Pub.303 sup.

Sailing Directions for Seto Naikai

Supplement No.7

22 December 2023

Japan Coast Guard

Explanatory Notes

Sailing Directions for Seto Naikai - Supplement No. 5 is issued to correct the outdated information in Publication No.303 Sailing Directions for Seto Naikai which was published in February 2019.

This supplement contains the information which has been gathered through the work of Hydrographic and Oceanographic Department, Japan Coast Guard by 27 October 2023.

The instructions for amending, deleting or adding of the previous issues are indicated in this supplement. This supplement also contains an index to be referred to the pages on which they are mentioned. The index is listed in numerical order, along with the titles of the ports or articles. Amendments are indicated in red letter on gray background while deletions are marked with strikethrough, in red letter on grey background. Chart images, tables or pictures to be delated, replaced or added are instructed in [square brackets].

Each sheet of the supplements is excerpted from the relevant issue of the Sailing Directions so that the page number printed in the supplement is corresponding to the original page number. In case that a sheet had spanned multiple pages by adding large volume of text or image, sub-number is given to the page number.

22 December 2023

Hydrographic and Oceanographic Department,
Japan Coast Guard

Caution

This supplement is for use in conjunction with Notices to Mariners, List of Aids to Navigation, and related charts and publications, because no corrections are given thereto except through supplements.

Especially for up-to-dated information concerning the safety of navigation instructed by Japan Coast Guard, please refer to Notices to Mariners and related publications.

In the interest of ensuring the safety of navigation and protecting the marine environment, the Japan Coast Guard (JCG) publicises information that could affect the safety of navigation and environmental protection by issuing Notices to Mariners (NTMs) and Navigational Warnings (NWs), and publishing such information on the JCG charts and in other nautical publications, based on laws, regulations, proclamations, charts, NTMs, NWs issued by countries concerned as well as reports made by ships.

Sailing Directions published by JCG are intended solely for the purpose of providing information for safe navigation. The contents included in the Sailing Directions do not reflect the Japanese Government's official stance regarding the laws, regulations, and proclamations of other countries.

Supplement No.7
INDEX

Page	Updated parts (title, port name, etc.)	Remarks
Ⅵ	FIGURE	
Ⅶ	FIGURE	
Ⅷ	FIGURE	
46	Osaka Wan	
46-1	Osaka Wan	
46-2	Osaka Wan	
46-3	Osaka Wan	
48	Akashi Kaikyo	
50	Akashi Kaikyo	
50-1	Akashi Kaikyo	
50-2	Akashi Kaikyo	
52	Akashi Kaikyo	
53	Akashi Kaikyo	
54	Akashi Kaikyo	
54-1	Akashi Kaikyo	
55	Akashi Kaikyo	
56	Akashi Kaikyo	
62	Bisan Seto	
62-1	Bisan Seto	
95	Kurushima Kaikyo	
96	Kurushima Kaikyo	
99	Kurushima Kaikyo	
100	Kurushima Kaikyo	
106	Kurushima Kaikyo	
144	Kanmon Kaikyo	
207	Osaka Wan	
208	Osaka Wan_Kobe Ku	
209	Osaka Wan_Kobe Ku	
210	Osaka Wan_Kobe Ku	
274	Tokuyama-Kudamatsu Ko	
277	Mitajiri-Nakanoseki Ko	
279	Ube Ko	

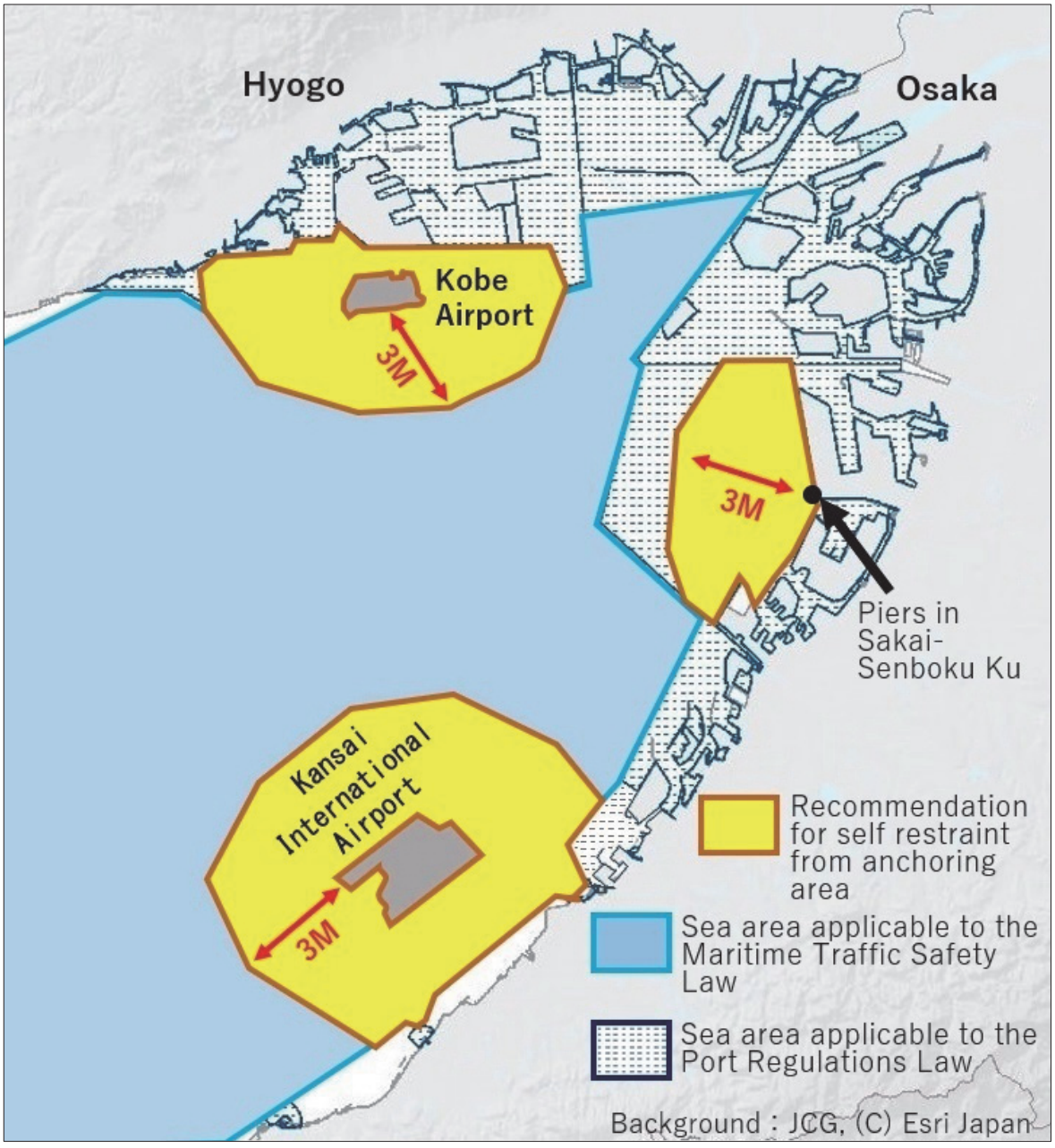
282	Kanda Ko	
286	Beppu Ko	
288	Oita Ko	
	Blank below	

FIGURE

Anchorage.

1. Intermediate area between Hanshin Ko Kobe Ku and Osaka Ku and the vicinity of 20m depth is said to be a good anchorage area. Ships of 3,000t or less are in the danger of dragging anchors due to heaves unless they are anchored at a place with the depth of 20m or less. Although Osaka Bay is surrounded by land, high waves enter from Tomogashima Suido. When a typhoon passed through this district in the past, many moored ships suffered anchor dragging due to these high waves. Caution must be taken on this matter.
2. When a typhoon is expected to pass the N side of the bay, large-size ferries are moored from the offing of northern Kansai International Airport to the offing of Kishiwada.

Fig.11-1 Sea area where recommendation for self restraint from anchoring will be issued [An image newly Added]



Typhoon and tsunami safety measures.

1. Vessels attempting to anchor in waters around Kansai International Airport are instructed to keep clear of 3M from the shore of Kansai International Airport. Furthermore, if a weather warning relating to storms or snowstorms is expected to be issued to Izumisano City, Sennan City, or Tajiri Town, Sennan County, Osaka Prefecture, a recommendation to refrain from anchoring will be issued to ships as follows based on the provisions of the Maritime Traffic Safety Law.

[Recommendation for self restraint from anchoring]

Sea area:

The area within 3M from the shore of the Kansai International Airport (Refer to Fig 11-1)

Periods:

When it is expected that there is a possibility of a phenomenon that would result in the announcement of a weather warning regarding stormy winds or snowstorms in Izumisano City, Sennan City, and Tajiri Town, Sennan District, Osaka Prefecture.

Vessels:

(1) Vessels with 100t or more should not anchor in the sea area within 3M from the shore of the Kansai International Airport.

(2) Anchoring vessels with 100t or more in the sea area within 3M from the Kansai International Airport should leave the sea area immediately, except for the following vessels.

(A) Vessels allowed to necessarily anchor in the sea area in order to carry out services that are required for the protection of human life or property, the maintenance of public order or other public needs.

(B) Vessels of the Japan Coast Guard.

(C) Vessels allowed to necessarily anchor in the sea area by the Commander of the 5th Regional Coast Guard Headquarters in order to avoid dangers to vessel traffic.

(D) Vessels allowed by the Commander of the 5th Regional Coast Guard Headquarters other than the above.

2. Vessels attempting to anchor in the waters around the Sakai-Senboku Port Piers (Cosmo Oil Crude Oil Pier, Osaka Gas LNG No.2 Pier and Sakai LNG Center Pier) are recommended to keep clear of 3M from those piers. Furthermore, in the Sakai-Senboku Ku of Hanshin Ko, if a weather warning relating to storms or snowstorms is expected to be issued, a recommendation to refrain from anchoring will be issued to ships as follows based on the provisions of the Port Regulations Act.

[recommendation for self restraint from anchoring]

Sea area:

The area within 3M from the Piers of the Sakai-Senboku Ku (Refer to Fig 11-1)

Periods:

When it is expected that there is a possibility of a phenomenon that would result in the announcement of a weather warning regarding stormy winds or snowstorms in Sakai-Senboku Ku, Hanshin Ko.

Vessels:

In principal, vessels with 100t or more should not anchor in the area within 3M from the Piers of Sakai-Senboku Ku.

3. Vessels attempting to anchor in the waters around Kobe Airport are recommended to keep clear of 3M away from Kobe Airport. Furthermore, in Kobe-shi, Hyogo Prefecture, if a weather warning is expected to be issued relating to storms or snowstorms, a recommendation to refrain from anchoring will be issued to ships based on the provisions of the Port Regulations Act.

[Recommendation for self restraint from anchoring]

Sea area:

The area within 3M from the shore of the Kobe Airport (Refer to Fig 11-1)

Periods:

When it is expected that there is a possibility of a phenomenon that would result in the announcement of a weather warning regarding stormy winds or snowstorms in Kobe city, Hyogo prefecture.

Vessels:

(1) Vessels with 100t or more should not anchor in the sea area within 3M from the Kobe Airport.

(2) Anchoring vessels with 100t or more in the sea area within 3M from the Kobe Airport should leave immediately, except for the following vessels.

(A) Vessels allowed to necessarily anchor in the sea area in order to carry out services that are required for the protection of human life or property, the maintenance of public order or other public needs.

(B) Vessels of the Japan Coast Guard.

(C) Vessels allowed to necessarily anchor in the sea area by the Captain of Hanshin Ko in order to avoid dangers to vessel traffic

(D) Vessels allowed by the Captain of Hanshin Ko other than the above.

4. When a "recommendation for self restraint from anchoring" is issued, it will be announced via the 5th Regional Coast Guard Local Navigational Warning, NAVTEX, patrol vessels of JCG, internet and e-mail of Maritime Information and Communication System, VHF radio communication, AIS message, Council for Typhoon Response, and so on.

（Contact: Navigation Safety Division, Maritime Traffic Department, the 5th Regional Coast Guard Headquarters）

Akashi Kaikyo (Charts JP131, W1217)

Akashi Kaikyo E entrance

(Photographed in December 2016)

General Information. Akashi Kaikyo is one of the important places of marine traffic in Seto Naikai. The width is about 2M with a rather strong current and there are some points where the current direction and the traffic route are crossing. There is a big traffic with many vessels as the result of convergence of 4 routes from Hanshin, Tomo-ga-Shima, Harima Nada and the N of Ieshima Shoto. And there are many fishing boats in operation since this area is a good point of boat seine fishery. Within the channel, there is Akashi Kaikyo Traffic Route designated in Maritime Traffic Safety Law. In that traffic route vessels must follow traffic method regulated in the same law. There is Akashi Kaikyo O-hashi Bridge spans the traffic route which could be a good mark from a distance. Near the channel the depth is deep enough but in the N part relatively is shallow. Especially, from the N side of W entrance of the channel to Higashi-Harima Ko there is a shallow area with the depth of 10m or less the area expands up to the 3M from the coast.

