u>TOTAL UNLICENSED</u>		<u>DECK UNLICENSED</u>		<u>ENGINE UNLICENSED</u>		<u>STEWARD</u>	
	<u>Entries</u>	<u>Percent</u>	<u>Entries</u>	<u>Percent</u>	<u>Entries</u>	<u>Percent</u>	<u>Entries</u>	<u>Percent</u>
FILIPINO	2,203	71.7%	1,126	72.8%	739	67.4%	328	75.2%
INDIAN	198	6.4%	113	7.3%	62	5.7%	16	3.7%
SWEDISH	166	5.4%	97	6.3%	26	2.4%	36	8.3%
CHINESE (PRC)	84	2.7%	40	2.6%	33	3.0%	11	2.5%
SINGAPOREAN	47	1.5%	23	1.5%	12	1.1%	12	2.8%
CHILEAN	44	1.4%	17	1.1%	21	1.9%	6	1.4%
POLISH	30	1.0%	13	0.8%	15	1.4%	1	0.2%
BULGARIAN	29	0.9%	19	1.2%	6	0.5%	4	0.9%
CHINESE (TAI)	27	0.9%	17	1.1%	5	0.5%	5	1.1%
ITALIAN	16	0.5%	11	0.7%	2	0.2%	3	0.7%
TOP 10	2,844	92.5%	1,476	95.5%	921	84.0%	422	96.8%
MALAYSIAN	12	0.4%	11	0.7%	-	0.0%	1	0.2%
MYANMAR	12	0.4%	4	0.3%	6	0.5%	2	0.5%
ROMANIAN	9	0.3%	8	0.5%	-	0.0%	1	0.2%
FINLAND	8	0.3%	4	0.3%	3	0.3%	1	0.2%
KOREAN-SOUTH	6	0.2%	3	0.2%	2	0.2%	1	0.2%
DANISH	4	0.1%	4	0.3%	-	0.0%	-	0.0%
JAPANESE	4	0.1%	1	0.1%	-	0.0%	3	0.7%
YUGOSLAVIAN	4	0.1%	3	0.2%	-	0.0%	1	0.2%
BANGLADESH	3	0.1%	3	0.2%	-	0.0%	-	0.0%
BURMESE	3	0.1%	3	0.2%	-	0.0%	-	0.0%
2ND 10	65	2.1%	44	2.8%	11	1.0%	10	2.3%
TOP 20	2,909	94.6%	1,520	98.3%	932	85.0%	432	99.1%
TOTAL	3,074	100.0%	1,546	100.0%	1,097	100.0%	436	100.0%

**CREW NATIONALITIES (UNLICENSED DECK)
RO RO'S AND VEHICLE CARRIERS (2004)**

NATIONALITY	TOTAL DECK		BOSUN		AB SEAMAN		ORDINARY SEAMAN		GENERAL PURPOSE		OTHER DECK	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	1,136	73.5%	151	77.8%	603	78.3%	261	83.4%	8	21.1%	113	48.9%
INDIAN	119	7.7%	16	8.2%	36	4.7%	14	4.5%	24	63.2%	29	12.6%
SWEDISH	103	6.7%	5	2.6%	61	7.9%	1	0.3%	-	0.0%	36	15.6%
CHINESE (PRC)	40	2.6%	7	3.6%	15	1.9%	13	4.2%	-	0.0%	5	2.2%
SINGAPOREAN	23	1.5%	5	2.6%	18	2.3%	-	0.0%	-	0.0%	-	0.0%
BULGARIAN	19	1.2%	1	0.5%	1	0.1%	2	0.6%	1	2.6%	14	6.1%
CHILEAN	17	1.1%	2	1.0%	9	1.2%	6	1.9%	-	0.0%	-	0.0%
CHINESE (TAI)	17	1.1%	2	1.0%	6	0.8%	3	1.0%	-	0.0%	6	2.6%
POLISH	14	0.9%	-	0.0%	2	0.3%	3	1.0%	5	13.2%	4	1.7%
ITALIAN	11	0.7%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	11	4.8%
TOP 10	1,499	97.0%	189	97.4%	751	97.5%	303	96.8%	38	100.0%	218	94.4%
MALAYSIAN	11	0.7%	3	1.5%	8	1.0%	-	0.0%	-	0.0%	-	0.0%
ROMANIAN	8	0.5%	-	0.0%	-	0.0%	8	2.6%	-	0.0%	-	0.0%
DANISH	4	0.3%	-	0.0%	4	0.5%	-	0.0%	-	0.0%	-	0.0%
FINLAND	4	0.3%	-	0.0%	3	0.4%	-	0.0%	-	0.0%	1	0.4%
MYANMAR	4	0.3%	1	0.5%	-	0.0%	-	0.0%	-	0.0%	3	1.3%
BANGLADESH	3	0.2%	-	0.0%	-	0.0%	1	0.3%	-	0.0%	2	0.9%
BURMESE	3	0.2%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	3	1.3%
KOREAN-SOUTH	3	0.2%	-	0.0%	1	0.1%	1	0.3%	-	0.0%	1	0.4%
YUGOSLAVIAN	3	0.2%	-	0.0%	2	0.3%	-	0.0%	-	0.0%	1	0.4%
JAPANESE	1	0.1%	1	0.5%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
2ND 10	44	2.8%	5	2.6%	18	2.3%	10	3.2%	-	0.0%	11	4.8%
TOP 20	1,543	99.8%	194	100.0%	769	99.9%	313	100.0%	38	100.0%	229	99.1%
TOTAL	1,546	100.0%	194	100.0%	770	100.0%	313	100.0%	38	100.0%	231	100.0%

