

Ise Bay/Mikawa Bay Marine Traffic Guide Book

Mikawa Port



The Isewan Association for Preventing Marine Accidents

Published in October 2009.

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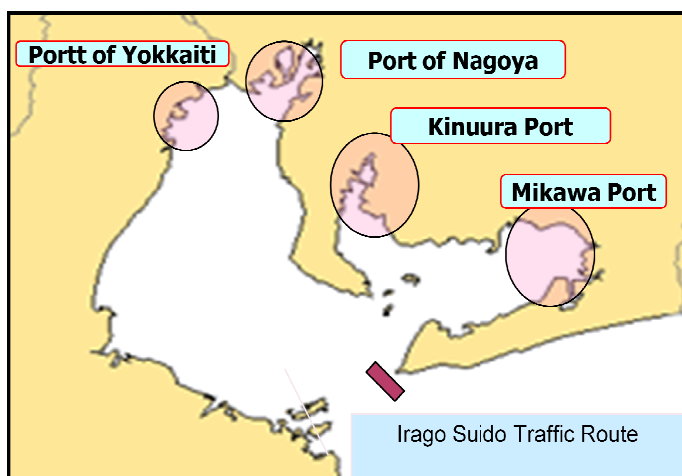
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Note

The content of this Guide Book may be amended or changed from time to time. Please also refer to the Association's official homepage to get the most updated information.

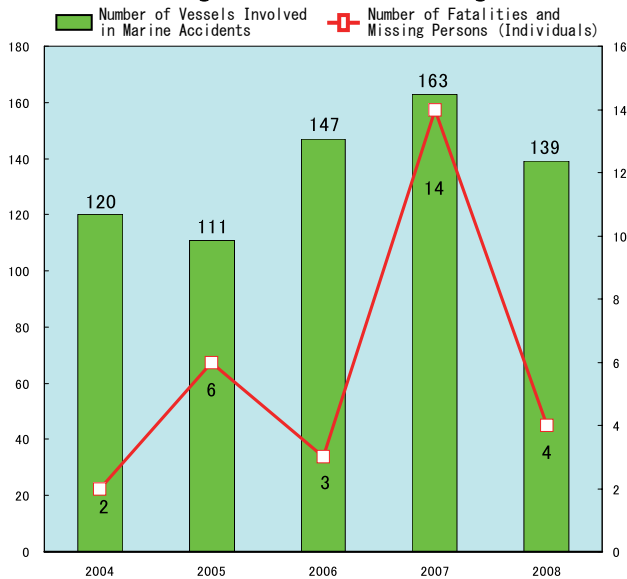
This Guide Book is compiled based on the 4th Regional Coast Guard Headquarters reference material.

Chapter 1 Conditions Regarding Marine Accidents in Ise Wan/Mikawa Wan, Main Hazardous areas, Main fisheries

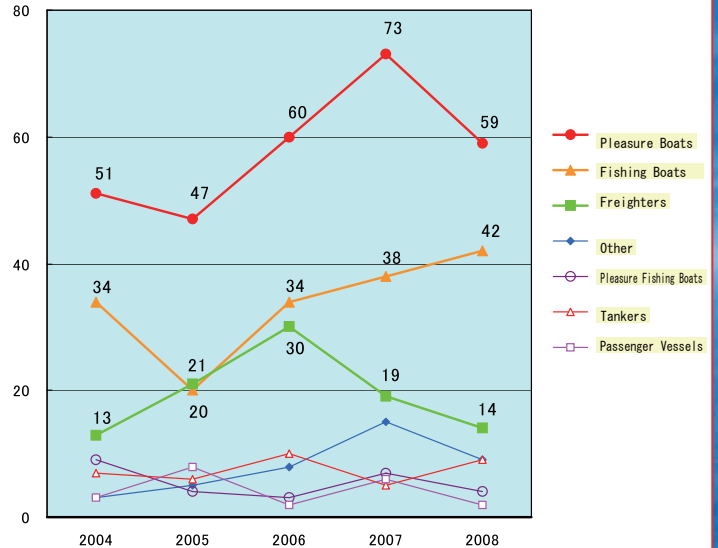
1. Conditions of the Occurrence of Marine Accidents (Waters Under the Jurisdiction of the 4th Regional Coast Guard Headquarters)

Statistics of All Marine Accidents Occurring in Jurisdiction 2004-2008

Trends of Marine Accidents and Casualties and Resulting Fatalities and Missing Persons

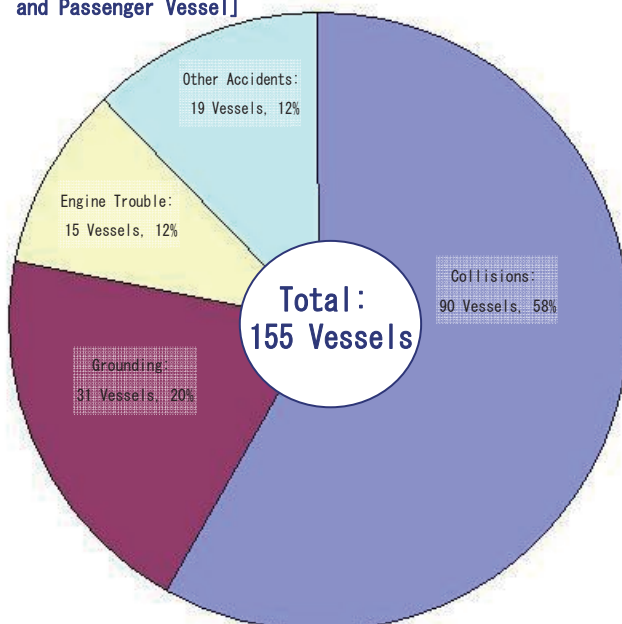


Trends of Marine Accidents by type of ship

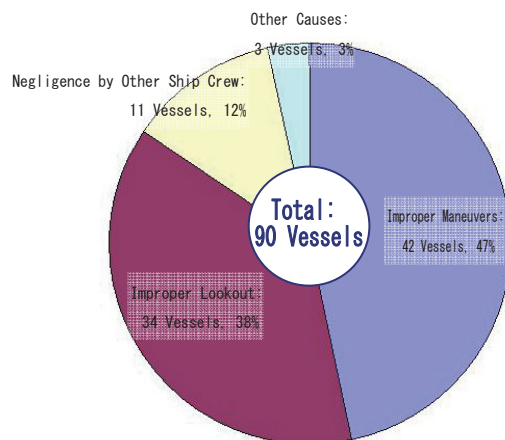


Conditions of the Occurrence of Accidents Involving Freighters, Tankers, and Passenger Vessels 2004-2008

[Number of ships Categorized by Freighter, Tanker, and Passenger Vessel]

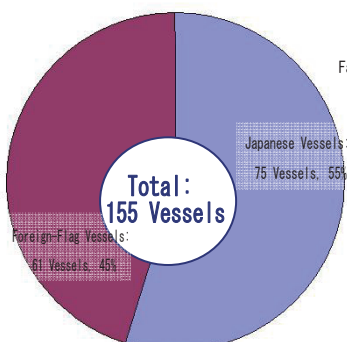


[Number of Ships Involved in Collision Accidents, Categorized by Cause]

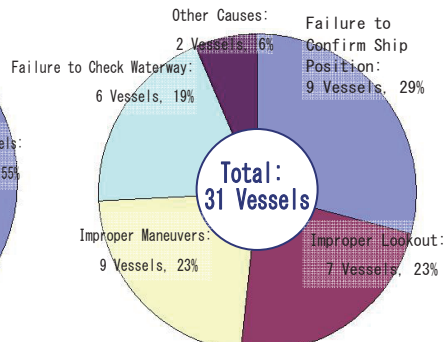


60% of Marine Accidents are Collisions. Main causes are improper maneuvers and/or improper lookout.

[Number of Japanese and Foreign-Flag Vessels Involved]



[Number of Grounding Categorized by Cause]

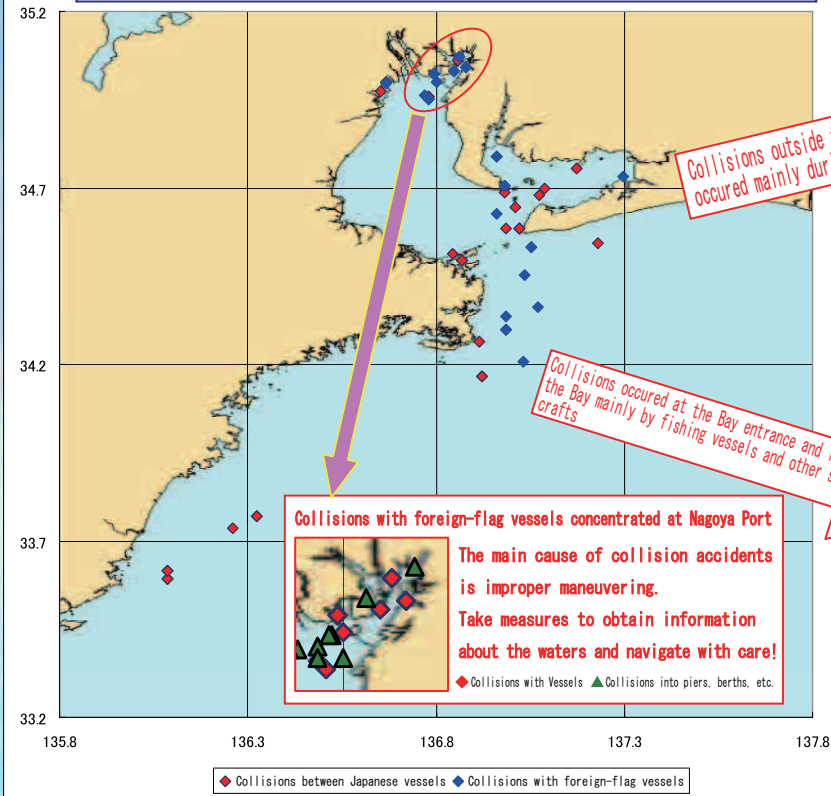


- (Point to Prevent Collisions)**
- Thorough and Proper lookout at all times
 - Give-way vessel should take early and substantial action to keep well clear. Stand-on vessel will best aid to avoid collision.
 - Good communications between vessels by radio VHF, whistle signals, and other means of communications
 - Utilize AIS information

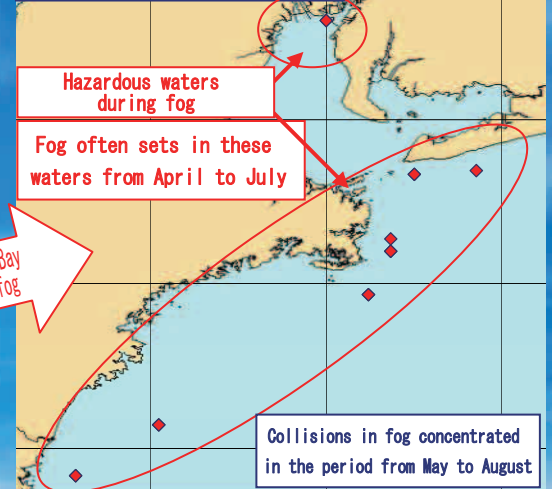
- (Points to Prevent Grounding)**
- Thorough and Proper lookouts at all times and confirmation of ship's positions
 - Obtain information of navigating area beforehand.