Weather. Near Akashi Kaikyo there occurs geographically a strong wind and wind wave. When a low pressure develops off Wakasa Wan of the Japan Sea, there are some cases of a big stormy weather with a strong S or SW wind,

wind wave and chopping wave in spite of the calm weather of Harima Nada.

Oceanography. Chopping wave occurring in the offing of Semento Iso (34°38′N 134°58′E) in the WNW of Akashi Kaikyo is locally called ′ IAINICHI ′ and makes the navigating of small vessels difficult. It often occurs at the time of turn of tide from the W current to E current with W ~ NW wind (6 ~ 10 m/s) in winter season and gradually moves E from Semento Iso.

The duration is 30 minutes ~ 2 hours.

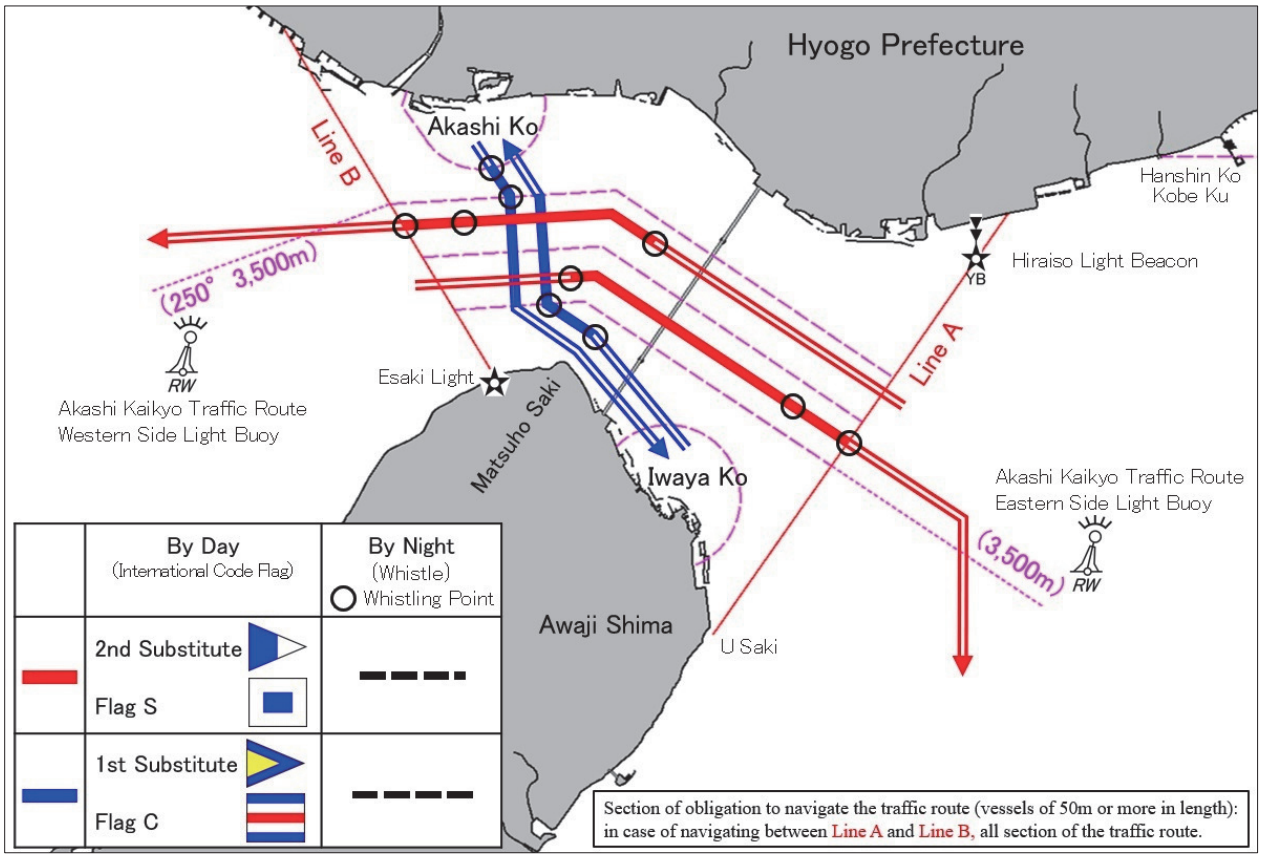
Tidal currents. (Refer to Fig.12 and Fig.13 on page 47.) W-going current is the strongest at high water in Akashi, while E-going current is strongest at low water. The spring rate of W-going current is 6.7kn, E-going current is 5kn.

Landmarks.

Landmark	Position	Remark
Hachibuse Yama	34°38.5′N 135°05.8′E	246m high and there is a station of ropeway near the peak. There is a white house lighting white at night.
A tower	34°39.1′N 135°13.1′E	It is the construction of Osaka Wan Vessel Traffic Service Center (grey color).
A tower	34°39.0′N 135°00.1′E	It is a house of astronomy with a clock tower and a light.

Marine Casualties. An accident occurred in March 2008, in which 3 vessels involving cargos and a tanker caused multiple collisions in the vicinity of the E entrance of Akashi Kaikyo Traffic Route. As a result of the accident, one of them sank.

Fig.14 Reference chart of Akashi Kaikyo Traffic Route (Maritime Traffic Safety Law) [An image replaced]



Navigation rules. Vessels shall observe the following in addition to navigation pursuant to the provisions of Maritime Traffic Safety Law at Akashi Kaikyo Traffic Route and ~~nearby~~ Northern part of Osaka Wan:

1. Measures to inform the route (Article 7 of Maritime Traffic Safety Law, Article 6 of Regulations for the Enforcement of Maritime Traffic Safety Law)

・ Vessels (other than those not equipped with a whistle and less than 100 GT) which intend to enter a traffic route from outside of the traffic route or go outside from the traffic route, shall indicate their routes (Refer to Fig.14.).

・ Vessels (other than those not equipped with a whistle, Automatic Identification System and not operating

distance of 160m or more from the tugboat bow to the back end of the objects or from push boat stern to the head of the objects, are navigating the traffic route.

3. Notification concerning the navigation of huge vessels, etc. (Article 22 of Maritime Traffic Safety Law and Articles 10 to 14 of Regulations for the Enforcement of Maritime Traffic Safety Law)

(1) Vessels with obligation to report

The following vessels (A)~(D) shall report to the Osaka Wan Vessel Traffic Service Center the matters listed in (3) below by noon of the day before the estimated date of entering into Akashi Kaikyo Traffic Route.

If there occur any changes in the reported matters, the vessel shall notify the Center three hours before the entry into Akashi Kaikyo Traffic Route, and thereafter, if there are any changes in the reported items, the vessel shall notify the Center immediately.

(A) Huge vessels.

(B) Vessels except huge vessels, and with a length of 160m or more.

(C) Vessels of 25,000 GT and more carrying liquefied gas.

(D) Vessels navigating while pushing or towing vessels or rafts or other objects and with a distance of 160m or more from the tugboat bow to the back end of the objects or from push boat stern to the head of the objects.

(2) Following Vessels (A)~(D) carrying dangerous cargo which do not correspond to ones above mentioned (1) shall report the matters (A) through (E) and (G) listed in (3) below at 3 hours before the estimated time of entering into the Akashi Kaikyo Traffic Route to the Osaka Wan Vessel Traffic Service Center.

If there are any changes in the reported matters, the vessel shall immediately report the changes to the Osaka Wan Vessel Traffic Service Center.

(A) A vessel of 300t and more carrying certain amount of powder (Please refer to item 1, paragraph 1 of article 11 of the Ordinance for Enforcement of the Act on Maritime Traffic Safety for the exact amount.)

(B) A vessel of 1,000t and more carrying inflammable high pressure gas in bulk.

(C) A vessel of 1,000t and more carrying inflammable liquid in bulk.

(D) A vessel of 300t and more carrying organic peroxide of 200 tons and more.

(3) Reporting items

(A) Name, Gross tonnage and length of the vessels.

(B) The sections of the traffic routes intended to be navigated, the time of entering the traffic routes and the time of leaving the traffic routes.

(C) Call sign or call name in the case of vessels that have a ship station.

(D) Methods for communicating with Japan Coast Guard in the case of vessels that do not have a ship station.

(E) Port of destination in the case of vessels having a port of destination.

(F) Draft in the case of huge vessels.

(G) In the case of the Dangerous cargo, each type and amount.

(H) In the case of vessels towing objects, etc., the length from the tugboat bow to the back end of the objects or from push boat stern to the head of the objects, and general information about the objects.

(4) Means of report

(A) Paper

Please fill in the report form and bring it to any of the Japan Coast Guard offices or mail it to the OSAKA MARTIS.

7-2-22, Minatojima Minami-cho, Chuo-ku, Kobe-City, Hyogo 650-0047, JAPAN

(B) Phone

+81-78-302-7611

+81-78-302-7612

(C) E-mail

Please contact the Osaka Wan Vessel Traffic Service Center.

(**Note 2**): "Huge vessels, etc." applies to the following:

・ Huge vessels: The term "Huge vessel" shall mean any vessel of 200m or more in length.

・ Vessels carrying dangerous cargo (Articles 11 of Regulations for the Enforcement of Maritime Traffic Safety Law): The vessel with more than of gross tonnage determined depending on the kind of dangerous cargo loading.

・ Gunpowder, etc.: Gunpowder kind (only those whose quantity is 80 tons or more in the case of explosives; 80 tons or more calculated on the basis of the amount mentioned in the right hand column of the following table as 1 ton of explosives, in the case of gunpowder kind listed in the left hand column of the same table.): Vessels of 300 GT or more.

Gunpowder kind		Quantity to be converted into 1 ton of explosive
Gunpowder		2 tons
Fire article (Including ammunition, hereinafter the same in this table.)	Ball cartridge or blank cartridge	2,000,000 rounds
	Fuses or fire fuse	50,000 pieces
	Percussion cup for gun	10,000,000 pieces
	Industrial percussion cup or electric percussion cup	1,000,000 pieces
	Signal percussion cup	250,000 pieces
	Detonating fuse	50 kilometers
	Other material	Whose raw material is gunpowder 2 tons. Whose raw material is explosive 1 ton.

・ High-pressure gas of inflammability loaded in bulk. : Vessels of 1,000 GT or more.

・ Inflammable liquids loaded in bulk: Vessels of 1,000 GT or more.

・ Organic peroxides (only those whose amount is 200 t or more): Vessels of 300 GT or more.

・ Special vessels carrying dangerous cargo: Vessels of 50,000 GT or more carrying dangerous cargo (25,000 GT or more in case of carrying the dangerous cargo of liquefied gas).

・ Vessels Towing Very Long Object, etc. Vessels navigating while pushing or towing vessels or rafts or other objects and with a distance of 200m or more from the tugboat bow to the back end of the objects or from push boat stern to the head of the objects.

4. The designation of track in the sea areas off the traffic routes (Article 25 Paragraph 2 of Marine Traffic Safety Law, Notice on Designation of Tracks Pursuant to Provisions of Article 25 Paragraph 2 of the Law (Japan Coast Guard Notice No.92, 2010)).

(1) Tracks in the sea areas near the E entrance/exit of Akashi Kaikyo Traffic Route (Refer to Fig.15 on page 52.).

(A) Vessels more than 50m in the length which will navigate westward along Akashi Kaikyo Traffic Route shall navigate in the area to the N side of the Line A. Also cross the Line B. Moreover, navigate in the area more than 200m off the Point A.

(B) Vessels more than 50m in the length which will navigate eastward along Akashi Kaikyo Traffic Route shall navigate in the area to the S side of the Line A, and shall navigate in the area more than 200m off the Point A.

(Remarks)

Line A: a line joining the following 2 points.

・ a point 4,550m, 160° from Hiraiso Light Beacon (34°37′18"N 135°03′55"E).

・ a point (Point B) 2,700m, 215° from Hiraiso Light Beacon (Akashi Kaikyo Traffic Route Center No.3 Light Buoy is the landmark for Point B.).

Line B: a line joining the following 2 points.

・ a point 2,350m, 139° from Hiraiso Light Beacon.
・ a point 2,300m, 180° from a point above.
・ As the estimated target to show the N end of Akashi Kaikyo Traffic Route NE is set the virtual AIS Aids to Navigation is set (Limited to AIS-equipped vessels).

