

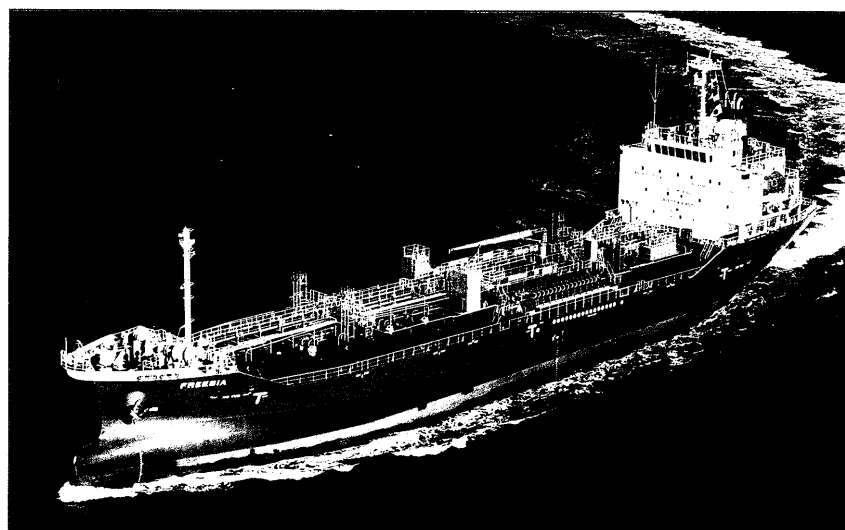
NK in Action

The Classed Fleet

At the end of December 2003, the ClassNK Register totaled 6,270 vessels, totaling 120,802,851 gross tons (gt). This was 56 vessels less than the total of 6,326 in 2002, but was an increase of 3,665,524 gt on the total for the previous year.

5,207 ships, (83.0%) totaling 110,596,647 gt, (91.6%) of the total register were flagged outside Japan, with ports of registry in 62 nations and territories. Ships flying the flags of Panama, Japan, Liberia, Singapore and Hong Kong accounted for 77.2% of the total number and 83.7% of the total gross tonnage classed by the Society.

Additions to the Register during the year numbered 365 ships, of 8,468,322 gt, 18 ships more than joined in the previous year and 736,573 gt more than joined in the previous year. 421 ships, of 5,185,415 gt, left the register, 26 less ships than left the previous year, but represented 610,618 more tonnage than that "lost" in 2002.



FREESIA

A 8,521 dwt oil/chemical carrier built by Higaki Shipbuilding Co., Ltd. for Freesia Navigation S.A.

102 of those ships were removed for reasons of noncompliance with the Society's rules while 103 vessels were transferred to other classification societies. The average age of the NK fleet was 10.6 years old for ships of 100 gt and over.

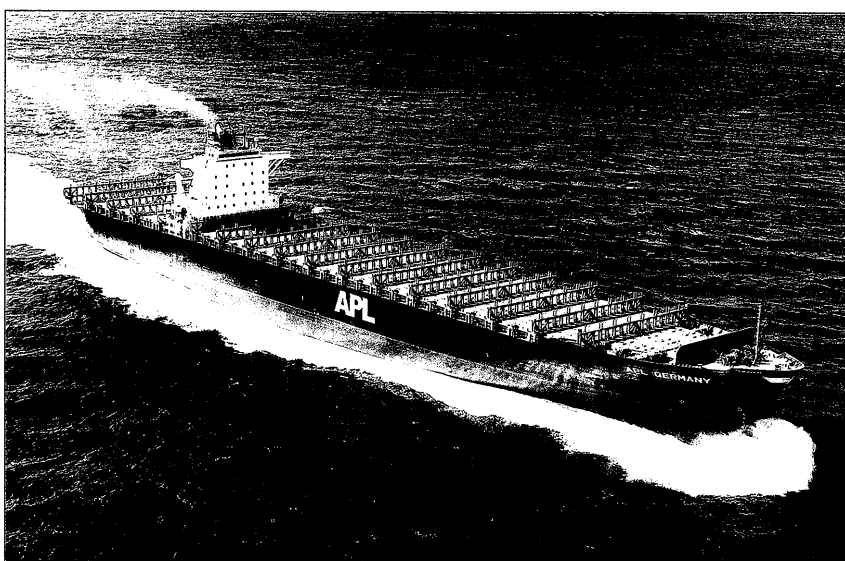
Newbuildings

At 316, the number of newly constructed ships classed by the Society increased by 5.4% over the previous year, and the 7,683,524 gt classed represented an increase of 480,336 gt over the total added in the previous year. These newbuildings represented 86.6% of the number of ships added to the register and 90.7% of the additional tonnage.