2. Hazardous Waters shown by Marine Accident Locations

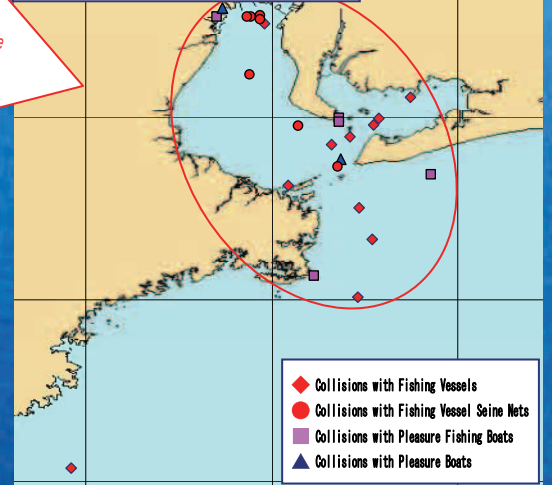
Locations of collision between freighters, tankers, and passenger vessels (2004-2008)



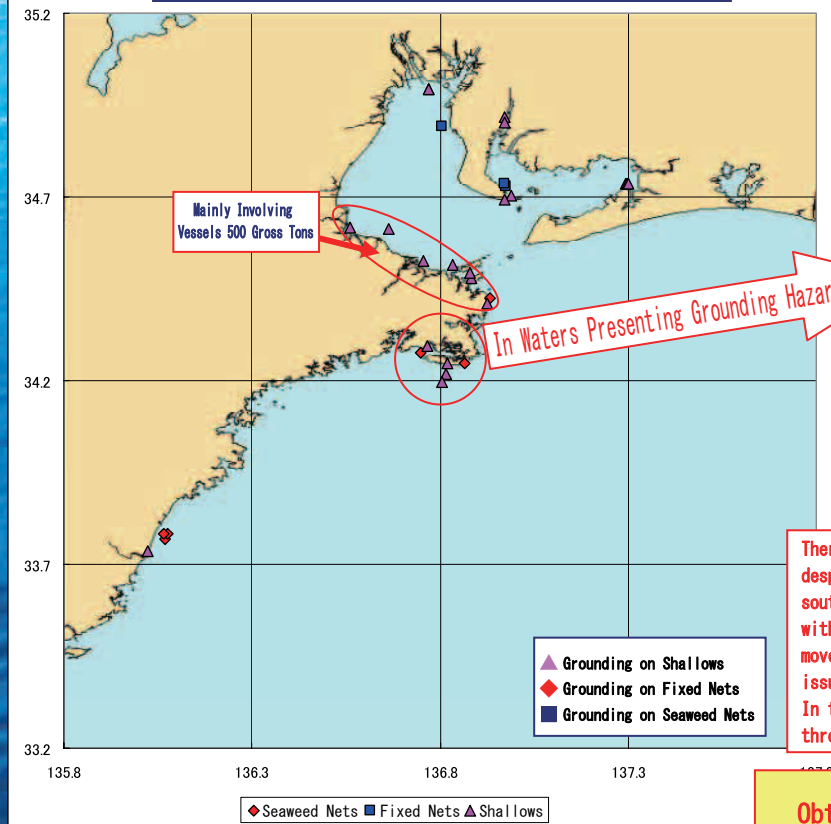
Locations of Collisions occurred During Fog



Locations of Collision Accidents with Fishing Vessels etc

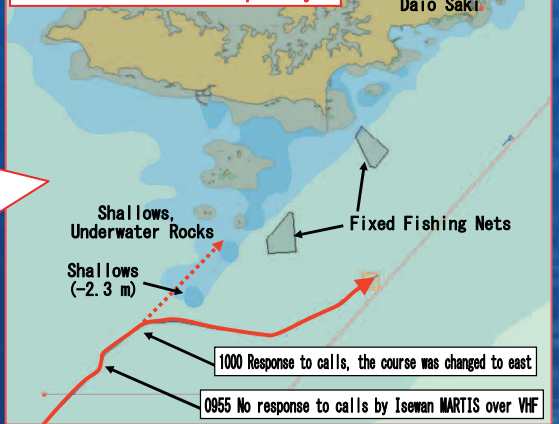


Locations of Grounding by freighters, tankers, and passenger vessels (2004-2008)



Example of Marine Accident prevention with Use of AIS Information February 22, 2006

The following type of incident occurs frequently



There are many incidents in which ships proceed dead ahead despite shallows and presence of fixed fishing nets in waters south of Daio Saki, due to improper lookout and lack of familiarity with waters. In these waters, Ise Wan MARTIS watches the movements of AIS-enabled vessels, and in the event of an emergency issues AIS messages via VHF to prompt caution. In this case as well, a marine accident was avoided through an alert from Ise Wan MARTIS.

**Ensure proper lookouts!
Obtain information about the local waters!**
(There are numerous fixed fishing nets and shallows in the coastal waters)

3. Cautions When Navigating in Fog

Cautions When Navigating in Fog

General items to be obeyed

Navigation watch Continuous observing other's movement by radar.

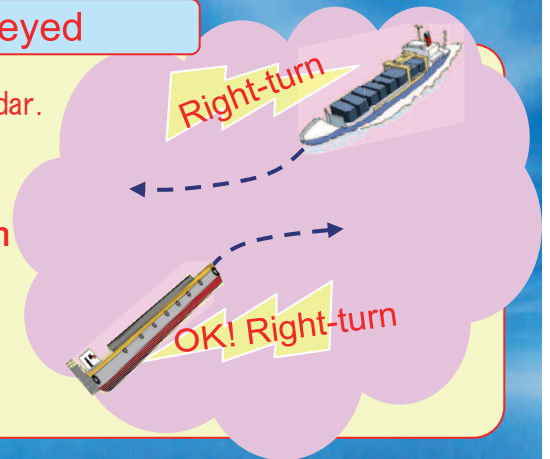
AIS & VHF: Checking intention to each other

Early action: Take apparent action.

Alteration course to port may often be dangerous.

Close-quarter situation: Stop without hesitation.

Fog signal: Proper use for sound signals.

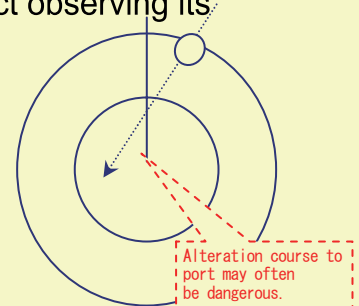


General collision-cause in the poor visibility

As one of the causes for collision, it is generally thought that changing your course with too easy judgment about the other ship's course after glancing at it on the radar screen at close range may lead to an accident especially after being neglect observing its movement continuously by using radar tracking function.

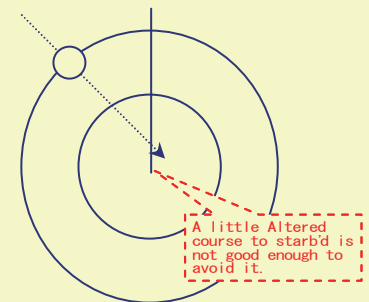
Alteration course to port

In the case that the radar return of the opposite ship at short range fixes on the right semicircle, it is often shown to have a tendency to turn your ship to the left because of being afraid of turning to the direction for the opposite ship psychologically.



Alteration course to starb'd

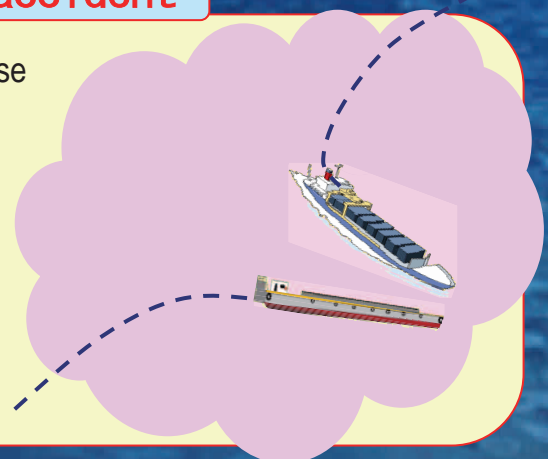
In the case that the radar return of the opposite ship at short range fixes on the left semicircle, it is often shown to have a tendency to being too late for avoiding it because of wrong judgment as a little changing of your course is thought to be enough to avoid it.



From MAIA Marine Accident Analysis Report

A case of a marine accident

At 0300 am on the 6th July, in the poor visibility caused by dense fog off Daio-saki, the collision occurred between a container (7,400 tons, 129m) going to Korea from Nagoya and a pusher barge (160 tons, 150m including the barge) going to Kinuura from Mizushima. In the visibility of about two miles, both had recognized each other in the distance of five miles before the accident. After coming close to one another, however, the container altered course to port and the pusher barge altered course to starb'd, then both collided with each other.

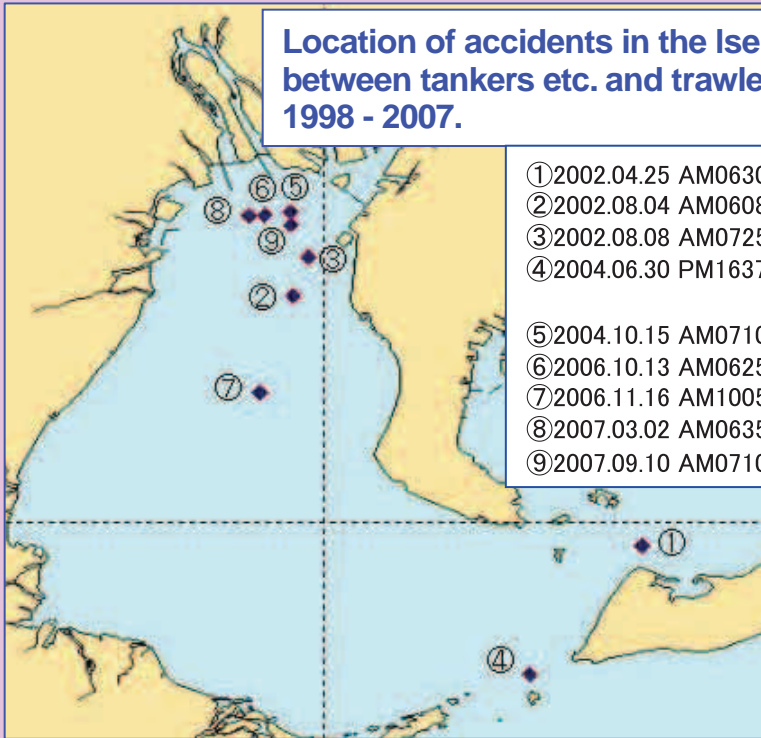


4. Marine Accidents with Fishing boats Operating in Ise Wan and Mikawa Wan

Marine Accidents with Fishing boats Operating in Ise Wan and Mikawa Wan

In the Ise Wan and Mikawa Wan areas, commercial trawlers operate more or less all year round in major shipping lanes used by cargo ships trawl fishing using a pair of boats drags a single net as much as 500m in length. And a cargo ship catch on one of these nets and capsize the fishing boats.

