

# ort State Control

Australia



## 2002

## **PORT STATE CONTROL REPORT**





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## PREFACE

Welcome to the 2002 AMSA port State control annual report. 2002 was another very active year for port State control in Australia and once again it was demonstrated that some ship owners, flag States and Classification Societies are still unable or unwilling to fulfil all of their obligations under the international conventions intended to protect people's lives and the marine environment.

During 2002, 2842 inspections were carried out on foreign flag ships, which resulted in 166 detentions. This represents a detention rate of 5.8% which is an increase of 1.4% when compared to the previous year's rate of 4.4%. However, we do not believe that this is due to a decrease in the quality of ships calling at Australian ports; on the contrary, the average number of deficiencies found per inspection continues to decrease.

Instead, we attribute the increase in detention rate to several factors, which are outlined in detail in the body of this report, but include:

- The full implementation of the STCW Convention (as amended in 1995) requirements for seafarer certification to be recognised by the flag State of the ship on which the seafarer is serving. Despite the long transitional period allowed under this Convention, and a further amnesty granted by port State control authorities around the world, many ships were still found to have officers on board not in compliance with this requirement;
- The continuation of AMSA's Focused Inspection Campaign on areas of concern; and
- Further concentration of AMSA inspection resources towards ships considered to pose a higher risk.

World events, such as the loss of the tanker Prestige off Spain and subsequent worldwide reaction, are closely monitored by AMSA in order to assess how these may impact upon Australia. AMSA will continue to respond as necessary to such events and in the case of the Prestige, has taken several measures including raising the inspection rate for single hull oil tankers to 100%.

AMSA continues to devote considerable resources to its port State control program in the form of personnel, training, information systems and contributions to regional agreements on port State control. The objective remains the eradication of substandard shipping. To this end, AMSA also continues to examine the statistics related to port State control in Australia in order to continually assess the effectiveness of the program and identify areas where we can improve performance.

Clive Davidson Chief Executive Officer Australian Maritime Safety Authority May 2003

	1998	1999	2000	2001	2002
Total Inspections	2946	2753	2926	2913	2842
Total Detentions	201	145	125	127	166
Detention %	6.8	5.3	4.3	4.4	5.8

## SUMMARY OF DETENTIONS AND INSPECTIONS

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#### **OVERVIEW**

#### **Port State Control - Application**

A number of international maritime conventions adopted by the International Maritime Organization (IMO) and the International Labour Organization (ILO) provide nations with the instruments to conduct control inspections of foreign ships visiting their ports. These inspections are called port State control (PSC) inspections.

Port State control is the regime under which the Australian Maritime Safety Authority (AMSA) inspects foreign ships visiting Australian ports to ensure they comply with internationally accepted standards. This plays an important part in identifying and then eliminating sub-standard ships from Australian waters.

When shipowners, Classification Societies and flag State administrations have failed to comply with the requirements of the international conventions, port State control comes into effect. PSC inspections are conducted to verify that foreign ships are seaworthy, do not pose a pollution risk, provide a healthy and safe working environment and comply with the relevant conventions.

Under international law, it is the responsibility of the flag State to ensure that all ships flying its flag meet the applicable international standards. Port State control complements the responsibility of the flag State; it does not replace it.

#### Port State Control in Australia

In Australia, AMSA has the responsibility for conducting PSC inspections in Australian ports. There are 14 ports permanently manned by 40 AMSA surveyors. These surveyors undertake PSC inspections and other duties related to ship safety and protection of the marine environment. In addition there are 65 other ports, that are not permanently manned by AMSA surveyors, where PSC inspections are regularly carried out. A list of 63 of these ports is presented later in this report showing the number of ships inspected in each port by AMSA surveyors during the 2002 calendar year.

AMSA's objective is to inspect at least 50% of foreign ships visiting Australian ports. The percentage is based on the number of "eligible" ships visiting Australian ports during a given year. For this purpose, an "eligible" ship means one that has not been inspected by AMSA during the six months immediately preceding its date of arrival at an Australian port. In the case of tankers of 15 years of age or over and for all passenger ships, this period is three months. In achieving this inspection level, eligible ships are selected for inspection on the basis of assessed risk that a particular ship would be found unseaworthy.

Briefly, when undertaking a PSC inspection, the surveyor initially verifies that the vessel has valid certificates and documents on board, as required under the international conventions for the voyage in question. In addition, surveyors use a standard initial checklist and inspect critical areas essential for the safe operation of the ship. This approach allows the surveyor to gain the necessary overall impression of the vessel's condition. Where certification is invalid, or there are clear grounds to suspect that the ship and/ or its equipment or crew may substantially not comply with the relevant requirements, a more detailed inspection may be undertaken.

During the inspection, details are recorded in a unique Ship Inspection Record (SIR) Book, which also contains guidelines, checklists and forms required for an inspection. The guidance and initial checklist provides the baseline standard for conducting PSC inspections. Beyond this, surveyors also utilise their professional judgement to determine the extent to which a ship needs to be inspected following the initial inspection. Included in the SIR Book is a specific section covering tanker inspections. The SIR Book forms the basis for information to be transferred to the AMSA ship inspection database (Shipsys). The information from the database is readily available at computer terminals in all AMSA offices for immediate access by administration and survey staff. During 2002, Shipsys was enhanced through active information exchange with the Asia Pacific Computer Information System (APCIS), operated by the Tokyo MOU. Interested parties may view PSC inspection results from all member countries through the Tokyo MOU website at www.tmou.org

#### **PSC Training**

To meet AMSA's objectives, considerable resources are directed towards training. A structured training scheme requires all newly recruited AMSA surveyors to receive PSC training at the commencement of their service. Existing surveyors are given periodic refresher training. As part of this ongoing training, all AMSA surveyors attended workshops during 2002 to promote a uniform approach to PSC inspections. At these workshops, new ideas were exchanged and surveyor knowledge updated to reflect recent changes to SOLAS, MARPOL and related IMO Codes. A system of surveyor interchange between AMSA regional offices was explored and a program has been instigated to allow surveyors to spend time in another region to expand their PSC inspection experience. It is intended that this exchange program will be completed by all surveyors over a period of two to three years.

Other outcomes from the workshop included a totally revised SIR Book and ideas for enhancements to Shipsys. In addition positive discussion was held on the continuation of the Focussed Inspection Campaigns (FIC). Additional AMSA specific training is being structured for all surveyors to ensure the effectiveness of the campaigns.

To remain up-to-date with current legislation and technology, AMSA maintains an intranet surveyor information system that is an integral part of its management system. During 2002 the AMSA intranet was redeveloped. Reference materials available include the *Navigation Act 1912*, Marine Orders, Instructions To Surveyors, IMO Resolutions, Circulars and Conventions. This method of promulgation of reference material keeps AMSA surveyors' knowledge current and also solves a quality management issue by ensuring controlled versions of documents are available at all AMSA offices simultaneously around the country.

AMSA also operates an external website at www.amsa.gov.au for the interest of other parties. Port State control information is available here and includes topics such as statistics, annual reports, focussed inspection campaigns and up-to-date monthly ship detention lists.

Conscious of the need to actively monitor its PSC activities, AMSA ensures it is performing in the most effective and efficient manner by continuous auditing. All AMSA office administrative and survey staff are subjected to periodic audits. The PSC auditing program plays a vital role in monitoring AMSA surveyors' PSC inspection activities and has been developed to support and reinforce the objectives of the PSC training program. PSC auditors are Senior Surveyors selected from regional offices and tasked with auditing areas outside of their own regions. Similarly, a group of PSC trainers are selected from experienced surveyors in the regional offices to train new and existing surveyors to maintain consistency in decision making and in actions taken. The ultimate goal is that all AMSA surveyors properly follow AMSA procedures when conducting PSC inspections in a consistent and uniform manner.