CREW NATIONALITIES (UNLICENSED ENGINE)
RO RO'S AND VEHICLE CARRIERS (2004)

NATIONALITY	TOTAL ENGINE		J.ENG/QMED		ELECTRICIANS		PUMP/FITTER/MECH		OILER/MOTOR		WIPER/DEU		OTHER ENGINE	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	739	67.4%	-	0.0%	48	66.7%	135	37.2%	437	87.6%	119	82.1%	-	0.0%
INDIAN	62	5.7%	8	100.0%	14	19.4%	16	4.4%	6	1.2%	15	10.3%	3	30.0%
SWEDISH	26	2.4%	-	0.0%	1	1.4%	13	3.6%	12	2.4%	-	0.0%	-	0.0%
CHINESE (PRC)	33	3.0%	-	0.0%	3	4.2%	10	2.8%	16	3.2%	4	2.8%	-	0.0%
CHILEAN	21	1.9%	-	0.0%	3	4.2%	6	1.7%	9	1.8%	3	2.1%	-	0.0%
POLISH	15	1.4%	-	0.0%	-	0.0%	12	3.3%	3	0.6%	-	0.0%	-	0.0%
SINGAPOREAN	12	1.1%	-	0.0%	-	0.0%	7	1.9%	5	1.0%	-	0.0%	-	0.0%
BULGARIAN	6	0.5%	-	0.0%	1	1.4%	3	0.8%	2	0.4%	-	0.0%	-	0.0%
MYANMAR	6	0.5%	-	0.0%	-	0.0%	6	1.7%	-	0.0%	-	0.0%	-	0.0%
CHINESE (TAI)	5	0.5%	-	0.0%	-	0.0%	2	0.6%	3	0.6%	-	0.0%	-	0.0%
TOP 10	925	84.3%	8	100.0%	70	97.2%	210	57.9%	493	98.8%	141	97.2%	3	30.0%
FINLAND	3	0.3%	-	0.0%	-	0.0%	-	0.0%	3	0.6%	-	0.0%	-	0.0%
ITALIAN	2	0.2%	-	0.0%	-	0.0%	1	0.3%	1	0.2%	-	0.0%	-	0.0%
KOREAN-SOUTH	2	0.2%	-	0.0%	-	0.0%	-	0.0%	2	0.4%	-	0.0%	-	0.0%
BANGLADESH	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
BURMESE	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
DANISH	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
JAPANESE	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
MALAYSIAN	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
ROMANIAN	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
YUGOSLAVIAN	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
2ND 10	7	0.6%	-	0.0%	-	0.0%	1	0.3%	6	1.2%	-	0.0%	-	0.0%
TOP 20	932	85.0%	8	100.0%	70	97.2%	211	58.1%	499	100.0%	141	97.2%	3	30.0%
TOTAL	1,097	100.0%	8	100.0%	72	100.0%	363	100.0%	499	100.0%	145	100.0%	10	100.0%