Point A: a point 4,550m, 160° from Hiraiso Light Beacon (Akashi Kaikyo Traffic Route Eastward Light Buoy is the landmark for the Point A.).

(2) Tracks in the sea areas near the W entrance/exit of Akashi Kaikyo Traffic Route. (Refer to Fig.16 on page 52.)

(A) Vessels more than 5,000 GT navigating Akashi Kaikyo Traffic Route westward and having reached the area outside of the traffic route by crossing the borderline of the entrance/exit on the W side of the traffic route shall navigate in the area to the N side of the Line A.

(B) Vessels more than 5,000 GT crossing the borderline of entrance/exit on the W side of Akashi Kaikyo Traffic Route and navigating the traffic route eastward shall navigate in the area to the S side of the Line A.

(Remarks)

Line A: a line joining the following 2 points.

・ a point (Point A) 2,050m, 328°30′ from E Saki Light（34°36′23″N 135°59′36″E) (Akashi Kaikyo Traffic Route Center No.1 Light Buoy is the landmark for Point A.).
・ a point (Point B) 2,700m, 215° from a point above (Akashi Kaikyo Traffic Route Westward Light Buoy is the landmark for the Point B.).

Fig.15 Designated Route near the E entrance of Akashi Kaikyo (Maritime Traffic Safety Law)

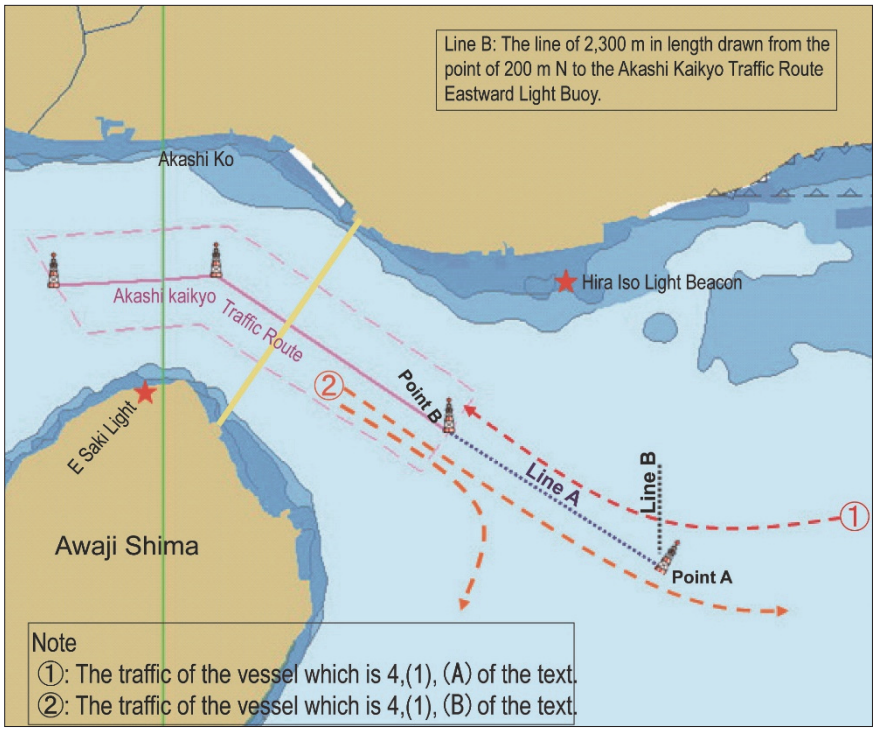
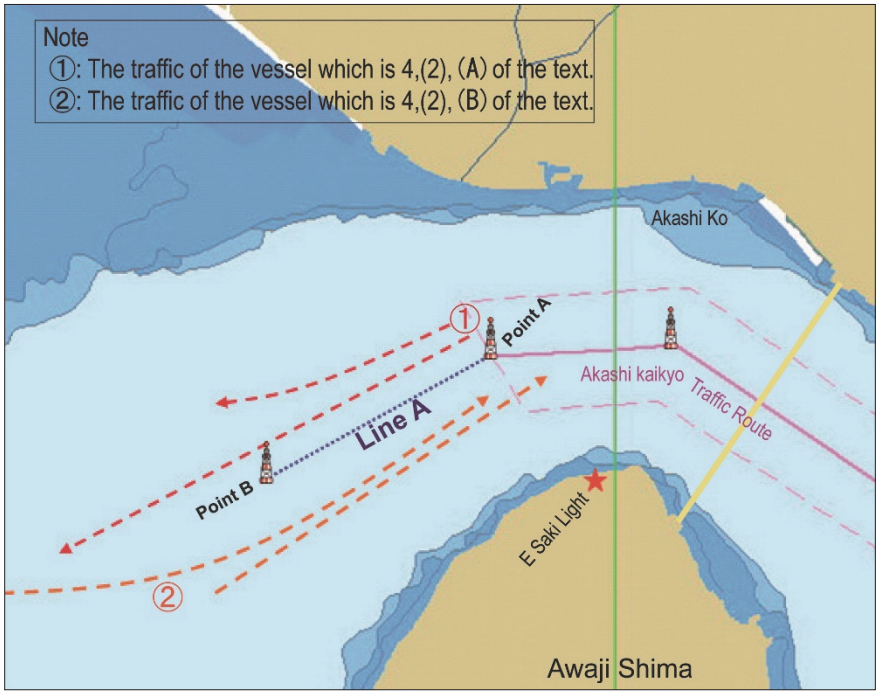


Fig.16 Designated Route near the W entrance of Akashi Kaikyo (Maritime Traffic Safety Law)



5. Listening of the information provided by Japan Coast Guard Commandant (Article 30 of Maritime Traffic Safety Law, Article 23-3 of Regulations for the Enforcement of Maritime Traffic Safety Law)

(1) Osaka Wan Vessel Traffic Service Center provides the following information by the VHF radiotelephone to

specified vessels (Vessels navigating the sea areas shown in Fig.17 with a length of 50m or more).

Specified vessels shall listen to the information provided by Osaka Wan Vessel Traffic Service Center while navigating sea areas shown in Fig.17.

(A) Information concerning to traffic rules when there is a possibility of specified vessels navigating traffic routes and the sea areas surrounding the traffic routes (Refer to Fig.17.) against the traffic rules applying to the areas.

(B) Information pertaining to occurrence of sinking vessels, failure of aids to navigation and problems of other vessel traffic that are likely to hinder considerably the safety of the navigation of the specified vessels.

(C) Information pertaining to the sea areas under construction and other work, sea areas which are extremely shallow and other sea areas difficult to navigate safely for the specified vessels when the specified vessels are found to be at risk from approaching too close to these sea areas.

(D) Information pertaining to vessels, which are not able to avoid the course of other vessels easily, and whose navigation is likely to hinder considerably the safety of the navigation of the specified vessels.

(E) Information pertaining to other specified vessels when the specified vessels are found to be approaching too close to the other specified vessels.

(F) Information considered necessary to be observed by the specified vessels besides from (A) to (E) above.

Incidentally, it is as follows when listening to the information is difficult.

~~・ It does not have a VHF radiotelephone.~~

~~・ The communication with the VHF radiotelephone is difficult by electric wave disorders and so on.~~

~~・ VHF radiotelephone is used for the communication with other ships etc.~~

(2) When abnormal weather/sea state such as typhoon, tsunami, etc.(hereinafter referred to as ‘abnormal weather, etc.’) is expected, the following information for ships of 50m or more in length navigating, drifting or anchoring in the area where Maritime Traffic Safety Law applies in the vicinity of the northwest of Kansai International Airport in the mandatory information listening area as specified by Figure 5(hereinafter referred to as ‘specified vessels under abnormal weather, etc.’) (Message Marker “INFORMATION” or "WARNING")

(A) Information on the ships anchoring in the forefront of path for the specified vessels under abnormal weather, etc.

(B) Information on the risk which will affect the anchoring condition of the specified vessels under abnormal weather, etc.

(C) Information on the risk which will affect the anchoring condition of other specified vessels under abnormal weather, etc. anchoring near the specified vessels under abnormal weather, etc.

(D) Information on the occurrence of maritime traffic obstruction events such as shipwreck, aids to navigation malfunction, etc. which may significantly affect the navigation, drifting or anchoring of the specified vessels under abnormal weather, etc.

(E) Information other than the above, which are deemed necessary to be listened by the specified vessels under abnormal weather, etc. for their safe navigation, drifting or anchoring.

(F) Any other information which is considered necessary to be informed to specified vessels under abnormal weather, etc. in order to ensure the safety navigation, drifting or anchoring.

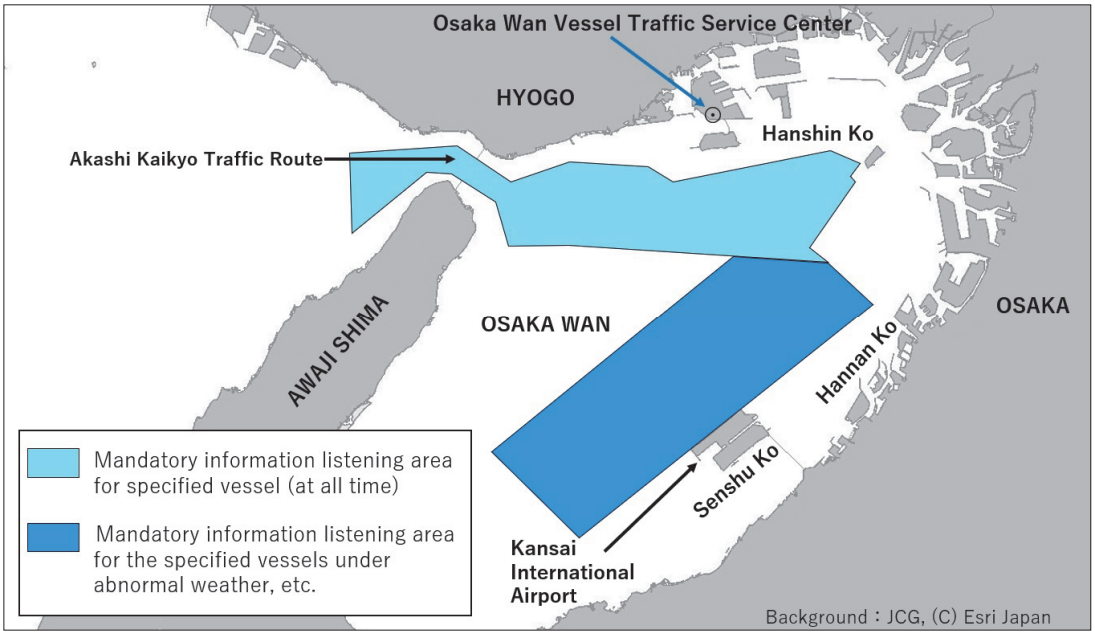
(3) Any information referred in the preceding (1), (2) which The Osaka Wan Vessel Traffic Service Center considers necessary to be informed to vessels which are equipped with AIS (except a specified vessel) (hereinafter referred to as an “AIS equipped vessel” (Message Marker "INFORMATION" or “WARNING”)

(4) Any other information which The Osaka Wan Vessel Traffic Service Center considers necessary for safe navigation of a specified vessel or an AIS equipped vessel or which is requested by a specified vessel or an AIS equipped vessel (Message Marker "INFORMATION")

(5) Any navigational safety information which The Osaka Wan Vessel Traffic Service Center considers necessary for or requested by a vessel neither a specified vessel nor an AIS equipped vessel (Message Marker "INFORMATION")

Fig.17 Sea area where the specified vessel should listen to the information

[An image replaced]



6. Observance of Navigation and Hazard Prevention Recommendations. (Article 31 of Maritime Traffic Safety Law, Article 23-4 of Regulations for the Enforcement of Maritime Traffic Safety Law)

Osaka Wan Vessel Traffic Service Center may issue recommendations for changing course or taking other necessary measures to specified vessels when it is found necessary to comply with navigation or to prevent danger.

7. Providing information by Osaka Wan Vessel Traffic Service Center, etc.

Information provision by Osaka Wan Vessel Traffic Service Center "OSAKA MARTIS" is carried out via VHF radio telephone with one of the following message markers: "Information," "Warning," "Advice," or "Instruction."

(1) "INFORMATION"

Providing information, etc. pursuant to provisions of Article 30 of Maritime Traffic Safety Law (excluding (2) below).

This indicates that OSAKA MARTIS is informing observed data, situations, etc. which contribute to navigational safety. Consequences of INFORMATION will be up to the recipient.