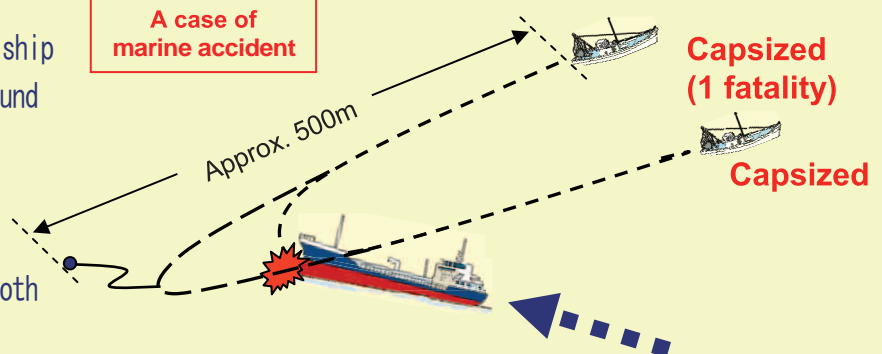
Location of accidents in the Ise and Mikawa Wans between tankers etc. and trawlers and their nets, 1998 - 2007.



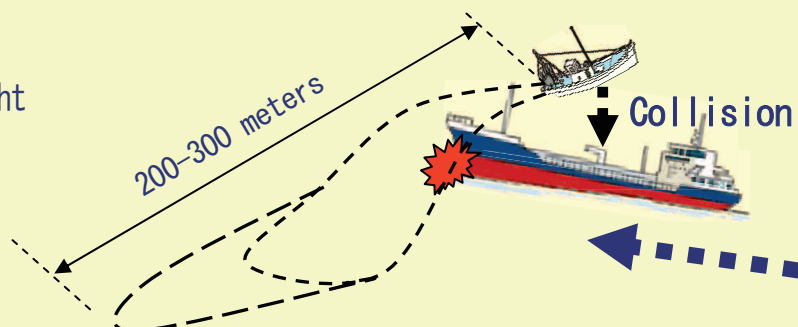
- | | |
|---|--|
| ①2002.04.25 AM0630 Cargo ship | } Two-boat trawling team
(Capsized) |
| ②2002.08.04 AM0608 Tanker | |
| ③2002.08.08 AM0725 Cargo ship | |
| ④2004.06.30 PM1637 Passenger liner/Single trawler
(Damage to or loss of equipment) | |
| ⑤2004.10.15 AM0710 Cargo ship | } Two-boat trawling team
(Damage to or loss of equipment) |
| ⑥2006.10.13 AM0625 Cargo ship | |
| ⑦2006.11.16 AM1005 Tanker | |
| ⑧2007.03.02 AM0635 Cargo ship | |
| ⑨2007.09.10 AM0710 Cargo ship | |

In the early morning, a cargo ship navigating off Nagoya Port, had found a number of fishing boats ahead, it reduced speed and changed course in order to avoid collision. It caught the fishing net causing both of the fishing boats to capsize.

A case of marine accident



In the evening, a freighter navigating in Mikawa Wan caught in the lines of a trawler, pulling the trawler into the freighter and causing a collision.



5. Cautions Avoiding Collisions with Trawlers and Fishing Gear

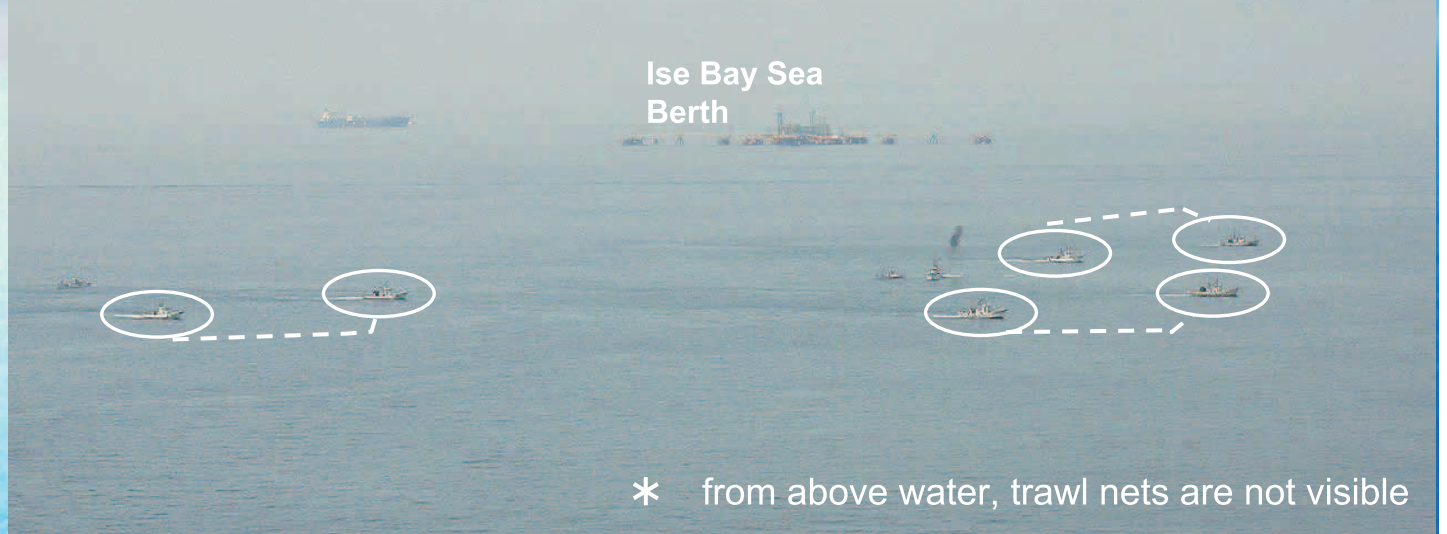
Cautions Avoiding Collisions with Trawlers and Fishing Gear

◎ Be aware of the location of fishing fleets, and maintain a safe distance

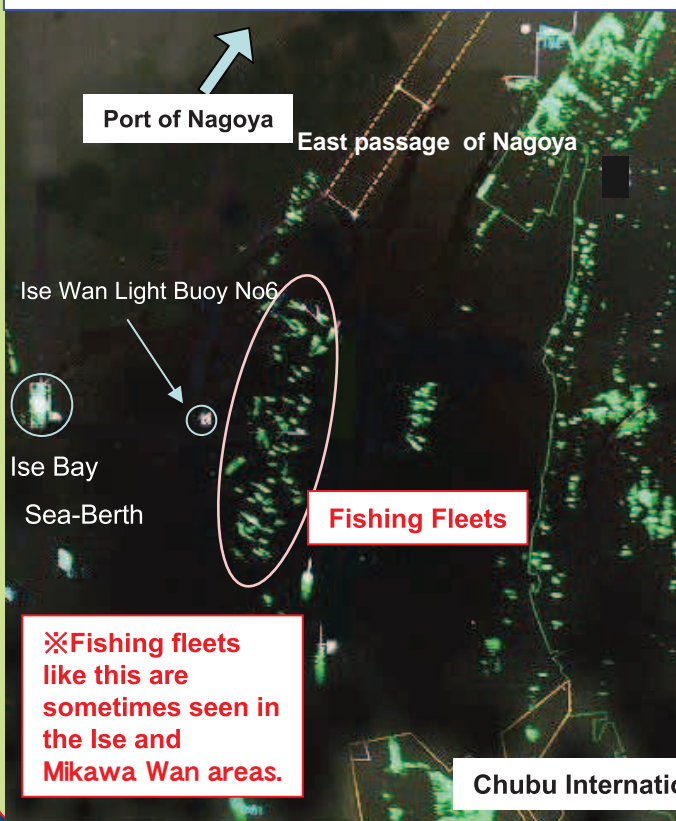
◎ Keep well clear of fishing fleets

◎ Maintain a vigilant look out with binoculars

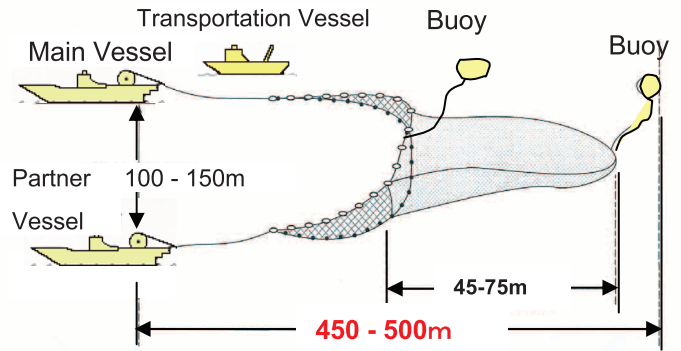
- Confirm speed and course of fishing boats
- Is there a warp cable or flag buoy astern?



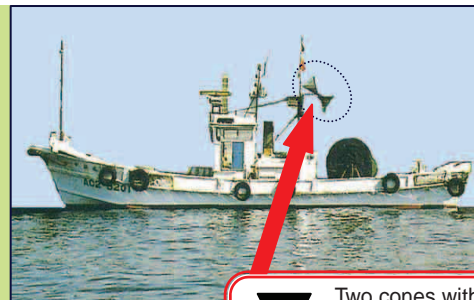
Radar image of fishing fleet (2008.9.30, approx. 0600)



Pair trawling in operation



*From above water, trawl nets are not visible.

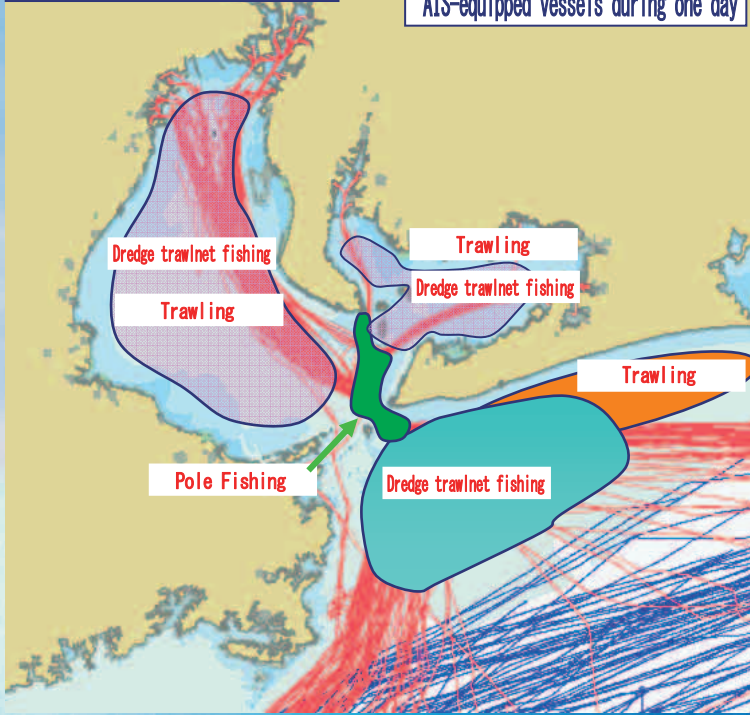


Two cones with their apexes together in a vertical line is always raised when in operation.

