



## CSR Report 2007

The corporate social responsibility  
policy and activities of the NYK Group

***Bringing value to life.***

  
**NYK LOGISTICS**  
& MEGACARRIER

## NYK Group Mission Statement

### Basic Philosophy

Through safe and dependable *monohakobi* (transport), we contribute to the betterment of societies throughout the world as a comprehensive global-logistics enterprise offering ocean, land, and air transportation.

### Management Policy

#### Together with Our Customers

Through the use of our extensive skill and expertise and by considering each business site to be of utmost importance, we always work to create new value so that our customers will consider us a trusted and reliable partner.

#### Together with Our Shareholders and Investors

We aim to enhance our corporate value by being financially responsible and by conducting business activities in an open, honest, and transparent fashion.

#### Together with Society

As a good corporate citizen, we positively take on the tough issues that challenge our society, such as concerns involving the preservation of our natural environment, as we work for the betterment of the world that we inhabit.

#### Together with All Staff Members in the NYK Group

As a global enterprise that has the utmost respect for diversity in the workplace and the spirit of challenge, we emphasize the development of employee talents so that all staff members can take pride in their work and eventually fulfill their dreams.



## Safely and reliably transporting value for our customers

The NYK Group's monohakobi services extend to the land and air as well as the sea. As an integrated logistics company, we consider our most important social responsibility to be the delivery of our customers' products—their value—safely and on time.

### Safe operations programs —The safety activity process—

NYK has formulated its own safe operations standards called NAV9000,<sup>1)</sup> which it rigorously enforces throughout its services. We engage in a wide range of activities designed to achieve safe operation for all our ships, keeping a PDCA (Plan, Do, Check, Act) cycle in continuous motion. It is through the repetition of these basic activities that operational safety is ultimately achieved. Each individual activity either leads into or is initiated as the result of another activity. Each step in the cycle is essential; skip even one and safe navigation is no longer possible. That is why steady, repeated, systematic activities are required.

#### The PDCA Cycle in Maritime Safety



#### Formulation of safety and environment guidelines and action programs

NYK has a Safety and Environment Management Committee (see p. 25) chaired by the president to implement specific, effective activities to ensure the safety of ship operations, and by extension, prevent

marine pollution and otherwise help to preserve the global environment. The committee determines the software, hardware and budget required to achieve safe navigation and conduct a wide range of environmental conservation programs. The overall direction that it determines are reflected in the work of committees that oversee specific clusters of vessels and types of services to provide for more focused implementation.

#### Accident research and response

The NYK Group unfortunately experienced several accidents involving human life and oil spillage during 2006. When accidents occur, we work quickly to confirm the facts and make the necessary reports, and we also investigate causes so as to determine how to prevent recurrence and improve our operations. As one example, in an incident involving a container ship collision, we identified the following contributing factors and formulated the following countermeasures.

#### 1) Response immediately after the accident

Upon first receiving word of the accident, we established a Crisis Management Center within the headquarter and issued response instructions placing high-priority on saving the lives of crew members on the two ships and preventing oil spillage or other pollution of the ocean.

#### 2) Investigation of causes

We sent members of the head-office staff and *Jippen Marine Science Inc.*<sup>2)</sup> to the ship to investigate. They found that the primary cause of the accident was a problem in bridge team management (BTM),<sup>3)</sup> a failure of communication on the bridge.

#### 3) Formulation of measures to prevent recurrence

Based on the investigation findings, we reviewed our existing BTM training and are now in the process of creating a system by which NYK and the ship management company will collaborate to audit BTM practices on individual ships.

1. **NAV9000**  
NAV9000 is an original NYK safety and environment standard that represents the cumulative expertise in maritime services that the company has gained during more than 100 years of operations, together with the requirements of our customers, feedback on past accidents and problems, and the standards of the ISO 9000 and 14000 series standards.



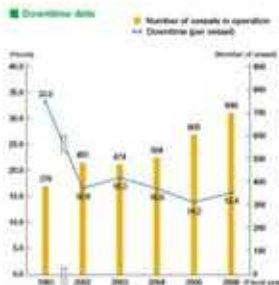
NAV9000 is registered as a service mark in the Japanese Patent Office, United States and Japan.

2. **Jippen Marine Science Inc.**  
Maritime consulting company with NYK Group.

3. **Bridge team management (BTM)**  
Management technique that reduces human accidents by assigning teamwork on the bridge.

### ▶ Using downtime to increase safety

One of the yardsticks that NYK uses to measure operational safety is "downtime," the amount of time that ships are stopped or delayed due to accidents or other problems. We keep a database of downtime that is subject to regular reviews so that we can monitor status and, when necessary, revise our targets and activities.



### —Connecting ports safely—

The Safety and Environmental Management Committee determines safety program guidelines for all ships operated by NYK. Specific programs are formulated in accordance with these guidelines and communicated to ships and staff in many different forms. We also use our proprietary safety management system, NAVSOCC, to monitor implementation on ships and at group companies, with ship visits during safety campaigns providing further confirmation. To help improve safety, status and findings are communicated to relevant personnel and fed back to ships in *Clear Line*, a monthly safety and environment information magazine.

### ▶ Safety campaigns, safety conferences

In July 1997, the very large crude carrier (VLCC) *Diamond Grace* ran aground in Balikpapan, causing an oil spill and resulting in one of the worst accidents in the company's 122-year history. To learn from this experience and to bring the entire staff of NYK together to achieve safe operations, we conduct two safety campaigns each year, *Remember Naka-no-Gai* in the summer, and *Get on Safety* in the winter. In the campaigns, members of the sales, navigation and technology teams visit ships, recastern "books" that tend to be taken for granted, deepen the interaction and mutual understanding between ship crews and on-shore staff, and work to increase awareness of safety. Shipowners and ship management companies are vital partners in achieving safe operations. NYK holds safety conferences and safety seminars where we provide them with necessary feedback and endeavor to maintain close and meaningful communications.

#### Discussion meeting and improvement case studies

Each year, NYK holds a Ship Captains and Chief Engineers Discussion Meeting for ship captains and chief engineers, who meet with the president and other members of the management committee. The meeting provides an opportunity for management to hear what people have to say at the working level on the ships, communicate the company's management guidelines and exchange systems. An example of one of the improvements is fixed piping, which is used as an auxiliary resource on all new ships (excluding some categories). NYK will continue to listen to what the working level has to say and use those recommendations to improve its fleet and operations.



Meeting held on the *Atsuharu Maru* (VLCC #10) in August 2008.

#### 1. Operation

A meeting designed to rectify accidents and problems encountered during the month, presentative measures and improvements, findings from Naka-no-Gai, direct information, reference to case materials, and other items that should help improve safety.

#### 2. Remember Naka-no-Gai Campaign

An event held every July, the month in which the accident occurred, in an effort to bring the events before the Diamond Grace VLCC from large-scale marine accident.

#### 3. Get on Safety

An event held over the two months of September and January each year focusing on safety measures by rough water weather.



Interview with the chief engineer of a very large crude carrier

**"I want to ensure safe operations and I am excited about training people to oversee this."**

Phased Suez Charvita Sathara Arumudi, Chief Engineer, *Atsuharu* VLCC

▶ p. 24



—Prevention of accidents—

NYK's safety promotion activities are driven by the PDCA cycle. Prime examples include NAV9000 and Near Miss 3000 activities. Crew training programs are the key on the "software" side, and to the end, we conduct 3000 training and HSM training around the world, on the "hardware" side, we constantly review our standard specifications based on feedback received from operating ships. In recent years there has been a growing need to combat piracy, which has emerged as a leading security concern around the world. NYK has developed "Jack Light" high-illumination searchlights as an anti-piracy tool and is in the process of installing them on ships.

▶ Expanding and deepening NAV9000 activities



Checklist and audit equipment

Whether our own ships or chartered vessels, NYK uses, as the ship's operator, its practical experience to be precisely involved in safety and work to fully spread and effectively execute safety activities. NAV 9000 activities require ships and companies (shipowners, management companies) to comply with NYK's own standard which complies with international treaties and national legislations, and makes use of the company's extensive experience and years fulfilling customers' needs. Employees with expertise in this area make regular visits to ships and companies to check compliance. Companies are required to implement remedies and improvements when areas for improvement are identified, and NYK works with everyone involved so that effective measures can be put in place to prevent recurrence. In fiscal 2006, we visited 307 ships and initiated improvements on most of them, helping to maintain and increase the safety of the vessels we operate.