The newbuildings could be broken into the following major categories:

- Bulk Carriers
2003: 88 ships/3,196,550 gt
(2002: 109 ships/3,659,543 gt)
- Tankers and Gas Carriers
2003: 89 ships/ 2,773,830 gt
(2002: 75 ships/2,002,209 gt)
- Cargo Ships
2002: 57 ships/1,627,409 gt
(2002: 53 ships/1,492,276 gt)

Of these 316 ships, 87 or 27.5% were built by shipbuilders outside Japan, a significant improvement on the previous year and a positive sign of the increasing internationalization of the Society's business.



APL GERMANY

A 67,009 dwt container carrier constructed by Koyo Dockyard Co., Ltd. for El Barrio Shipping S.A.

Survey Activities

The number of Class Maintenance Surveys undertaken in Japan was 3878, while 10,028 surveys were done overseas. Major survey locations included: Singapore (1344); Pusan, South Korea (599); Kuala Lumpur, Malaysia (558); Taipei, Taiwan (493); and, Shanghai, China (476). The number of surveys undertaken on behalf of other societies totaled 138 including: BKI (4), CRS (7), GL (2), IRS (3), RINA (3), RS (2), VR (117)

The number of Equipment Maintenance Surveys totaled 21,581, broken down as follows: Refrigerating Installations 310; Cargo Handling Appliances 3,803; Marine Pollution Prevention Systems 5,102; Safety Equipment 6,438; Radio Installations 4,069; Automatic and Remote Control Systems 1,859.

The number of certificates issued was: Load Line 2,616; Safety Construction

6,660; Safety Radio 4,367; Oil Pollution Prevention 4,943; and, Tonnage 679.

The Society also undertakes a NOx verification service for diesel engines, issuing Statements of Compliance (SOC). So far, the Society has issued 1,132 SOC's.

Machinery Materials and Equipment Inspections

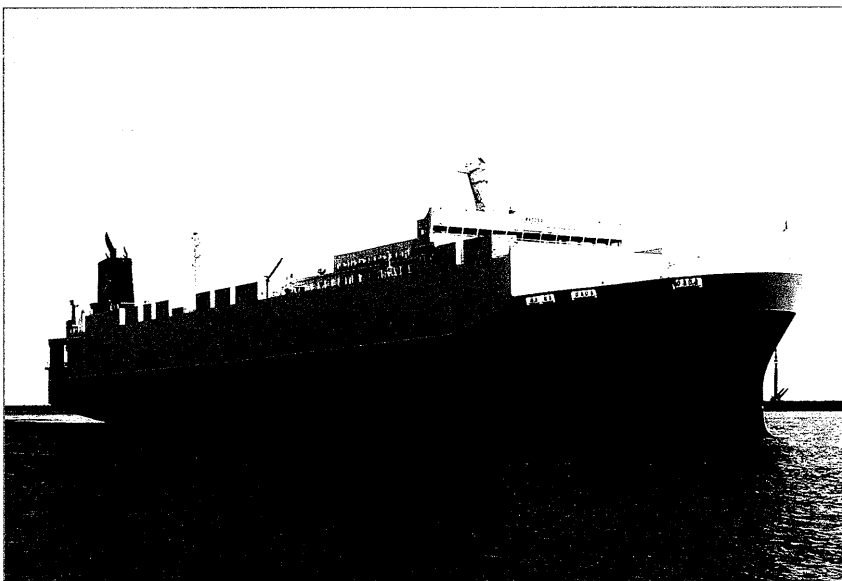
Main activities related to the inspection of materials and equipment for marine use during the year are shown below.