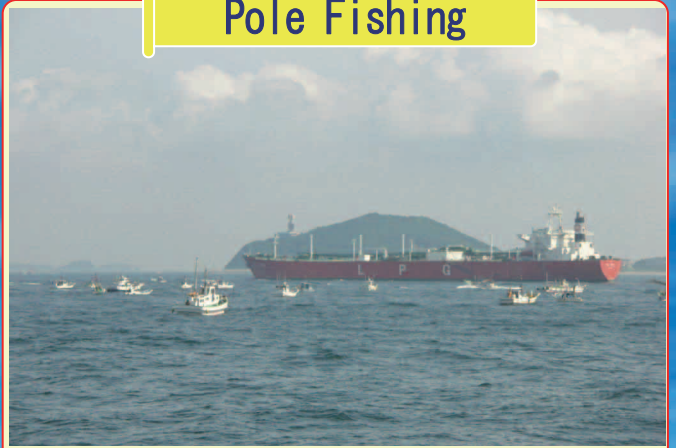
6. Main Conditions in Fishing Activity

Main Waters for Fishing Operations

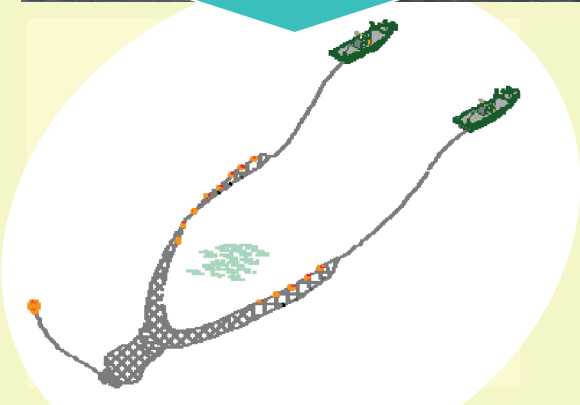
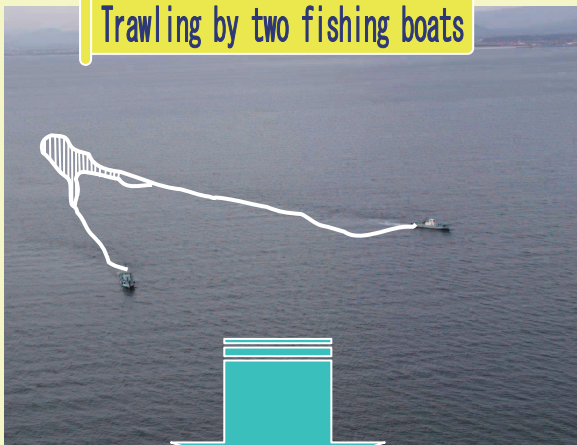
Red and blue lines indicate wakes of AIS-equipped vessels during one day



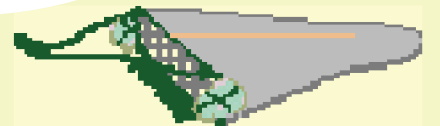
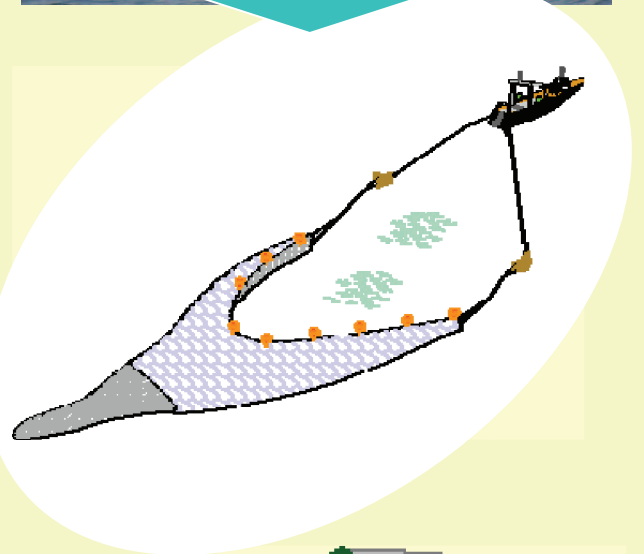
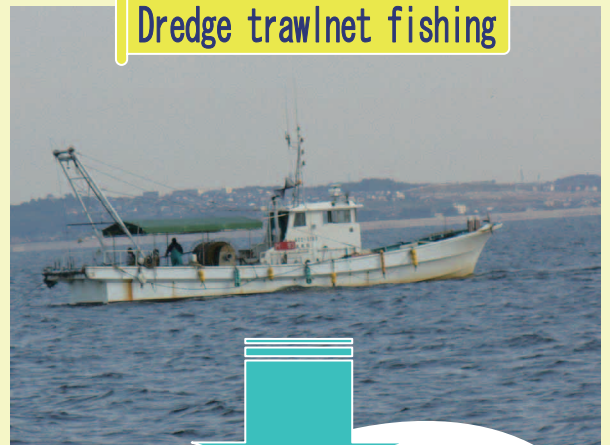
Pole Fishing



Trawling by two fishing boats



Dredge trawlnet fishing



Shellfish Nets (Primarily used in Mikawa Wan)

7. Conditions Regarding Placement of Seaweed Nets and Fixed Fishing Nets



For more on seaweed nets, fixed fishing nets, and other information, refer to "Umi no Jouhou Arekore" (Miscellaneous Marine Information: information on placement of fishing gear) on the 4th Regional Coast Guard Headquarters website:

<http://www.kaiho.mlit.go.jp/04kanku/>

Chapter 2 Irigo Suido Traffic Route and Adjacent Waters

1. Navigation
2. Traffic Control Signals That Should Be Heeded When Navigating the in Traffic Route
3. Notification of Traffic Routes
4. Report of Position
5. Taking a Pilot On Board
6. Regarding VHF Wireless Telephones, and AIS





Irigo Suido

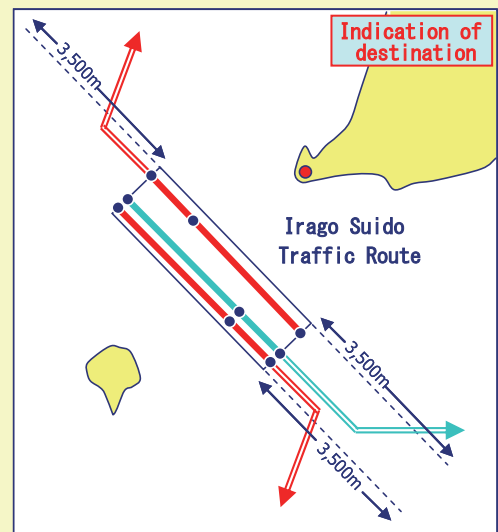
1. Navigation

(1) Navigation Based on the Maritime Traffic Safety Law.

Vessel navigating in the Irago Suido Traffic Route shall follow the below mentioned requirements of the Maritime Traffic Safety Law as stipulated in the Regulations for Preventing Collisions at Sea.

- ① Any vessel other than a huge vessel intending to navigate the traffic route must avoid the course of any huge vessel navigating in the route (huge Vessels are defined as vessels whose length over all (hereafter Loa.) is 200m or more).
- ② Any vessel whose length is 50 meters or more should navigating in the traffic route along the route.
- ③ No vessel shall navigate at a speed exceeding 12 knots in the traffic route.
- ④ When, after navigating the Irago Suido Traffic Route, a vessel of 100 gross tons or over crosses the line extending 3,500 meters from the boundary marking the side of a traffic route, as shown in the figure, the vessel must indicate its destination by giving signal shown below.

Method of Signaling	Sailing Vessel	Sailing Vessel
Day (International Signal Flags)		
Night (Whistle)	-----	-----
	● Point at which whistle is blown	



- ⑤ Vessels navigating in the traffic route should keep to the right of the center of the traffic route.
- ⑥ All vessels with length 130 meters or more (excluding huge vessels) must obey the signals issued by the Ise Wan Traffic Advisory Service Center.
- ⑦ Restriction of entry into the traffic route in poor visibility
Huge vessels, vessels of 50,000 G/T or more carrying dangerous cargo (vessels of 25,000 G/T or more carrying liquefied gas), vessels of 130m or more carrying dangerous cargo, and vessels towing or pushing long object whose distance is 200m or more should not enter the traffic route when the visibility in the traffic route being 1 mile or less.
- ⑧ Restriction of entry time into the traffic route
Vessels of 50,000 G/T or more carrying dangerous cargo (vessels of 25,000 G/T or more carrying liquefied gas) should enter the traffic route from 1 hour before sunrise till sunset.
However, "the vessel of 25,000 G/T or more "carrying liquefied gas, which has both an escort boat and a boat with specified fire fighting equipment, can enter "Irago Suido Traffic Route" from 19:00 to 03:00 N.B. : In the above cases, one of the boats must have a night vision device such as NVG.

(2) In addition to navigation based on the Maritime Traffic Safety Law, the Director of the 4th Regional Coast Guard Headquarters also recommends use of the following navigation practices in the traffic route and in the vicinity of its entrance.

① Restriction on overtaking

A vessel should avoid overtaking another vessel, as far as practicable, in the traffic route and adjacent waters.

② Navigation in the vicinity of the gateway of the traffic route.

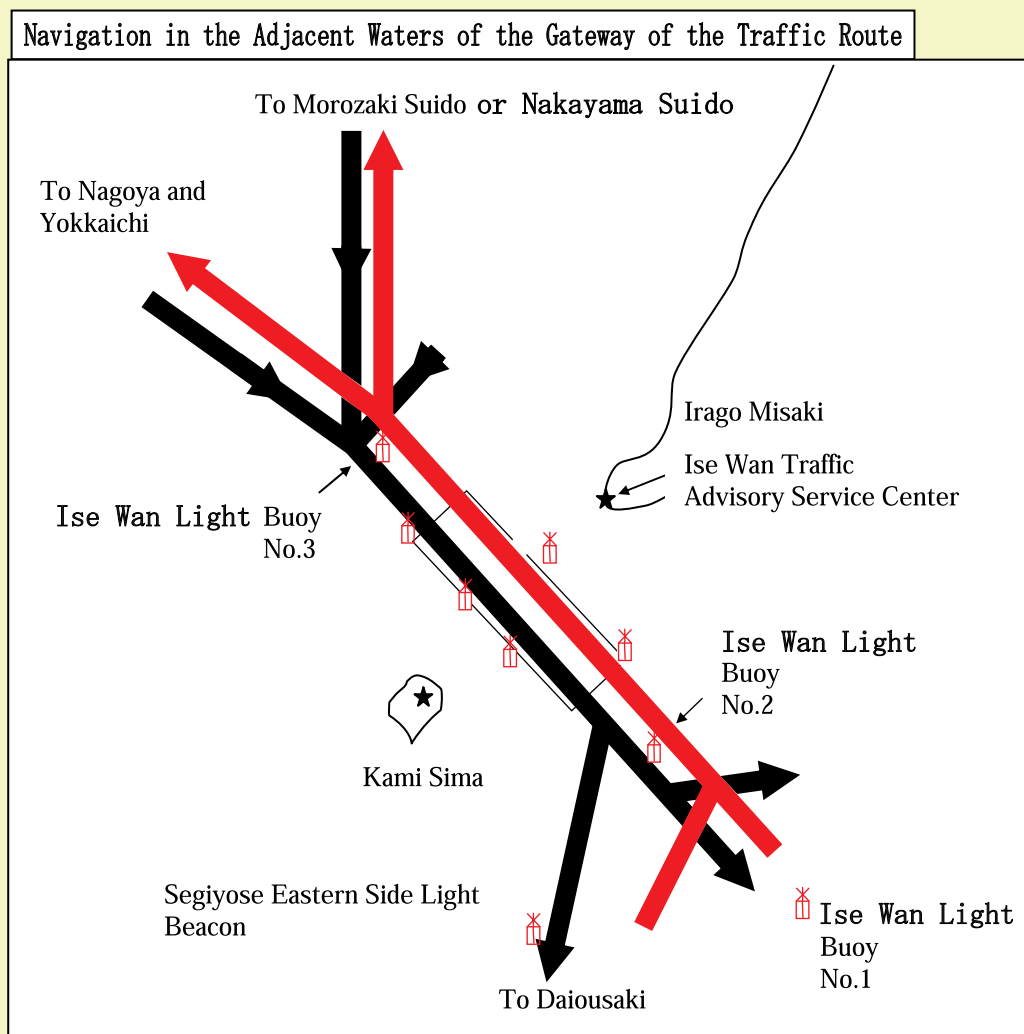
◆Northern approach to the traffic route

A vessel intending to enter or having left the traffic route should pass Ise Wan Light Buoy NO.3 ($34^{\circ} 35.3' N$, $136^{\circ} 58.3' E$, approx.) on her port side.