■ Breakdown of NAV9000 improvements (percentage)

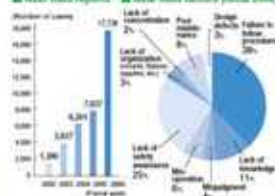
	2004	2005	2006
Ship audits	268	285	368
Company audits	40	30	25
Improvements	2,891	2,322	3,130

▶ Expansion of Near Miss 3000 activities

Near Miss 3000 activities ask crews to identify the potential for accidents and take the lead in making improvements. Near misses (mistakes that do not result in accidents or other problems) follow Heinrich's Law, and NYK takes a broad view of what they constitute, performing detailed analysis of phenomena (unsafe behavior and circumstances) so that they can

be eliminated as quickly as possible. Since October 2006, we have been working with shipowners and ship management companies on "DEVIL Hunting" which is a process we use to identify "devils" (dangerous Events and Irregular Events). These are currently approximately 430 vessels and 40 companies participating.

■ Near miss reports



▶ Global education and training

NYK ships have "Near Miss Committees" that function as a part of Near Miss 3000 activities, as well as Shipboard Management Meetings in which the captain and crew members discuss ways to remedy and improve issues on board. The ship's Safety and Health Committee and other organizations also meet regularly to provide all crew members with explanations, information and training on all facets of safety and health issues and activities. Other programs furnish crew members with education and training on firefighting and lifesaving equipment, as required by rules, and provide opportunities to master specific skills and operations.



—Appropriate response in the event of accidents—

In the event that an accident or other problem occurs, damage can be minimized through accurate information collection, decision-making and instructions in the initial stages. When an accident or problem at sea occurs anywhere in the world, NYK establishes organizations or tasks with providing speedy and appropriate response: the Crisis Management Center (CMC) located in the Tokyo headquarters, the Regional Headquarters (RHQ) in the regional management company where the accident occurred, and the Local Headquarters (LHQ) at the accident site. We also have an Emergency Response Network (ERN) to quickly collect information. ERN staff assume that the Tokyo headquarters and local personnel on-site have appropriate information on the accident status and respond as instructed by the headquarters.

1. HSM  
Safety Management Systems developed by ship management companies for ship operators

2. Classified vessels  
"Charter" refers to a ship that is not our own. The shipowner arranges for the equipment and crew and guarantees the performance of the vessel.

3. Heinrich's Law  
A law of accident accidents that says that behind every serious accident there are 29 minor accidents and 300 frightening near misses



4. CMC  
Crisis Management Center

5. RHQ  
Regional Headquarters

6. LHQ  
Local Headquarters

7. ERN  
Emergency Response Network

### Emergency Response Network



### Accident response training

NYK provides regular accident response training to improve employees' ability to deal with accidents when they occur. We operate several of many different types and classes, and our ships could potentially encounter many different kinds of accidents and problems, so they are aimed together to create scenarios for training services. We also seek the participation of shipowners, ship management companies and large numbers of outsiders in order to make training as realistic as possible. In May 2006, we conducted a joint anti-terrorism exercise with the Hong Kong Police, in September we worked with the Japan Coast Guard for an exercise in responding to an unidentified vessel,<sup>1</sup> and in January 2007 we held a desktop exercise with the 7th Regional Coast Guard Headquarters on joint responses to accidents on a cruise ship. Post-exercise reviews are one of our priorities, and we use the opinions and insights that they provide to further enhance our accident response systems.

### Overview of Training Programs in Fiscal 2006

Month	Type of ship	Contents
Apr.	LPG ship	Collaboration with drilling oil spill
Apr.	Bulk carrier	Collaboration with drilling oil spill
Apr.	Container ship	Fire in the cargo hold
Apr.	LPG ship	Collaboration with drilling oil spill former reply
Apr.	LPG ship	Drilling vessel fire
Apr.	Very large crude carrier	Drilling by unidentified vessel
Apr.	Bulk carrier	Collaboration with drilling oil spill
Apr.	Container ship	Collaboration, human reply on other ship, fire
Apr.	Very large crude carrier	Collaboration with drilling oil spill
Apr.	Crude ship	Fire former reply



Japanese Coast Guard patrol ship during joint training

### Process of identifying factors, making remedies, and publishing and sharing information

The key to safe navigation is a process of (1) collecting data on factors contributing to accidents and problems, (2) analyzing information, (3) formulating and publishing responses, and (4) confirming the implementation of responses so as to prevent future accidents (preventative safety). There are two forms of accident analysis and response formulation: those performed for each individual accident, and those performed at regular intervals to analyze trends that are highlighted by statistics. The former require rapid analysis by relevant business units while the latter require an analysis of trends in the accident database. There are also two forms of publication: bulletins that are only a summary of the accident and the major points to be aware of, and formal contentment letters that are based on fuller analysis. NYK has developed a safety information management system called "VOICES"<sup>2</sup> for more efficient management of these documents onboard ships. In October 2006, we began installing the system on ships, and also in the premises of shipowners and management companies. Case For also contains timely information on case studies and contentment letters. We conduct the same sort of research and analysis for accidents that occur at other shippers. During fiscal 2006, we collected information from publications by government agencies to formulate a table of "anchorage limits by ship type and class," which has been broadly distributed in boxes, and also to group companies, shipowners, management companies and working-level ships, where it is put into practice.

### Process of inspecting systems and facilities



### ISO9001 certification

This is a series of safety activities that are conducted based on international standards. In August 2006, the company's management systems were certified under ISO9001:2004 by Nippon Kaiji Kaokai. The scope of application includes safe operations management activities for all effective shipping services, activities to prevent environmental pollution, risk management activities and related technical support activities.

### Exercise in responding to an unidentified vessel

The exercise for the exercise for June 4 (JUN 4 EXERCISE) organized by NYK, an anti-terrorism exercise with the Japan Coast Guard for the purpose of responding to an unidentified vessel, was held on September 19, 2006.

### VOICES

VOICES (Voice of Information on Occurrence of Vessel Incidents) is an information management system developed by NYK, an safety information management system for the company is managed in the form of electronic files and has data 8 and 10 ships as an e-mail distribution. The biggest advantage is that from the introduction of the system is the ability to search all documents instantly & wide range of safety information led to other departments.

### ISO9001:2004 certification

ISO9001:2004 is an international standard for quality management and quality assurance. Certification proves that the organization's systems satisfy the standard requirements.

## Reflecting the opinions of stakeholders in our operations

Stakeholder dialogue 

### Working with a maritime university to train professionals in marine *monohakobi*

—CSR by the NYK Special Class, a joint program with Shanghai Maritime University—

NYK enjoys a special partnership with Shanghai Maritime University, and since October 2002, there has been an NYK Special Class held every other year for navigators and engineers that has developed a reputation for producing excellent crew members. For this year's issue of the CSR report, Toshihiro Tanaka, manager of the Seafarer Planning Team, interviewed Associate Professor Ruai Wei of Shanghai Maritime University.

#### The first five years of the NYK Special Class

**Tanaka:** Shanghai Maritime University (SMU) established the NYK Special Class in 2002. I would like to hear your impressions looking back on the first five years.

**Wei:** The program has gone extremely well. It goes far beyond anything else you can find in China's maritime education and training. One of the attractions is the scholarship and loan program, which is very popular with students. Some of our best students make use of the loan program, and it has been instrumental in instilling competitiveness and a desire

for self-improvement among them.

**Tanaka:** Could you describe what you consider to be the distinguishing features of the curriculum and what students have to say about it?

**Wei:** We created the curriculum for the Special Class in collaboration with NYK, while also incorporating the requirements laid out by China's Maritime Safety Administration (MSA) and the requirements for earning a degree. What I think distinguishes the class from other programs is that its purpose is to enable students to master the practical skills they will need on board ships while also gaining classroom instruction in operational safety. An example would be the



visiting lecturers. NYK furnishes lecturers to the class, who visit Shanghai four times a year. Some of the requests that we receive from students include more time and opportunities to learn maritime English and more opportunities for field studies, especially visits to oceangoing vessels, other kinds of ships and port facilities. Our students also tell us that they want to learn more about NYK, what kind of a company it is and what sorts of businesses it is engaged in.

### Educating crew members

**Tanaka:** As you know, the first class graduated in 2005 and completed their onboard training in the summer of 2006. They were assigned to NYK ships at the end of last year. I am confident that they have high skill levels. Everyone knows that they are extremely diligent in their studies and very keen to improve themselves. How would you evaluate the quality of the students?