Article		Amount
Materials	Rolled steels	2,495,879 tons
	Castings and forgings	74,314 tons
Machinery installations	Diesel engines	1,473 sets
	Boilers	367 sets
	Deck machinery	1,460 sets
	Auxiliary machinery	17,321 sets
Equipment	Anchors	716 sets
	Chains	8,927 lengths
Container	Refrigeration units for freight containers	2,954 sets

Audit and Registration of Safety Management Systems

The Society assessed and granted Documents of Compliance (DOCs) to 53 companies, and granted Safety Management Certificates (SMCs) to 666 ships. The number of Maintenance Audits of Safety Management Systems was: DOCs 518 and SMCs 962. Meanwhile, the number of companies whose registration was canceled was 16, and the number of ships was 641. As a result, the

total number of ship management companies and ships registered at the end of December 2003 was 590 and 3,786 respectively. In all, 54 countries have authorized ClassNK to carry out Safety Management System assessments and issue certificates on their behalf, and the number of ISM Lead Auditors rose to 399.



MUSASHI MARU

A 6,389 dwt ro-ro cargo/vehicles carrier constructed by Shin Kurushima Dockyard Co., Ltd. for Kyushu Kyuko Ferry Co., Ltd.

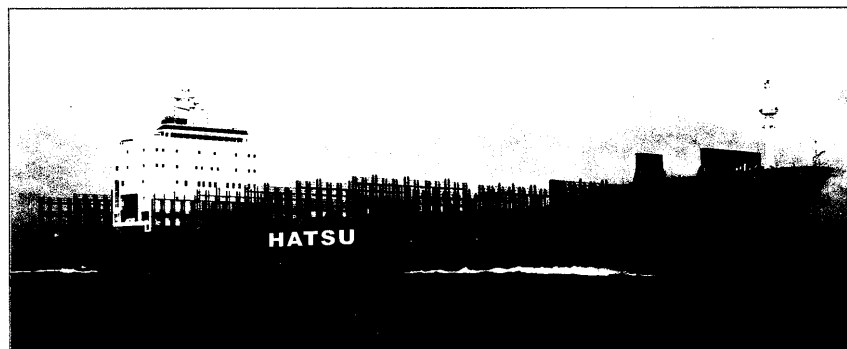
Assessment and Registration of Quality Management Systems

In 2003, 15 suppliers were assessed and registered under the ISO 14001 standard, bringing the total number of suppliers assessed and registered under this standard to 55. Similarly, 31 suppliers were assessed and registered under the ISO 9001 standards, bringing the total number of suppliers assessed and registered under this standard to 326.

NK Quality Assessments

The second SGS Surveillance after the second renewal audit conducted in accordance with certification based on ISO 9001:1994, was carried out at six Head Office locations and ten survey offices. Maintenance of certification was verified (January through April 2003). An audit conducted in accordance with certification based on ISO 9001:2000 was carried out at fifteen Head Office locations and nine survey offices, while the first maintenance audit conducted in accordance with certification based on ISO 9001:2000 began in December.

As part of the IACS QSCS Annual Audit program, annual audits were carried out at



HATSU PRIMA

A 19,309 dwt container carrier built by Evergreen Shipyard Corp. for Hatsu Marine Limited

twelve Head Office locations and at four locations overseas based on the 5th Issue of the IACS QSCS. Vertical Contract Audits were also carried out on the surveys of nine ships and one ISM-approved company. NK continued to be recognized as conforming to the IACS QSCS.

The first audit by Raad Voor Accreditatie (RvA) was carried out at the Rotterdam Office and Head Office.

An audit by the United Kingdom Maritime and Coastguard Agency (MCA) was carried out at Head Office and three

survey offices, and a Vertical Contract Audit (VCA) was undertaken on one ship survey.

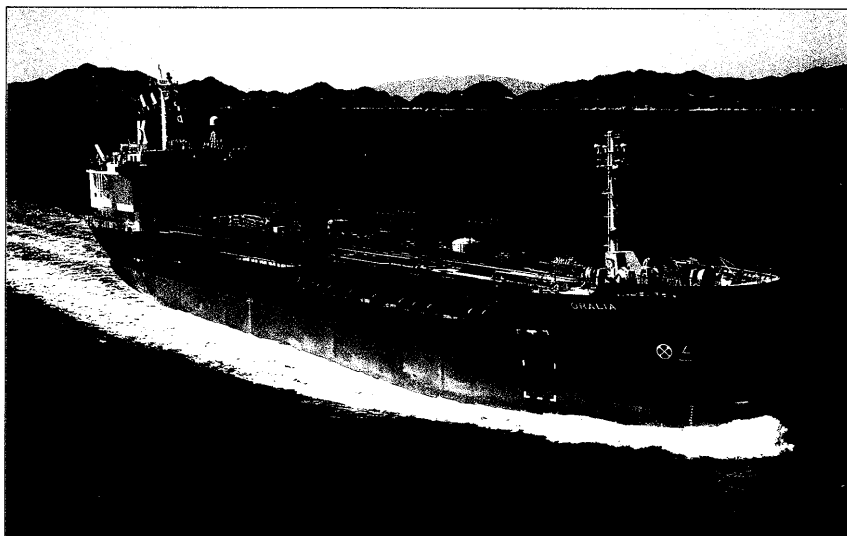
The Rules

During the year, as part of NK's developing maritime security activities, "Rules for the Audit and Registration of Ship Security Management Systems" were enacted.