(2) "WARNING"

Provision of information when it is recognized that there is a danger to the navigation of ships pursuant to the provisions of Article 30 of the Maritime Traffic Safety Law.

This indicates that OSAKA MARTIS is informing any dangerous situation that may impede safe navigation of vessels. The recipient of this message should pay immediate attention to the situation mentioned and consequences of WARNING will be up to the recipient.

(3) "ADVICE"

Advice pursuant to the provision of Article 31 of Maritime Traffic Safety Law.

This indicates that OSAKA MARTIS is providing advice, pursuant to the Maritime Traffic Safety Law, to take any necessary action to comply with the traffic regulations on the traffic route, such as altering the vessel's way, etc. to avoid the dangerous situation that may impede safe navigation of the vessel. The recipient of this message should maneuver considering this advice very carefully. The decision whether to follow the ADVICE still stays with the recipient.

(4) "INSTRUCTION"

Instructions under Article 10-2 and Article 23 of Maritime Traffic Safety Law.
This indicates that OSAKA MARTIS is instructing vessels to take certain action, pursuant to the Maritime Traffic Safety Law. The recipient has to follow this message unless he/she has contradictory safety reasons.

(Note 3): Providing information, etc. by Osaka Wan Vessel Traffic Service Center does not give instructions for maneuvering.

Osaka Wan Vessel Traffic Service Center provides the "OSAKA MARTIS" USER MANUAL on the internet.
URL https://www6.kaiho.mlit.go.jp/osakawan/info/tab/08_users-manual(English).pdf

Guidance for Safety Navigation. The 5th Regional Coast Guard Headquarters makes the following Guidance for Safety Navigation:

1. Taking a pilot on board
The following vessels should take a pilot on board.
(1) A vessel of entitled to fly the flag of a foreign country.
(2) A vessel entitled to fly the Japanese flag, commanded by a master who does not have sufficient sea-going service and experience of navigating in Akashi Kaikyo Traffic Route.

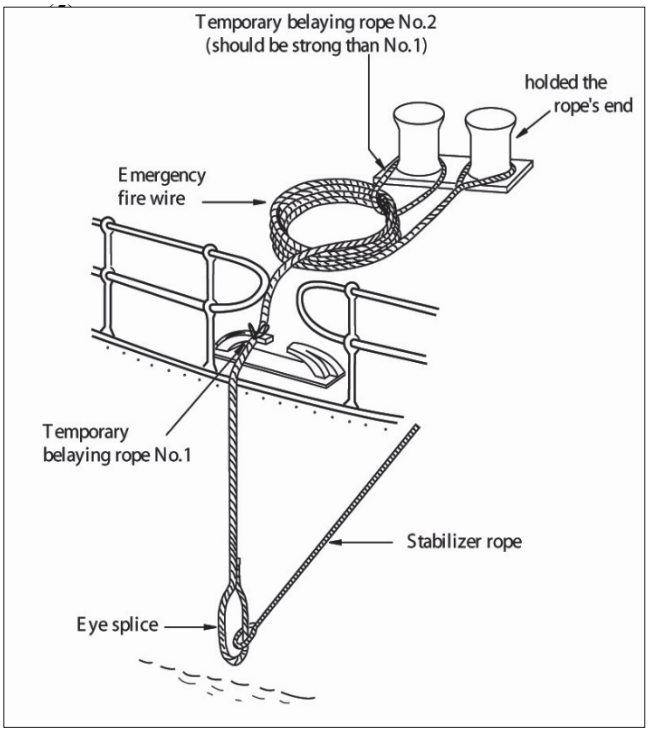
2. Continuous placement of an escort boat
Huge vessels of 250m or more in length or Huge vessels which is vessels carrying dangerous cargo is A vessel under the legal obligation to place an escort boat for guarding her course should continue to place the escort boat, until she confirms her safe navigation even out off the traffic route.

3. Navigation rules for sea areas in the vicinity of the entrance of Akashi Kaikyo Traffic Route
All vessels, including those whose length is less than 50m, are requested to enter the traffic route at the entrance.

4. Preparation of emergency fire wire (Refer to Fig.18.)
Vessels carrying dangerous cargo (except amply fortified tankers equipped with SUNKEN BITT) designated by Maritime Traffic Safety Law must prepare an emergency fire wire (FIRE WIRE) both at the bow and the stern respectively for use immediately in case of emergency, in case of navigating Osaka Wan and Harima Nada.

5. Position Report

Fig.18 Example figure of emergency fire wire



・Temporary fixing wire must be fixed to prevent a spontaneous running out.
・In this case, temporary belaying rope No.1 is possible to cut down by human power while using, No.2 is possible to cut down by the towing power of tugboat, two conditions must be met.

5. Position Report (Refer to Fig.19.)

Vessels with a length of 50m or more and vessels towing object, etc., having a length of 100m or more (excluding vessels with Automatic Identification System and operating it appropriately), shall make a Position Report to Osaka Wan Vessel Traffic Service Center when they reach the first Position Report Line.

[Reporting items]

(1) Name of the vessel and its call sign

(2) Present position or an abbreviation of the Position Report Line that has been passed and the time of passing the line (Japan standard time, 24 hour mode)

(3) Destination

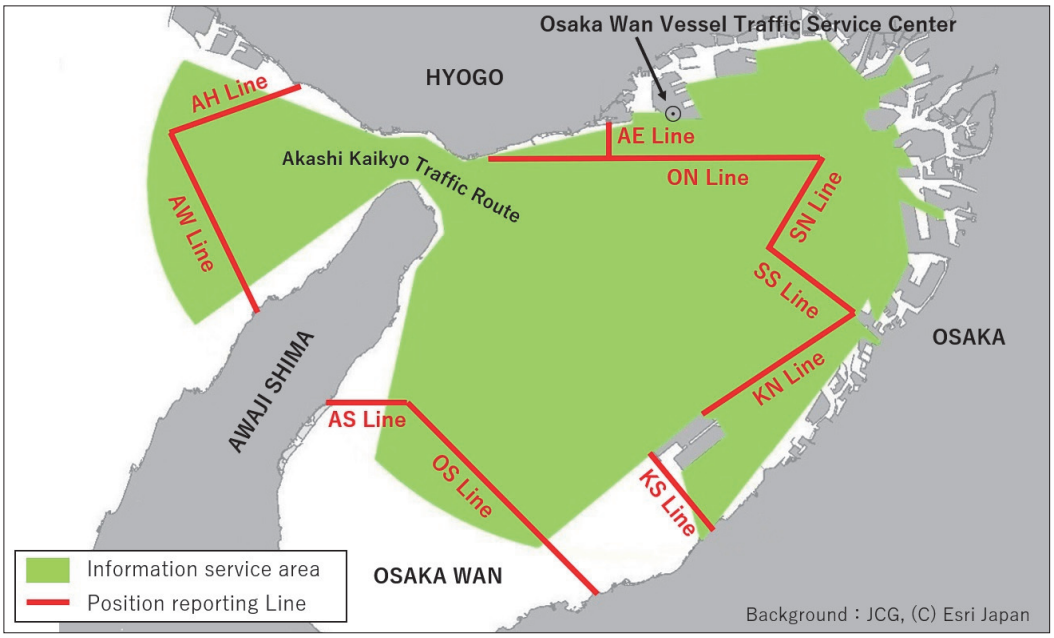
[Reporting method]

(1) VHF radiotelephone

Call name: Osaka Martis

Call ch: ch16 or ch 13

Fig.19 Information Service area by Osaka Wan Traffic Service Center and Position Reporting Lines [An image replaced]



[Replace by a new table]

Name	Abbreviation	Position
Osaka Wan N	ON Line	A line drawn 090° from the Hiraiso Light Beacon (34°37.3′N 135°03.9′E) to the harbour limit of Osaka Ku, Hanshin Ko (34°37.3′N 135°20.5′E).
Akashi Kaikyo E	AE Line	A line drawn 180° from a point (34°38.9′N 135°10.1′E) 9,880m 072° from Hiraiso Light Beacon (34°37.3′N 135°03.9′E) to ON Line.
Sakai-Senboku N	SN Line	A line joining the E end of ON Line (34°37.3′N 135°20.5′E) and the W end of the port area of Sakai-Senboku Ku, Hanshin Ko (34°33.8′N 135°17.9′E).
Sakai-Senboku S	SS Line	A line joining the S end of SN Line (34°33.8′N 135°17.9′E) and the N end of the port area of Hannan Ko (34°31.2′N 135°21.6′E).
Kansai International Airport N	KN Line	A line joining the S end of SS Line (34°31.2′N 135°21.6′E) and the N end of Kanku Shima (34°27.3′N 135°14.5′E).

Kansai International Airport S	KS Line	A line drawn 141° from W end of Kanku Shima (34°25.7′N 135°12.1′E) to the coast (34°22.6′N 135°15.1′E).
Akashi Kaikyo S	AS Line	A line drawn from Tsuna Ko Sano E Breakwater Light (34°27.6′N 134°56.4′E) to a point (34°27.6′N 135°00.3′E) 5,900m 090° from the same light.
Osaka Wan S	OS Line	A line joining the E end of AS line (34°27.6′N 135°00.3′E) and the E end of the port area of Fuke Ko (34°19.9′N 135°09.2′E).
Harima Nada	AH Line	A line joining Eigashima Ko W Breakwater Light (34°40.4′N 134°54.6′E) and Harima Nada Kita Koro No.10 Light Buoy (34°38.4′N 134°49.1′E).
Akashi Kaikyo W	AW Line	A line joining Awaji-Murotsu Ko W Breakwater Light (34°31.5′N 134°52.7′E) and Harima Nada Kita Koro No.10 Light Buoy (34°38.4′N 134°49.1′E).

6. Maintenance of Communication with Osaka Wan Vessel Traffic Service Center.

(1) Vessels with VHF radiotelephone (ch16, 156.8MHz) shall maintain of communication with Osaka Wan Vessel Traffic Service Center "OSAKA MARTIS" in case of information provided pertaining to the safety of navigation while ~~in traffic routes, main routes to traffic routes and in sea areas surrounding the traffic routes.~~ within the information service area of OSAKA MARTIS. Vessels with ch13 shall keep watch on this channel as well as ch16, since Osaka Wan Traffic Service Center may make a call by ch13 when ch16 is congested.

(2) Fog information

The following agency provides reports as necessary when visibility becomes 2,000m or less at Akashi Kaikyo Traffic Route, Tomo-ga-Shima Suido, Naruto Kaikyo, Hanshin Ko Osaka Ku, Hanshin Ko Kobe Ku, Himeji Ko and Wakayama-Shimotsu Ko. The 5th Regional Coast Guard Headquarters: F3E 156.6 MHz (ch12) in Japanese (in English as necessary) (Kobe Coast Guard Radio)

(3) Osaka Wan Vessel Traffic Service Center provides information on the scheduled arrival of large ships in the Akashi Kaikyo Traffic Route on the website.

URL https://www6.kaiho.mlit.go.jp/osakawan/schedule/AKASHI/schedule_1.html

7. Preparation of charts

Vessels navigating in Osaka Wan should provide at least the following charts (covering the areas they plan to navigate) and grasp updated information on ports in advance.

JP77 KII SUIDO AND APPROACHES	JP150A OSAKA WAN
JP106 OSAKA WAN AND HARIMA NADA	JP150C KII SUIDO
JP131 AKASHI KAIKYO AND APPROACHES	

Pilotage. Pilotage is available on request to Naikai Pilot Association (Refer to Chapter 6 "PILOTAGE" of Part 1 on page 8.).

Fisheries Special caution must be paid as there are often many fishing boats in operation near the S of Hira Iso at the E entrance of Akashi Kaikyo and near Shika-no-Se at the W entrance. In the area from Akashi Kaikyo and the vicinities to Hannan Ko being a good fishery throughout the year, there are many fishing boats in operation early in the morning and in the evening, and from February to June there are many groups, each composed of 200 ~ 300 fishing boats of boat seine fishery, round haul netter, dragnet fishery and pole-and-line fishing in one fishery place.

Overhead bridge. There is Akashi Kaikyo Ohashi (vertical clearance of 65m) connecting Honshu (Kobe-shi) and the N end of Awaji Shima.

Reference. In navigating W-ward at Akashi Kaikyo Traffic Route there are small steel vessels proceeding toward Ie Shima diverting at the point of Akashi Kaikyo Koro Central No.1 Light Buoy and caution must be paid to the movement of these small steel vessels while passing over them in the W entrance of the traffic route. And there is a case of dangerous near miss occurring with a vessel veering to the area near Akashi Kaikyo Traffic Route Central No.1 Light Buoy from Akashi Kaikyo Traffic Route Western Side Light Buoy and Ie Shima in the traffic route.