**Ruan Wei**  
Associate Professor  
Shanghai Maritime  
University

**Wei:** The first thing I would have to say is that it will take time to make substantial improvements in the level of entering students. SMU is working to improve the quality of its new students and also their English abilities. That is because we see this as the most important factor in students' quality. This fall, SMU will be moving to a new campus that has approximately 6.5 times the land area of our present location. We plan to teach maritime English there, using practical, work-related training—onboard film drills and simulator exercises.

**Tanaka:** I'd like to ask you about the difficulties in educating crew members who will work in the harsh environments found at sea. What is the most important thing in training people who are able to function in those kinds of situations?

**Wei:** Ships are increasingly being equipped with state-of-the-art machinery and devices and ships are also subject to rigorous, systematic inspections by port state control at ports of call, for example. The crew's quality must be suited to these circumstances and needs. At SMU, we consider student quality to be defined by experience onship, knowledge of ship operations, computer skills, English skills, ship management abilities, interpersonal skills, and enthusiasm about working

in the maritime industry. And let's not forget professional attitudes either.

### What the collaboration between Shanghai Maritime University and NYK has achieved

**Tanaka:** What effect has the collaboration with NYK had on SMU?

**Wei:** I consider it to be a "window" and "bridge" by which we learn trends in the maritime industry and what is required of crew education. NYK provides us with generous resources and expertise that help us to improve the quality of our students and that has an extremely large impact on society. I believe this increases the likelihood that the university will be able to achieve its goals and guidelines. We hope to enhance this cooperative relationship further in the future and to extend it to other maritime areas as well.

**Tanaka:** Tell us a little about where SMU is headed in the future.

**Wei:** In September we will be opening a new campus that will have bigger and better facilities. It has an area of 133.33 hectares and is able to serve 20,000 students. The facilities and equipment will be suitable for training in maritime safety as well as specialized areas like LNG and LPG ships, and we hope that the university's activities will expand to reach international levels. We will be following the progress of the global maritime industry very closely in the future and want to contribute to the internationalization of maritime education.

**Tanaka:** As a final comment, I would note that the market for crew members is extremely tight at the current point in time and it is much more difficult than it used to be to recruit and keep talented personnel. NYK believes that it has a duty to create systems for educating top-class crew who are able to contribute to society, in part because of the company's own need to attract skilled crew members who are able to function in an increasingly wide variety of ship environments. We hope that our collaboration with SMU will provide more Chinese students with the opportunity to become excellent crew members and vital participants in the maritime industry.

Thank you for your time today.



**Toshihiro  
Tanaka**

Manager  
Seafarer Planning Team  
Seafarer Planning Group  
NYK Line

## Together with our employees

The NYK Group monitors working conditions and introduces innovative systems to ensure that employees are proud and satisfied with their jobs and that the work environment is a place in which employee individuality and values are respected.

### Monitoring working conditions and employee satisfaction

In the spring of 2005, the NYK Group formulated an HR philosophy<sup>1</sup> as part of its "New Horizon 2007" medium-term business plan, under which it stated, "Continually develop diverse talent at all group companies across global fields." This statement marks a recognition that the basic objective of HR activities is development with a wide range of skills and that its object is a wide range of employees around the world. The group's business domains are undergoing dramatic expansion and growth in both qualitative and quantitative terms. With the cooperation of group companies, last year we began what will be an annual Survey of Personnel Administration and Human Resources Development in the NYK Group (HR Data Survey) to capture what kind of people were working in what kinds of jobs, in which workplaces and what kinds of care, support and leadership they required. The results from the survey serve as basic data for the formulation and implementation of groupwide human resources development plans.

#### ▶ HR Data Survey covering 200 group companies

From April to May 2006, NYK conducted its first-ever groupwide survey to gather the basic data required to achieve the development of group employees advocated in our HR philosophy. The survey attempted to develop comprehensive information on leadership, holiday and leave systems, health and safety systems, human resources development, and systems to protect human rights and working conditions. Findings are shared with all participating group companies. The results serve as a foundation from which we can work at the group level to increase awareness of working conditions and human resources development, helping to ensure that our workplaces instill pride and satisfaction in our staff. We plan to conduct the survey again in fiscal 2007, updating it to reflect the opinions of those involved so that the implementation is more efficient and the data is more useful.

### Workplaces that instill pride and satisfaction

It is important that each member of our group still be able to take pride and satisfaction in their work and their position as a member of the NYK Group in order for us to be an organization that fully utilizes and improves the skills and abilities of the individual. For a company or organization to instill work satisfaction, it is vital that there be a solid relationship of trust between the company and the community and also between the company and the employee, though how this relationship is achieved will change to some extent according to individual values. We believe that one of the most important components in NYK's management is the provision of workplaces in which employees can take satisfaction, and as a group we conduct many programs and experiments to this end.

#### ▶ Safeguard work and personal life

We have formulated a Private Sector Employer Action Plan (April 2005 to March 2007) under the Law for Measures to Support the Development of the Next Generation, and the direction provided by the Tokyo Labour Bureau has confirmed achievement of its goals.



#### ▶ Mentoring program

We launched the NYK Mentor Network in November 2005. Under the program, senior employees serve as mentors to provide guidance and support to junior colleagues, advising them on how to successfully carry out job assignments, helping to increase motivation and otherwise supervising their development. Younger employees selected as mentees are given training in the knowledge and skills that mentoring imparts. More recently, we have begun to consider concrete mentoring programs for group employees assigned to NYK for the first time and for new hires at group companies.

<sup>1</sup> HR philosophy "HR" is an abbreviation for "Human Resources." The philosophy was established in spring 2005 under New Horizon 2007 as guiding principles for all group company employees.

#### ▶ Volunteer Leave System

In April 2006, we introduced a Volunteer Leave System to encourage employees to participate in volunteer activities. Eligible volunteer activities are announced by the Office for Corporate Citizenship (OCC), and employees can also volunteer for activities sponsored by an NYK club,\* spending up to five days a year on volunteer programs. One example is the NYK Reading Team, which is an NYK club that goes to day-care centers and other public facilities in Tokyo to read books to children during weekday business hours. In fiscal 2006, five employees obtained several volunteer leaves, through which these employees deepened interaction with people in many different walks of life.



The NYK Reading Team



Child Care Center staff, parents, and children

#### ▶ Integration of NYK Career Club (NCC) and NYK Friend Club (NFC)

NYK launched the NYK Career Club (NCC) and NYK Friend Club (NFC) in April 2006. The NCC is a program created in response to the amended Senior Citizen Employment Stabilization Law and provides for reemployment through age 65 of employees who retire at age 60 and meet certain conditions. The NFC is a program that provides for fixed-term reemployment of staff members who have left NYK to raise families or for other personal reasons. The purpose of both programs is to provide ambitious, skilled employees with opportunities to work after they have left the company. By April 2007, a total of 10 people had signed up with the NCC and four with the NFC.

#### ▶ Improved utilization rates for day-care centers

In April 2002, NYK became the first company in downtown Tokyo to open its own internal day-care facility, Yusei Child Care Center. After opening the facility, we continued to ask ourselves how we could facilitate its use by more employees, which resulted in several innovations, including programs to enable users to commute by car and the acceptance of children from employees of other companies. These steps allowed us to double the number of daily users from five in April 2006 to 10 in April 2007.

#### ▶ "No overtime working" program

The Office-Hours Management Committee<sup>1</sup> is a joint labor-management group that studies and implements programs to reduce overtime working hours. The "no overtime working" program was first implemented in August 2005, and to help it become established, during fiscal 2006 we began to switch the internal PA system to a free program by employees from 5:00 p.m. during which workers are encouraged to go home on time, and the effort that has proved effective. NYK is also trying to support a meeting-oriented work style, which has been demonstrated to improve daily productivity. Workers who arrive at their assignments one hour ahead of the scheduled time are provided with special allowances as an incentive.

#### Watching children grow up close, I have learned to be a better parent.

I have a total of 11 days of paid leave, including Saturdays, Sundays and holidays. In fact, I was able to take paid holidays under a system that allows you to borrow paid leave that was not taken in the three previous years. I wish to be honest, I felt worried about whether I would really have the time off, but having obtained the leave, I was able to watch my daughter up close after she was born, which helped me to learn how to care for her very safely, and I think that has been something precious for me. Just the experience has reconfirmed for me that while work is important, family is important too, and I think that it will make a positive contribution to my future work life.



Interview with a staff member enrolled in the management system

"What sets NYK apart are the ties between people"

Kazuo Yoshida  
Management Coordinator Team, Management Coordination Group, NYK Line

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<sup>1</sup> OCC  
Office of Corporate Citizenship, responsible for social and environmental activities and other New Corporate Communication Group

<sup>2</sup> NYK clubs  
Voluntary groups that meet for various topics to promote interaction within the company and identify new business opportunities.