GOLDEN FRIENDSHIP

A 19,772 dwt oil/chemical carrier constructed by Fukuoka Shipbuilding Co., Ltd. for Fernus Line S.A.



ORALIA

A 8,715 dwt oil/chemical carrier
constructed by Asakawa Shipbuilding Co.,
Ltd. for New Glory Shipping S.A.

The mainstay of a ship classification society's technical credibility lays in its rules. Therefore the Society constantly reviews and revises the Rules, Regulations and Guidance. In addition to keeping the Rules up to date with constantly changing statutory requirements, the Society also focuses on reviewing its rules to incorporate the results of its research and development activities.

The full list of the Rules and Guidance established and/or amended by the Society in 2003 includes:

1. Guidance for the Classification and Registry of Ships
 - A part revision related to application for classification registration, installation registration and surveys
2. Rules and Guidance for the Survey and Construction of Steel Ships
 - 1) A part revision related to enhanced surveys for general dry cargo ships and docking surveys (Part B)
 - 2) A part revision related to application of steels (Part C, CS)
 - 3) A part revision related to detailed requirements for side scuttles and rectangular windows (Part C)
 - 4) A part revision related to cathodic protection system for tankers (Part C)
 - 5) A part revision related to environmental tests for automatic devices and equipment (Part D)
 - 6) A part revision related to dead-ship requirements for small ships (Part D)
 - 7) A part revision related to detailed requirements for fire protection, detection and extinction (Part D, R)
 - 8) A part revision related to designed inclination angle for machinery installations (Part D)
 - 9) A part revision related to application of fire resistant cables (Part H)
 - 10) A part revision related to characteristics of governors for main generator engines (Part H)
 - 11) A part revision related to main generator systems driven by propulsion shafts (Part H)
 - 12) A part revision related to generator systems driven by propulsion shafts in addition to main generator systems (Part H)
 - 13) A part revision related to non-metallic cable supports (Part H, P)
 - 14) A part revision related to standard loading conditions for bulk carriers (Part A, C)
 - 15) A part revision related to protective arrangements against explosion of starting air manifolds (Part D)
 - 16) A part revision related to small hatches fitted on exposed fore deck (Part C, CS)
 - 17) A part revision related to strength of deck fittings on exposed fore deck (Part C, CS, D)
 - 18) A part revision related to surveys on automatic air pipe heads (Part B)
 - 19) A part revision related to electrical equipment necessary to provide normal operational conditions of propulsion and safety (Part H)
 - 20) A part revision related to rotating machines (Part H)
 - 21) A part revision related to rolled steels for hull (Part K)
 - 22) A part revision related to rolled stainless steels and their welding consumables (Part M, K)
 - 23) A part revision related to castings and steel forgings (Part K)
 - 24) A part revision related to material of chains (Part K, L)
 - 25) A part revision related to watertight doors (Part B, C, CS, R)
 - 26) A part revision related to survey for deck fittings and small hatches on exposed fore deck of existing ships (Part B)
 - 27) A part revision related to securing devices and stoppers for watertight hatch covers of existing bulk carriers (Part B, C)
 - 28) A part revision related to prepara-