Bisan Seto Vessel Traffic Service Center may issue instructions (to wait off the traffic routes during the necessary period of time to avoid danger) which are found to be necessary to prevent danger to vessels which are navigating or are intending to navigate the traffic routes, by the VHF radiotelephone or other appropriate methods when it is applied to the following cases:

(1) In the case of visibility being between 1,000m and 2,000m, and when huge vessels, special vessels carrying dangerous cargo and vessels towing very long object, etc. are navigating the traffic routes.

(2) In the case of visibility being 1,000m or less, and when vessels with a length of 160m or more, or vessels carrying dangerous cargo or vessels towing very long object, etc. are navigating the traffic route.

3. Notification concerning the navigation of huge vessels, etc. (Article 22 of Maritime Traffic Safety Law and Articles 10 to 14 of Regulations for the Enforcement of Maritime Traffic Safety Law)

(1) Vessels with obligation to report

The following vessels (A)~(D) shall report to the Bisan Seto Vessel Traffic Service Center the matters listed in (3) below by noon of the day before the estimated date of entering into the Bisan Seto Traffic Routes. If there occur any changes in the reported matters, the vessel shall notify the Center three hours before the entry into Bisan Seto Traffic Route, and thereafter, if there are any changes in the reported of the changes, the vessel shall notify the Center immediately.

(A) Huge vessels.

(B) Vessels except huge vessels, and with a length of 160m or more (excluding Mizushima Traffic Route), and with a length of 70m or more (Mizushima Traffic Route only).

(C) Vessels of 25,000 GT and more carrying liquefied gas.

(D) Vessels navigating while pushing or towing vessels or rafts or other objects and with a distance of 200m or more from the tugboat bow to the back end of the objects or from push boat stern to the head of the objects.

(2) Following Vessels (A)~(D) carrying dangerous cargo which do not correspond to into shall report the matters through (E) and (G) listed in (3) below at 3 hours before the estimated time of entering into the Bisan Seto Traffic Routes to the Bisan Seto Vessel Traffic Service Center.

If there are any changes in the reported matters, the vessel shall immediately report the changes to the Bisan Seto Vessel Traffic Service Center.

(A) A vessel of 300t and more carrying certain amount of powder (Please refer to item 1, paragraph 1 of article 11 of the Ordinance for Enforcement of the Law on Maritime Traffic Safety for the exact amount.)

(B) A vessel of 1,000t and more carrying inflammable high pressure gas in bulk.

(C) A vessel of 1,000t and more carrying inflammable liquid in bulk.

(D) A vessel of 300t and more carrying organic peroxide of 200 tons and more.

(3) Reporting items

(A) Name, Gross tonnage and length of the vessels.

(B) The sections of the traffic routes intended to be navigated, the time of entering the traffic routes and the time of leaving the traffic routes.

(C) Call sign or call name in the case of vessels that have a ship station.

(D) Methods for communicating with Japan Coast Guard in the case of vessels that do not have a ship station.

(E) Port of destination in the case of vessels having a port of destination.

(F) Draft in the case of huge vessels.

(G) The type and each amount dangerous cargo in the case of vessels carrying dangerous cargo.

(H) In the case of vessels towing objects, etc., the length from the tugboat bow to the back end of the objects or from push boat stern to the head of the objects, and general information about the objects.

(Note2): Huge vessels, etc.: Refer to the section of (Note2) of Navigation Rules in Akashi Kaikyo on page 50.

4. Listening of the information provided by Japan Coast Guard Commandant. (Article 30 of Maritime Traffic Safety

Law, Article 23-2, 23-3 of Regulations for the Enforcement of Maritime Traffic Safety Law)

Bisan Seto Vessel Traffic Service Center provides the following information by the VHF radiotelephone to specified vessels (Vessels navigating the sea areas shown in Fig.22 on page 63 with a length of 50m or more).

Specified vessels shall listen to the information provided by Bisan Seto Vessel Traffic Service Center while navigating sea areas shown in Fig.22.

(1) Information concerning to traffic rules when there is a possibility of specified vessels navigating traffic routes and the sea areas surrounding the traffic routes against the traffic rules applying to the areas.

(2) Information pertaining to occurrence of sinking vessels, failure of aids to navigation and problems of other

Marine casualties. Kurushima Kaikyo is one of the most difficult waters to navigate due to traffic of up to 500 vessels per day and strong, complex tidal currents. On this strait, a lot of sea disasters which is collision and running aground occur frequently. Mariners should carefully confirm to the movement of the other vessels, especially when tidal current flows S, for inbound and outbound vessels cross in the vicinity of the E and W entrance of the traffic route. (Refer to Fig.32 on page 97.)

Moreover, be careful in particular because a vessel going in and out of Miyanokubo Seto and Oge Seto and so on increases at the W entrance of the traffic route.

Characteristics of the collision and aground on Kurushima Kaikyo

1. Tendency of the sea disaster

Vessels that depart from Hanshin or Kyusyu district in the evening, navigating an eastern and western way in Seto Naikai, reach the Kurushima Kaikyo from 2300 to 0200 of the next day.

Most sea disasters in Kurushima Kaikyo, therefore, occur between 0100 and 0200 during peak congestion of navigating vessels.

2. Occurrences of the sea disaster in the sea area distinction

(1) ~~Aground to the SE coast of Uma Shima~~ Collision around the W entrance of Kurushima Kaikyo Traffic Route

At the W entrance Kurushima Kaikyo Traffic Route during southward tidal current, collision accidents with sinking have occurred because of the complex traffic jam for inbound and outbound vessels intersecting.

In particular, caution is required in the following cases:

- N-bound vessels from Tsurushima Suido to the W entrance should exercise caution against the intersection with vessels shifting to the starboard side at the W entrance of the traffic route of Kurushima Kaikyo for Tsurushima as well as the intersection with vessels navigating from the W entrance of the traffic route of Kurushima Kaikyo to Kudako Suido.

- Vessels leaving the W entrance of the traffic route of Kurushima Kaikyo should also exercise caution against the intersection with N-bound vessels from Tsurushima Suido.

(2) ~~Collision in Nishi Suido~~ Grounding on the SE coast of Uma Shima

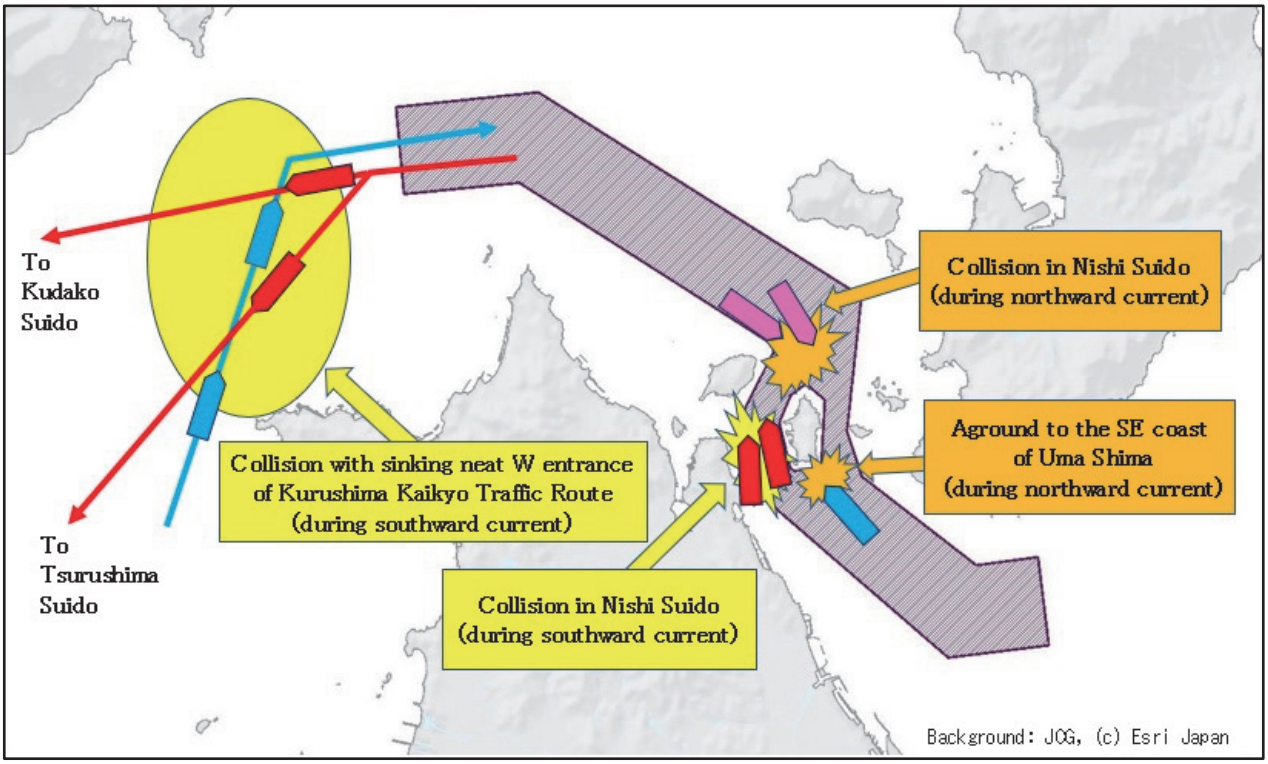
At the S entrance of Naka Suido during northward tidal current, grounding has while approaching the S entrance around Uma Shima with fair tide, mainly because of the delay in alternating the course to the Naka Suido and the resulting drift.

(3) Collision in Nishi Suido

- At the N entrance of Nishi Suido during northward tidal current, collision occurs when alternating starboard without confirming other vessels of starboard side (Shikoku side) heading in the same direction and when entering Nishi Suido from the W entrance of Kurushima Kaikyo Traffic Route approaching the NE corner of O Shima {near the Nishi Suido} in the passing or navigating side-by-side.
- At the center of Nishi Suido during southward tidal current, by the following factor, it approaches the other ship too much and the collision occurs.
- Because the tide current is opposite, passage time gets longer.
- In night, the cross in the course of the small-angle is difficult to judgement by the sternlight of the other vessel or the radar.
- When passing the other vessel, it isn't possible to get a big angle to the tide current direction.
- An enough avoidance action isn't made of narrow channel.

No-passing zone is currently established by the law. However the strength and weakness of the tidal current and the deceleration of the other vessel and so on become the factor and it sometimes becomes passing relation even if it doesn't try to pass. And behind the vessel with slow speed, several vessels sometimes become a complicated condition. It is important to pay enough attention to movements of the other vessel which is navigating in the front, and keep safe distance.

Fig.31-1 Reference chart of typical marine accidents around Kurushima Kaikyo
[An image newly Added]



Landmarks.

Landmark	Position	Remarks
Nakato Shima	34°07′N 133°00′E	There is a lighthouse (painted white) in the NW end.
Uma Shima	34°07′N 133°00′E	Island with 2 tops and near the S top (88m high), there is a steel tower for overhead cable in the about 200m S of Su-no Saki on the N end.
Kurushima Kaikyo Vessel Traffic Service Center	34°05′N 132°59′E	There is an information signals signboard which is prominent. Conspicuous. Ohama Tidal Current Signal Station is juxtaposed.
O Shima	34°08′N 132°59′E	There is a steel tower for an overhead cable (66m high) on the SW end and a steel tower for an overhead cable in the center of the SE coast.
Kuru Shima	34°07′N 132°58′E	There is a steel tower for an overhead cable (83m high).
Tsu Shima	34°09′N 133°00′E	There are 2 tops respectively on the E and W, and looks like one mountain from the W. Near Ichinose Yama (177m high) and O shima Hana there is a Tidal Current Signal Station.
Oge Shima	34°12′N 132°56′E	White ground is exposed in many points produced by the mining of limestone lock.

5

Anchorage. Due to dense fog and waiting for tide, some of vessels anchor at the offing in the E of O Shima near the E entrance to Kurushima Kaikyo., and in the N area of Tsu Shima and Obe Wan in the SE of Kajitori-no-Hana {Shikoku side} near the W entrance to Kurushima Kaikyo.

(C) Navigate as close as possible to the Shikoku side in case of head tide.

(D) A vessel navigating Nishi Suido to enter the channel between O Shima {near the Nishi Suido} and Hashihama or a vessel intending to enter from the same channel into Kurushima Kaikyo Traffic Route and navigate Nishi Suido, shall keep to the Shikoku side of other vessel regardless of (B) and (C).

(E) Navigate with a speed over the ground more than 4kn in case of head tide.