<sup>3</sup> Office-Hours Management Committee  
The first stable form 2005 of the joint-management Special Committee by the Reduction of Working Hours, established in 1998.

▶ **Employee safety activities**

Physical and mental health management is important for healthy, energetic employees. In addition to regular checkups and other programs mandated by law, NYK also has unique programs such as lectures by industrial physicians on the prevention of lifestyle-related diseases and efforts to educate employees about and prevent metabolic syndromes. The psychiatrist stationed in the company health office also provides mental health education as a part of new employee and new team manager training programs, giving staff members correct knowledge about prevention and early discovery of mental health issues. The Office-Environment Enrichment Committee meets once a month to provide a forum for an exchange of opinions between labor and management on workplace environments and employee health management. Industrial physicians are present at the meeting, which seek to achieve timely improvements.

▶ **NYK club activities**

NYK club activities give employees with mutual interests an opportunity to get together for free discussions. They were introduced in fiscal 2002 as a means of promoting greater interaction within the company and potentially creating new business opportunities. During the first half of fiscal 2006, there were seven active clubs, and in October they held an Activity Reporting Meeting. The number of active clubs during the second half was eight. Some examples include the Hikawamura Club, which provides guide services for visitors to the historic *Hikawamura* docked in Yokohama, and the Panda Club, which promotes understanding and research of Chinese culture through Chinese language classes and yoga circles. Clubs are operated entirely by employees at their own discretion. NYK looks forward to seeing these activities grow and develop and will continue to support them.



Hikawamura Club in action

▶ **Professional Labour Bureau (PLB) received as part of the Ministry of Health, Labour and Welfare's Family-Friendly Company Award**

NYK received the Professional Labour Bureau Prize at the 2006 Family-Friendly Company Awards sponsored by the Ministry of Health, Labour and Welfare. The program is designed to recognize companies that offer flexible working conditions to facilitate a proper balance between careers on the one hand and child and family care responsibilities on the other. NYK was

chosen for its child care and family care leave system that offers longer periods of leave than mandated by law, its introduction of shorter working hours to the child-care and family care flexible system, and its provisions for commuting by car to improve convenience for employees using its in-house day-care facilities in downtown Tokyo.



Meeting summary



**Employee development**

NYK employs approximately 48,000 people around the world. We have an extraordinarily diverse staff for which we provide environments conducive to professional growth based on our group HR philosophy of offering full development opportunities in global fields. We have a large selection of training programs, from new employee training on up, that help to develop global business leaders.

▶ **Global NYK Week**

In November 2002, NYK began holding a training program called Global NYK Week for mid-level employees. The program is offered twice a year at the Tokyo headquarters. A total of 190 employees have participated in the event, which marked its ninth session in November 2006. Participants have an opportunity to speak directly with NYK president Miyahara, and many stimulating comments have been received about *monozukushi* being the transportation of value, and about ambitions to develop leadership qualities and embark on new challenges. During visits to the NYK Maritime Museum, participants have been able to learn how those who went before them overcame obstacles, and many have commented about how this has helped them to overcome the challenges and issues faced today.



Global NYK Week

## Together with crew members

Crew members are at the very front lines of the safe operation of NYK's expanding fleet. Estimates say that there will be a global shortage of approximately 20,000 navigators and ship engineers in 2010, and NYK has created a variety of programs and opportunities to attract and train talented seafarers.

### Crew recruitment —Adapting to a larger fleet—

One of the key elements in NYK's strategy for responding to the growing demand for marine transportation services is to expand the size of its fleet, and this means that the company also requires larger numbers of crew members. It is particularly important that we attract highly skilled seafarers who are capable of operating ever larger ships and vessels that carry delicate substances like crude oil and liquefied natural gas. NYK has traditionally relied upon the Philippines for much of its crewing needs, but we also recruit in many other countries. In addition to finding experienced seafarers, we provide opportunities for *cadets*<sup>1</sup> and have programs to mold them into future officers.

#### Expanding the supply of crew members

In addition to the Philippines and Indonesia, in 2002 NYK began opening Manning Offices in four regions of India to attract skilled Indian crew members. In Europe, we have Manning Offices in Croatia and Romania, and in 2006 began to recruit crew from Ukraine and Russia as well.

#### Manning offices throughout the world



#### Cadet system

NYK hires and trains cadets who will serve as the officers of the future in its fleet. We enjoy close ties with new host marine academies throughout the world, and operate NYK Special Classes in many of them. In the past, we have hired about 50 cadets, primarily from the Philippines, but from 2006 onward, we plan to expand hiring to approximately 200 new cadets each year.

#### Educational institutions from which cadets are hired

Country	Number
China, India	2 each
Russia, Philippines	2 each
Croatia, Romania	1 each

#### The NYK-TDQ Maritime Academy in the Philippines

In June 1, 2007, a new NYK-TDQ Maritime Academy<sup>2</sup> opens in the Philippines, one of our major suppliers of crew members. The academy is opened jointly by NYK and its local business partner, TDQ,<sup>3</sup> as a means of increasing officer candidates and maintaining and improving their quality. Housing is also provided for the 60 applicants accepted each year for the navigation course, in addition to the 60 applicants accepted yearly for the engineering course. The five-year curriculum includes three years of classroom learning plus a one-year internship on ship, where students will receive an excellent basic education while also gaining the practical knowledge and skills in ship operations and management required for future officers.



Approximately 2,000 applicants for the winter entrance exam given in December 2006.



Model of the NYK-TDQ Maritime Academy to be completed in the Philippines.

<sup>1</sup> Cadet: Officer candidates. A trainee who is an apprentice to master the skills required for certification as a navigator or engineer. Cadets are assigned to NYK ships when they receive training and acquire certification, after which they may be hired as navigators or engineers by NYK.

<sup>2</sup> NYK-TDQ Maritime Academy: Under governmental funding facilities, NYK-TDQ Maritime Academy is sanctioned by the Department of Education of the Philippines.

<sup>3</sup> TDQ: Transnational Development Group, NYK's local business partner operating in the Philippines.

## Crew training

NYK has standardized the crew training program that it uses throughout the world in order to develop quality crew members with the knowledge and skills required by the group.

### Crew training systems

NYK has formulated uniform requirements that clearly indicate the knowledge and skills to be mastered by crew members at each rank, regardless of their nationality. OIT programs and supplementary land training courses help crew members to meet these requirements. On ship, the NYK STARSHIP OIT support software uses computers for individualized learning and effective training. On land, we have the Singapore Training Center,<sup>1</sup> which opened in 2006, in addition to existing centers in Japan and Manila. All three locations use advanced simulators to provide training for officer candidates. At training centers throughout the world, local instructors teach from a standardized curriculum, using both classroom experiences and computer-based education.

### NYK Officers Requirements



### NYK STARSHIP onboard educational software

NYK STARSHIP OIT support software developed for NYK crew members. It uses 3-D graphics, animations and videos to teach crew members NYK practices while they are on ship.

1. Cadet OIT support software	For cadets
2. Cargo handling OIT support software for specific ship categories	For captains and deck officers
3. Degree-related OIT support software	For chief engineers and engineers

### From 10 to 20 crew cadets per ship

NYK has expanded its hiring of cadets to 200 per year, and as part of the training program for these new officer candidates, we will be including cadet quarters, classrooms and instructor quarters capable of housing up to 20 people on four new ships scheduled to be completed in 2018. Cadets in principle undergo a 12-month onboard training program, the first three months of which will be spent on a training ship staffed with specialized instructors to ensure that all cadets receive the same basic training.

### On-ship training for Japanese crew

In Japan, we previously included only graduates from maritime academies in our recruiting pool for Japanese seafarers. However, in fiscal 2008, we began including new graduates from regular four-year universities in this recruiting pool, and trainees from these universities will be provided with crew training through on-ship courses. Employees hired in this fashion will be able to obtain a seafarer's certificate after 24–30 months of study and onboard training. After several years of experience as a crew member on NYK vessels, these individuals will also have the opportunity to rise to the position of captain or other engineer.

## Crew member safety and health

Maintaining a healthy, injury-free crew is essential to safe ship operations. Prior to boarding, all crew members are given health checkups, with regular follow-up and health management programs during the voyage. Activities like NAVSOOD (see p. 16) help to confirm that the ship's environment is appropriately maintained and increase the safety awareness of crew members, which in turn helps to prevent accidents and injuries. NYK gathers and analyzes data on accidents and illnesses to monitor conditions, verify the effectiveness of activities and identify improvements. On ship, the captain chairs the Onboard Safety and Sanitary Committee, which is responsible for checking and continuing crew member safety and health.