#### Flag State Inspections in Australia

Flag State inspections are carried out on Australian ships in the same manner and with the same frequency as port State control inspections. Australia has delegated statutory surveys required under the various maritime conventions for ships under its flag to six prominent Classification Societies ("Recognised Organisations") with which it has written agreements which clearly define roles and responsibilities of all parties. These agreements conform to the model recommended by IMO. Several strategies are employed by AMSA to ensure that Australian flagged ships continue to meet the necessary standards:

- Periodic audits are undertaken by AMSA auditors on these six Recognised Organisations.
- In the terms of the ISM Code, AMSA retains sole responsibility for and carries out necessary audits of the safety management systems of Australian ship owners and operators.
- Flag State inspections not only cover the same areas as PSC inspections, but also incorporate the requirements of AMSA's role as the Inspectorate under the *Occupational Health and Safety (Maritime Industry) Act 1993.*
- When a vessel is found to be unseaworthy it is detained in the same manner as a PSC detention.

#### **Port State Control - International Perspective**

#### **Regional Port State Control**

Australia conducts a PSC program that complies with both the spirit and the intent of the control provisions contained within the relevant international conventions. In addition to complying with Australian Government safety objectives, AMSA's PSC program also focuses on the aims of the Asia-Pacific and Indian Ocean Memoranda of Understanding on Port State Control, which join the major maritime nations in the Asia-Pacific and Indian Ocean regions to common PSC strategies through the operation of uniform and consistent PSC programs.

Success and experience gained from member states which are participating in the various memoranda of understanding on port State control, has confirmed that more effectiveness can be gained from regional cooperation. The IMO Assembly Resolution A.682(17) "Regional Cooperation in the Control of Ships and discharges" recognises this fact. Identification of unsafe ships and rectification of serious defects before departure has led to reduced risks posed by substandard ships around the world.

Since the Paris MOU entered into effect in the early 1980s and the IMO adopted Resolution A.682(17), port State control has gradually made significant developments. These developments have been achieved through the dedicated commitments of responsible maritime Authorities implementing port State control activities. Port State control is now widely accepted as a major driving force in maritime safety and an effective method for combating the risks posed by substandard ships. At present there are eight regional PSC agreements in existence and Australia is an active participant of both the Indian Ocean MOU and the Tokyo MOU.

## 2002 PORT STATE CONTROL TASK

#### **Foreign Flag Shipping Activity**

In 2002, 3,193 foreign flag ships made 17,583 separate calls at 76 Australian ports.

Many ships are regular visitors to Australia, being dedicated to certain bulk, LNG or liner trades. Of the 2,339 ships that made multiple port calls 502 made 10 or more visits (one made 76). However a reasonable proportion of ships are itinerant, irregular visitors with 854 making only a single port call during the year.

#### **Ship Types**

The profile of ship types visiting Australia naturally reflects the mix of Australia's trade, with bulk carriers accounting for 63% of the ships, followed by container ships, oil tankers, general cargo ships and vehicle carriers. These five ship types account for 86% of the ships. The type profile of the foreign fleet is shown in Figure 1.

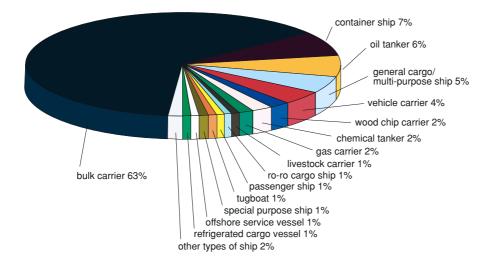
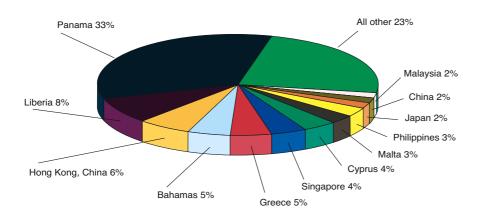


Figure 1 Foreign flag ships visiting Australia in 2002 by type

#### **Flag Profile**

The ships that visited Australia in 2002 represented 72 Flag States, although four Flags - Panama, Liberia, Hong Kong and Bahamas - covered over half of the ships. The flag State of a ship is sometimes given significant weight in the risk management processes of some foreign administrations, but detailed statistical analysis commissioned by AMSA indicates that Flag is of minimal value, if any, as a criterion for identifying higher risk ships. The flag profile of the ships visiting Australia is shown in Figure 2.

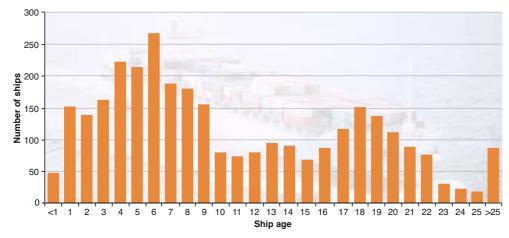


*Figure 2 Foreign ships flag profile* 

#### **Risk Profile of the Foreign Fleet**

Ship age is one of the important factors in targeting higher-risk ships for inspection. The age profile of the fleet of foreign ships in 2002 is shown in Figure 3.

This age profile broadly reflects that of the world fleet. The age of the fleet of ships visiting Australia has fallen over recent years, with a median age of nine years in 2002. The risk ranking of individual ships also takes account of other characteristics, such as ship type, inspection history, Class and flag, in addition to age; resulting in the generation of a numerical "risk factor" that assists AMSA's surveyors to choose which ships to inspect.



*Figure 3 Foreign fleet age profile* 

#### **Inspection Rates**

The volume and risk profile of ships arriving in Australia varies from day to day - total national daily arrivals during 2002 ranged from 20 to 67, with those eligible for inspection ranging from 3 to 27. The number of eligible high risk group ships (ie, those aged 15 or more) arriving in Australia in a single day ranged from 0 to 10.

Some ships stay in port for much shorter time periods than others - from a few hours to days. These variables mean that on a given day there can be more eligible higher-risk ships than can realistically be inspected or there can be mainly lower-risk ships available for inspection. AMSA's PSC workload is thus subject to considerable variation over time.

With 14 offices around the coast covering all ports, AMSA manages its Marine Surveyor resources so that its PSC responsibilities are met effectively and efficiently. Some ports remote from AMSA offices can be accessed more quickly or more easily than others and AMSA's surveyors must, on occasion, balance risk ratings and the logistics of accessing different ships when deciding which to inspect or the order in which they are to be inspected. This means that some, (particularly lower-risk) ships are not necessarily inspected at their first port call.

AMSA aims to inspect at least 50% of ships that are eligible. Given the importance of ship age as one of the main indicators of the likelihood of a ship being unseaworthy, AMSA has adopted subsidiary target inspection rates for certain age-based groups of ships, these are shown below along with the actual inspection rates achieved during 2002.

Ship Age	Target Inspection Rate	Actual Inspection Rate 2002
15 or more years	80%	95%
10 to 14 years	60%	86%
5 to 9 years	40%	74%
Up to 4 years	25%	63%
Overall	> 50%	80%

These inspection rates are calculated on the basis of unique eligible ships which are inspected during the period. Such a ship may have made multiple port calls before being inspected and so these rates may be somewhat higher than considering inspection rates on a port call, or voyage to Australia basis.

These are broad groupings only and the choice as to which ships are inspected is made after considering both the objective risk factor of each individual ship and the surveyor's own knowledge of the ships or operators in question, plus any other relevant intelligence.

The PSC inspections undertaken by AMSA typically reflect the results of risk management analysis. As ship age is a major factor in determining the risk rankings of most ship types, the overall age profile of ships inspected should be such that older ships tend to be inspected more often than younger ships.