(2) When it is expected that the tidal current turns or has already turned;

Kurushima Kaikyo Vessel Traffic Service Center sometimes may instructs a vessel which is navigating the traffic route along the course or is intending to navigate the traffic route to take a different navigation from above (1) when it is recognized that danger might occurs for the vessels' traffic by above (1) based on the situation of the vessels' traffic.

(3) Vessels navigating Kurushima Kaikyo Traffic Route during 1 hour before turning of the tidal current shall report name of the vessel, communication method with Japan Coast Guard, speed and estimated time of entering the traffic route immediately after crossing the position reporting line (Refer to Fig.34 on page 104.) to Kurushima Kaikyo Vessel Traffic Service Center (Article 9 Paragraph 3 of Regulations for the Enforcement of Maritime Traffic Safety Law). Communication is by the radiotelephone or telephone to Kurushima Kaikyo Vessel Traffic Service Center; (Refer to notice of concerning communication methods on Kurushima Kaikyo Traffic Route (Japan Coast Guard Notice No.164, 2010)

5. Vessels equipped with whistle must signal as follows.

(1) In case that the vessel navigates Naka Suido, when a tidal turn is notified in advance by the signal of each tidal current signal station and it is anticipated that the tidal turn will take place white the vessel is passing Naka Suido or Nishi Suido;

(A) The vessel navigating Naka Suido continues sounding one prolonged blast using a whistle from the time when the vessel concerned navigates with Tsu Shima Ichi-no-se Hana or Ryujin Shima abeam until it passes through Naka Suido.

(B) The vessel navigating Nishi Suido continues sounding two prolonged blast using a whistle from the time when the vessel concerned navigates with Tsu Shima Ichi-no-se Hana or Ryujin Shima abeam until it passes through Nishi Suido.

(2) When the vessel navigates Nishi Suido and intends to enter the channel {Kurushima-no-seto, Nishi-no-seto} between O Shima{near the Nishi Suido}and Hashihama or when the vessel intends to enter from the same channels into Kurushima Kaikyo Traffic Route and navigate Nishi Suido, the vessel will continue sounding three prolonged blasts using a whistle from the time when the vessel concerned navigates with Kuru Shima or Ryujin Shima abeam until it passes through Nishi Suido. In addition, in the Kurushima Kaikyo Traffic Route and its vicinities, it is not necessary to carry out the bend section signal and the response signal of Article 34, paragraph 6 of the Law for the prevention of Collision at Sea because the previous signals are defined.

6. Notification concerning the navigation of huge vessels, etc. (Article 22 of Maritime Traffic Safety Law and Articles 10 to 14 of Regulations for the Enforcement of Maritime Traffic Safety Law)

The captain of the vessel corresponding to follows (1) must report items of follows (2) by noon of the day before the estimated day of entering the Kurushima Kaikyo Traffic Route to the Kurushima Kaikyo Vessel Traffic Service Center.

But vessels carrying dangerous cargo not to correspond to (D) from (A) of follows (1) and vessels less than 160m more than 70meters in length which intend to navigate the Mizushima Traffic Route should report same items 3 hours before the estimated time of entering the Kurushima Kaikyo Traffic Route to the Kurushima Kaikyo Vessel Traffic Service Center.

(1) Vessels with obligation to report

The following vessels (A)~(D) shall report matters listed in (3) by noon of the day before the estimated date of

entering the Kurushima Kaikyo Traffic Route to the Kurushima Kaikyo Vessel Traffic Service Center.

When any changes occur in the report, the vessel shall report them at 3 hours before the time of entering Kurushima Kaikyo Traffic Route. If any other changes occur after that, they shall be reported as soon as possible.

(A) Huge vessels.

(B) Vessels except huge vessels, and with a length of 160m or more.

(C) Vessels of 25,000 GT and more carrying liquefied gas.

(D) Vessels navigating while pushing or towing vessels or rafts or other objects and with a distance of 100m or more from the tugboat bow to the back end of the objects or from push boat stern to the head of the objects.

(2) Following Vessels (A)~(D) carrying dangerous cargo which do not correspond to ones above mentioned shall report the matters (A) through (E) and (G) listed in (3) below at 3 hours before the estimated time of entering into the Kurushima Kaikyo Traffic Route to the Kurushima Kaikyo Vessel Traffic Service Center.

If there are any changes in the reported matters, the vessel shall immediately report the changes to the Kurushima Kaikyo Vessel Traffic Service Center.

(A) A vessel of 300t and more carrying certain amount of powder (Please refer to item 1, paragraph 1 of article 11 of the Ordinance for Enforcement of the Law on Maritime Traffic Safety for the exact amount.)

(B) A vessel of 1,000t and more carrying inflammable high pressure gas in bulk.

(C) A vessel of 1,000t and more carrying inflammable liquid in bulk.

(D) A vessel of 300t and more carrying organic peroxide of 200 tons and more.

(3) Reporting items

(A) Name, gross tonnage and length of the vessels

(B) The sections of the traffic routes intended to be navigated, the time of entering the traffic routes and the time of leaving the traffic routes.

(C) Call sign or call name in the case of vessels that have a ship station.

(D) Methods for communicating with Japan Coast Guard in the case of vessels that do not have a ship station.

(E) Port of destination in the case of vessels having a port of destination.

(F) Draft in the case of huge vessels.

(G) The type and each amount dangerous cargo in the case of vessels carrying dangerous cargo. (Dangerous cargo listed in each Item of Article 11 of Regulations for the Enforcement of the same Law. The same shall apply hereinafter.)

(H) In the case of vessels towing objects, etc., the length from the tugboat bow to the back end of the objects or from push boat stern to the head of the objects, and general information about the objects.

(Note 2): Huge vessels, etc.: Refer to the section of (Note 2) of Navigation Rules in Akashi Kaikyo on page 50.

Uma Shima, Nakato Shima and O Shima {near the Higashi Suido}. The island or peninsula sometimes could be unseen by the powerful lights.

Near the E and W entrance to Kurushima Kaikyo, there are fishing boats operating by Stow-nets (fishing season is twice a year, in spring and autumn and peak season is from May to July). There are fishing boats operating by drift-nets in the N of No.2 and No.4 Kurushima Kaikyo Traffic Route Light Buoys.

Overhead bridges. There is Kurushima Kaikyo No.1 Ohashi (vertical clearance of 46m) between O Shima {near the Higashi Suido} and Mushi Shima, Kurushima Kaikyo No.2 Ohashi (vertical clearance of 65m) between Mushi Shima and Uma Shima, and Kurushima Kaikyo No.3 Ohashi (vertical clearance of 65m) between Uma Shima and Imabari.

Overhead cables. There is an overhead cable (vertical clearance of 75m) between N of Uma Shima and O Shima {near the Nishi Suido}, and an overhead cable (vertical clearance of 56m, 50m from NE) reaching Hashihama on the other side SW passing Kuru Shima from near the SW end of O Shima {near the Nishi Suido}, and an overhead cable (vertical clearance of 29m, 54m, from the E) reaching Tsu Shima and passing Ozukuma Shima from Boze (34°08.5′ N 133°01.0′ E).

Caution.

1. Caution must be paid since vessels navigating at the traffic route cross other vessels going in and out Higashi Suido, such as regular vessels servicing between Islands and Imabari Ko near the E entrance to Kurushima Kaikyo. Moreover vessels cross other vessels going in and out Mitarai Seto, Oge Seto, Hanaguri Seto and Miyanokubo Seto at the W entrance.
2. Near No.2 and No.4 Kurushima Kaikyo Traffic Route Light Buoys, there is a tendency that vessels navigating at Naka Suido sail closely to those light buoys.
3. There are 6 light buoys of identifying Kurushima Kaikyo Traffic Route, 4 lighthouses on Uma Shima in the center of Kurushima Kaikyo, and 3 light beacons at the E end of O Shima {near the Nishi Suido}. They turn on and off in the same period (in 6 seconds cycle, turns on and off all together) and they could facilitate the distinction of the traffic route. The lighthouses on Uma Shima and the light beacon at the E end of O Shima {near the Nishi Suido} light up the light tower giving the clearer visibility.
4. When entering from the E entrance of Kurushima Kaikyo during the N-going current and heading for the Naka Suido, be careful not to misidentify the Naka Suido as the Nishi Suido and head for the Higashi Suido because the Nishi Suido is obscured by Uma Shima.

(2) Information pertaining to occurrence of sinking vessels, failure of aids to navigation and problems of other vessel traffic that are likely to hinder considerably the safety of the navigation of the specified vessels.

(3) Information pertaining to the sea areas under construction and other work, sea areas which are extremely shallow and other sea areas difficult to navigate safely for the specified vessels when the specified vessels are found to be at risk from approaching too close to these sea areas.

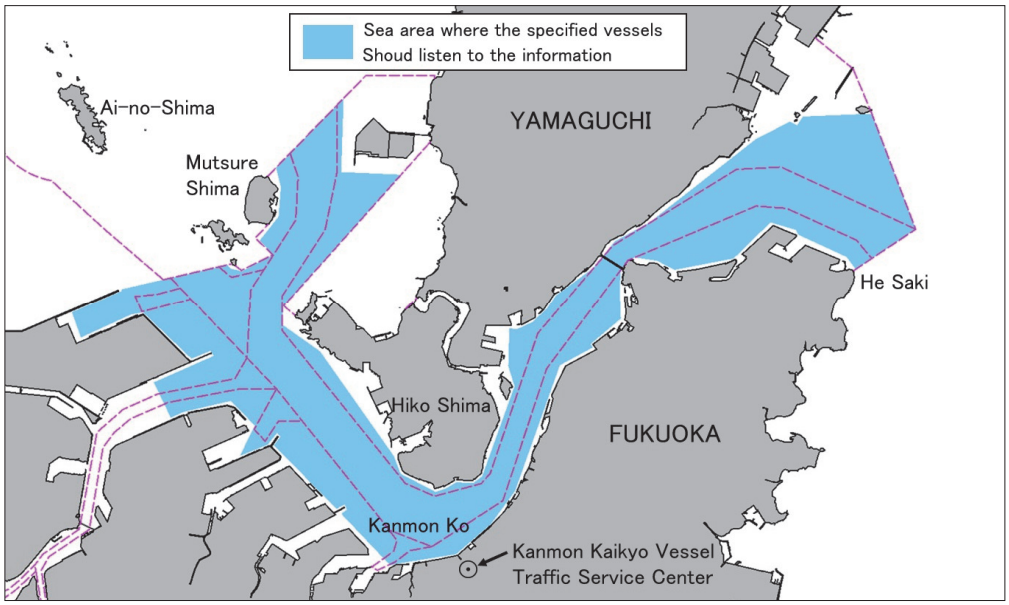
(4) Information pertaining to vessels, which are not able to avoid the course of other vessels easily, and whose navigation is likely to hinder considerably the safety of the navigation of the specified vessels.

(5) Information pertaining to other specified vessels when the specified vessels are found to be approaching too close to the other specified vessels.

(6) Information considered necessary to be observed by the specified vessels besides from (1) to (5) above.

Fig.46 Kanmon Kaikyo Sea area where the specified vessel should listen to the information

[An image replaced]



4. Observance of Navigation and Hazard Prevention Recommendations (Article 42 of Port Regulations Law, Article 20-5 of Regulations for the Enforcement of Port Regulations Law)

Kanmon Kaikyo Vessel Traffic Service Center may issue recommendations for changing course or taking other necessary measures to specified vessels by the VHF radiotelephone or other appropriate methods when it is found necessary to comply with navigation or to prevent danger.

5. Providing information by Kanmon Kaikyo Vessel Traffic Service Center, etc.

Kanmon Kaikyo Vessel Traffic Service Center provides information, etc. by the VHF radiotelephone, etc. with the following codes to start, depending on the contents. Refer to "Notice to Specify Methods, etc. of Article 8-2 of Instructions Under Regulations for the Enforcement of Port Regulations Law " (Japan Coast Guard Notice No. 163, 2010) and "Notice of Information Provisional Methods, etc. (provided by Moji Vessel Traffic Signal Station Operated by Kanmon Kaikyo Vessel Traffic Service Center and by the Center") (Japan Coast Guard Notice No. 170, 2010) for more details:

(1) INFORMATION: Providing information, etc. pursuant to Provisions of Article 41 of Port Regulations Law.

(2) WARNING: Providing information to make notice of any dangerous situation that may impede safe navigation of vessels.

(3) ADVICE: Advice pursuant to the Provision of Article 42 of Port Regulations Law.

(4) INSTRUCTION: Instructions under Article 14-2 of Port Regulations Law.

(Note) Information, etc. provided by Kanmon Kaikyo Vessel Traffic Service Center does not give instructions for manoeuvring.