### Reducing gastrointestinal

For employees who have previously been exposed to asbestos, NYK provides health examinations, health management initiatives, information on asbestos relief systems, a specialized consultation office and special compensation for asbestos-related injuries and health damage.

### 1. OIT On-ship OIT Training

2. STCW Employment Training and Assessment System (EAS) Computer software for on-ship and individual instruction. (EAS and practice centers. Also to support and manage OIT by recording individual progress and test results.)

3. Singapore Training Center (Opened in November 2006. Total floor space of 13,000 m<sup>2</sup>, equipped with a wide range of simulators covering ship operations, firefighting, primary medical services, ship simulator engine control, of harbor major handling, etc. This facility enables crew members to master knowledge and skills in a lively and practical manner.)



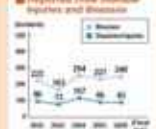
The Singapore Training Center opened in November 2006.

4. STCW International for "Ship Security Officer Training" (advance training program to "designated and approved")

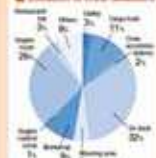
5. STCW International for "Safety Management System Training" (advance training program to "designated and approved")

6. STCW International for "IMO Education and Exercise (EEX) Program" (training programs for non-Approved crew members on IMO vessels.)

### Projected crew member injuries and illnesses



### Location of crew illnesses

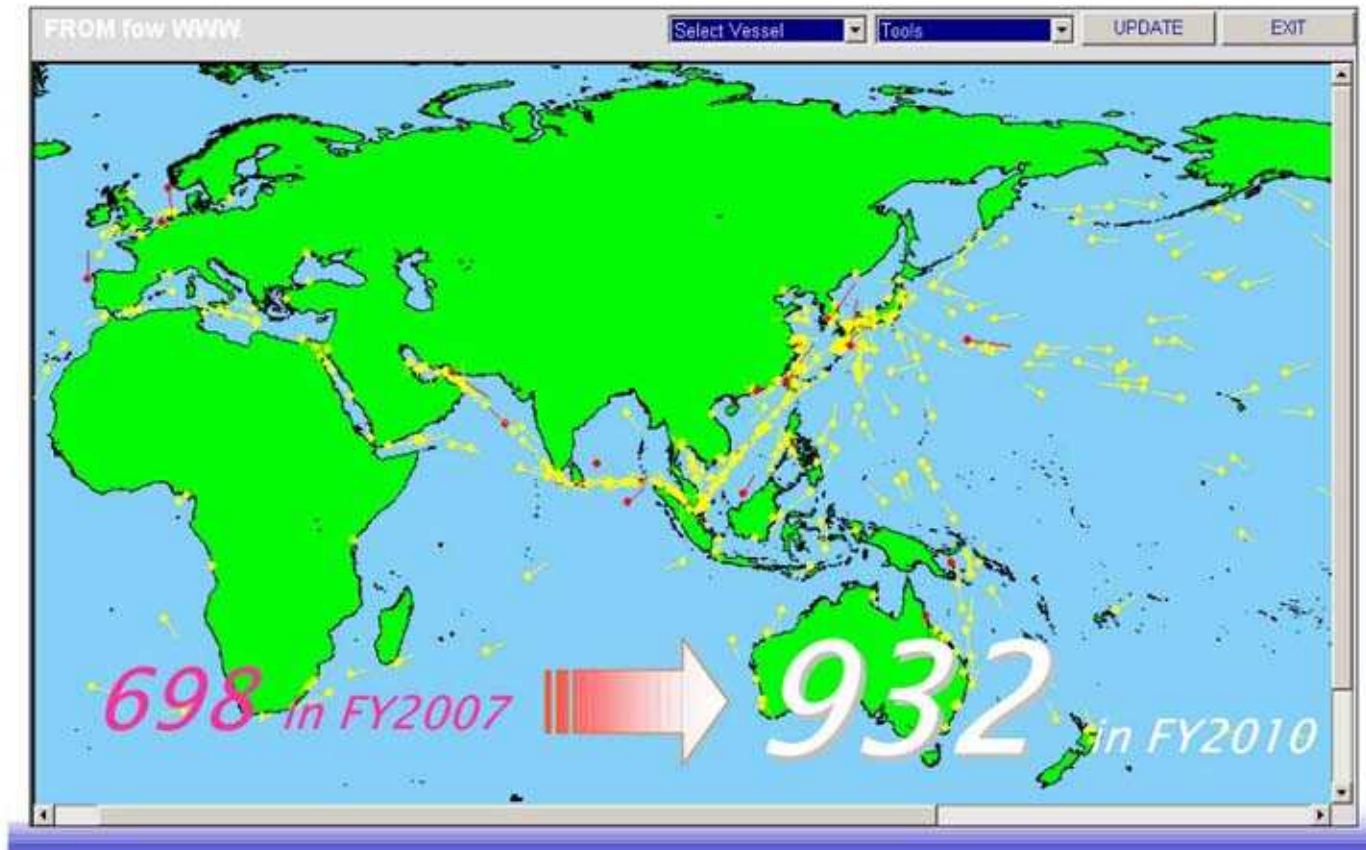


## *Loss Prevention Initiatives*

NYK Presentation to UK Underwriters

- 1. Cultivate global human resources*
- 2. Lessons from incidents*
- 3. Keeping quality of NYK fleet : NAV9000*
- 4. Near Miss 3000 Activities*
- 5. Other safety activities*

## Expanding Fleet Scale



*More vessels, more crew needed...*



## “NYK MARITIME COLLEGE” concept



## Opening NYK-TDG Maritime Academy in Philippines

- A total of 120 students in each grade
- Approximately 30 instructors (including part-time instructors)



President Arroyo at Cornerstone-Laying ceremony

**Coming Soon!**



## *Building Training Vessels*

*3 Container ships + 1 LNG Carrier , each with the capacity to take 20 cadets*



***Most practical way to understand the company's approach to safe operation***



**1st Delivery: May 2008 (LNGC)**

## Developing E-Learning System: *STARS Series*

STARS (Shipboard Training and Assessment Records System)



## *Standard training program in the Academy*



3yrs Pre-Sea training  
in classroom



3months Onboard training  
in training ship (OJT)



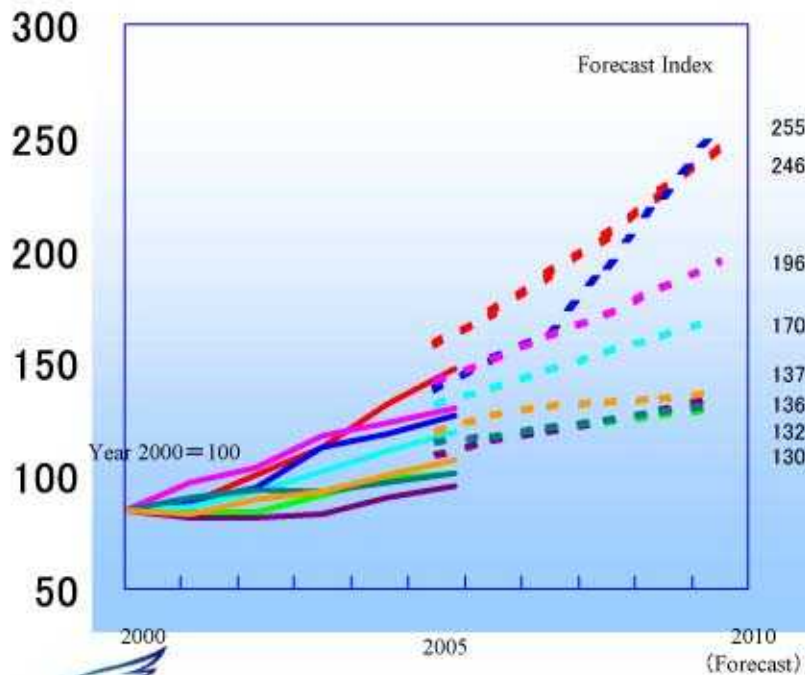
9months Onboard training  
in ship on service (OJT)



E-Learning Onboard  
(STARS)

# 1-1. Shipping Industry Trends

## Expanding Seaborne Trade



	2000	2005	2010 (Forecast)
LNG	100	139	255
CTNR	100	158	246
COAL	100	142	196
ORE	100	132	170
CAR	100	120	137
COAL(F)	100	110	136
GRAIN	100	115	132
OIL	100	115	130
GDP	100	114	132

