

Overview of Accidents and Measures to Reestablish Safety

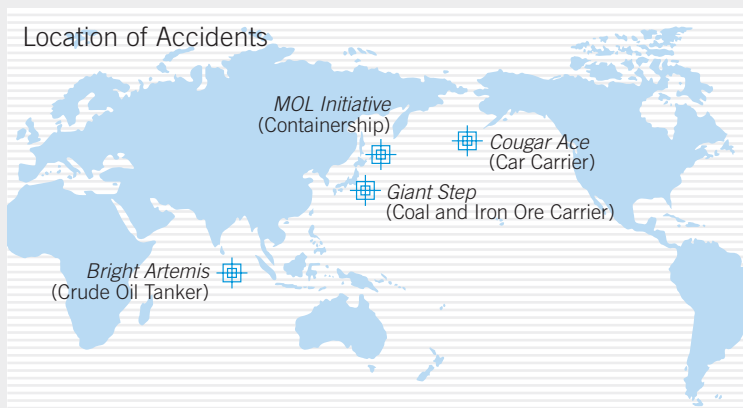
Overview of Accidents

In the past year, four MOL-operated vessels were involved in serious accidents. In April 2006, the containership *MOL Initiative* had a fire in its engine room offshore Nemuro, Hokkaido. In July, the car carrier *Cougar Ace* listed heavily in the Pacific. In September, the crude oil tanker *Bright Artemis*, which went to assist a ship in distress, was struck by that ship, resulting in a crude oil spill. In October, near Kashima Port in Ibaraki Prefecture, the coal and iron ore carrier *Giant Step* was moving offshore to avoid rough weather when it went aground and the vessel's hull cracked and broke. Eight crew members lost their lives and two are still missing.

These accidents caused tremendous distress to all related parties, and all of the directors and employees of the MOL Group have taken this situation to heart. We are committed to returning to the basics and doing our utmost to reinforce the safety of our operations in accordance with the conviction that safety is the foundation of our business.

In the Interview With the President section that starts on page 12, the president discusses the steps that MOL has taken to restructure its safe operation organization.

In the following interview, Captain Soichi Hiratsuka, the executive officer in charge of safe operation, describes the results of internal and external investigations and, based on those results, the safety measures that we are implementing, with a special emphasis on seafarers and reestablishing MOL seamanship.



Accident Investigation and Countermeasures

Q. Would you discuss the activities of the Emergency Committee for Enhancement of Operational Safety, which was formed after the accidents?

Following the accidents, President Ashida communicated a message of “returning to the basics” to everyone in the company, and the emergency committee was established with his direction.

The first approach was MOL's independent investigation. Committee members spoke directly with ship management companies, manning companies, and seafarers in conducting the investigation. In addition, a questionnaire was distributed to MOL vessels to verify the level of understanding of MOL's notifications and instructions related to safe operation.

The second approach was an investigation by overseas authority Det Norske Veritas

(DNV). DNV held group discussion workshops in such cities as Tokyo, Singapore, London, and Manila—the hubs of MOL's ship management and manning operations.

As a result, we identified three problem areas:

1. The workload of seafarers has increased.
2. Fail-safe equipment and facilities that exceed international standards are required.
3. Measures must be taken to respond to today's abnormal climate.

With these problem areas as a focus, we began to implement the “measures to reinforce safe operation.”

Q. Please talk about measures for seafarers.

MOL has established seven overseas crew training centers. To increase the skills of our crew members, we will take additional steps



Soichi Hiratsuka
Executive officer, Deputy Director-General of
Safety Operations Headquarters

to further enhance the education and training provided at these centers. In addition to requirements for seaman's certificates that meet international standards, we will extend the scope of our unique MOL RANKSTEP program, which institutes rigorous technical requirements for each level of officers on our vessels.