3. There is a case of small vessels suddenly appearing from behind large vessels mooring at the quay of each shipyard at the area from Kobe-Nishi Passage to Naka Jetty.
4. Many container vessels and cargo vessels berth in Section 5.
5. In the E and W of Kobe Airport, An aircraft approach surface area based on the Civil Aeronautics Act is set. Caution should be exercised with the safety vertical clearance of the vessel's mast, etc., as shown in the diagram of Chart JP 101A.
6. With the construction of the W extension of Osaka Bay Coast Road, the removal work of No.5 Breakwater of Kobe Ko is being carried out.

Entry prohibited. There is entry prohibited area at Section 6 in the S side of No.7 Breakwater.

Entry restricted. In order of the Captain of the Port to prevent fire hazard, no general vessel is allowed to enter the area within 30m from the tanker carrying flammable dangerous cargo at berth or anchor in the port. In addition, the tanker raises drop curtains during ''the flammable dangerous materials loading'' that the port can view during anchorage easily in the night.

Anchorage. Good anchorage is obtainable with the bottom materials of mud. Quarantine anchorage is in Section 4 and nominated anchorages for vessels carrying dangerous cargo are at Section 4~6.

Port communications. Port communication could be made among the vessel, the Captain of the Port and the Port Authority by the radio telephone.

Report destination	Call name	Frequency	Hours of operation	Remarks
Captain of the Port	KOBE COAST GUARD RADIO	ch16/12	24hours	Matters relating to Kobe-Nishi Passage, Kobe-Chuo Passage, Shinko Passage, and Kobe Ku in Hanshin Ko
Port Authority	KOBE PORT RADIO	ch16/11, 12, 18, 19, 20 (priority is ch11, 18)	24hours	+81-78-303-1711

Facilities.

Name			Position	Length (m)	Depth (Approx.m)	Capacity (D/W×vessel)	Remarks
Section 1	No.1 Shinko Jetty A･C		34°40.9′N 135°11.8′E	364	8.5	10,000×2	
	No.1 Shinko Jetty D~F			360	7.5~8.5	10,000×2	
	No.2 Shinko Jetty G･H			360	8.5~9	10,000×2	
	No.2 Shinko Jetty I･J			356	8.5~9	10,000×2	
	No.3 Shinko Jetty K･L			357	6~9	10,000×2	
	No.3 Shinko Jetty M･N			~~373~~	8.5~11	45,000×1	
	No.4 Shinko Jetty O･P			~~591~~	8.5~11	45,000×2 ~~50,000×2~~	
	Naka Jetty A		34°40.8′N 135°11.3′E	220	8~9	10,000t×1	
	Naka Jetty B~E			470	5~9	30,000t×1 1,000t×1	
	Takahama Quay		34°40.8′N 135°11.1′E	294	5.5~7	~~3,000×2~~	
	~~Ichibamae Quay~~		~~34°40.0′N 135°10.7′E~~	~~144~~	~~3~4~~	~~700×5~~	
	Hyogo Wharf	A~E	34°40.0′N 135°11.0′E	623	6~7	5,000×5	
		F･G	34°39.8′N 135°11.0′E	423	~~7~~9	~~10,000×2~~	
		H		211	9	7,500×1	
		I		278	9	10,000×1	
		J･K		265	7.5	5,000×2	
Port Island	U･V Quay		34°40.0′N 135°12.0′E	680	11.5	70,000×2	
	S Quay			300	11.5	25,000×1	

Port Island	T Quay		34°40.8′N	135°13.0′E	336	12	35,000×1	
	Liner Quay 1~3				710	10	15,000×3	
	Container Quay O~R				1280	12	35,000×4	
	Liner Quay 4~15		34°40.3′N	135°13.4′E	2,637	10	15,000×12	
	Container Quay D~H		34°40.1′N	135°13.6′E	1,211	11~12	15,000×1 20,000×1 35,000×3	
	Container Quay 18		34°39.9′N	135°14.1′E	750	15.5~16	60,000×1	
	Container Quay I・J		34°39.8′N	135°13.8′E	700	12	30,000×2	
	L Quay		34°39.5′N	135°13.7′E	180	7.5	5,000×1	
	Container Quay 13~17		34°39.4′N	135°14.3′E	2,200	13.5~16	60,000×2 100,000×3	
	M Quay				120	10	1,000×1	
Section 2	Nada Wharf Quay		34°42.0′N	135°13.8′E	645	4~7	6,000×8 3,000×1	
	Maya Wharf	Container Terminal A~C	34°41.7′N	135°13.8′E	588	8.5~9	20,000×3	
		Container Terminal D~H			1,318	10~12	30,000×3	
		Container Terminal I・J			661	10~12	20,000×2	
	Dolphin Berth	~~No.1・2~~	~~34°41.2′N~~	~~135°13.5′E~~	~~418~~	~~9~10~~	~~15,000×2~~	
		No.6~8	34°41.2′N	135°14.0′E	600	10~10.5	15,000×3	
		No.9	34°40.2′N	135°14.2′E	209	12	15,000×1	
	Shin Ko E Wharf	S・T	34°41.3′N	135°12.7′E	457	5~10	~~15,000×2~~	
		U~X			1,152	8~12.5	5,000×1 ~~10,000×2~~ ~~30,000×2~~	
		Y~Z			465	4~10	15,000×2	
	Shinko No.4 Jetty Q・R		34°40.9′N	135°12.2′E	649	9~12	45,000×3	
Rokko Island	W-1 Quay		34°41.2′N	135°15.2E	350	14	40,000×1	
	Container Wharf 2～7		34°40.8′N	135°16.0′E	Extension 2,450	13~16	40,000×2 50,000×5	Container Crane
	A~C Quay		34°41.4′N	135°15.2′E	573	5~9	7,000×1 15,000×1	
	D~I Quay ~~Heavy Cargo Wharf G・I~~		34°41.7′N	135°15.5′E	1,202	10	15,000×6	Container Crane
	Landing Place (N)		34°41.9′N	135°16.6′E	1,085	4~4.5	~~700class~~	
	Multi Purpose Wharf J~M				755	10	15,000×4	Container Crane
	Ferry Wharf 1~3		34°41.8′N	135°17.0′E	759	8.5~9	10,000×1 8,000×1 15,000×1	
	N~Q Quay		34°41.4′N	135°17.0′E	649	8~10	~~30,000×4~~	
	R~V Quay				985	10	10,000×1	
	W~Z Quay				1,076	12	15,000×4 30,000×1 46,000×1	Container Crane
	Landing Place (E)		34°41.5′N	135°16.7′E	311	5	~~700class~~	
	Liner Wharf 1・2		34°41.0′N	135°17.4′E	804	11.5～13	46,000×1	Container Crane

Section 3	E Kobe Ferry Wharf No.1		34°42.8′N 135°17.0′E	100	6	2,000t×1	
	E Kobe Ferry Wharf No.3		34°42.9′N 135°17.2′E	165	7.5	8,000t×1	
	E Domestic Wharf	A~E Quay	34°43.0′N 135°17.6′E	455	5.5	2,000×5	
		F~I Quay	34°43.1′N 135°18.0′E	361	4~5.5	2,000×4	
		J~P Quay		629	5.5	2,000×7	
		Q~U Quay	34°42.9′N 135°18.2′E	527	6	3,000×5	
Section 4	Suma Ko -5.5m Quay		34°38.5′N 135°08.0′E	185	3~5	2,000×2	

The largest vessel to enter. On 8 October 2006, Container vessel “Emma Maersk” (170,794t, draft 16.0m) was brought to Container Wharf 5 at Rokko Island.

Safeguards against Typhoon and Tsunami etc. In order to prevent marine casualties caused by Typhoon and Tsunami etc., The Osaka Ko Maritime Accident Prevention Countermeasure Committee is established to issue information on typhoon and tsunami to vessel and Concerned parties in port and give countermeasures to taken including relevant warnings, evacuation from berths. When stormy weather is expected, Captain of the port Hanshin Ko issue evacuation advisory and especially, It will be recommendation for self-restraint of anchoring around the Kobe Airport.

(See Subsection “Typhoon and tsunami safety measures.”, Section 2 “Osaka Wan”, Chapter 1. “KII SUIDO – AKASHI KAIKYO”, Part 2. “Offshore and Through Route”.)

~~［recommendation for self-restraint of anchoring］~~

~~Vessels: Vessels set forth below.~~

~~1. Vessels with gross tonnage of 100 tons or more, should not anchor at the sea area within 3 nautical miles from the Kobe Airport.~~

~~2. Anchoring vessels with gross tonnage of 100 tons or more at the sea area within 3 nautical miles from the Kobe Airport should leave immediately.~~

~~Sea area: A range of 3 nautical miles from the shore of the Kobe Airport.~~

~~Periods: If a weather phenomenon could potentially arise, such as windstorm or snowstorm related weather warning announcement in Kobe.~~

Maritime authorities and facilities.

Name	Telephone	Name	Telephone
The 5th Regional Coast Guard Headquarters	+81-78-391-6551	Kobe Quarantine Station	+81-78-672-9651
Kobe Coast Guard Office (Captain of the Port)	+81-78-331-6743	Kobe Branch, Osaka Regional Immigration Bureau	+81-78-391-4747
Kobe District Transport Bureau	+81-78-321-3141	Kobe Marine Accident Inquiry Commissioners Office	+81-78-331-6371
Kobe Customs	+81-78-333-3100	Animal Quarantine Station Kobe Branch	+81-78-222-8990
Port Island Sub-Branch, Kobe Customs	+81-78-303-3550	Kobe Plant Protection Station	+81-78-331-2806
Rokko Island Sub-Branch, Kobe Customs	+81-78-857-0740	Kobe Ko control office, Port & Harbor Bureau, Kobe City	+81-78-304-2500

Tug boats. One municipal and 32 private tug boats for mother vessel are available.

Ferry boats. Many ferry boats are available and they come and go from Meriken wharf.

Supplies. Many water supply boats and fuel supply boats are available.

Repairs.

Name	Telephone
Mitsubishi Heavy Industries Co., Ltd., Kobe Shipbuilding	+81-78-672-2221
Kawasaki Heavy Industries Co., Ltd., Kobe Factory	+81-78-682-5501
Shin Kobe Dock Co., Ltd.	+81-78-599-5747
Kamix Co., Ltd.	+81-78-431-2181

Medical facilities.

Name	Telephone
National Hospital Organization, Kobe Medical Center	+81-78-791-0111
Kobe Ekisaikai Hospital	+81-78-781-7811
Rokko Island Hospital	+81-78-858-1111

Maritime traffic. Regular passenger vessels and car ferries are operated for Senshu, Shodo Shima, Shikoku, Kyushu and China.

4. Quarantine anchorage is at Section 3 (34°00′N 131°45′E) in the center of Tokuyama Wan and at Section 4 (33°57′N 131°52′E) in the E ward of the S of Kasado Shima.
5. The anchorage for vessels carrying dangerous cargo is designated Section 1～3.
(1)Section 1: Near the N of Sa Shima. (See the Landmarks.)
(Name of Anchorage: Sa Shima North).
(2)Section 2: Near the N of Kasado Shima. (See the Landmarks.)
(Name of Anchorage: Kudamatsu South).
(3)Section 3: Near the SW of Shin-Nan-Yo Quay. (See the Facilities.).
(Name of Anchorage: Shinnanyo No.1 and No.2).
Near the E of Sen Shima. (34°02.6′N 131°46.0′E)
(Name of Anchorage: Sen Shima E No.1～12).
Near the S of Sa Shima.
(Name of Anchorage: Oura West No.1～6).
Near the S of Sukumo Shima. (See the Landmarks.)
(Name of Anchorage: Sukumo Shima South No.1 and No.2 (Vessels carrying dangerous cargo and various vessels)) .
In addition, the designated anchorage sites for various vessels other than vessels carrying dangerous cargo and located near quarantine anchorage in Section 3.(Name of Anchorage: Kurokami South No.1～10)
The details are also published on the web page:
https://www6.kaiho.mlit.go.jp/06kanku/tokuyama/

Caution In case of anchoring to refuge in Uma Shima on the W of Tokuyama Wan, in the area between Otsu Shima and Kurokami Shima, or in the S of Kasado Wan at the time of rough weather such as typhoon the Captain of the Port instructs to avoid laying at an anchorage for certain vessels such as a vessel carrying dangerous cargo.

Port communications. Port communication could be made among the vessel, the Captain of the Port and the Port Authority by the radio telephone.