◆Southern approach to the traffic route

A vessel intending to enter or having left the traffic route should pass Ise Wan Light Buoy NO.2 ($34^{\circ} 32.4' N$, $137^{\circ} 01.8' E$, approx.) on her port side.

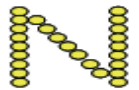


However a vessel passed the traffic route and navigating towards the vicinity of Daiousaki can take a route for eastern side sea area of Segiyose Eastern Side Light Beacon just after leaving the traffic route.

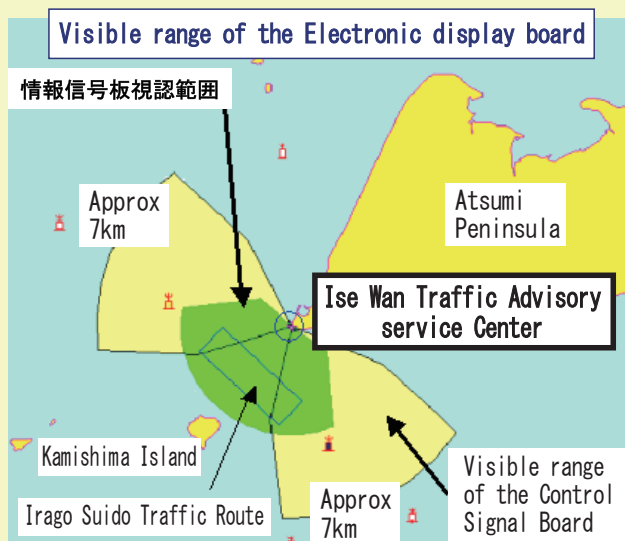


2. Traffic Control Signals That Should Be Heeded When Navigating the Traffic Route

Vessels navigating in the Irago Suido Traffic Route are required to obey all signals based on law. Signals are indicated on an electric signal board at the Ise Wan Traffic Advisory Service Center. When huge vessels navigating in the traffic route, vessels from 130m to less than 200m in Loa. may be required to wait outside of the traffic route.

When navigating in the traffic route, pay close attention to this signal and remain in close contact with the Ise Wan Traffic Advisory Service Center.

Signal		Meaning of signal
	Flashing of the letter "N"	Vessels of 130m or more and less than 200m in length intending to navigate southeastward through Irago Suido Traffic Route are required to wait outside of the traffic route.
	Flashing of the letter "S"	Vessels of 130m or more and less than 200m in length intending to navigate northwestward through Irago Suido Traffic Route are required to wait outside of the traffic route.
	Flashing alternately of the letter "N" and "S"	Vessels of 130m or more and less than 200m in length intending to navigate through Irago Suido Traffic Route are required to wait outside of the traffic route.



The Ise Wan Traffic Advisory Service Center



Information Signals

Huge vessels navigating Irago Suido Traffic Route are indicated on the electronic display board (arrow signals).



The direction of large vessels is indicated by an arrow.

[Flashed once every four seconds] Large vessel will sail within one hour.

[Flashed once every two seconds] Large vessel will sail within fifteen minutes.

[Flashed in sequence once every eight seconds] (Example:   )

Large vessel will sail within approximately fifteen minutes, and within fifteen minutes following the vessel's departure, another large vessel will be sailing in the opposite direction.

3. Notification of Traffic Routes

The following vessels entering the Irago Suido Traffic Route should report the Notification of traffic routes to the Director of Ise Wan Traffic Advisory Service Center.

Type of vessel	Time of Notification	Matters to be reported
Huge vessels (Any vessel 200m or more in length)	By noon of the day prior to the estimated date of entering the traffic route.	Name and gross tonnage of the vessel Length of vessel Types of dangerous cargo and amounts of each type Estimated date and time of entry into traffic route (JST) Estimated date and time of departure from traffic route (JST)
Vessels carrying dangerous cargo (vessels of 25,000 G/T or more carrying liquefied gas)		
Vessels towing or pushing long object(s) (Vessels with overall length of 200 meters or more that are used for pulling or pushing other vessels, including rafts.)		
Vessels of 10,000 G/T or more, 130m or more and less than 200m in total length		
Vessels carrying dangerous cargo (other than the above)	By 3 hours before the estimated time of entering the traffic route.	
Vessels of 3,000 G/T or more and less than 10,000 G/T		

* For more details on means of communication and the information transmitted, refer to the Ise Wan Traffic Advisory Service Center website:

<http://www6.kaiho.mlit.go.jp/isewan/index.htm>

Alternatively, refer to H304BW, Ise Wan Maritime Traffic Information Chart.

4. Report of Position

Huge vessels and other particular vessels, vessels of 130 m or more in Loa., or vessels of 1,000 G/T or more should report their Position to the Ise Wan Traffic Advisory Service Center at the time they arrive at the initial reporting line. However, huge vessels, 130 m or longer, or vessels of 3,000 G/T or more, and equipped with AIS and operate it properly, they may transmit information by AIS for Position Report.

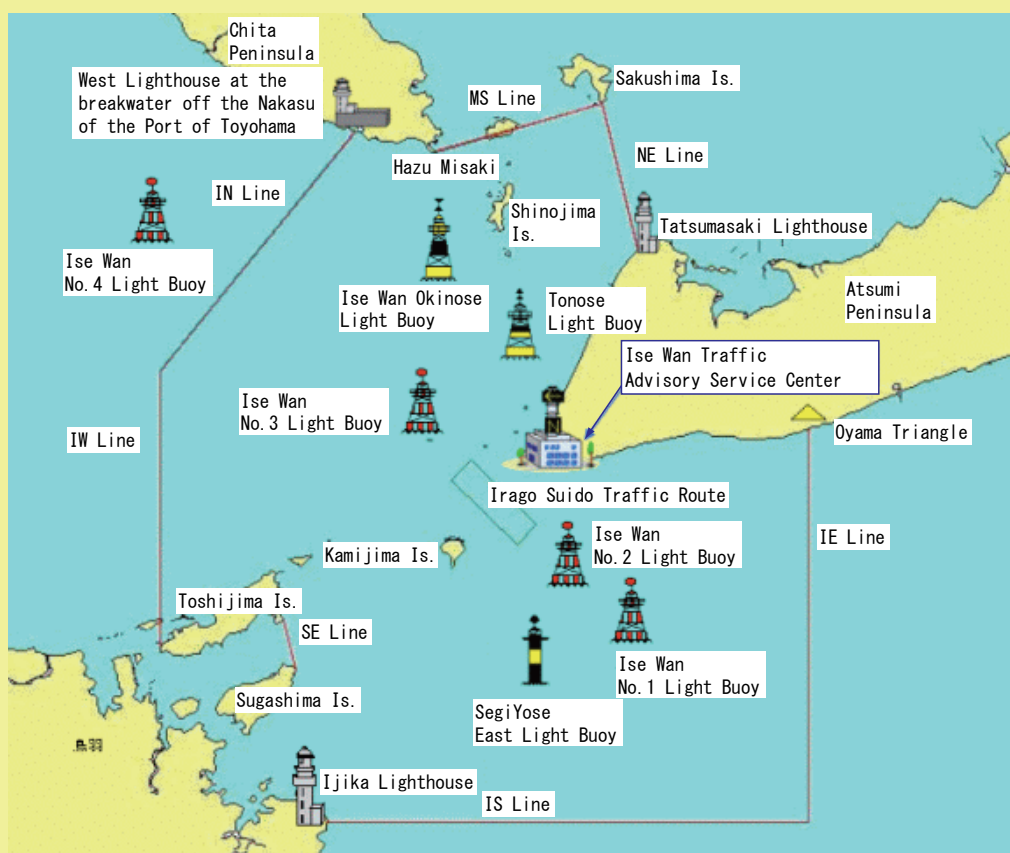
In addition, vessels of 1,000 G/T or more but less than 3,000 G/T (except vessels carrying hazardous materials), and equipped with AIS and operate it properly, they may transmit information by AIS and communicate with the Center by VHF (CH16 or CH13) at the right time until they arrive at the Position report line for Position Report.

5. Taking a Pilot On Board

- (1) Vessels of 10,000 gross tons or greater are required to take a pilot on board.
- (2) Vessels described below are required to take a pilot on board.
 - ① A vessel entitled to fly the flag of a foreign country
 - ② A vessel entitled to fly the Japanese flag of 130 m or more in Loa carrying dangerous cargo.

Reporting Lines and the Radar Service Area

Name of Position Reporting Line	Abbreviation	Description
Ise Wan Ko Minami	IS Line	A line extending 20.5km(34-36-39.8N,137-08-47.14E) east of Ijika Lighthouse(34-26-29.8N,136-55-25.2E)
Ise Wan Ko Higashi	IE Line	A line extending 17.5km(34-36-39.8N,137-08-47.14E) south of Oyama Triangle Point(34-36-07.46N,137-08-47.14E)
Nakayama Suiso Higashi	NE Line	A line connecting Tatsumasaki Lighthouse and southern end of Sakushima Is.
Morosaki Suido Minami	MS Line	A line connecting southern end of Sakushima Is. and Cape Hazumisaki
Ise Wan Ko Kita	IN Line	A line extending 11.1km southeast(217)of the West Lighthouse At the breakwater off the Tokohama Port Sandbank
Ise Wan Ko Nishi	IW Line	A line extending 13.3km north from the western end of Toshijima Is.
Sugashima Suido Higashi	SE Line	A line connecting eastern end of Sugashima Is. And Southeastern end of Toshijima Is.