**CREW NATIONALITIES (UNLICENSED STEWARD)
RO RO'S AND VEHICLE CARRIERS (2004)**

NATIONALITY	TOTAL STEWARD		CHIEF STEWARD/COOK		COOKS		STEWARDS		MESSMEN/BOYS	
	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent	Entries	Percent
FILIPINO	328	75.2%	125	66.1%	49	64.5%	18	11.4%	136	80.0%
SWEDISH	36	8.3%	8	4.2%	9	11.8%	5	3.2%	14	8.2%
INDIAN	16	3.7%	3	1.6%	3	3.9%	3	1.9%	7	4.1%
CHINESE (PRC)	11	2.5%	5	2.6%	2	2.6%	-	0.0%	4	2.4%
SINGAPOREAN	12	2.8%	9	4.8%	-	0.0%	1	0.6%	2	1.2%
CHILEAN	6	1.4%	3	1.6%	-	0.0%	-	0.0%	3	1.8%
CHINESE (TAI)	5	1.1%	1	0.5%	1	1.3%	2	1.3%	1	0.6%
BULGARIAN	4	0.9%	-	0.0%	2	2.6%	1	0.6%	1	0.6%
JAPANESE	3	0.7%	2	1.1%	-	0.0%	1	0.6%	-	0.0%
ITALIAN	3	0.7%	1	0.5%	2	2.6%	-	0.0%	-	0.0%
TOP 10	424	97.2%	157	83.1%	68	89.5%	31	19.6%	168	98.8%
MYANMAR	2	0.5%	-	0.0%	-	0.0%	2	1.3%	-	0.0%
FINLAND	1	0.2%	-	0.0%	1	1.3%	-	0.0%	-	0.0%
KOREAN-SOUTH	1	0.2%	1	0.5%	-	0.0%	-	0.0%	-	0.0%
MALAYSIAN	1	0.2%	1	0.5%	-	0.0%	-	0.0%	-	0.0%
POLISH	1	0.2%	-	0.0%	-	0.0%	1	0.6%	-	0.0%
ROMANIAN	1	0.2%	-	0.0%	1	1.3%	-	0.0%	-	0.0%
YUGOSLAVIAN	1	0.2%	-	0.0%	1	1.3%	-	0.0%	-	0.0%
BURMESE	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
BANGLADESH	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
DANISH	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
2ND 10	8	1.8%	2	1.1%	3	3.9%	3	1.9%	-	0.0%
TOP 20	432	99.1%	159	84.1%	71	93.4%	34	21.5%	168	98.8%
TOTAL	436	100.0%	189	100.0%	76	100.0%	158	100.0%	170	100.0%

BULK VESSELS (2004)
AVERAGE CREW BY VESSEL SIZE AND AGE

ALL BULK VESSELS

D W T (000's)

	0 - 10	10 - 25	25 - 40	40 - 70	70 - 110	110 - 175	> 175	ALL
0 - 5 Yrs	NA	19.8	20.1	21.2	20.9	20.0	NA	20.4
A	NA	20.7	20.8	22.0	21.4	NA	*	21.2
G	NA	19.8	21.9	23.1	23.4	NA	NA	22.0
E	7.3	21.6	23.0	23.4	21.0	NA	NA	19.7
> 20	19.5	21.8	23.9	25.7	26.2	27.0	NA	24.0
ALL	13.4	20.7	21.9	23.1	22.5	23.5	NA	22.2

**CONTAINER VESSELS (2004)
AVERAGE CREW BY VESSEL SIZE AND AGE**

TEU'S

	0-1000	1000-1500	1500-2500	2500-4000	>4000	ALL
0 - 5 Yrs	12.3	17.1	20.5	22.2	22.2	21.5
6 - 10	14.4	17.8	20.6	21.7	21.1	21.1
11 - 15	15.1	15.2	20.7	22.9	22.4	22.1
16 - 20	NA	20.5	23.2	22.8	22.2	22.7
> 20	15.7	23.6	23.8	22.5	NA	22.6
ALL	17.5	19.6	21.2	22.4	20.7	21.1

A

G

E

RORO - VEHICLE CARRIER VESSELS (2004)
AVERAGE CREW BY VESSEL SIZE AND AGE

ALL RORO VESSELS

D W T (000's)

	0 - 10	10 - 25	25 - 40	40 - 70	70 - 110	ALL
0 - 5 Yrs	NA	20.3	NA *	NA *	NA	20.3
A	20.0 *	21.1 *	NA *	N/A	NA	20.5
G	NA	22.3	19.0	NA	NA	20.6
E	22.5	22.6	21.0	22.7	NA	22.2
> 20	22.0	23.5	23.2	20.3	NA	22.2
ALL	21.5	22.0	21.1	21.5	NA	21.1