This is the case, as shown in more detail in Figure 4, which shows the actual number of ships eligible and inspected by ship age.

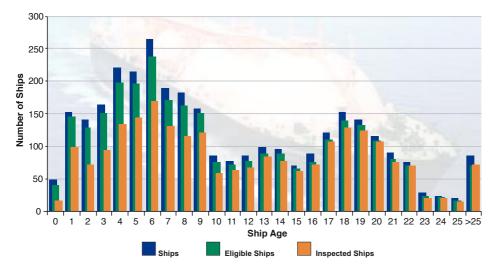


Figure 4 Age profile of ships arriving and inspected in Australia

Of the 3,193 foreign-flag ships that visited Australia in 2002, 2,903 made a total of 5,295 calls at 72 ports while eligible for port State control inspection. Of these 2,317 were subjected to 2,842 inspections at 63 ports - 80% of the eligible ships were therefore inspected at least once during the year. There were 37 inspections of 36 ships that were technically not eligible for inspection.

Of the 854 ships that made a single visit to Australia in 2002, 756 were eligible for inspection. Four hundred and thirty nine of these were inspected at their only port call; an inspection rate of 58%, at 63 ports. Seventy five percent of these single-visit, eligible ships were bulk carriers, 7% oil tankers and 4% general cargo ships. Two hundred and eighty two of the single-visit ships were 15 or more years old and thus categorised as "high risk". 252 of these were eligible for inspection, and 222, or 88%, were inspected.

AMSA gains best value from its marine surveyor workforce by ensuring that they are effectively and efficiently deployed. This is achieved by considering the range of ports where ships typically call and intelligently selecting the optimum location at which a ship is inspected. This strategy takes account of AMSA's risk management

analysis of ships and means that higher risk ships are more likely to be inspected sooner, while inspections of lower risk ships can reasonably be given lower priority, with inspections of these more likely to be deferred to second or subsequent ports of call. These targeting priorities adopted by AMSA produced the following inspection profile in terms of how quickly an eligible ship is inspected.

Visit at	By Risk Group								Overall	
which the ship was inspected (when eligible)	High Risk Insps	Share	Medium High Risk Insps	Share	Medium Low Risk Insps	Share	Medium Low Risk Insps	Share	Number of Insps	Share of Total
First	943	86%	312	75%	496	62%	284	59%	2035	73%
Second	119	11%	74	18%	199	25%	119	25%	511	18%
Third	22	2%	25	6%	64	8%	52	11%	163	6%
Fourth	10	1%	2		26	3%	19	4%	57	2%
Fifth & over	4		4	1%	20	2%	7	1%	39	1%
Total	1098	100%	417	100%	805	100%	481	100%	2805	100%

This data shows that, overall, 90% of PSC inspections were undertaken within the first two port calls after a ship became eligible and that, the higher the risk group, the more likely it is that a ship will be inspected as soon as possible after it becomes eligible for inspection. High risk group ships were much more likely to be inspected within the first two port calls (97%) after becoming eligible for inspection than low risk group ships (84%).

This result is consistent with sensible risk management prioritisation of inspections.

#### **Inspection Results**

An inspection may comprise more than one visit to a ship. An initial visit at which the vessel is assessed and follow-up visits at which any deficiencies found during the initial visit are verified as being rectified or requiring further attention. A standard use of codes allows other PSC inspectors to determine what action is required at a follow-up inspection. During the year 2002, 2,842 initial inspections were carried out on ships registered under 63 foreign flags in 63 different ports around the country. Additionally, 90 inspections were carried out on ships under the Australian flag. Table 1 (page 15) gives the number of inspections carried out in each port during the past five years.

Figure 5 shows the annual number of inspections for the past five years. It can be seen that between 1998 and 2002, AMSA maintained an annual average of more than 2,800 ships inspected.

Bulk carriers continued to constitute the majority of inspections by ship type at 59.6%. Container ships, general cargo/multi-purpose ships, oil tankers and vehicle carriers registered a substantial portion of inspections at about 25% collectively.

The number of ships inspected in each port, by flag State and by type are found in the major tables section from page 15 onwards.

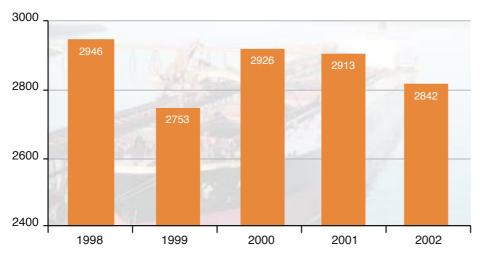


Figure 5 Number of inspections

#### Deficiencies

A deficiency is recorded when the condition of a ship's hull and machinery or its equipment does not conform to the requirements of the relevant IMO safety or pollution prevention convention or where hazards to the health or safety of the crew exist which are considered to be in breach of ILO conventions.

Deficiencies may arise from:

- The absence of either equipment or approved arrangements required by conventions.
- Non-compliance of equipment or arrangements with the appropriate specifications of the relevant convention.
- Substantial deterioration of the ship or its equipment, such as life-saving appliances, fire-fighting equipment or radio equipment.
- Wastage or cracking of the ship's structure.
- Crew certification not complying to STCW95.
- Factors related to the Safety Management System (ISM Code).
- SOLAS and MARPOL operational issues.

In 2002, 7,460 deficiencies were observed on ships and are listed by major categories in terms of totals and percentages in Table 4 (page 17).

Relatively minor deficiencies are found on many ships. These may not pose an immediate hazard to the safety of the ship or its crew or passengers. In such cases sufficient time is allowed for rectification at the discretion of the surveyor, taking into account factors such as the nature of the deficiency, availability of facilities for repairs in the inspection or destination ports, and level of risk the deficiency poses.

While there was a decrease of 71 ship inspections in 2002 compared with that of 2001, the total number of deficiencies has also decreased by over 1,200. The average number of deficiencies per inspection was 2.63, resulting in a 0.35 deficiency point decrease. These overall figures may indicate that the standard of vessels is improving. Figure 6 shows the annual average number of deficiencies per inspection for the period 1998 - 2002.

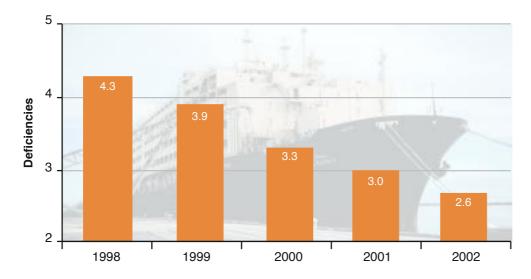


Figure 6 Average number of deficiencies per inspection

As in previous years, fire-fighting equipment and life-saving appliances are the major items where most deficiencies are found. Their combined portion in the total number of deficiencies has gone up from 30.7% last year to 31.8% during 2002. Loadline deficiencies have continued to drop in the last five years. In 1998, 1,327 deficiencies were detected compared with 652 in the last period. The drop of 51% in this category compares favourably against the drop across all categories of 40%. Such an improvement may be attributable to improved maintenance of these areas being fostered by implementation of the ISM Code. The ISM code has become a prominent feature of inspections in the past twelve months and contributes significantly to the number of deficiencies and detentions found during 2002.

Apart from those mentioned above, there was generally a downward trend in the number of deficiencies found in the majority of deficiency categories. For instance, since the last report, deficiencies in SOLAS Operational deficiencies and Radio items have reduced by 24% and 41% respectively.

However, for certain specific categories the figures have gone in the opposite direction. During the past year, there was an upward trend in the number of deficiencies related to Certification and Watch-keeping for Seafarers and MARPOL Annex I, primarily due to the Focussed Inspection Campaigns (FIC) on these topics. Table 5 (page 18) shows the number of deficiencies noted in areas under the Certification and Watchkeeping category and their corresponding percentages. Table 6 (page 18) expands the deficiencies under MARPOL Annex I in detail.