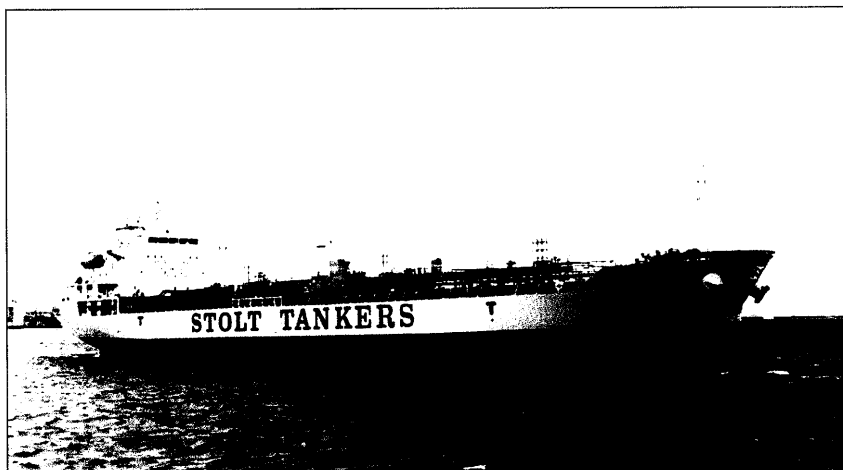
- tion for surveys (Part B)
- 29) A part revision related to steel watertight hatch covers of bulk carriers, ore carriers and combination carriers (Part C)
- 30) A part revision related to forecastles of bulk carriers, ore carriers and combination carriers (Part C)
- 31) A part revision related to watertightness of chain lockers (Part B, C, CS)
- 32) A part revision related to standard loading conditions for longitudinal strength calculation (Part C)
- 33) A part revision related to strengthening for navigation in ice (Part B, C)
- 34) A part revision related to electronically controlled diesel engines (Part D)
- 35) A part revision related to override arrangement for safety systems of main propulsion machinery (Part D)
- 36) A part revision related to indication of ship identification number (Part B, C, CS)
- 37) A part revision related to low pressure type fixed carbon dioxide gas fire-extinguishing systems (Part R)
- 38) A part revision related to graphical symbols for shipboard fire control plans (Part R)
- 39) A part revision related to additional requirements for partially watertight hatch covers (Part C, R)
- 40) A part revision related to definition of general dry cargo ships (Part B)

- 41) A part revision related to preparation for surveys and close-up surveys for oil tankers (Part B)
- 42) A part revision related to windows on navigation bridge (Part C, CS)
- 43) A part revision related to water level detection and alarm systems and dewatering arrangements for bulk carriers (Part B, D)
- 44) A part revision related to unified interpretations for fire protection and extinction (Part D, R)

- 45) A part revision related to fire integrity of weathertight doors (Part R)
- 46) A part revision related to emergency towing arrangements (Part C)

STOLT NANAMI

A 19,932 dwt oil/chemical carrier built by Kitanihon Shipbuilding Co., Ltd. for Maki Ocean Shipping S.A., and managed by V. Ships (Asia) Pte Ltd.



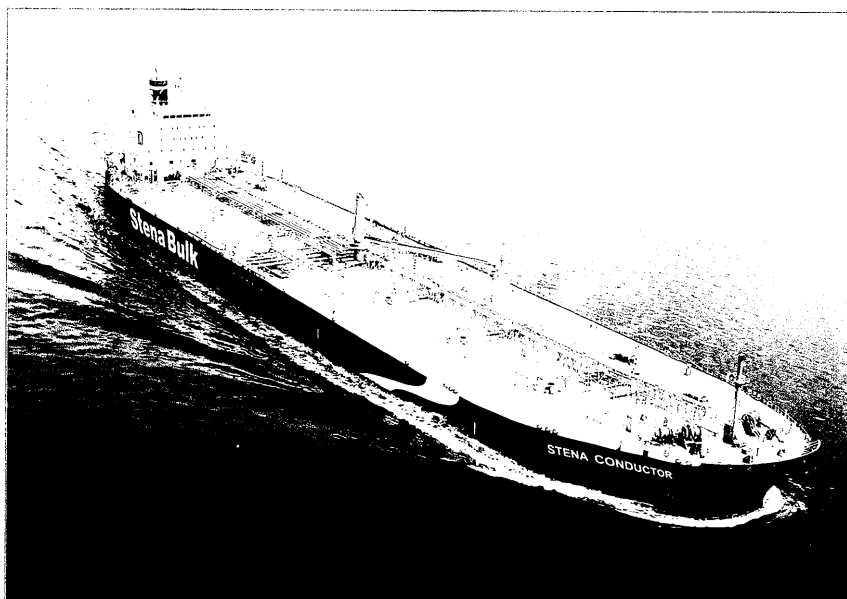
CAPE VICTORY

A 177,359 dwt bulk carrier constructed by Namura Shipbuilding Co., Ltd. for Fuyo Kaiun Co., Ltd.