**TANKER VESSELS (2004)
AVERAGE CREW BY VESSEL SIZE AND AGE**

ALL TANKERS**

D W T (000's)

	0 - 10	10 - 25	25 - 40	40 - 70	70 - 110	110 - 175	> 175	ALL
0 - 5 Yrs	16.5	19.2	21.1	23.9	23.8	23.9	27.5	22.3
A	14.0	20.2	20.7	24.8	23.7	24.7	24.8 *	21.8
G	19.6	22.1	21.1	23.2	25.5	27.2	29.5	24.0
E	18.7	23.1	25.6	25.9	26.9	NA *	NA	24.0
> 20	19.6	24.3	28.5	27.6	23.5	23.0	20.5	23.8
ALL	17.6	21.7	23.4	25.0	24.6	24.7	25.2	23.1

**BULK VESSELS
ACTUAL CREW COMPLEMENTS**

	ORE/OIL CARRIER		CEMENT CARRIER		BULK CARRIER		BULK CARRIER	
	LIBERIAN FLAG	PANAMA FLAG	PANAMA FLAG	MALTA FLAG	MALTA FLAG	PANAMA FLAG	PANAMA FLAG	PANAMA FLAG
OFFICERS								
Master	1 Norwegian	1 Mexican	1	1 Ukrainian	1	1 Bulgarian		
Chief Officer	1 Polish	1 Mexican	1	1 Ukrainian	1	1 Filipino		
2nd Officer	1 Polish	1 Mexican	1	1 Ukrainian	1	1 Filipino		
3rd Officer	1 Polish	1 Panamanian	1	1 Ukrainian	1	1 Filipino		
4th Officer								
Radio Officer								
Chief Engineer	1 Croatian	1 Mexican	1	1 Ukrainian	1	1 Bulgarian		
1st Engineer	1 Croatian	2 Mexican	2	1 Ukrainian	1	1 Filipino		
2nd Engineer		1 Mexican	1	1 Ukrainian	1	1 Filipino		
3rd Engineer				1 Ukrainian	1	1 Filipino		
4th Engineer				1 Ukrainian	1	1 Filipino		
5th Engineer								
Electrical Engineer				1 Ukrainian	1			
Other Officers								
Cadet		1 Venezuelan	1					
UNLICENSED								
Bosun	1 Trinidad		2	1 Ukrainian	1	1 Filipino		
AB Seaman	2 Trinidad		2	6 Ukrainian	6	3 Filipino		
Ordinary Seaman						2 Filipino		
General Purpose								
Other Unlic Deck								
Junior Eng'r/QMED								
Electrician			1					
Pump/Fitter/Mechanic	2 Trinidad	1 Mexican	1	4 Ukrainian	4	3 Filipino		
Oiler/Motorman		1 Mexican	1	3 Ukrainian	3	1 Filipino		
Wiper/DEU	1 Trinidad	3 Mexican	3					
Other Unlic Engine	3 Trinidad							
Chief Steward/Cook	1 Trinidad					1 Filipino		
Cook			1	1 Ukrainian	1			
Steward	1 Trinidad	1 Mexican	1	1 Ukrainian	1			
Messman/Boy		1 Mexican	1			1 Filipino		
Total Crew	16		20		25		20	

CONTAINER VESSELS
ACTUAL CREW COMPLEMENTS

	CONTAINERSHIP		
	LIBERIAN FLAG	CYPRUS FLAG	BERMUDA FLAG
<u>OFFICERS</u>			
Master	1 Indian	1 Bulgarian	1 Croatian
Chief Officer	1 Indian	1 Bulgarian	1 Croatian
2nd Officer	1 Indian	1 Poland	1 Croatian
3rd Officer	1	1 Bulgarian	1 Croatian
4th Officer			
Radio Officer			
Chief Engineer	1 Indian	1 Bulgarian	1 Croatian
1st Engineer	1 Indian	1 Poland	
2nd Engineer	1 Indian	1 Poland	1 Croatian
3rd Engineer	1	1 Poland	1 Croatian
4th Engineer	1 Indian		1 Croatian
Cargo Engineer			
Electrical Engineer		1 Poland	
Other Officers			
Cadet	1 Gibraltar		
<u>UNLICENSED</u>			
Bosun	1 Indian	1 Filipino	1 Croatian
AB Seaman	3 Indian	3 Filipino	3 Croatian
Ordinary Seaman	2 Indian	2 Filipino	1 Croatian
General Purpose			
Other Unlic Deck			
Junior Eng'r/QMED			
Electrician	1 Indian		1 Croatian
Pump/Fitter/Mechanic	2 Indian	1 Bulgarian	1 Croatian
Oiler/Motorman	2 Indian	3 Filipino	
Wiper/DEU	1 Indian	1 Filipino	3 Croatian
Other Unlic Engine			
Chief Steward/Cook	1 Indian		
Cook			
Steward		1 Filipino	1 Croatian
Messman/Boy	1 Indian	1 Filipino	1 Croatian
Total Crew	22	22	20