6. Regarding VHF Wireless Telephones, and AIS

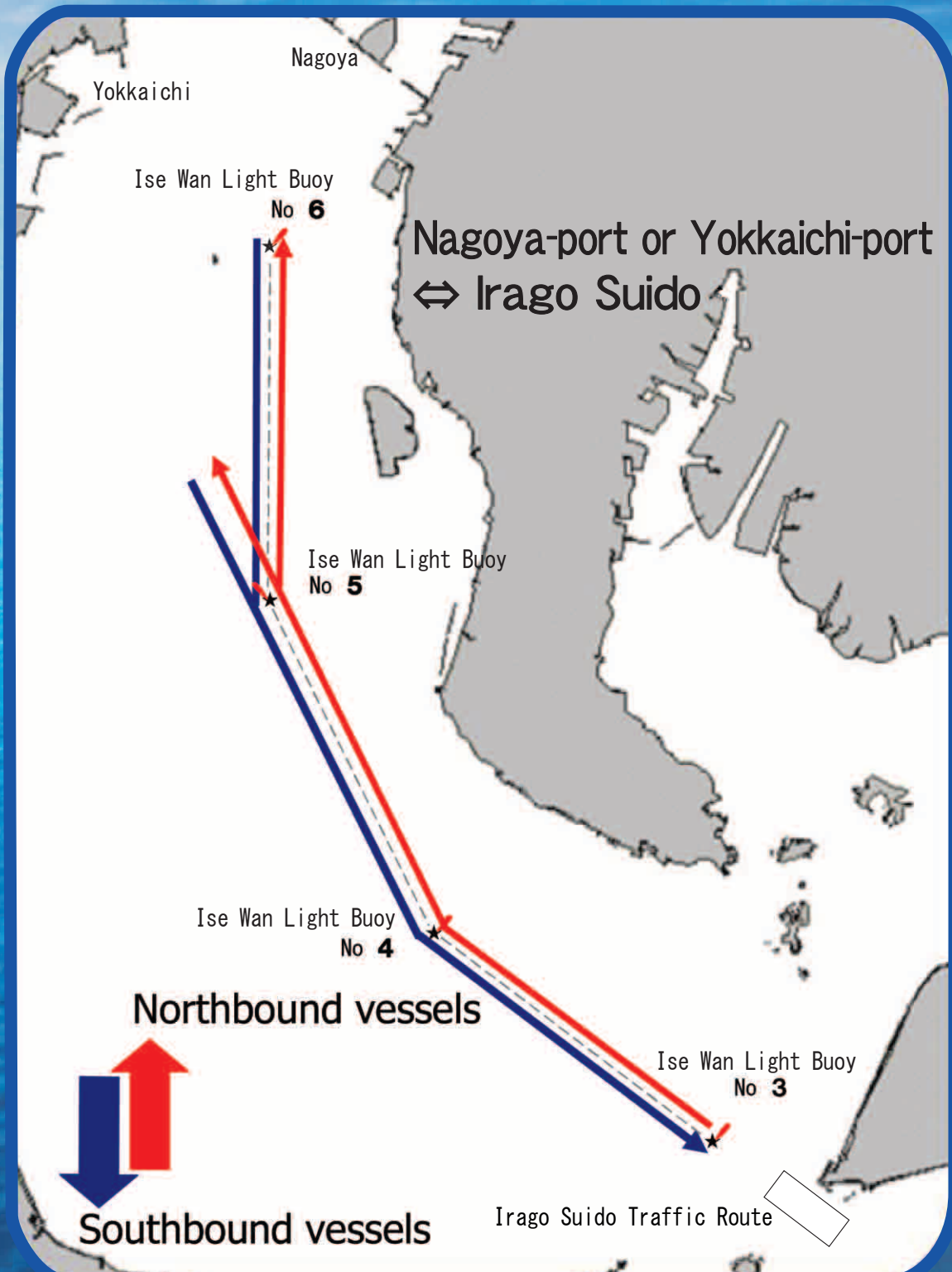
The Ise Wan Traffic Advisory Service Center provides information required for safe navigation (alerts for avoiding hazards and other information) by means of VHF radio telephone and AIS. Please note the following.

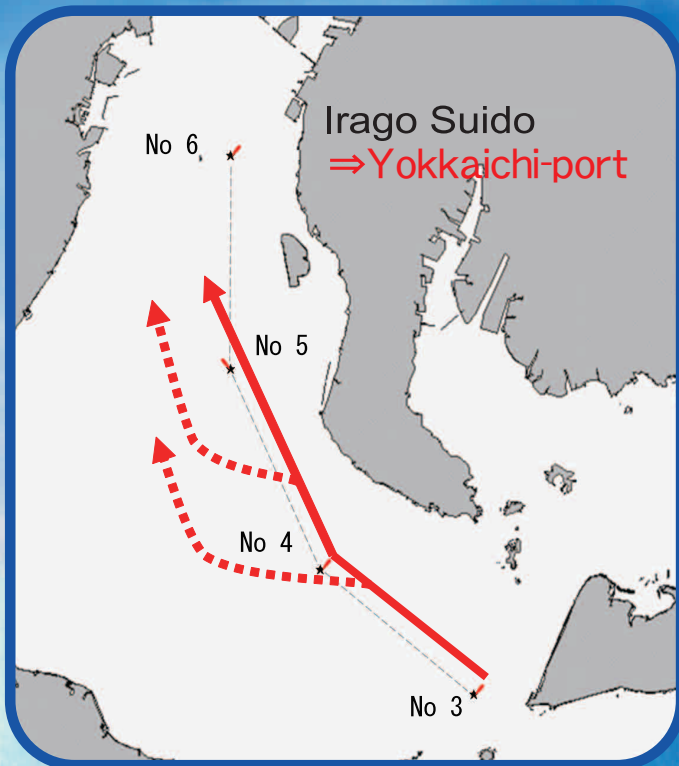
- Vessels reaching sixty miles off Irago should monitor VHF Channel 16 (maintain contact). (In the event traffic on Channel 16 is congested, calls may be made on Channel 13. Vessels prepared to receive on Channel 13 should monitor Channel 13 as well as Channel 16.)
- AIS information must be entered correctly. In particular, the destination port and ETA must be set correctly.
- AIS messages must be confirmed.

Chapter 3 Navigating in Ise Bay

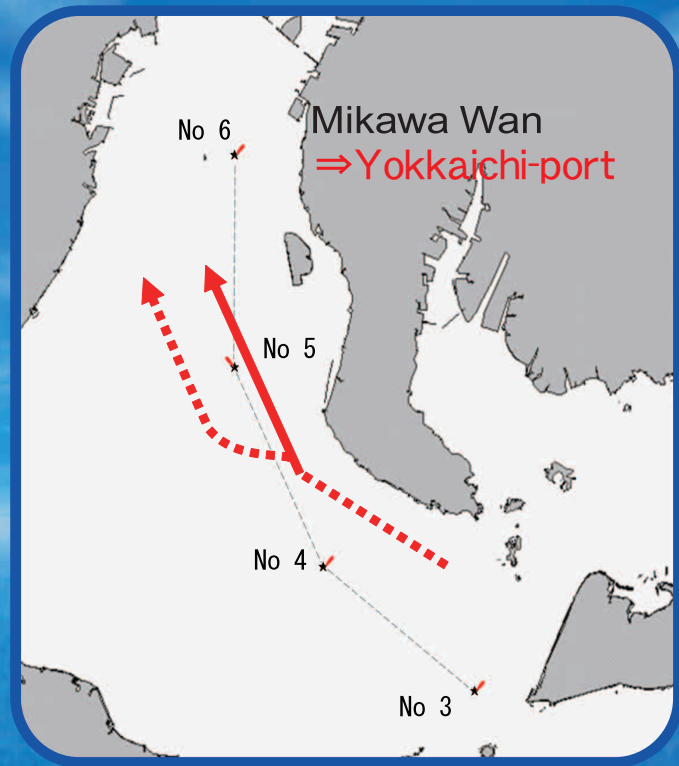
To ensure the safety of vessel traffic in Ise Bay, vessels with a gross tonnage of 500 gross tons or more are to navigate as per the following recommendations by the Director of the 4th Regional Coast Guard Headquarters.

- (1) Southbound or Northbound vessels navigating between the Nagoya-Ko and Irigo Suido should pass the Ise Wan Light Buoys No.4, No.5 and No.6 observing them on your port side
- (2) Southbound or Northbound vessels navigating between the Yokkaichi-Ko and Irigo Suido should pass the Ise Wan Light Buoys No.4 and No.5 on your port side

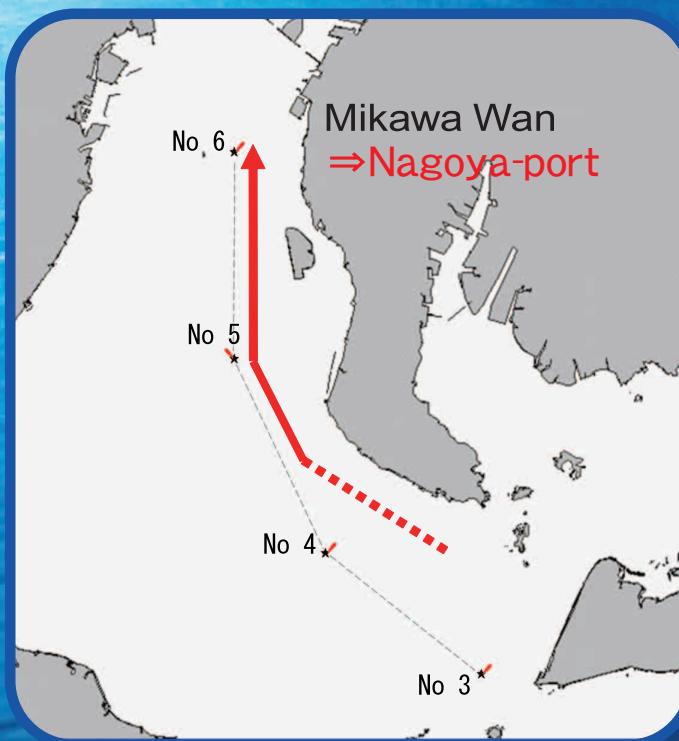




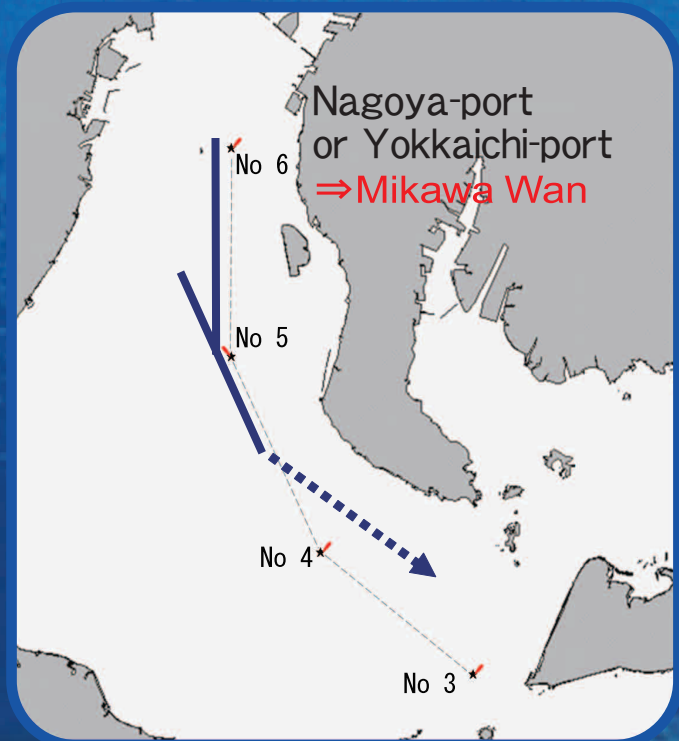
Note:Keep well clear in advance to the west depending on the southbound vessel's movement.