- 47) A part revision related to disconnection of main bus bars in main switchboards (Part H)
- 48) A part revision related to maintenance of batteries (Part H)
- 49) A part revision related to earthing of single-core cables (Part H)
- 50) A part revision related to earthing of cargo piping systems in tankers (Part B, D)
- 51) A part revision related to test specimens and mechanical testing procedures (Part K, M)
- 52) A part revision related to testing and inspection of equipment (Part L)
- 53) A part revision related to hold frames of existing bulk carriers (Part B, C)
- 54) A part revision related to test of ship manoeuvrability (Part B)
- 55) A part revision related to car decks (Part B, C)
- 3. Rules for High Speed Craft
 - 1) A part revision related to designed inclination angle for

- machinery installations
- 2) A part revision related to indication of ship identification number
- 3) A part revision related to navigation lights of WIG craft
- 4. Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use
 - 1) A part revision related to non-metallic cable supports
 - 2) A part revision related to environmental tests for automatic devices and equipment
 - 3) A part revision related to rolled steels for hull
 - 4) A part revision related to MARPOL73/78 ANNEX IV
 - 5) A part revision related to electronically controlled diesel engines
 - 6) A part revision related to water level detection and alarm systems for bulk carriers
 - 7) A part revision related to emergency towing arrangements

- 8) A part revision related to testing and inspection of equipment
- 5. Rules and Guidance for Automatic and Remote Control Systems
 - 1) A part revision related to environmental tests for automatic devices and Equipment
 - 2) A part revision related to override arrangement for safety systems of main propulsion machinery
- 6. Rules and Guidance for the Survey and Construction of Passenger Ships
 - 1) A part revision related to application of fire resistant cables
 - 2) A part revision related to watertight doors
 - 3) A part revision related to indication of ship identification number
 - 4) A part revision related to graphical symbols for shipboard fire control plans
- 7. Rules and Guidance for the Marine Pollution Prevention Systems
 - 1) A part revision related to MARPOL73/78 ANNEX IV
 - 2) A part revision related to condition assessment scheme
- 8. Rules for the Survey and Construction of Ships of Fibreglass Reinforced Plastics
 - A part revision related to indication of ship identification number



STENA CONDUCTOR

A 107,198 dwt oil carrier constructed by Imabari Shipbuilding Co., Ltd. for Friend Shine Shipping S.A.

9. Rules for Approval of Manufacturers and Service Suppliers

A part revision related to firms engaged in performance test of VDRs

10. Regulations for Technical Services

A part revision related to emergency technical assistance services

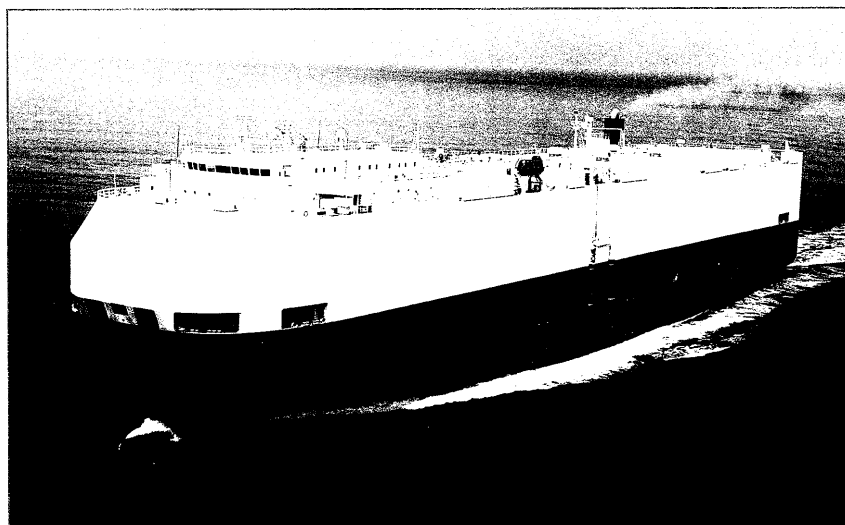
11. Regulations for the Issue of Statutory Certificates

A part revision related to SOLAS Chapter XI-2 and ISPS Code

Training

Surveyor training was conducted for 96 newly selected exclusive surveyors, including 15 non-Japanese surveyors, who recently joined the Society. This training included diesel engine factory practice. In addition, retraining was provided for seven mid-level exclusive surveyors from overseas branch offices. The aim of the retraining was to update and enhance the participants' knowledge levels, as well as to resolve any issues or incorrect understanding on the part of the participants.

