## Review of Maritime Traffic Regulations for Tokyo Bay and Ise Bay

From an economical and industrial point of view, Tokyo bay is the most important bay in Japan. In Tokyo bay, there are ports like Tokyo, Yokohama, Kawasaki, Chiba etc., and the Uraga Channel Sea Route (Breadth 1,400m, Length 14.8km, Depth 23m). A sea fort, Fort No. 3 ("dai san kaiho"), was completed in 1921 at Tokyo bay. This fort was built in order to defend the bay. It sank during the Great Kanto earthquake in 1923. Subsequently, several marine accidents such as collisions, grounding accidents, etc. occurred due to this fort in this bay where approximately 600 or more huge ships navigated daily. Because of this, demolition work of the collapsed Fort No. 3 ("dai san kaiho") was started in December 2000 by the Ministry of Land, Infrastructure, Transport and Tourism, and was completed in August 2007.

Moreover, the vicinity of the Nakayama Channel passage in Ise bay has high rate of marine accidents due to shallow water and hidden rocks. Navigation of incoming and outgoing vessels for central areas such as Nagoya, Yokkaichi etc. is a busy passage. Since it is a good fishing area in the Ise bay and a marine area where many fishing boats navigate, the risk of marine accidents was high.

Therefore, the Nakayama Channel passage (Breadth 700m, Length 2.9km, Depth-14m) was declared to be the water way designated to be developed and preserved by the Ministry of Land, Infrastructure, Transport and Tourism in December 1989. In April 1999, dredging work began in this passage after coordinating with the fishermen, and the channel dredging work was completed in August 2004.

Operations of the Ise Wan Traffic Advisory Service Center began from July 1, 2003. In the gateway area of the Chubu economic zone, in the Irago Channel and its neighboring sea area, approximately 500 vessels navigated daily. The information (such as reminders about possible marine accidents and current weather conditions) necessary for safe navigation is provided and vessels larger than the specified size are controlled by the Japan Coast Guard to ensure the safety of vessels navigating in this extremely narrow sea area.

In addition, as a result of significant changes in the environment of marine traffic in Tokyo Bay and the Ise Bay, GPS position-fix accuracy improvement and mounting of the AIS (Automatic Identification System) in vessels larger than the specified size have become mandatory.



Fort No. 3 ("dai san kaiho") demolition



Nakayama Channel dredging conditions



Ise Wan Traffic Advisory Service Center

In October 2007, the Japan Coast Guard established the Council of Transport Policy based on the Maritime Traffic Safety Act, to review the marine traffic regulations applicable to the new marine traffic environment. Based on the report submitted by the council, "Marine Traffic Safety Act Enforcement Regulations" were revised and enforced from January 1, 2008.

\* water way designated to be developed and preserved (Ports and Harbors Act, Article 2, Paragraph 8)
A shipping lane outside of a harbor or waterway area that requires development- and preservation-related construction work to enable shipping transportation.

## [Review of Maritime Traffic Regulations]

(Tokyo Bay)

- Elimination of the restricted area for entering, exiting or crossing Uraga Channel Sea Route Demolishing Fort No. 3 ("dai san kaiho") has reduced the risk of grounding accidents. Also, the water area and the surrounding area that can be used by vessels during navigation through this channel have widened, and navigation freedom has increased. Therefore, the restricted area for entering, exiting or crossing Uraga Channel Sea Route has been eliminated.
- Revision of the mandatory sea route section for ships navigating through the Uraga Channel Sea Route Targets for the section for ships navigating through the Uraga Channel Sea Route have disappeared due to the demolition of the Fort No. 3 ("dai san kaiho"). The mandatory sea route section applicable to vessels navigating towards Yokosuka Port and the Nakanose Sea Route was renewed with a demarcation line drawn at a right angle from Fort No. 1 ("dai ichi kaiho") to the Uraga Channel Sea Route.

**Revision of destination indication** For vessels that navigate through the Uraga Channel Sea Route or cross the Nakanose Sea Route, it was necessary to hoist different destination indication flags for each route. Hence, it had become a burden on the sailors as they had to hoist and change flags in a short period of time at the terminal areas of the Uraga Channel Sea Route the Nakanose Sea Route.

Therefore, instead of changing flags at the terminals of both routes, a destination indication method in which several movements could be indicated in one flag was introduced.



## **Review of Maritime Traffic Regulations (Tokyo Bay)**

## (Ise Bay)

- Elimination of the large vessels' exemption from an obligation to navigate through the Irago Channel Sea Route Due to the relation between the draft of large vessels and water depth in Nakayama Channel, the large vessels that navigate in the Irago Channel Sea Route toward the north west, while moving towards Mikawa Bay, had to cross the north eastern side of the route from the middle of the Irago Channel Sea Route and to take a detour along Atsumi Peninsula. This was permitted as a special case, but it was eliminated on completion of the Nakayama Channel Sea Route maintenance and on setting of the environment in which large vessels could navigate safely. Restrictions on the mandatory sea route section were revised so that it would apply to all sections and the destination indications that are to be put up by the large vessels were eliminated.

- Review of the standard for waiting outside the sea route in the Irago Channel Sea Route

Previously, when large vessels\* and quasi-large vessels\* were expected to pass each other in the channel, a quasi-large vessel was uniformly directed to wait outside the sea route. However, the navigational environment was improved when operations of the Ise Wan Traffic Advisory Service Center commenced. Hence, the rule for quasi-large vessels to wait outside the sea route was altered, allowing (excluding vessels carrying dangerous substances) the simultaneous passage of large and quasi-large vessels.



**Review of Maritime Traffic Regulations (Ise Bay)** 

A mark indicating the west side of the Uraga Channel Sea Route was lost with the demolition of Fort No. 3 ("dai san kaiho"). Hence, the Japan Coast Guard ensured the safety of navigating vessels by installing the "Uraga Channel Sea Route No. 5 light buoy" and clearly divided the water areas for vessels navigating through and outside the Uraga Channel Sea Route.

The Japan Coast Guard informs vessel operators about the Maritime Traffic Act and guides them for the implementation of safety operations. In collaboration with concerned authorities it also performs different activities related to preventing maritime accidents, though, not only for vessel operators but also for citizens.



Uraga suido traffic route No. 5 light buoy installation status

\* Large vessel

A vessel with a total length of 200m or more.

\* Quasi-large vessel

For vessels using the Irago Channel Sea Route, vessels with a total length between 130m or more and 200m or less.