Inspection of Tables 7 and 8 (pages 18 and 19) show that although some individual items are still higher than desirable, the overall deficiency counts are significantly lower. A majority of deficiencies identified under the category of "SOLAS operational" are found to be related to "abandon ship drills" and "muster list" which are important elements of ship safety in the event of a mishap on board. Also of relevance is the number of deficiencies related to "operation of GMDSS equipment".

Both SOLAS and MARPOL contain specific provisions on control of operational requirements and AMSA surveyors have expanded their inspections from traditional checks of the physical condition of a ship and its equipment to also include the ship's crew competence and familiarity with the safety and pollution free operation of their ships.

#### Detentions

A ship is detained under the *Navigation Act of 1912*, when the deficiencies observed during an inspection are considered by the inspecting surveyor to render the ship unseaworthy or substandard. In making this decision, the international maritime safety and pollution prevention conventions are used as the yardstick. AMSA marine surveyors use their professional judgement to determine if a ship should be detained.

When intervention action is taken to detain a ship, AMSA follows international convention requirements of informing the ship's flag State and the appropriate Recognised Organisation that issued the ship's statutory certificates relevant to the detainable deficiencies. Details of the detention are subsequently reported to the IMO.

Serious deterioration of the hull structure, overloading or defective equipment such as life saving, radio and fire-fighting appliances would be considered as deficiencies serious enough to render a ship unseaworthy. Vessels which seriously breach the provisions of Marine Orders Part 11 (Substandard Ships), which invokes the spirit of ILO147, may also be detained if considered to be a safety or health hazard.

The percentage of deficiency categories which resulted in a detention are shown in Figure 7.

In 2002, 166 ships registered under 39 foreign flags were detained in Australia. Worldwide only one Australian flagged ship was detained in the same period, this occurred here in Australia and indicates an unbiased and rigid inspection regime applies to both flag and port State inspections.

#### **Detention Rate**

The detention rate is calculated on the basis of the number of inspections that resulted in detention as a percentage of the total number of inspections. As can be seen from the summary of inspections and detentions on the opening pages of this report, the detention rate for 2002 was 5.8%, an increase of 1.4 percentage points from 2001.

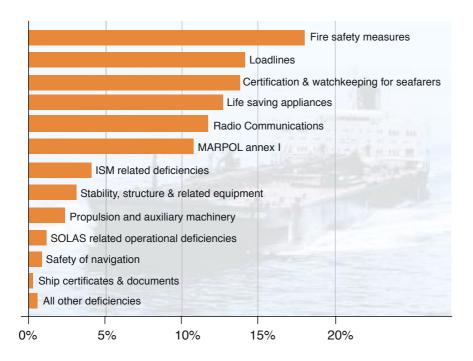


Figure 7 Deficiencies as a percentage of detentions Investigations were made to establish if this was cause for concern - did it reflect a drop in the quality of ships visiting Australia? Noting that the average number of deficiencies per inspection continued to drop, other factors were considered, rather than a drop in quality.

The first factor to consider is the improved risk management approach to allocating inspection resources to higher risk ships, as discussed above. If such a strategy is to be effective and ships with a higher probability of detention are being targeted for inspection, then it is to be expected that the detention rate will increase (ignoring other factors which may be at work).

The second factor to consider is the possible impact of focussed inspection campaigns that were run during 2002, in conjunction with the final expiry of the transitional provisions permitted under STCW 95 and subsequent period of grace permitted by the IMO.

#### Impact of the STCW95 amendments

The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, as amended in 1995 was adopted on 7 July 1995 and scheduled to come into effect on 1 February 2002. However, despite the lengthy lead time, it became evident in late 2001, that many maritime Administrations and seafarers would not be in full compliance before February 2002. In response, the IMO took the extraordinary step of issuing IMO STCW 7 / Circ.12. This notice advised that PSC officers not fully enforce the requirements of the code regarding certification for a period of grace until 31 July 2002, but instead to issue a letter of warning. Australia complied with this request, however full compliance was enforced from 1 August 2002 by running a focussed inspection campaign on the area. The impact of this can be seen clearly in Figure 8.

Obviously, despite the period of grace, action was necessary to ensure full and effective implementation of the convention. During the period of the campaign, 1043 ships were inspected of which 28 were detained with deficiencies related to STCW non-compliances. Nineteen of these ships were detained not having any other deficiencies at that inspection. If these solely STCW detentions were discounted, the underlying detention rate would have been reduced to the order of 5.2%. The primary item of detention was the lack of valid certification for officers which comprised 62% of the deficiencies.

#### Impact of the MARPOL Annex 1 FIC

During the 2002 FIC on MARPOL Annex 1, starting in April, 1100 vessels were inspected of which 12 were detained with MARPOL related deficiencies. However, nine of these vessels were detained as a result of MARPOL deficiencies alone. There was also one other vessel detained, that had an STCW deficiency in conjunction with the MARPOL deficiency. These additional 10 vessels being discounted would have further lowered the rate to 4.8%. The keeping of oil movement records in a proper Oil Record Book, coupled with oil pollution planning were the items causing the majority of deficiencies and amounted to 39.3% of all deficiencies in this category. However, the primary item resulting in detentions was the inoperability of the oil filtering equipment which comprised 18.4%.

In Figure 8, a diagrammatic view is shown of the effect of the resultant MARPOL and STCW 95 detentions on the overall detentions during the year.

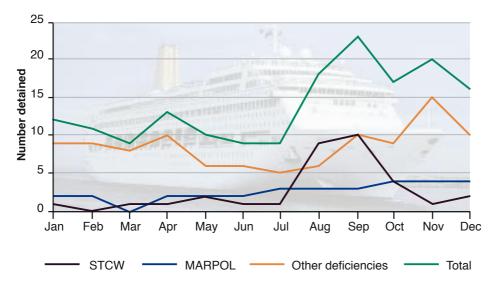
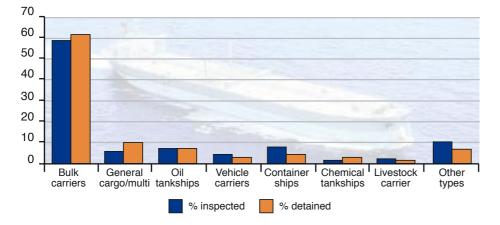
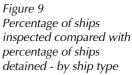


Figure 8 Impact of the Focussed Inspection Campaign (FIC) on detentions

#### Ship Type

Figure 9 shows a comparison of how the main ship types inspected performed with regards to detention. For example, container ships represented 8% of total inspection for the year and only 5% of the total detentions for the year, and so performed quite well. Of some concern here are general cargo ships and chemical tankers which were both over-represented when comparing detentions to inspections.





#### **Responsibility of Recognised Organisations**

During 2002, AMSA surveyors began to assess detainable deficiencies to decide if the detainable deficiency was due to a failure of the recognised organisation to detect the deficiency during surveys. The procedures for this and criteria used for assessment are those adopted by the Tokyo MOU and are identical to those used by the Paris MOU and United States Coast Guard.

Statistics for allocation of responsibility to recognised organisations must be calculated on the basis of detainable deficiencies rather than inspections; a ship classed by one organisation may be detained for failure of a safety management system audited and certificated under the ISM Code by another organisation, similarly a ship may be detained for several deficiencies, some of which may be allocated responsibility, and others not.