TANKER VESSELS
ACTUAL CREW COMPLEMENTS

	CRUDE OIL		LPG TANKER		FRUIT JUICE TANKER	
	GREECE FLAG	ITALY FLAG	ITALY FLAG	LIBERIA FLAG		
OFFICERS						
Master	1 Greek	1 Italian		1 Croatian		
Chief Officer	1 Greek	1 Italian		1 Croatian		
2nd Officer	2 Greek	4 Italian/Filipino		1 Croatian		
3rd Officer				1 Croatian		
4th Officer						
Radio Officer						
Chief Engineer	1 Greek	1 Italian		1 Croatian		
1st Engineer						
2nd Engineer			1 Argentina	1 Croatian		
3rd Engineer	1 Greek	1 Argentina		1 Croatian		
4th Engineer				1 Croatian		
Cargo Engineer						
Electrical Engineer						
Other Officers						
Cadet		4 Italian/Filipino				
UNLICENSED						
Bosun	1 Greek	1 Filipino		1 Spanish		
AB Seaman	4 Filipino	3 Filipino		2 Croatian/Ukrainian		
Ordinary Seaman	2 Filipino	3 Filipino		2 Croatian		
General Purpose						
Other Unlic Deck						
Junior Eng'r/QMED						
Electrician	1 Greek	1 Spanish		1 Polish		
Pump/Fitter/Mechanic		4 Italian/Filipino	Spanish	1 Croatian		
Oilier/Motorman	1 Filipino			2 Croatian		
Wiper/DEU	1 Filipino	1 Filipino		2 Croatian		
Other Unlic Engine						
Chief Steward/Cook	1 Greek	1 Italian		1 Croatian		
Cook	1 Filipino			1 Croatian		
Steward	2 Greek			1 Croatian		
Messman/Boy		1 Filipino		1 Croatian		
Total Crew	20	28		22		

RORO - VEHICLE CARRIER VESSELS
ACTUAL CREW COMPLEMENTS

	VEHICLE CARRIER		CONTAINER RO-RO	VEHICLES CARRIER	
	PANAMANIAN FLAG	SWEDISH FLAG	JAPAN FLAG		
<u>OFFICERS</u>					
Master	1	1	1	1	1
Chief Officer	1	1	1	1	1
2nd Officer		2	2	1	1
3rd Officer	1			1	1
4th Officer					
Radio Officer					
Chief Engineer	1	1	1	1	1
1st Engineer		1	1	1	1
2nd Engineer	1	2	2	1	1
3rd Engineer	1			1	1
4th Engineer					
Cargo Engineer					
Electrical Engineer	1				
Other Officers					
Cadet	2	2	2		
<u>UNLICENSED</u>					
Bosun	1		1		1
AB Seaman	3		5		3
Ordinary Seaman	2				3
General Purpose					
Other Unlic Deck					
Junior Eng'r/QMED					
Electrician					
Pump/Fitter/Mechanic	1		1		4
Oiler/Motorman	2		1		1
Wiper/DEU	1		2		1
Other Unlic Engine					
Chief Steward/Cook			1		1
Cook					1
Steward					
Messman/Boy	1		2		
Total Crew	20	23	22		22

APPENDICES

**CREW LIST DISTRIBUTION
By Port and Month (2003)**

<u>Port</u>	<u>Total</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Houston, TX	474		27			1	1	7	7	125	90	118	105
Los Angeles, CA	418						1	72	52	79	42	69	103
Long Beach, CA	629		8	3	3	13		168	116	70	60	117	71
Miami, FL	649					108	73	78	132	78	104	45	31
New Orleans, LA	1,066	1		5		180	160	2	82	152	153	162	169
Newark	632					75	41	38	99	100	86	97	96
New York	396		23	102		39	42	20	52	65	24	5	24
Savannah, GA	83					49	34						
Seattle, WA	117					1	31	13	24			48	
Total Crew Lists	4,464	1	58	110	3	466	383	391	564	669	559	661	599