Note:Keep well clear in advance to the west depending on the southbound vessel's movement.



Note:You should navigate with Ise Wan No.5 and No.6 Light Buoys on your port side.



Note:You should navigate with Ise Wan No.5 Light Buoys on your port side.

Chapter 7 Mikawa Port

1. Navigation

2. Other

* 1 Navigation rules are based on the Port Regulations Law.

The Port Regulations Law was enacted in 1948 as a special law appended to the Law for Preventing Collisions at Sea specifying general regulations for vessel traffic with the aim of ensuring the safety of vessel traffic within ports and orderliness of the ports.

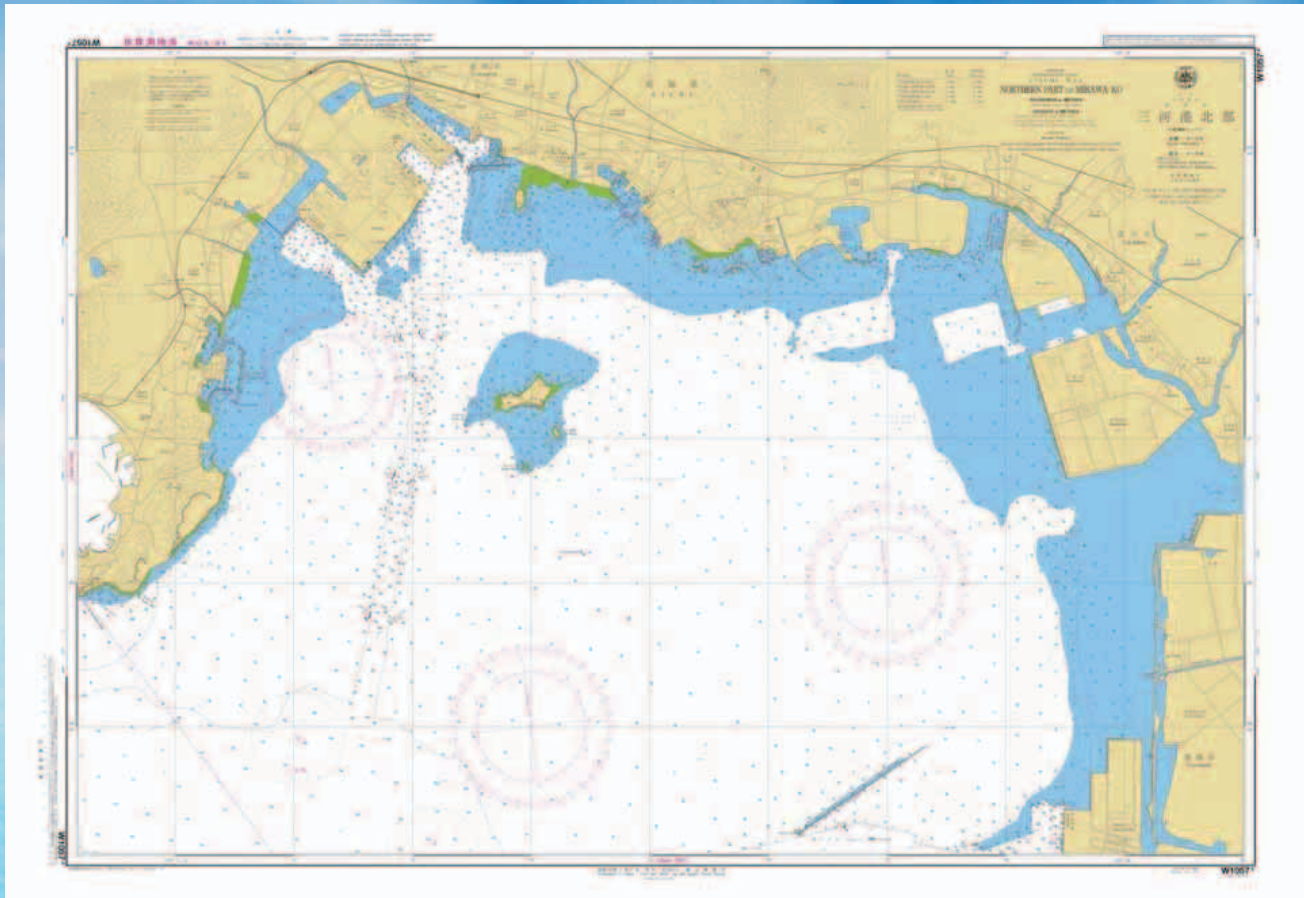
In the Port of Mikawa, the Port Regulations Law is given priority in application to the Law for Preventing Collisions at Sea.



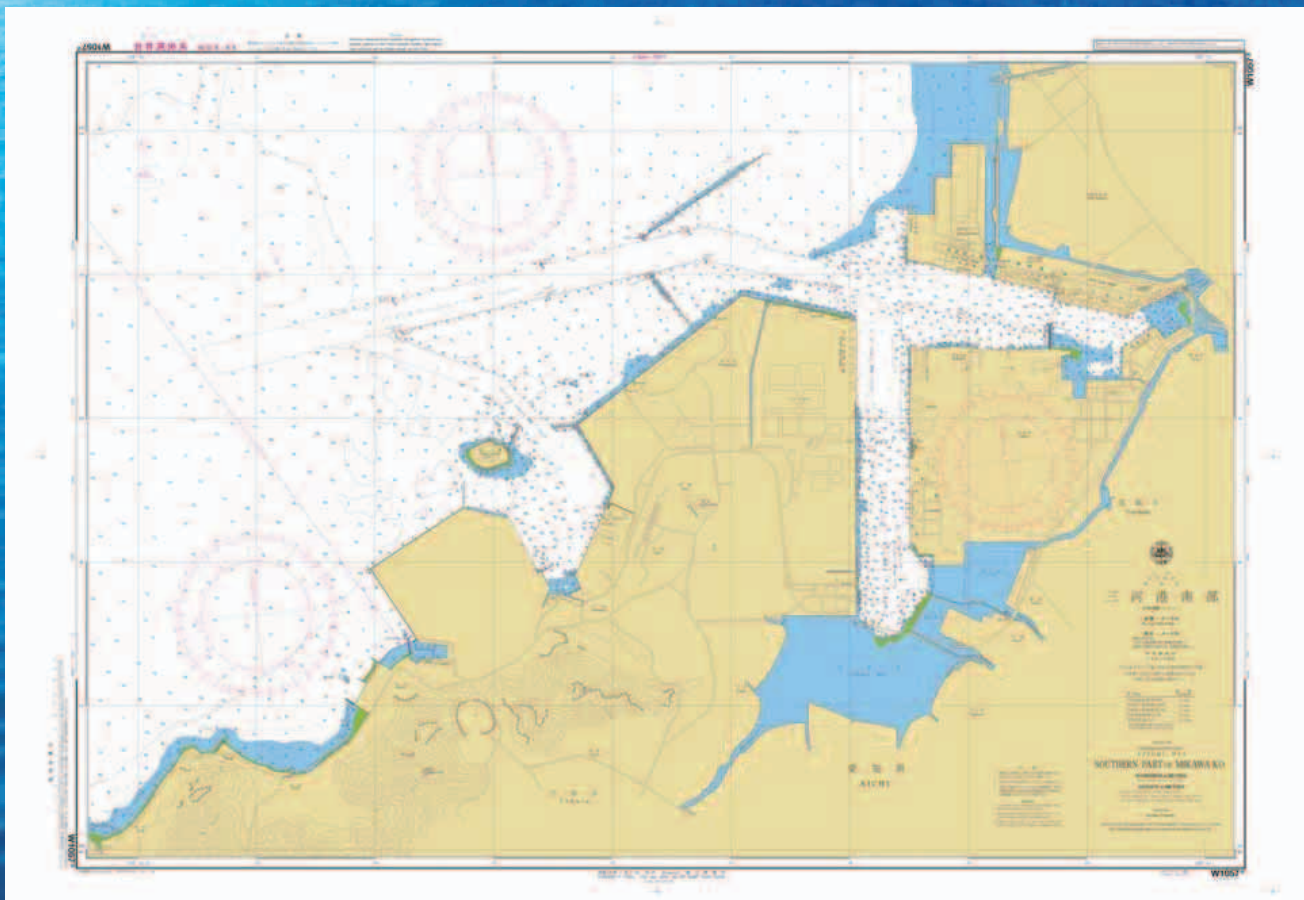
Mikawa Port

Mikawa Port Charts

Mikawa Port, North Area W1057A



Mikawa Port, South Area W1057B



* These charts cannot be used for navigation.

1. Navigation

1. Navigate in the passage when entering/departing the port.
2. Do not anchor in the passage.
3. When entering the passage from outside, or when exiting the passage from the passage, by other vessels navigating in the passage.
4. Vessels should not navigate side by side in the passage.
5. Vessels should proceed on the right side of the passage when other vessels are encountered in the passage.
6. Vessels should not overtake other vessels in the traffic route.
7. Vessels must not navigate at speeds presenting a danger to other vessels.

2. Other

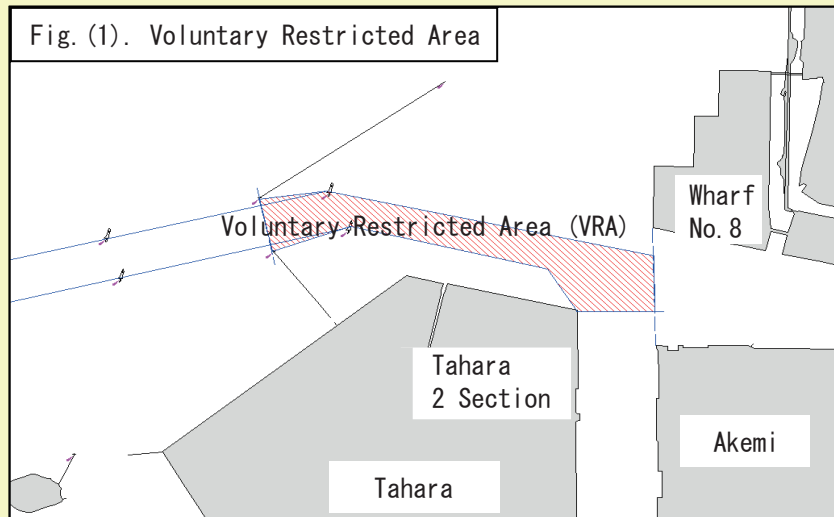
(1) Regarding Self Regulated Rules in the Mikawa Port Toyohashi Traffic Route

① Vessels of 3,000 G/T or more who intend to enter into or depart from Mikawa Port through Toyohashi Passage are kindly requested to observe the following Voluntary Traffic Rules.

(i) All vessels of 3,000 G/T or more must not overtake/meet other vessels of 3,000 G/T or more in the Voluntary Restricted Area (hereinafter VRA) shown in Fig. (1).

(ii) The entering vessel of 3,000 G/T or more (hereinafter EEE vessel) must give priority to the departing vessel of 3,000 G/T or more (hereinafter DDD vessel) in case there is certain possibility for both vessels to meet inside the VRA.