A total of 17 surveyors undertook training as ISM Probationary Auditors, bringing the number who have completed this training to 474 persons. In addition,



three members of the Ship Survey Department of the Ministry of Land, Infrastructure and Transport Maritime Bureau also participated in the training.

SPLENDID ACE

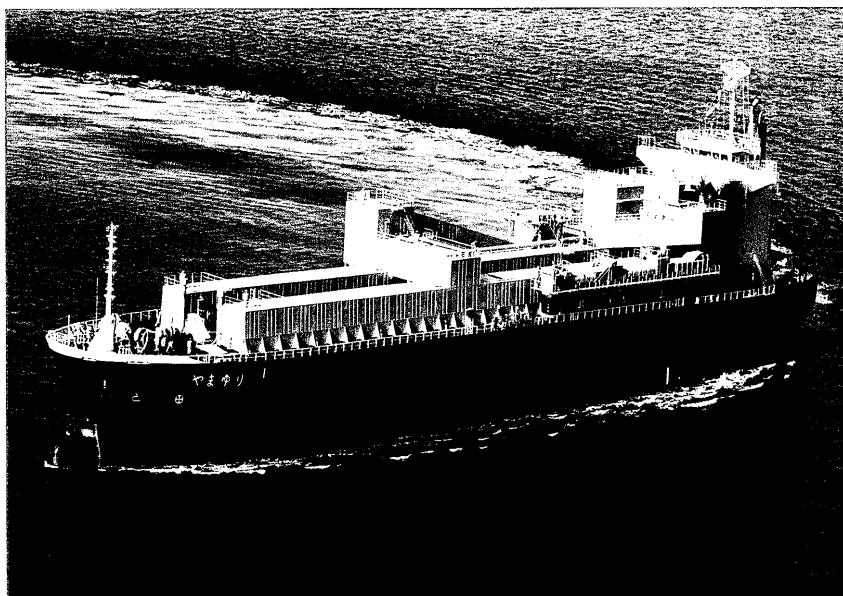
A 19,893 dwt vehicles carrier constructed by Minaminippon Shipbuilding Co., Ltd. for Gavotte Shipping Corporation

Training for Maritime Security Auditors was held at Head Office locations, around Japan and overseas. A total of 72 surveyors participated in training sessions held in Japan, while 90 surveyors undertook the training at overseas locations.

As part of an ongoing international cooperation program, the Society conducted training for six additional surveyors from the Vietnam Register. The training took

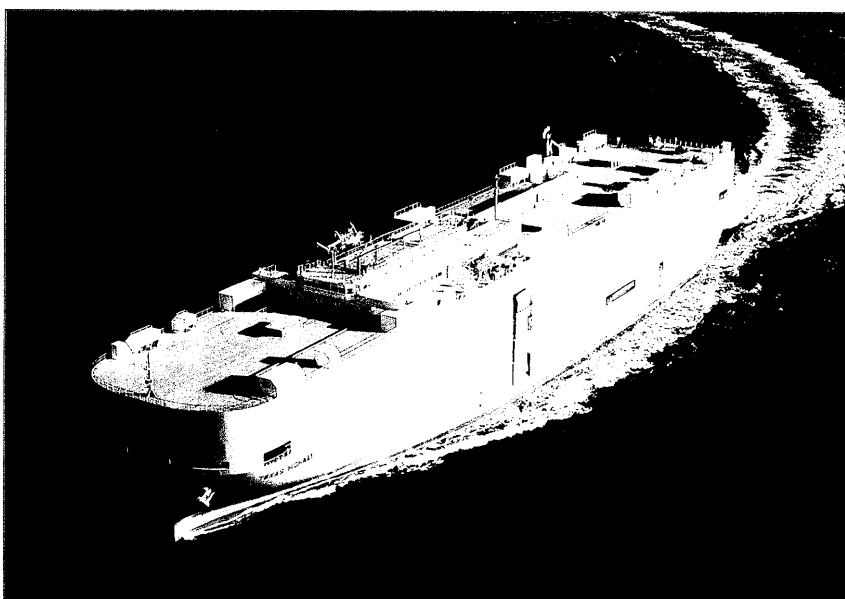
place in Vietnam, Japan and Singapore.