During 2002, there were 344 detainable deficiencies issued by AMSA surveyors. One hundred and fifteen of these deficiencies were assessed as being the responsibility of a Recognised Organisation. The breakdown of these deficiencies is given in the table below. In time, enough data should be gathered by AMSA surveyors in this area to enable analysis to be carried out to assess whether the recognised organisation carrying out statutory surveys or audits is a valid factor to consider in targeting a ship for inspection.

Ship Recognised Organisation (RO)	RO Responsible detainable deficiencies	Total detainable deficiencies	RO Responsible as percentage of total detainable
American Bureau of Shipping	7	59	11.86%
Biro Klasifikasi Indonesia	3	3	100.00%
Bureau Veritas	14	27	51.85%
China Classification Society	4	5	80.00%
China Corporation Register of Shipping	6	8	75.00%
Det Norske Veritas	10	23	43.48%
Germanischer Lloyd	2	17	11.76%
Honduras International Survey & Inspection Bureau	0	3	0.00%
Indian Register of Shipping	3	4	75.00%
Korean Register of Shipping	5	13	38.46%
Lloyd's Register of Shipping	31	79	39.24%
Nippon Kaiji Kyokai	30	97	30.93%
Registro Italiano Navale	0	5	0.00%
Russian Maritime Register of Shipping	0	1	0.00%
Totals	115	344	33.43%

## Table 1 - Total ships inspected by port

All Sydney arrival statistics are now listed under Port Jackson

Port		Numb	er of Insp	of Inspections Number of Inspections	
FUIL	1998	1999	2000	2001	2002
Abbot Point	11	11	12	6	12
Albany	5	6	9	9	11
Ardrossan	5	4	5	3	3
Barrow Island	0	0	1	0	0
Barry Beach	2	6	2	2	1
Bell Bay	20	27	22	28	31
Bing Bong Creek	2	0	1	0	0
Brisbane	180	181	200	252	248
Broome	0	0	1	1	1
Bunbury	50	46	66	60	68
Bundaberg	2	1	4	3	2
Burnie	6	4	8	9	17
Cairns	15	15	20	28	29
Cape Cuvier	0	0	2	0	1
Cape Flattery	1	0	0	2	1
Christmas Island	0	1	1	0	3
Dampier	263	198	255	255	266
Darwin	93	89	78	65	89
Derby	0	1	0	0	2
Devonport	1	1	4	4	2
Eden	4	3	1	0	2
Esperance	7	12	15	13	19
Exmouth	0	0	0	0	0
Fremantle	115	93	86	119	127
Geelong	97	95	117	122	65
Geraldton	12	3	16	21	26
Gladstone	71	121	139	178	135
Gove	24	13	12	25	10
Groote Eylandt	3	9	7	8	12
Hay Point /	100	140	100	470	100
Dalrymple Bay	130	149	126	173	160
Hobart	10	5	4	4	2
Karumba	2	6	9	3	5
Kurnell	22	21	20	11	18
Kwinana	223	208	201	185	189
₋ucinda	1	0	4	3	6

## Table 2 - Total ships inspected by flag State

Flag State	Number of Inspections							
Flay State	1998	1999	2000	2001	2002			
American Samoa				1	0			
Anguilla	1	0	1	0	0			
Antigua and Barbuda	20	18	20	21	25			
Bahamas	131	126	136	138	144			
Bahrain					1			
Bangladesh	0	1	0	0	0			
Barbados	3	2	3	2	2			
Belgium	4	0	2	0	2			
Belize	3	4	7	7	4			
Bermuda	13	19	32	34	24			
Brazil	0	2	0	2	1			
Bulgaria	1	2	1	0	0			
Cambodia					1			
Cayman Islands	7	6	8	10	5			
Channel Islands	0	0	0	2	0			
China, People's Republic of	75	79	78	53	45			
Cook Islands	2	0	0	0	0			
Croatia	4	6	5	4	7			
Cyprus	94	108	106	129	127			
Czech Republic	0	0	0	0	0			
Denmark	42	38	53	47	22			
Egypt	13	7	11	12	11			
Estonia	0	0	0	0	0			
Fiji	2	1	3	4	4			
France	17	17	15	17	16			
French Polynesia	0	0	0	0	0			
Germany	33	22	27	19	18			
Gibraltar	0	1	1	2	2			
Greece	127	102	100	109	135			
Honduras	0	2	1	0	1			
Hong Kong, China	118	104	145	159	177			
India	49	38	33	35	35			
Indonesia	9	14	10	13	10			
Iran	30	22	21	31	28			
Ireland	0	0	0	0	0			
Isle of Man	25	26	27	38	50			
Italy	10	12	14	13	17			
Japan	68	71	57	69	62			
Jordan	0	0	0	0	0			
Kiribati	0	0	0	0	0			
Korea, Republic of	53	46	46	47	48			
Kuwait	7	9	9	9	9			
Kyrgyzstan	0	0	0	1	0			
Liberia	295	295	248	231	207			

Fig. Objects	Number of Inspections							
Flag State	1998	1999	2000	2001	2002			
Luxembourg	0	1	2	1	1			
Malaysia	58	56	66	53	48			
Malta	51	48	88	73	78			
Marshall Islands	14	15	19	28	37			
Mauritius	0	0	0	0	1			
Myanmar	8	3	4	8	5			
Netherlands	69	38	41	41	39			
Netherlands Antilles	2	2	3	5	5			
New Zealand	13	11	5	2	4			
Norway	117	78	75	72	58			
Pakistan	0	0	0	0	0			
Panama	842	870	954	918	910			
Papua New Guinea	6	7	5	18	14			
Philippines	120	99	99	94	84			
Poland	2	1	0	2	0			
Portugal	2	0	0	0	1			
Qatar	3	3	0	3	3			
Romania	2	0	0	0	0			
Russian Federation	28	27	24	25	16			
Saint Helena	0	0	0	1	0			
Saint Vincent and the Grenadines	36	24	18	18	13			
Samoa	0	0	0	1	2			
Saudi Arabia	5	3	4	4	2			
Singapore	146	130	131	129	129			
Slovakia	2	1	0	0	0			
Spain	0	1	0	0	0			
Sri Lanka	2	1	2	2	1			
Sweden	5	8	12	9	12			
Switzerland	5	8	10	5	11			
Taiwan	45	47	49	48	44			
Thailand	22	16	20	9	5			
Tonga	10	5	4	4	9			
Turkey	26	16	24	32	24			
Tuvalu	0	0	0	0	1			
Ukraine	5	0	1	0	1			
United Arab Emirates	2	2	2	1	0			
United Kingdom	20	15	21	27	21			
United States of America	1	1	2	6	2			
Uruguay	1	1	0	0	0			
Vanuatu	20	14	21	15	21			
Others	0	1	0	0	0			
TOTAL	2946	2753	2926	2913	2842			

Ship Type		Numb	er of Insp	ections	
omb type	1998	1999	2000	2001	2002
Bulk Carrier	1654	1572	1723	1757	1694
Chemical Tanker	86	64	72	65	68
Combination Carrier	13	12	15	22	16
Container Ship	284	275	239	236	226
Fishing Vessel	0	1	0	0	2
Gas Carrier	78	61	64	58	50
General Cargo / Multi-Purpose Ship	182	183	222	196	159
Heavy Load Carrier	7	9	5	8	9
High Speed Passenger Craft	5	7	2	2	2
Livestock Carrier	72	71	74	69	74
MODU & FPSO	2	1	0	0	3
Offshore Service Vessel	33	25	16	18	30