(in other words, EEE vessel must adjust ETA to VRA and wait for SSS vessel passing the break-water entrance)



② In the meantime all vessels of 3,000 G/T or more are also requested to contact to Mikawa-wan Port Radio 2 (hereinafter MPR2) at the following time/position and obtain information of other vessel to observe the above Voluntary Traffic Rules and make necessary arrangement with the vessel concerned.

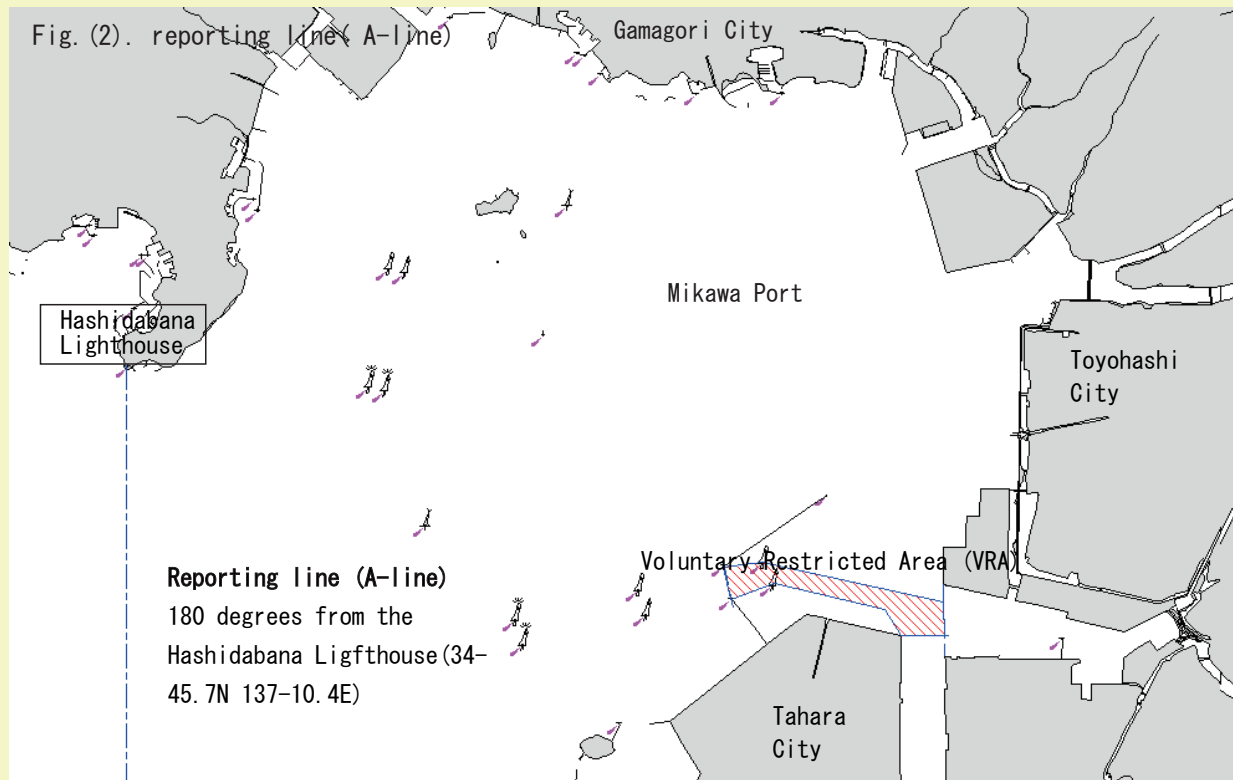
(1) EEE vessel

Call MPR2 when the vessel pass the reporting line (A-line) shown in Fig. (2).

In case the vessel is entering from anchorage, call MPR when the vessel hove up her anchor.

(2) DDD vessel

Call MPR2 when the vessel is ready to depart from her berth.

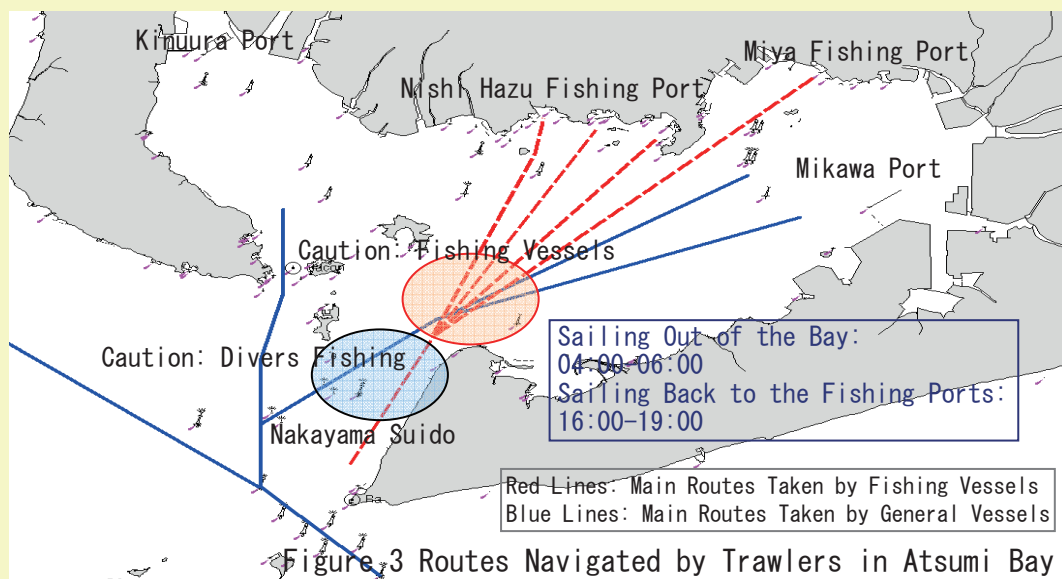


(3) Fishing Operations in the Waters Near Mikawa Bay

Fishing operations are highly active throughout the year in the waters from Irago Suido to Nakayama Suido.

In Figure 3, the main routes and time periods in which trawlers sail between fishing ports in Mikawa Bay and the Irago Suido offshore fishing grounds are indicated by dashed lines. The routes navigated by these trawlers intersect traffic routes taken by general vessels entering and exiting the Mikawa Port. Additionally, fishing operations with divers are also active year-round in the coastal waters from Nojima to Tatzuma Saki, and the small fishing vessels accompanying these diving operations fly "A" flags on their masts while anchored.

Masters and mates on vessels intending to navigate in the waters described above should pay close attention to these fishing vessels.



(4) Obtaining Recent Versions of Navigational Charts

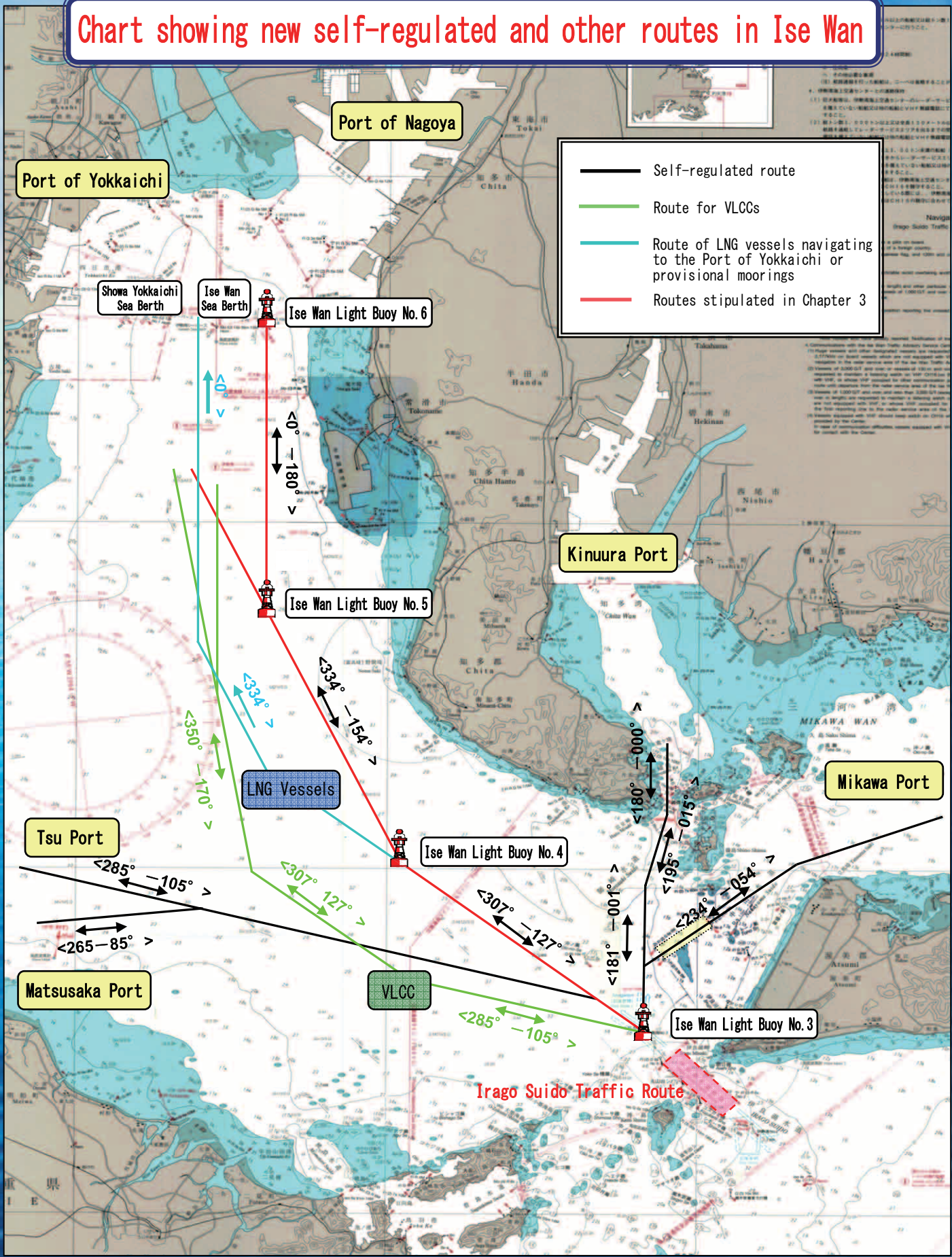
Vessels intending to navigate in Atsumi Bay or enter the Mikawa Port should obtain the most recent charts as described below.

	Japanese Version	English Version	U. S. Version
Ise Wan	W1051	2957	97181
Irago Suido and Approches	W1053	3650	97182
Irago Suido	W1064	—	—
Atsumi Wan	W1052	—	97188
Morozaki Suido	W1054	—	—
Mikawa Port, Northern Part	W1057A	3649	97185
Mikawa Port, Southern Part	W1057B	3649	97185
Ise Wan Maritime Traffic Information Chart	H-304BW(English Version) * Maritime Traffic Information Charts are not to be used for navigation.		

Chapter 8 Mutual Understanding Between Parties Utilizing Waters

1. Recommended Ise Wan Traffic Routes

Chart showing new self-regulated and other routes in Ise Wan



3. Self-Restraint in anchoring in the Nakayama Suido Passage for Development and Conservation

The voluntary restricted anchoring area was established at Nakayama Suido Passage (700m in width) and the extended area from the passage's east end to a boundary line of the Maritime Traffic Safety Law.

All vessels are recommended to refrain from anchoring in abovementioned areas.