In the future, MOL will recruit about 400 to 500 graduates a year from maritime colleges around the world. The initial training of these cadets will be conducted on the *Spirit of MOL*,

a training vessel. This is the world's first purpose-built training vessel owned directly by a shipping company. They will be trained on this vessel for the first four to six months of their one-year onboard training, and they will receive MOL's standard training in safety and conduct as seafarers. These new multinational recruits will support the company's growth in the years ahead, and by being trained together aboard the *Spirit of MOL* we want to cultivate a consciousness that they are all MOL seamen.



For seafarers working on our ships for the first time, and for those with limited experience on the routes or vessel types to which they have been assigned, we will institute a policy of allocating multiple crew members to a single position. With the scale of our operations expanding, we will implement this redundant staffing for a round-trip voyage or a segment of a voyage in order to ensure a smooth transition from predecessors to successors and the mastery of necessary skills. This policy will include captains and chief engineers. In addition, we will add additional crew members to vessels as needed, such as maintenance workers.

Q. Please discuss measures for fail-safe facilities and equipment that exceed international standards.

We have adopted various safety facilities and equipment that conform to international rules. From the viewpoint of fail-safe specifications, we have completely reviewed the MOL Safety Standards for safety facilities and equipment. We studied other companies' measures,

actively introduced those that we think will be effective in maintaining and increasing safety, and adopted them as MOL's standard specifications. These standards will apply to vessels already in service as well as newly built vessels, and we plan to make an additional investment of about ¥13 billion over the next three years.

For example, based on the lessons learned when a ballast management problem caused a car carrier to list heavily, central ballast control systems will be made a part of standard specifications. Also, after investigating the bulker accident off Kashima, we have decided to add the hawser quick-release apparatus that is used on new vessels to ships that are already in service.

Q. How will MOL respond to today's abnormal climate?

In recent years, we have seen dramatic changes in hydrographic, oceanographic, and atmospheric phenomena. To provide more-detailed information to vessels at sea and to facilitate close communication with the Head Office, in February 2007, we opened the Safety Operation Supporting Center in the Head Office building. The center also provides guidance for overall vessel operations. We have installed systems that enable the center to access the most up-to-date weather information and instantly provide that information to vessels, personnel in charge of ship operation, and agencies. Also, two officers are on duty around the clock to monitor the movement of vessels. The center provides necessary information and advice to support safe operation from onshore.

Q. Please discuss MOL's approach to safe operation in the future.

Safe operation is a never-ending theme. We have established the permanent Safety Assurance Committee, which will confirm the progress and effectiveness of measures to reinforce safe operation and propose necessary corrective measures. We will also invite presidents of ship management companies to serve as committee members and provide front-line insights on vessel safety. In addition, we have communicated the "measures to reinforce safe operation" to ship management companies and manning companies, and we have implemented Safety Conference briefing sessions for seafarers on leave in Mumbai, Manila, and Zadar.

Finally, against a background of advances in telecommunications technologies, vessel operations have been upgraded to a very high level. However, seafarers aboard our vessels are ultimately responsible for making decisions and taking action in constantly changing conditions. Learning from the accidents that occurred in the past year, the on-site captains and chief engineers have responsibility for making precise judgments and taking decisive action, and the crew members are responsible for following regulations and orders and earnestly performing their duties. We need to develop a work environment that supports those types of accurate judgments and actions. It is by reestablishing MOL seamanship—with everyone on land and at sea working together—that we will maintain safe operations in the years ahead.

Details of Measures to Reinforce Safe Operation

Investment (including capital investment) Unit: ¥ billions		
Three-year total		
Intangible Factors	Organizational Restructuring	
	(Improvement of ship management structure, establishment of Safety Operation Supporting Center, etc.)	¥13.0
	Recruiting and Training Seafarers	
Facilities and Equipment	Previewing and Implementing Safety Standard Specifications	¥22.0
	Ensure Thoroughness of Ship Maintenance Policies, etc.	
Total investment		¥35.0