At the request of the Japan International Cooperation Agency (JICA), the Society prepared and gave two lecture courses on ship survey work and other topics, as part of training conducted by the Overseas Shipbuilding Cooperation Center, for trainees from developing countries. The courses were titled: Group Training Course in Shipbuilding



YAMAYURI

A 12,588 dwt coal carrier constructed by Imabari Shipbuilding Co., Ltd. for Naigai Kisen Co., Ltd.



TEXAS HIGHWAY

A 17,481 dwt vehicles carrier constructed by Imabari Shipbuilding Co., Ltd. for Kawasaki Kisen Kaisha, Ltd.

and Quality Management Systems, and International Maritime Conventions and Ship Safety Inspections.

The Society also conducted a lecture at the request of the Tokyo MOU Secretariat on SOLAS and MARPOL, as part of a training session given by the Secretariat to port state control inspectors in the Asia Pacific area.

General

The suite of software and services known as PrimeShip-HULL was further developed with the addition of a new function as part of the *Guidelines for Hull Girder Torsional Strength Assessment for Container Ships*. The related *Guidelines for Container Carrier Structures* was published in December 2003.

The first domestic service LNG carrier in Japan, the *Shinjumaru No. 1* (total cargo tank capacity: 2,500m³) entered NK class and commenced service from the beginning of August 2003. The cargo equipment

onboard the ship was built by Kawasaki Shipbuilding's Sakaide Shipyard, while the hull was constructed by Higaki Shipbuilding. The vessel is the first of its kind and employs innovative new designs for cargo storage and handling.

Research on a FPSO (Floating Production, Storage and Offloading) System was commenced in collaboration with Mitsui Engineering & Shipbuilding Co., Ltd., the National Maritime Research Institute and Ocean Engineering Research, Inc. The Society will be responsible for the design review and technical evaluation of the marine structure. The project is expected to take three or four years.

The Society received a special award from The Society of Naval Architects of Japan (SNAJ). The SNAJ makes a number of awards each year, and in 2003 presented a *Special Award for Innovation in Technical Development*, in recognition of NK's development of practical methods for the evaluation of hull structure strength and the publication of the related Guidelines. The Guidelines consist of a *Technical Guide Regarding the Strength Evaluation of Hull Structures*, December 1999, *Guidelines for Tanker Structures*, November 2001 and *Guidelines for Bulk Carrier Structures*, August 2002.



NOSHIRO MARU

A 91,439 dwt bulk carrier constructed by Oshima Shipbuilding Co., Ltd. for Filberg Shipholding S.A.

NK Online

Online services have become an integral part of the Society's ability to provide the highest levels of customer service 24 hours a day, seven days a week. It is also critical that NK offices are online, and all offices were finally connected to the NK Global Network in 2003. The NK website is continually being enhanced, as is the NK SHIPS online information service. For example, a Special Attention for Surveys area was newly added to the NK SHIPS Survey Status page to enable the easier control and maintenance of Survey Records. Similarly, a customer feedback survey page, accessible via the Comments button on the top page of the NK web site, was newly added, and an IMO International Convention Calendar was also included. The calendar covers the main international conventions

adopted by the IMO. It has three main categories: "SAFETY", which covers the ICLL (International Convention on Load Lines), SOLAS (International Convention for the Safety of Life at Sea), and COLREG, "SECURITY", which covers SOLAS and "POLLUTION", which covers MARPOL (International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating hereto), AFC (International Convention on the Control of Harmful Anti-fouling Systems on Ships) and BWM (International Convention on the Control and Management of Ship's Ballast Water and Sediments, 2004).

The items in the table are new mandatory requirements for either new and/or existing vessels under relevant international conventions in addition to the current

regulations and conventions. All items, which are applicable from the date of entry into force on 1 January 2002, are, in principal, contained in the table. The table will be up-dated as new items/conventions are adopted, or relevant international conventions are amended at the IMO. In addition to the items already adopted at the IMO, some items expected to be adopted in the near future are also included in the table.

A new Client Mail Transmission Service including Technical Information and other useful resources was set up. Emails from the Society can now be received regularly and automatically, simply by registering for the service on the ClassNK web site.

NSS FORTUNE

A 184,9872 dwt bulk carrier constructed by Mitsui Engineering & Shipbuilding Co., Ltd. for Flaming Spirit Ltd.