IEA World Energy Outlook 2004

## 1-1. Shipping Industry Trends

### Seafarer Supply and Demand

		(Unit: 1,000 people)			
		2000	2005	2010	2015
Officers	Supply	404	466	467	472
	Demand	420	476	488	499
	Diff.	-16	-10	-21	-27
Ratings	Supply	823	721	740	774
	Demand	599	586	598	607
	Diff.	224	135	142	167

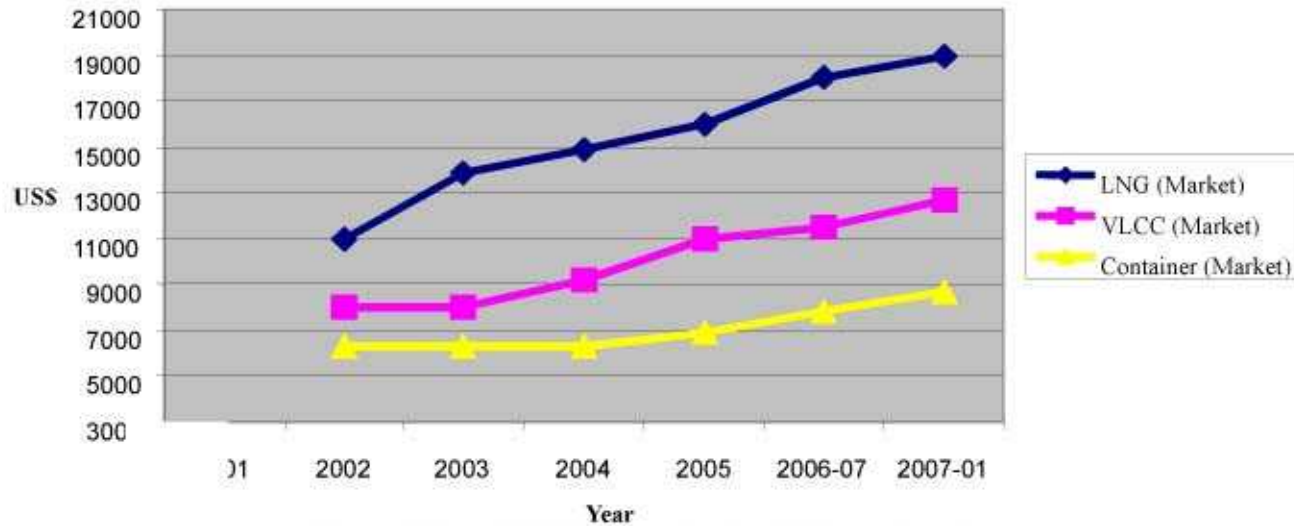
BIMCO/ISF Manpower 2005 Update

*A worldwide shortage of officers and engineers*

# 1-1. Shipping Industry Trends

## Increasing Wages

Master's Wages for Europeans (January 2007)

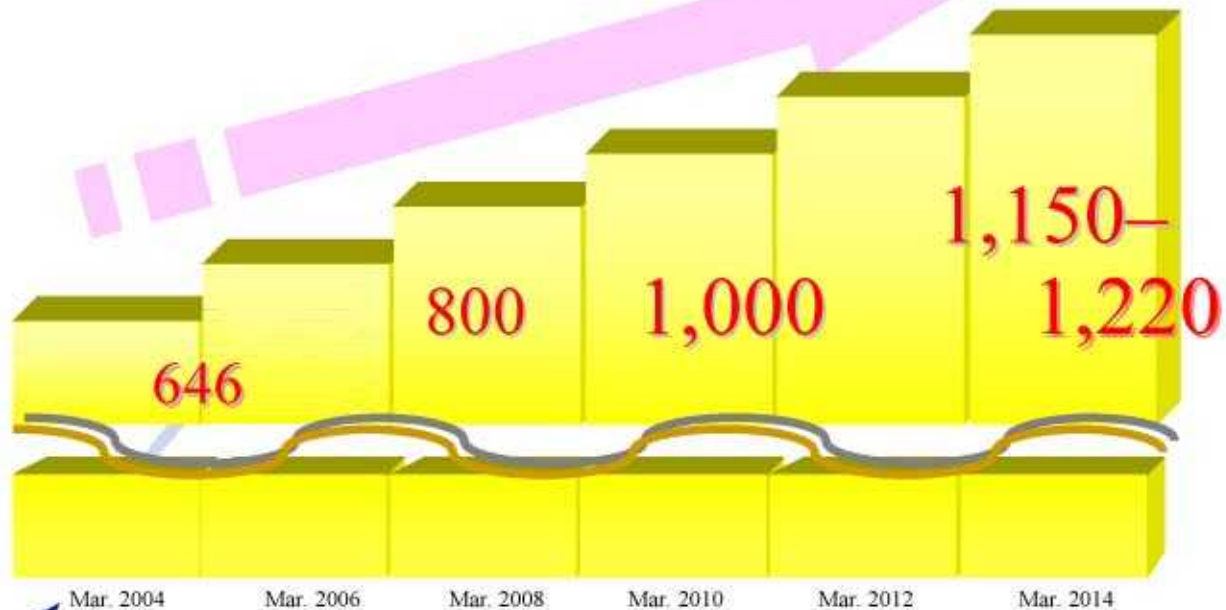


About 10–15% increase from 2006 to 2007

## 1-2. NYK Fleet and Safe Operations

### Expansion of NYK Fleet

Future expansion of NYK fleet





# Fleet Remote Monitoring System



## 1-2. NYK Fleet & Safety Operation

**What is the worst scenario for shipping lines?**



**Collision**

August 13, 2003

NYK PCC and a Ro-Ro vessel  
collided off Antwerp

August 11, 1996  
NYK Container vessel  
engine room fire  
in the Pacific Ocean



**Fire**

## 1-2. NYK Fleet and Safe Operations

**What is the worst scenario for a shipping line?**



July 2, 1997

**NYK VLCC touched the rocky bottom of Naka-no-se traffic route in Tokyo bay.  
1,500 kiloliters of crude oil flowed out.**

## 1-2. NYK Fleet and Safe Operations

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### What is the mission of a shipping line?

- *Safety of life at sea*
- *Safe operation of ships*
- *Environmental protection*