Table 3 – 7	Total ships	inspected	by type	of ship
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Shin Tuno	Number of Inspections					
Ship Type	1998	1999	2000	2001	2002	
Oil Tanker	186	178	201	208	202	
Other Types	29	14	12	15	12	
Passenger Ship	28	38	30	27	32	
Refrigerated Cargo Carrier	27	20	24	20	18	
Ro-Ro Cargo Ship	45	20	14	17	22	
Ro-Ro Passenger Ships	0	1	0	1		
Special Purpose Vessel	11	4	7	15	11	
Tankship-Non Specified	11	12	5	3	1	
Tugboat	12	12	8	5	12	
Vehicle Carrier	131	117	125	113	135	
Wood chip/pulp Carrier	50	56	68	58	64	
TOTAL	2946	2753	2926	2913	2842	

#### Table 4 - Totals and percentages of deficiency categories

Note: Safety in General deficiencies now assigned to Stability, Structure and related Items, Accident Prevention and Crew and Accomodation under the new Tokyo Mou codes now in use

Deficiency Categories		Numbe	er of defi	ciencies			Perc	entage o	f total	
		1999	2000	2001	2002	1998	1999	2000	2001	2002
Life-saving Appliances	2423	2030	1641	1375	1218	19.29	19.01	17.08	15.59	16.3
Fire Fighting Appliances	2491	1810	1337	1388	1181	19.84	16.95	16.36	15.74	15.8
Safety in General	1813	1373	1320			14.44	12.85	13.74		
Safety of Navigation	931	796	937	934	803	7.41	7.45	9.75	10.59	10.8
Load Line items	1327	997	918	770	630	10.57	9.33	9.55	8.73	8.4
Radio	564	955	849	1206	691	4.49	8.94	8.84	13.68	9.3
Propulsion and Auxiliary Machinery	583	464	343	304	280	4.64	4.34	3.57	3.45	3.8
Marpol Annex I (Oil)	315	308	333	277	413	2.51	2.88	3.47	3.14	5.5
ISM Related Deficiencies	242	214	277	175	229	1.93	2	2.88	1.98	3.1
Solas Operational Deficiencies	271	245	275	478	360	2.16	2.29	2.86	5.42	4,8
Crew and Accommodation (ILO 147)	381	316	241	348	164	3.03	2.96	2.51	3.95	2.2
Food and Catering (ILO 147)	256	208	173	160	87	2.04	1.95	1.8	1.81	1.2
Mooring Arrangements (ILO 147)	160	183	153	151	55	1.27	1.71	1.59	1.71	0.7
Ship's Certificates and Documents	184	188	120	94	94	1.47	1.76	1.25	1.07	1.3
Accident Prevention (ILO 147)	123	151	101	177	96	0.98	1.41	1.05	2.01	1.3
Carriage of Cargo and Dangerous Goods	137	109	98	97	82	1.09	1.02	1.02	1.1	1.1
Marpol Annex V	18	70	75	83	177	0.14	0.66	0.78	0.94	2.4
Certification and Watchkeeping for Seafarers	130	127	67	69	325	1.04	1.19	0.7	0.78	4.4
Working Spaces	83	60	48	34	22	0.66	0.56	0.5	0.39	0.3
MARPOL Related Operational Deficiencies	56	31	31	23	11	0.45	0.29	0.32	0.26	0.2
Alarm Signals	29	24	18	10	2	0.23	0.22	0.19	0.11	0.02
Oil, Chemical Tankers & Gas Carriers	22	7	10	8	17	0.18	0.07	0.1	0.09	0.2
MARPOL Annex II (Chemicals)	3	0	3	2	3	0.02	0	0.03	0.02	0.02
MARPOL Annex III (Harmful Substances)	2	1	1	1	1	0.02	0.01	0.01	0.01	0.01
Bulk Carriers – Additional Safety Measures				12	35				0.14	0.16
Stability, Structure and related items				669	472				7.59	6.3
All Other Deficiencies	14	14	5	24	12	0.11	0.13	0.05	0.27	0.2
TOTAL	12558	10681	9609	8818	7460					

## Table 5 – Certification and Watchkeeping for Seafarers

Item	Number of occurrences	Pertentage of total certification and watch-keeping deficiencies
Certificates for master and officers	235	71.6
Certificate for ratings for watch-keeping	3	0.9
Certificates for radio personnel	8	2.4
Certificate for personnel on tankers	7	2.1
Manning specified by the minimum safe manning document	19	5.8
Rest period	5	1.5
Other (STCW)	48	14.8
Total	325	

#### Table 6 - MARPOL Annex I

Item	Number of occurrences	Pertentage of total MARPOL Annex I deficiencies
Shipboard oil pollution emergency plan (SOPEP)	114	26.9
Oil record book	113	26.71
Control of discharge of oil	22	5.2
Retention of oil on board	18	4.3
Oil filtering equipment	61	14.4
Oil discharge monitoring and control system	17	4.0
15 PPM alarm arrangements	41	9.7
Oil / water interface detector	1	0.2
Suspected discharge violation	3	0.7
Other (MARPOL Annex I)	23	5.6
TOTAL	413	

### Table 7 - Radio Communications

Item	Number of occurrences	Pertentage of total Radio communications deficiencies
Functional requirements	19	2.7
Main installation	3	0.3
MF radio installation	5	0.7
MF/ HF radio installation	166	23.6
INMARSAT ship earth station	16	2.3
Maintenance / duplication of equipment	5	0.7
VHF radio installation	14	2.0
Facilities for reception of marine safety information	101	14.3
Satellite EPIRB 406 Mhz / 1.6 Ghz	39	5.5
VHF EPIRB	2	0.3
Radar transponder	7	1.0
Reserve source of energy	37	5.3
Radio log (diary)	122	17.3
Other (radio)	155	22.4
TOTAL	691	

Item	Number of occurrences	Pertentage of total SOLAS related operational deficiencies
Functional requirements	19	2.7
Muster list	48	13.3
Communication	1	0.3
Fire drills	3	0.8
Abandon ship drills	148	40.9
Fire control plan	1	0.3
Bridge operation	7	1.9
Operation of GMDSS equipment	102	28.2
Cargo operation	2	0.6
Operation of machinery	9	2.5
Manuals, instructions, etc.	14	3.9
Other (SOLAS operational)	25	6.9
TOTAL	360	

## Table 8 - SOLAS related operational deficiencies

#### Table 9 - Total ships detained by ship type

No percentages are shown where the number of inspections is less than ten.

Туре	Inspected	Detained	% of ships inspected
Functional requirements	19	2.7	
Bulk carrier	1694	103	6.1
Chemical tankers	68	7	10.3
Combination carrier	16	0	0
Container ships	226	9	4.0
Fishing vessel	2	0	
Gas carriers	50	2	4.0
General cargo / multi purpose	159	16	10.1
Heavy load carriers	9	2	
High speed passenger craft	2	0	
Livestock carriers	74	3	4.1
MODU & FPSO	3	0	
Offshore service vessel	30	0	0
Oil tankers	202	11	5.5
Other types of ships	12	1	8.3
Passenger ships	32	1	3.1
Refrigerated cargo vessels	18	2	11.1
RO-RO cargo ships	22	2	9.1
Special purpose ship	11	0	0
Tanker, not otherwise specified	1	0	
Tugboat	12	0	0
Vehicle carriers	135	5	3.7
Wood-chip carriers	64	2	3.1
TOTAL	2842	166	

## Table 10 - Total ships detained by flag

No percentages are shown where the number of inspections is less than ten.