By Port and Month (2004)

<u>Port</u>	<u>Total</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Houston, TX	569	126	85	128	125	3	101	11	14	1			
Los Angeles	443	95	67	74	101	81							
Long Beach	402	85	65	72	92	88							
Miami, FL	306	80	15	113		92	6						
New Orleans, LA	699	163	117	145	137	133	3	1					
Newark	121	70		4		2	45						
New York	261	26		46	63	56	70						
Total Crew Lists	2,801	645	349	582	518	455	225	12	14	1			

**VESSEL CALLS AT U.S. STUDY PORTS
VESSEL PORT CALLS 2004***

<u>PORTS</u>	<u>TANKERS</u>	<u>COMBINATION</u>	<u>GAS CARRIERS</u>	<u>BULK VESSELS</u>	<u>OTHER GENERAL CARGO</u>	<u>CONTAINERSHIPS</u>	<u>RO-RO'S</u>	<u>TOTALS</u>
HOUSTON	2612	122	185	680	300	748	210	4857
NEW ORLEANS	1162	56	97	2453	304	335	0	4407
LOS ANGELES/ LONG BEACH	914	0	0	591	294	2975	348	5122
NEW YORK	1319	106	10	339	156	2296	627	4853
MIAMI	0	0	0	0	57	860	239	1156
STUDY PORTS	6007	284	292	4063	1111	7214	1424	20395
ALL TOTAL	18503	666	926	10270	3915	17287	5191	56758
% STUDY PORTS	32.5%	42.6%	31.5%	39.6%	28.4%	41.7%	27.4%	35.9%

* Source: Vessel Calls at U.S. Ports 2003, July 2004, Office of Statistical and Economic Analysis,
U.S. Department of Transportation, Maritime Administration

**REGIONS OF CREW SUPPLY
COUNTRY BREAKDOWN**

REGION: <u>OTHERS</u>	<u>ASIA</u>	<u>EASTERN EUROPE</u>	<u>WESTERN EUROPE</u>	<u>SOUTH & CENTRAL AMERICA</u>
ALGERIA	BANGLADESH	ARMENIA	AUSTRIA	ARGENTINA
BENIN	CAMBODIA	AZERBAIJAN	BELGIUM	BELIZE
BOTSWANA	CHINA (PRC)	BELARUS	DENMARK	BOLIVIA
CANADA	CHINA (TAIWAN)	BULGARIA	FINLAND	BRAZIL
CAPE VERDE REPUBLIC	HONG KONG	CROATIA	FRANCE	BRITISH VIRGIN ISLANDS
CYPRUS	INDIA	CZECH REPUBLIC	GERMANY	CHILE
EGYPT	INDONESIA	ESTONIA	GREECE	COLOMBIA
ETHIOPIA	JAPAN	GEORGIA	ICELAND	COSTA RICA
FIJI	KOREA	HUNGARY	IRISH REPUBLIC	CUBA
GHANA	MALAYSIA	LATVIA	ITALY	DOMINICAN REPUBLIC
GUINEA-BISSAU	MALDIVES	LITHUANIA	LIECHTENSTEIN	ECUADOR
IRAQ	MYANMAR	MODOLVA	NETHERLANDS	EL SALVADOR
ISRAEL	PAKISTAN	POLAND	NORWAY	GRENADA
JORDAN	PHILIPPINES	ROMANIA	PORTUGAL	GUATEMALA
KENYA	SINGAPORE	RUSSIA	SPAIN	GUYANA
KIRBATI	SRI LANKA	SLOVENIA	SWEDEN	HAITI
LEBANON	THAILAND	SLOVAKIA	SWITZERLAND	HONDURAS
LIBERIA	VIETNAM	TURKMENISTAN		JAMAICA
MADAGASCAR		UKRAINE		MONTERRAT
NEW ZEALAND		YUGOSLOVIA		MEXICO
NIGERIA				NICARAGUA
SAUDI ARABIA				PANAMA
SENEGAL				PERU
SOUTH AFRICA				ST LUCIAN
SYRIA				ST VINCENT & GRENADINES
TANZANIA				TRINIDAD & TOBAGO
TURKEY				URUGUAY
TUVALU				VENEZUELA