*Contribution to Society*

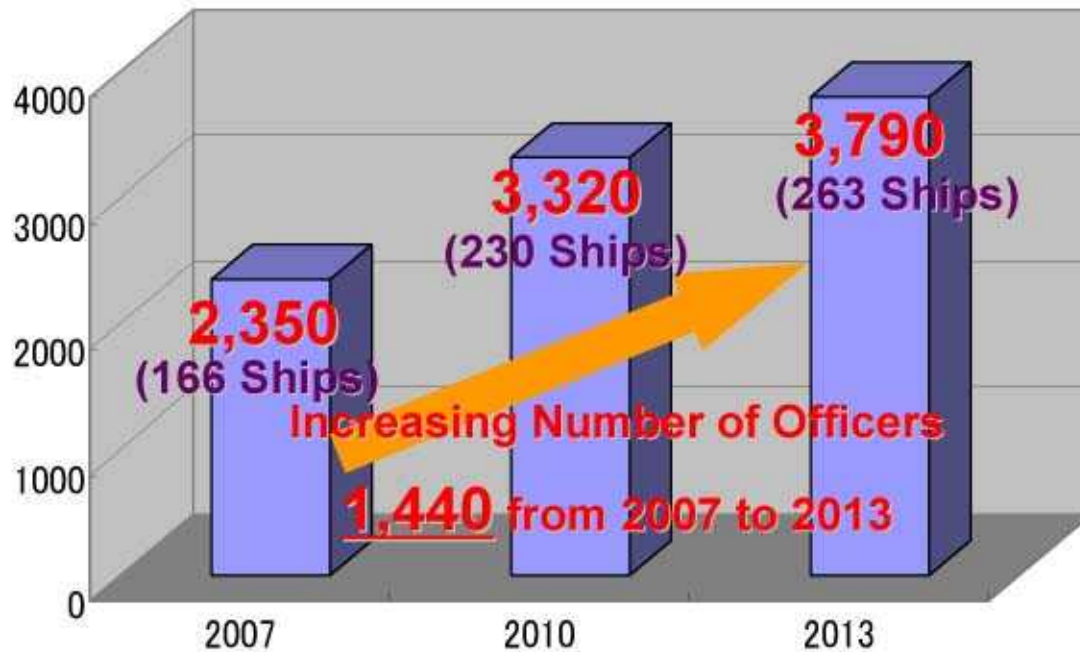
*Prevention of accidents*



*Safe Operations*

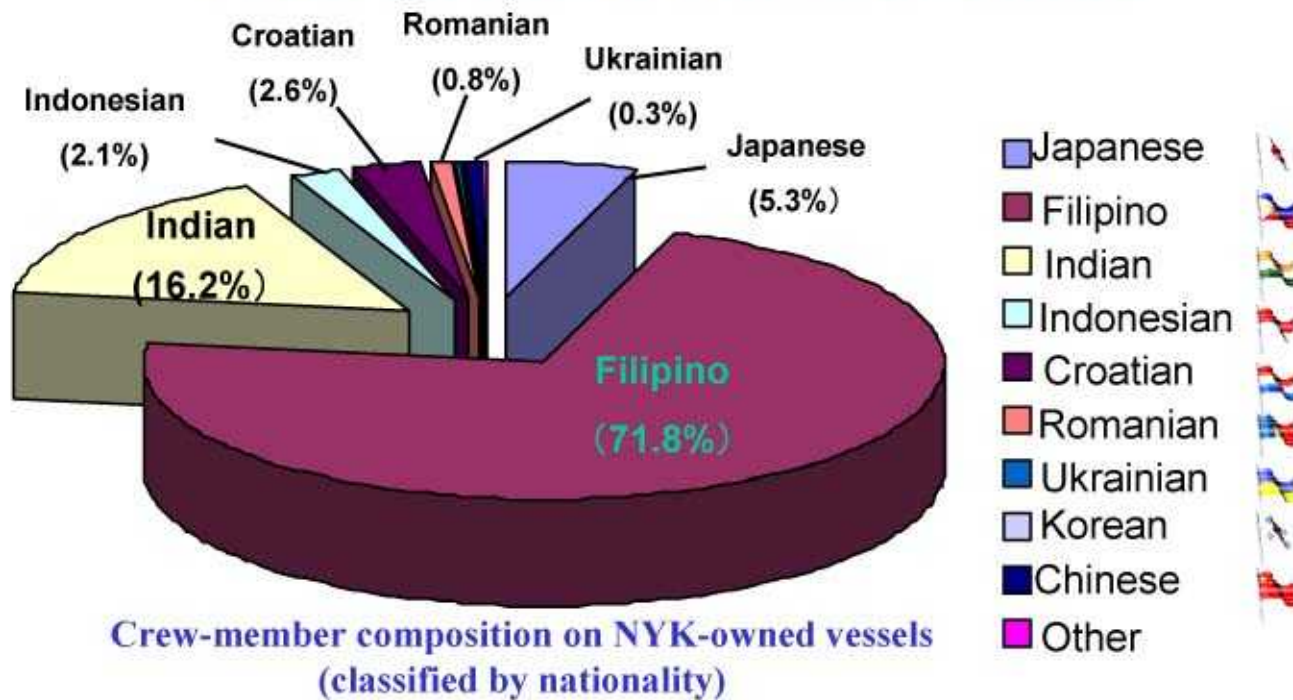
## 1-2. NYK Fleet and Safe Operations

### Officer Demand at NYK



## 2-1 Quantitative Expansion (Recruits)

### Diversification of Manning Sources



## 2-1 Quantitative Expansion (Recruits)

### Diversification of Manning Sources



## 2-1 Quantitative Expansion (Recruits)

---

### **Cadet Program**

- **High Loyalty**
- **High Quality**



Senior officers have been trained from  
our Cadet Program



University of Split  
Faculty of Maritime Studies  
Split

Concluded MOA concerning  
scholarship program  
(December 2005)



## 2-1 Quantitative Expansion (Recruits)

### Tie-ups with Universities



## 2-1 Quantitative Expansion (Recruits)

### Tie-ups with Universities

#### Special NYK Classes

Introduction and History of NYK

Seafarers' Day

Rules and Regulations

ISM Code

ISPS Code

Port State Control

Environmental Management

Emergency Response

Cargo Operations (Dry)

Cargo Operations (Wet)

Marine-Engine Guidance

Turbine Plant

## 2-1 Quantitative Expansion (Recruits)

### Cadet Training on Training Ships

#### Construction of Six Cadet Ships

- LNG Carrier (Delivery in 2008)
- Containership × 3 (Delivery in 2008)
- Crude-Oil Carrier (Delivery in 2010)
- LNG Carrier (Delivery in 2012)



- 20 cadets accepted
  - Instructor on board with cadets
- To foster qualified, loyal seafarers through unified basic training

---

## **2-1 Quantitative Expansion (Recruits)**

### **Establishment of Maritime Academy**

#### **Filipino Seafarers**



- Major Manning Source
- Strengthening of Basic Education
- Securing of NYK Crew



**NYK-TDG Maritime Academy**  
**Opened in June 2007**

## 2-1 Quantitative Expansion (Recruits)

### Establishment of Maritime Academy

#### NYK-TDG Maritime Academy

- Opening: June 2007
- Scale: 120 students per grade  
60 deck officers; 60 engineers  
About 35 instructors
- Location: Canlubang City  
(about one hour from Manila)
- Area: Nine hectares
- System: Total of four years