Flag	Inspected	Detained	% of ships inspected	Flag	Flag Inspected	Flag Inspected Detained
Antigua and Barbuda	25	1	4.0	Malta	Malta 78	Malta 78 8
Bahamas	144	1	0.7	Marshall Islands	Marshall Islands 37	Marshall Islands 37 2
Bahrain	1			Mauritius	Mauritius 1	Mauritius 1
Barbados	2	1		Myanmar	Myanmar 5	Myanmar 5
Belgium	2			Netherlands	Netherlands 39	Netherlands 39 3
Belize	4			Netherlands Antilles	Netherlands Antilles 5	Netherlands Antilles 5 1
Bermuda, UK	24		0	New Zealand	New Zealand 4	New Zealand 4
Brazil	1	1		Norway	Norway 58	Norway 58 1
ambodia	1			Panama	Panama 910	Panama 910 36
ayman Islands, UK	5			Papua New Guinea	Papua New Guinea 14	Papua New Guinea 14 3
China	45		0	Philippines	Philippines 84	Philippines 84 3
Croatia	7			Portugal	Portugal 1	Portugal 1
Cyprus	127	22	17.3	Qatar	Qatar 3	Qatar 3
Denmark	22		0	Russia	Russia 16	Russia 16 1
Egypt	11	3		Saint Vincent and the		
Fiji	4	1		Grenadines		
France	16		0	Samoa		
Germany	18	1	5.6	Saudi Arabia		
Gibraltar, UK	2			Singapore		
Greece	135	9	6.7	Sri Lanka		
Honduras	1	1		Sweden		
Hong Kong, China	177	6	3.4	Switzerland		
India	35	5	14.3	Taiwan, China		
Indonesia	10	1	10.0	Thailand		
Iran	28	5	17.9	Tonga	•	
Isle of Man, UK	50	1	2.09	Turkey	Turkey 24	
Italy	17			Tuvalu	Tuvalu 1	Tuvalu 1 1
Japan	62	1	1.69	Ukraine		
Korea (South)	48	6	12.59	United Kingdom	United Kingdom 21	United Kingdom 21 2
Kuwait	9	1		United States of America	United States of America 2	
Liberia	207	11	5.39	Vanuatu	Vanuatu 21	Vanuatu 21 1
Luxemburg	1			TOTAL	TOTAL 2842	TOTAL 2842 166
Malaysia	48	5	10.49			

## LIST OF SHIPS DETAINED IN 2002

Not all ships were detained as a result of defects related to certificates issued by the Classification Society

## Note: (1) Time that a ship was delayed beyond its scheduled sailing time (2) Ship detained on more than one occasion

Ship Name	Ship Name IMO Number Flag		Recognised organisation	Delay <sup>1</sup> (hours)
Acacia Ace	8202707	Vanuatu	Nippon Kaiji Kyokai	5.3
Achilleus <sup>2</sup>	8001268	Greece	Det Norske Veritas	9
Achtergracht	8821802	Netherlands	Lloyd's Register Of Shipping	
African Highway	8100985	Panama	Nippon Kaiji Kyokai	26.5
Agios Nektarios	8723610	Malta	Lloyd's Register Of Shipping	10
Aigeorgis	9216494	Greece	Lloyd's Register Of Shipping	
Akili	9222479	Cyprus	Nippon Kaiji Kyokai	
Al Messilah	7924425	Kuwait	Lloyd's Register Of Shipping	
Amer Himalaya	8908193	Cyprus	American Bureau Of Shipping	
Andhika Adhidaya	8708763	Singapore	Nippon Kaiji Kyokai	5.3
ANL Excellence	9134517	Liberia	Germanischer Lloyd	
ANL Explorer	8506098	Bahamas	Bureau Veritas	
ANL Trader	8506452	Antigua & Barbuda	Germanischer Lloyd	
Aries SB	8307739	Cyprus	American Bureau Of Shipping	
Ariso	9145683	Panama	Nippon Kaiji Kyokai	
Artemis	8001256	Greece	Det Norske Veritas	
Astro Jyojin	7718852	Panama	Nippon Kaiji Kyokai	3.5
BBC Nordland	9210282	Cyprus	Germanischer Lloyd	
BBC Rheiderland	9202041	United Kingdom	Germanischer Lloyd	
Bibi-M	8118554	Turkey	Lloyd's Register Of Shipping	16.5
Boss	8324115	Cyprus	Nippon Kaiji Kyokai	18.8
Bosset Chief	8806022	Papua New Guinea	Lloyd's Register Of Shipping	
Brinknes	9111216	Philippines	American Bureau Of Shipping	
Bunga Melor Satu	9070711	Malaysia	American Bureau Of Shipping	
Bunga Orkid Dua	9070785	Malaysia	Det Norske Veritas	
Capaz Duckling	7526601	Panama	American Bureau Of Shipping	
Cape Lord	8011249	Cyprus	China Classification Society	29
Cape Preston	8122579	Cyprus	Bureau Veritas	11.8
Cape York	8122581	Cyprus	Bureau Veritas	
Caraka Jaya Niaga III - 6	8917132	Indonesia	Biro Klasifikasi Indonesia	4
Celeste	7929499	Cyprus	Lloyd's Register Of Shipping	
China Joy	9113563	Liberia	American Bureau Of Shipping	
Chitose	9228239	Panama	Nippon Kaiji Kyokai	
Claudia	8128559	Barbados	Lloyd's Register Of Shipping	
Co-Op Harvest	8716332	Singapore	Nippon Kaiji Kyokai	
Corona Fury	9002582	Malta	Lloyd's Register Of Shipping	
Daria	9065912	Cyprus	Lloyd's Register Of Shipping	
Devprayag	8321072	India	Det Norske Veritas	

Ship Name	IMO Number	Flag	Recognised organisation	Delay¹ (hours)
Disco Volante	8114314	Malta	Bureau Veritas	
Doceserra	8510922	Brazil	American Bureau Of Shipping	37.3
Dooyang Hope	8802210	Korea (South)	Korean Register Of Shipping	
Eastern Garland	8905177	Panama	Nippon Kaiji Kyokai	3
Eco Challenge	8029507	Malaysia	Nippon Kaiji Kyokai	3.3
Eco Charger	8413954	Malaysia	Nippon Kaiji Kyokai	13.5
Enforcer	8029703	Panama	Det Norske Veritas	
Eternal Spirit	9141998	Panama	Nippon Kaiji Kyokai	
Fair Voyager	8321395	Liberia	Lloyd's Register Of Shipping	
Fairlift	8806905	Netherlands Antilles	Lloyd's Register Of Shipping	
Fanari	8013546	Cyprus	American Bureau Of Shipping	
Faneromeni	8807789	Cyprus	Lloyd's Register Of Shipping	
Far Eastern Marina	9162590	Panama	American Bureau Of Shipping	
Far Eastern Silo	9003108	Taiwan, China	China Corporation Register Of Shipping	7.3
Farid F	7203663	Saint Vincent & the Grenadines	Registro Italiano Navale	1.5
Ferosa	9004839	Saint Vincent & the Grenadines	Bureau Veritas	
Forest Venture	9116137	Hong Kong, China	Bureau Veritas	
Formosabulk Allstar	9107904	Panama	American Bureau Of Shipping	138
Francesco	8011421	Panama	American Bureau Of Shipping	
Frixos	8420218	Liberia	Lloyd's Register Of Shipping	
Gargantua	8210211	Cyprus	Bureau Veritas	
Giant Step	8309282	Panama	Nippon Kaiji Kyokai	
Global Triumph	9118666	Marshall Islands	Bureau Veritas	18
Glorious Halo	9162954	Panama	Nippon Kaiji Kyokai	
Goada Chief	9154816	Papua New Guinea	Lloyd's Register Of Shipping	
Golden Fan	8511263	Panama	Nippon Kaiji Kyokai	18
Golden Lucy I	8506763	Panama	Nippon Kaiji Kyokai	
Grain Union	8026921	Taiwan, China	China Corporation Register Of Shipping	
Grand Clipper	9121326	Hong Kong, China	American Bureau Of Shipping	
Grand Ocean	8319691	Liberia	Nippon Kaiji Kyokai	
Hakula	8508929	Tonga	Lloyd's Register Of Shipping	
Handy Trader	8509430	Philippines	Nippon Kaiji Kyokai	
Hanjin Melbourne	8517982	Korea (South)	Korean Register Of Shipping	
Hourai Maru	8303654	Singapore	Nippon Kaiji Kyokai	1.5
Hyundai Oceania	8211540	Korea (South)	Korean Register Of Shipping	17.5
Ioannis Zafirakis	8028644	Greece	American Bureau Of Shipping	
Ionikos	8017815	Greece	Nippon Kaiji Kyokai	
Iran Chamran	8309610	Iran	Lloyd's Register Of Shipping	
Iran Hamzeh	8320171	Iran	Lloyd's Register Of Shipping	
Iran Sadr	8320121	Iran	Det Norske Veritas	
Iran Shariat	8107581	Iran	Det Norske Veritas	
nun onunat	0107301	nan	Det Norske Veritas	

Ship Name	IMO Number	Flag	Recognised organisation	Delay <sup>1</sup> (hours)
Irene	9034327	Greece	American Bureau Of Shipping	
Irini	8802210	Marshall Islands	Bureau Veritas	
Iris Frontier	8602490	Panama	Nippon Kaiji Kyokai	7.5
Ivs Super Adventure	9140528	Panama	Nippon Kaiji Kyokai	
Java Sea	8607684	Singapore	Lloyd's Register Of Shipping	40
Kapitan Kurov	8502717	Russia	Russian Maritime Register Of Shipping	
Kimtrans Xpress	9225732	Singapore	Bureau Veritas	190.5
Kliomar	8813568	Cyprus	American Bureau Of Shipping	
Lancelot	8018089	Malta	Bureau Veritas	
Leliegracht	8611099	Netherlands	Lloyd's Register Of Shipping	3.3
Levin	8103755	Singapore	Germanischer Lloyd	
Lok Maheshwari	8026153	India	American Bureau Of Shipping	
Lord P	8401250	Malta	Nippon Kaiji Kyokai	
Lowlands Rose	9136577	Panama	Nippon Kaiji Kyokai	
Lucky	8303680	Liberia	Nippon Kaiji Kyokai	9.5
M Faruk	8028890	Turkey	Det Norske Veritas	32.3
Maharashtra	8511653	India	Bureau Veritas	
Mandakini	8321058	India	Indian Register Of Shipping	
Mani P	8208165	Malta	Nippon Kaiji Kyokai	
Marion Green	9164029	Netherlands	Lloyd's Register Of Shipping	
Maritime Peace	8312617	Singapore	Nippon Kaiji Kyokai	2.3
Mindanao River 2	8319328	Philippines	American Bureau Of Shipping	24
Mineral Century	9086095	Liberia	Lloyd's Register Of Shipping	
Ming Courage	8026933	Taiwan, China	China Corporation Register Of Shipping	
Minoan Flame	8005264	Malta	American Bureau Of Shipping	
Moor Laker	8312162	Hong Kong, China	Nippon Kaiji Kyokai	
MSC Nuria	7416911	Panama	Lloyd's Register Of Shipping	
MSC Pamela <sup>2</sup>	7125392	Panama	Nippon Kaiji Kyokai	0.5
MSC Peggy	8208672	Panama	American Bureau Of Shipping	
MSC Samia	7310143	Panama	Germanischer Lloyd	
Multi-Purpose 5	8921822	Malaysia	Lloyd's Register Of Shipping	
Myron N	8811364	Cyprus	Bureau Veritas	4
Navigator Venus	9177557	Liberia	Germanischer Lloyd	
Niugini Coast	8518091	Papua New Guinea	American Bureau Of Shipping	28.5
Northgate	8321981	Panama	Nippon Kaiji Kyokai	
NST Challenge	8306802	Hong Kong, China	Nippon Kaiji Kyokai	
Ocean Elite	7616236	Singapore	Nippon Kaiji Kyokai	
Ocean Lord	8308094	Korea (South)	Korean Register Of Shipping	18.5
Ocean Queen	8608092	Korea (South)	Korean Register Of Shipping	
Oji Pioneer	8906858	Liberia	Nippon Kaiji Kyokai	
Pacific Condor	9216339	Panama	Nippon Kaiji Kyokai	
Pacific Sky	8024026	United Kingdom	Lloyd's Register Of Shipping	

Ship Name	IMO Number	Flag	Recognised organisation	Delay¹ (hours)
Pacific Spirit	8410847	Fiji	Det Norske Veritas	
Packer	8713598	Liberia	American Bureau Of Shipping	
Pan Leader	8604905	Korea (South)	Korean Register Of Shipping	
Panagiotis L	8124876	Greece	American Bureau Of Shipping	
Panamax Star	8109137	Cyprus	Det Norske Veritas	
Paradise Island	9233480	Panama	Nippon Kaiji Kyokai	
Pontonikis	8408521	Cyprus	Nippon Kaiji Kyokai	
Pontonostos	8914245	Cyprus	Nippon Kaiji Kyokai	
Pontoporos	8318609	Cyprus	American Bureau Of Shipping	
Prigipos	7931442	Cyprus	Lloyd's Register Of Shipping	
Rani Padmini	7521687	India	Lloyd's Register Of Shipping	
Regine	9125877	Germany	Germanischer Lloyd	
Sanko Prelude	8309141	Panama	Nippon Kaiji Kyokai	6.5
Sanko Quality	9066174	Liberia	Nippon Kaiji Kyokai	19.5
Sanshu Maru	8919996	Japan	Nippon Kaiji Kyokai	5.3
Saqqara	8117031	Egypt	Lloyd's Register Of Shipping	8
Scan Bulker	9105396	Panama	Nippon Kaiji Kyokai	146.7
Sea Wisdom	9143714	Panama	Nippon Kaiji Kyokai	
Silver Zhang	8508187	Hong Kong, China	Bureau Veritas	12.8
Star Michalis	8318697	Greece	Det Norske Veritas	
Stolt Infra	8413980	Panama	Nippon Kaiji Kyokai	
Sun	8220163	Malta	Nippon Kaiji Kyokai	
Surmene 4	8308965	Turkey	Nippon Kaiji Kyokai	
Tahir Kiran	7433713	Turkey	Germanischer Lloyd	54.7
Tai Health	9216688	Panama	American Bureau Of Shipping	
Tai Ping	9086784	Hong Kong, China	Lloyd's Register Of Shipping	
Taiyoh lii	9156591	Singapore	Nippon Kaiji Kyokai	
Tanja Jacob	7920481	Tuvalu	Germanischer Lloyd	
Team Merkur	7926241	Norway	Det Norske Veritas	
Thalassini Tyhi	9071820	Cyprus	Lloyd's Register Of Shipping	
Themis P	9075539	Panama	Nippon Kaiji Kyokai	
Thia Chryssoula	8834586	Cyprus	Registro Italiano Navale	
Thor Captain	8111752	Thailand	Germanischer Lloyd	22
Thor Simba	8308757	Isle Of Man, UK	Lloyd's Register Of Shipping	
Thrasyvoulos V	8125820	Panama	Lloyd's Register Of Shipping	
Torm Eastern	8400543	Panama	Nippon Kaiji Kyokai	26.5
Turandot	9070450	Sweden	Lloyd's Register Of Shipping	
Veroika	8421119	Panama	Lloyd's Register Of Shipping	
Wadi Al Kamar	8309907	Egypt	Lloyd's Register Of Shipping	
Wadi Halfa	8309866	Egypt	Lloyd's Register Of Shipping	
Well Pescadores	9198379	Panama	Bureau Veritas	
Wing Sang 38	8403181	Honduras	Honduras International Survey & Inspection Bureau	1085