Three years of lectures + one year of onboard training



## **2-2 Qualitative Strengthening (Education and Training)**

### **Concept of NYK Maritime College (NMC)**

**Training Regardless of Nationality**



**Development of Clearly Specified NYK Requirements**  
**Development of Shore & Shipboard Training System**

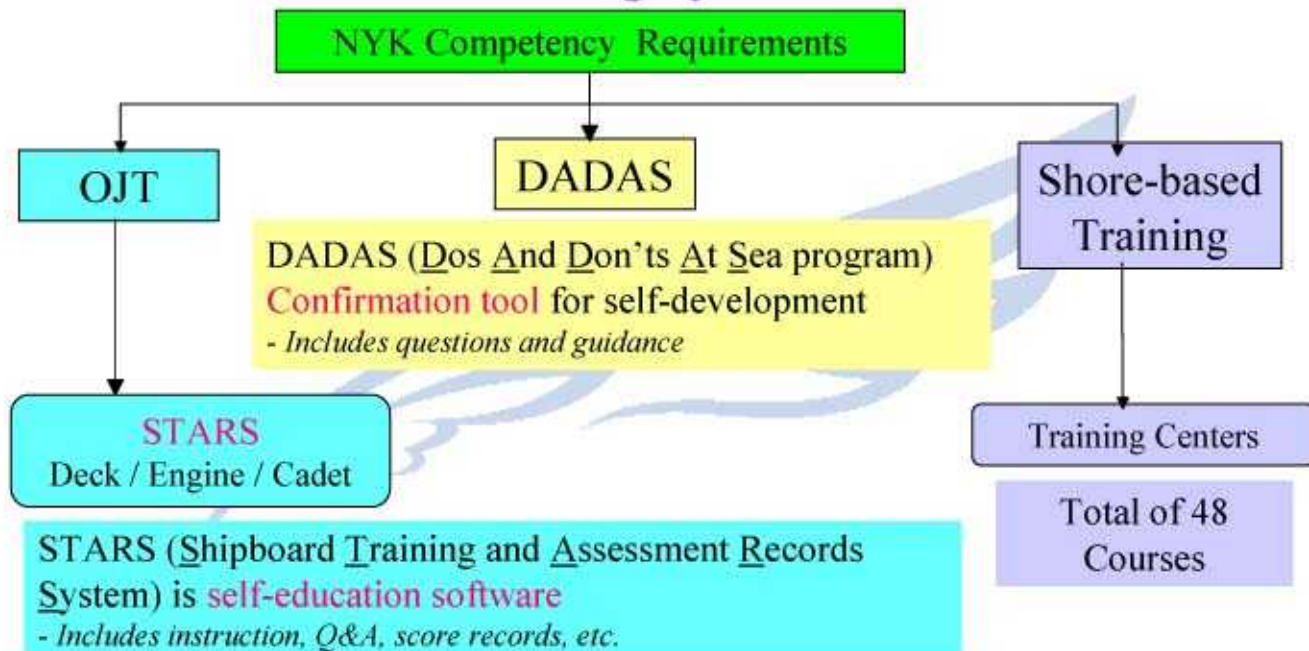


**Concept of NYK Maritime College (NMC)**

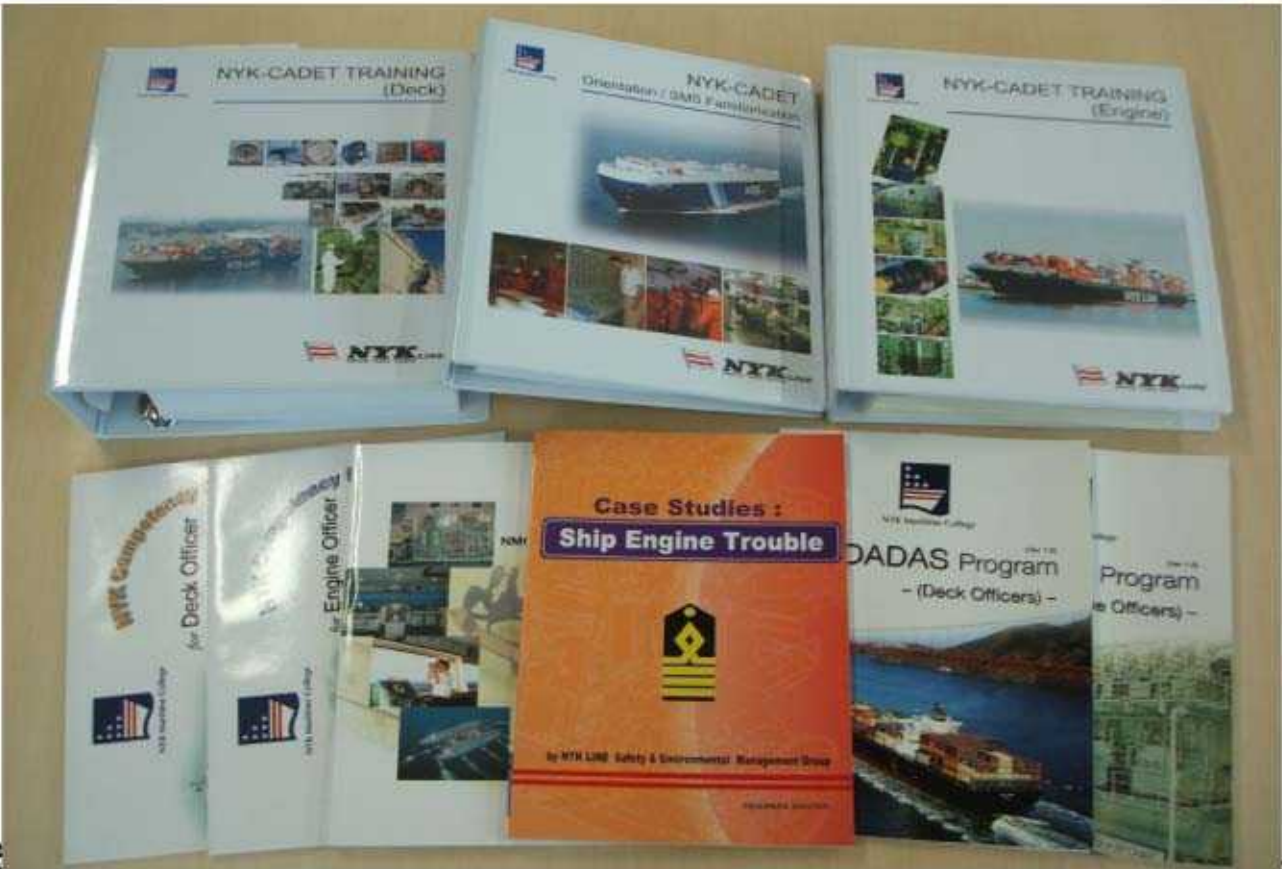
## 2-2 Qualitative Strengthening (Education and Training)

### Concept of NYK Maritime College (NMC)

#### NYK Training System



# Publication



# VLCC STARS Opening Page

- Operation Guide
- Crew Profile
- NYK's Instructions
- Learning Video Clips**
- Take Test
- Help



# VLCC STARS



## Video Clip Line-up

For a master access VLCC STARS

Module \*  
Logout \*

- Operation Guide
- Crew Profile
- NYKs
- Learning
- Take Test
- Help

A master should review the highlighted video clips during his onboard period.

*Those videos highlighted in red color are very important to your daily operations. Please make sure you view them!*

No.	Video Group	Video Title
1.	Discharging Operation	<ul style="list-style-type: none"><li>• <a href="#">Pre arrival - Port/Berth regulation</a></li><li>• <a href="#">Pre arrival - Ship/shore information exchange</a></li><li>• <a href="#">Pre arrival - Plan to maintain ship in safe hydrostatic condition</a></li><li>• <a href="#">Pre arrival - Discharge plan for two or more port</a></li><li>• <a href="#">Pre arrival - Ship/shore agreement on discharge &amp; sequence</a></li><li>• <a href="#">Pre arrival - Port operation meeting (VLCC Discharge)</a></li><li>• <a href="#">Pre arrival - Operability checks of equipments</a></li><li>• <a href="#">Pre arrival - Status of cargo valves</a></li><li>• <a href="#">Pre arrival - Cargo tank pressure control</a></li><li>• <a href="#">Ullaging &amp; Gauging the tank level</a></li><li>• <a href="#">Equipment - Measuring Instruments</a></li></ul>



# VLCC STARS

## Test for Other Ranks

### Question 3:

What item must be checked prior to allowing visitors on board?

Hint : Learning Video Clip: Action to be taken immediately after berthing

- X** 1  Business Card
- 2  ID (with Photo)
- 3  Video Rental Card
- 4  Family Photo

Test  
Crew can confirm their understanding by taking a multiple-choice test.

### Overview of Answers

Qns No.	Selected Answer
1	2
2	3
3	1
4	
5	
6	

# VLCC STARS

Test Results  
Results are then recorded

Test for Other Ranks

You have completed the test.  
You are now reviewing your answers for the test.

**Result: 71%**

Your result: 10 out of 14 correct. (71%)

Question 1:

What is classified oil removal materials?

Complete & Close

<<Previous

Next>>

1. Oil Absorbent < Correct Answer
2. Internal Shore Connection
3. Valve Handle < Your Answer
4. Messenger Line

Overview of Answers

Qns No.	Selected Answer	Correct Answer
1	3	1
2	3	2
3	2	2
4	2	4
5	2	2
6	1	1

# VLCC STARS

Personal Training Report	
Passport No.	FLEET4
Crew ID	12345
Crew Name	FLEET FOUR
Rank	MASTER
Nationality	JAPANESE

A manager can access the test results of each crew member

N.A.: Not Accessed

Test Name	Date	Result(%)
Test for Master	27-02-2008 09:47:15	Test Not Completed
Test for Master	23-01-2008 11:01:43	Test Not Completed

# Philippines Training Center













## THE MARINE SOCIETY

(FOUNDED 1756)

*Patron:*

HER MAJESTY THE QUEEN

HANWAY HOUSE, CLARK'S PLACE, LONDON, E.C.2

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### MEMORANDUM

#### REGARDING THE NEED FOR A NAUTICAL PROFESSIONAL INSTITUTE

If Britain is to maintain a leading position in world shipping, modern developments require that officers in the Merchant Navy should be recognised to be of the highest quality and professional ability.

For many years the qualifications of officers in the shipping industry have depended on statutory requirements which became necessary to ensure safety at sea during the nineteenth century. While these qualifications are no less necessary at the present time, the nature of the work of seamen has gradually changed and now demands that officers should not only have a good academic background but a more extensive technical knowledge than was necessary in the past.

A large number of schools and colleges at present provide nautical, marine engineering and radio training in different parts of the country and in recent years improvements have been made in the education and training of officers for the shipping industry but a definite pattern has not emerged. No generally accepted professional requirement exists and no authoritative body is able to co-ordinate and influence the standard of nautical training by setting qualifying examinations.

While the statutory certificates issued by the Board of Trade provide some status to officers in the Merchant Navy, they are necessarily concerned mainly with safety and do not carry that wider recognition and professional qualification available in other comparable vocations. Numerous associations and quasi-official organisations concerned with industrial relations and other nautical matters have been established over the years. These bodies represent the different interests of seamen and it cannot be denied that many of them perform a useful service in an industry as extensive as shipping.

Apart from the Institute of Marine Engineers, however, officers in the shipping industry do not have a corporate or recognised vocational organisation and there is a need for a nautical professional institute to be established. Such a responsible body should provide a focus for the profession, review and regulate the qualifications of its members and generally advance their vocation. It would be able to advise authoritatively on training, set examinations and keep its members up to date on professional matters.

If it is possible to incorporate within a central organisation the professional interests of all officers in the Merchant Navy including those of the Institute of Marine Engineers, it should not only add to the efficiency of British shipping but also enhance their standing in the twentieth century.

June 1967



**THANK YOU**

**Captain Duncan McKelvie F.N.I**  
**NYK Line Area Marine Representative**  
**Dubai Office**

**Tanker Operators' Meeting, Dubai, 21 May 2008**