Call name	Frequency	Hours of operation	Contact address	Remarks
HIROSHIMA COAST GUARD RADIO	ch16/12	24 hours	Tokuyama Coast Guard Office	
TOKUYAMA KUDAMATSU PORT RADIO	ch16/11, 12, 18	24 hours	+81-834-32-8667	

Pilotage. Pilotage is available on request to Naikai Pilot Associations. (Refer to Chapter 6 “PILOTAGE” of Part 1 on page 8.)

Facilities.

Name		Position	Length (m)	Depth (Approx.m)	Capacity (D/W×vessel)	Remarks
Section 1	Nachi Wharf	34°02.5′N 131°48.2′E	40	7.5	5,000×1	
	Harumi Wharf No.1 ~ No.7	34°02.6′N 131°47.4′E	1,240	6~12	5,000×2 15,000×4 30,000×1	There are Obstructions in front of No.1~No.4. No.9 is located at the S end of the wharf in Section 3.
	Harumi Wharf landing place	34°02.8′N 131°47.9′E	400	4	500t class	
	Minato-machi landing place	34°03.0′N 131°47.8′E	164	3~3.5	700t class	
	Minato-machi Wharf	34°03.0′N 131°47.7′E	210	5~6	3,000×2	
	Hirano Minato Wharf	34°04.0′N 131°45.0′E	270	4.5~5	3,000×3	They are located at the NE of Shinnanyo Quay in Section 3.
	Hirano landing place	34°04.1′N 131°45.1′E	280	2~4	500t class	
Section 2	No.1 Wharf	34°00.2′N 131°51.6′E	425	3~4	500t class	
	No.2 Wharf	34°00.3′N 131°51.2′E	480	4~7	700×2 2,000×4	NW side
			500	7.5~10	5,000×1 15,000×2	SE side
Section 3	Shinnanyo N6 Quay	34°03.4′N 131°44.4′E	185	10	10,000×1	
			240	12	30,000×1	
	Harumi Wharf No.9	34°01.7′N 131°46.9′E	280	14	60,000×1	
Section 4	Shimada Quay	33°57.3′N 131°55.5′E	180	5.5	2,000×2	
			130	7.5	5,000×1	

Fairway.

1. The fairway reaching Heiwa Wharf in the inner port from about 0.4M WNW of Ryu-ga-Saki at Mitajiri Chiku, is about 110m in width and 6.5~7.5 in depth.
2. The fairway reaching Nakanoseki Quay in the inner port from the entrance to the port in Nakanose Chiku, is about 230m in width and 12～12.5m in depth.

Although both fairways are indicated by light buoys, vessels should be cautions of the shallow parts on both sides of the fairways since it is a dredged fairway.

Entry restricted. In order of the Captain of the Port to prevent fire hazard, no general vessel is allowed to enter the area within 30m from the tanker carrying flammable dangerous cargo at berth or anchor in the port.

Facilities.

Name	Position	Length (m)	Depth (Approx. m)	Capacity (D/W×vessel)	Remarks
Tsukiji No.4 Quay	34°02.2′N　131°35.5′E	260	7.5	5,000×2	
Tsukiji No.3 Quay		180	5.5	2,000×2	
Tsukiji No.4 Landing Place	34°02.3′N　134°35.5′E	600	4	500t class	
Tsukiji No.3 Landing Place	34°02.1′N　131°35.2′E	120	4	500t class	
Tsukiji No.1 Quay	34°02.0′N　131°35.3′E	240	5.5~6	2,000×3	
Tsukiji No.2 Quay		130	6.5~7.5	5,000×1	
Nakanoseki No.1 Quay	34°00.8′N　131°33.8′E	360	5.5	2000×4	
Nakanoseki No.2 Quay	34°00.5′N　131°33.7′E	520	7.5~8	5,000×4	Crane
Nakanoseki No.3 Quay	34°00.4′N　131°33.5′E	480	12	30,000×2	

Safeguards against Typhoon and Tsunami. In order to prevent marine casualties caused by Typhoon and Tsunami etc., The Typhoon and Tsunami etc. vessel Calamity Prevention measures examination Committee, Mitajiri-Nakanoseki Ko Subcommittee is established to issue information on typhoon and tsunami to vessel and Concerned parties in port and give countermeasures to taken including relevant warnings, evacuation from berths and cancellation thereof. (Contact inquiry: Tokuyama Coast Guard Office)

Maritime authorities and facilities.

Name	Telephone	Name	Telephone
Mitajiri Nakanoseki Detachment of Tokuyama Coast Guard	+81-835-23-9898	Hofu Sub-Branch, Tokuyama Branch, Moji Customs	+81-835-22-2385
Port Authority	+81-835-22-6209		

Tug boat・Ferry boat. Tugboats and ferry boats staying at Tokuyama-Kudamatsu Ko can be arranged.

Supplies. At Tsukiji Quay (Heiwa wharf), there is a valve for supplying fuel.

Repairs. There are several small dockyards.

Medical facility.

Name	Telephone
Yamaguchi Grand Medical Central	+81-835-22-4411

Maritime traffic. Regular passenger boats are operated between this port and Mitajiri Chiku and No Shima.

4. The fairway reaching the exclusive piers of Seibu Oil and Ubekosan W Okinoyama Pier at the W end of the harbour is about 140m in navigable width and about 7.5m in depth.

All the fairways are indicated by several light buoys. In the winter season, there are many aquaculture facilities set outside the fairway.

Precautions for navigation. In the E and W area of Yamaguchi Ube Airport, An aircraft approach surface area based on the Civil Aeronautics Act is set. For particulars, apply to Yamaguchi Ube Airport Office (TEL; +81-836-21-5841).

Anchorage. Quarantine anchorage is located about 1.6M WNW of Motoyama Light Beacon at the S end of the harbour limit.

Pilotage. Pilotage is available on request to Naikai Pilot Associations. (Refer to Chapter 6 “PILOTAGE” of Part 1 on page 8.)

Pilot boarding positions for vessel entering the Ubekosan No.6 Quay are as follows.

1. Vessel entering from the E ward: 33°51.2′N 131°15.2′E (approx.).
2. Vessel anchoring off Ube Ko or vessel entering from the S ward: 33°50.5′N 131°13.8′E (approx.).
3. Vessel entering from the W ward: 33°53.1′N 131°08.8′E (approx.).

Facilities.

Name	Position	Length (m)	Depth (Approx. m)	Capacity (D/W×vessel)	Remarks
Shibanaka E Quay	33°56.1′N 131°14.9′E	162	7.5~8	10,000×1	Crane
Shibanaka W No.1 Quay	33°55.9′N 131°13.9′E	270	13	50,000×1	
Shibanaka W No.2 Quay	33°56.0′N 131°14.0′E	240	12	30,000×1	
Shibanaka No.1 Quay	33°56.3′N 131°14.2′E	185	8.5	15,000×1	
Shibanaka No.2・3 Quay	33°56.3′N 131°14.3′E	260	6~7.5	3,000×2	
Onda Quay	33°56.4′N 131°14.7′E	240	4.5	700×4	
Minatomachi Landing Place	33°56.6′N 131°14.6′E	240	3~4	500×4	
Shinmachi No.1・2 Quay	33°56.9′N 131°14.4′E	260	5~6.5	5,000×2	
Shinmachi No.3 Quay	33°56.8′N 131°14.5′E	90	3~4	2,000×1	
Okinoyama No.1 Quay	33°56.7′N 131°14.1′E	185	7.5~9.5	15,000×1	
Okinoyama No.2 Quay		185	8~8.5	15,000×1	

Overhead bridge. There is Kosan O-hashi Bridge (vertical clearance of about 25m) at the entrance of Nishi Ko.

Overhead cables. There is an overhead cable (vertical clearance of 32m) at the S entrance of Sakae Kawa Unga. There are 2 more (vertical clearance of 52m and 28m) at the central part of Sakae Kawa Unga. There is an overhead cable (vertical clearance of 44m) in the Kogyo Unga.

The largest vessel to enter the port. In July 2017, cargo vessel (73,583t) berthed at the Ubekosan No.6 Quay.

Safety measure against abnormal weather including typhoon and tsunami. In order to prevent accidents due to abnormal weather, the Ube and Sanyo Onoda Ku Harbour Natural Disaster Safety Measures Committee and its surrounding waters is established; they manage typhoon and tsunami damage prevention countermeasures by providing typhoon and tsunami information, issuing warnings, and issuing and cancelling evacuation advisories for all vessels in the harbour. (Inquiry: Ube Coast Guard Station)

Maritime authorities and facilities.

Name	Telephone	Name	Telephone
Ube Coast Guard Station (Captain of the Port)	+81-836-21-2410	Ube Branch Customs, Moji Customs	+81-836-21-7391
		Ube Ko Port and Harbour Management Office	+81-836-31-3311

Tug boat・Ferry boat. Many tug boats (maximum 3,400PS) and ferry boats are available.

Supplies. A small fuel oil supply boat is available.

General Information. Kanda Ko locates in the W of Suo Nada, about 10M S of the E entrance to Kanmon Kaikyo. The NW part of the port, surrounded by breakwaters is called Hon-ko, and the S part is called Nan-ko. Kitakyushu Airport is in the NE of the port area.

Weather. E winds blow most frequently throughout the year. From the beginning of spring to summer, winds tend to lie in the E. When strong winds lie in the E, ocean waves set into the port. Although there are W or NW winds from autumn to winter, they are blocked by mountains and within the port relatively calm. From autumn to winter, fog occurs but doesn't last for long.

Landmarks.

Landmark	Position	Remarks
Ko-no-Shima	33°48.0′N 131°01.0′E	53m high, long in E-W direction, it appears a small island with a round peak as seen from the entrance to the port.
Chimney	33°47.2′N 130°59.9′E	204m high, painted blue and white, within the premises of a power station.
Matsu Yama	33°48.0′N 130°59.0′E	128m high, red and brown surface of the ground is largely exposed.

Fairway. There is a fairway with about 200m in width and 10 ~ 12m in depth, reaching Kand ko from the ENE of the outside of the port, which is indicated by light buoys. The fairway is divided 2 fairways in the NE of Kami-no-shima. One is reaching Hon-ko Quay with 200m in width, 10～12m in depth and the other is reaching Nan-ko Quay with 300m in width, 9～10m in depth. They are indicated by several light buoys.

Precaution for navigation. In the N and S of Kitakyushu Airport, an aircraft approach surface area based on the Civil Aeronautics Act is set.

Port communication. Port communications could be made between vessels and the Port Authority by the radio telephone.

Call name	Frequency	Hours of operation	Contact address	Remarks
KANDA PORT RADIO	ch16/07,20,64(12, 14)	24hours	+81-93-383-0106	

Pilotage. Pilotage is available on request to Naikai Pilot Associations. (Refer to Chapter 6 "PILOTAGE" of Part 1 on page 8.)

Facilities.

Name	Position	Length (m)	Depth (Approx.m)	Capacity (D/W×vessel)	Remarks
Honko No.4 Quay	33°47.7′N 130°59.6′E	386	4.5	700×6	
Honko No.5 Quay		150	5	2,000×2	
Honko No.6 Quay		110	5.5	3,000×1	
Honko No.7 Quay		130	6	5,000×1	
Honko No.10 Quay		370	9～10	10,000×2	
Honko No.13 Quay	33°47.7′N 131°00.0′E	260	13	40,000×1	Crane
Nanko No.4 Quay	33°46.6′N 130°59.8′E	440	1~4	700×7	
Nanko No.7A Quay		130	5~7.5	5,000×1	
Nanko Ferry Quay A	33°46.4′N 130°59.9′E	195	7.5	7,500×1	
Nanko No.7D Quay		230		5,000×1	
Nanko No.7B Quay	33°46.3′N 131°00.0′E	260	7.5	5,000×2	
Nanko No.5 Quay		360	5	2,000×4	
Nanko No.7C Quay		130	6.5	5,000×1	
Nanko No.10 Quay	33°46.6′N 131°00.6′E	340	10	10,000×2	
Matsuyama Dolphin	33°48.0′N 131°00.0′E	580	6.5~7.5	10,000×2	
Matsuyama Log Quay		185	8	10,000×1	

Overhead cable. There is an overhead cable (vertical clearance of 49m) between Hon-ko Quay in the N of Hon-ko and the vicinity of Timber Quay in the N of the Hon-ko Quay.

The largest vessel to enter the port. A foreign vessel of 71,178t has berthed at the port since 2010.

Safety measure against abnormal weather including typhoon and tsunami. In order to prevent accidents due to typhoons and tsunamis and other abnormal weather, the Kanda Ko Natural Disaster Safety Measures Committee communicates and its surrounding waters is established; they manage typhoon and tsunami damage prevention countermeasures by providing typhoon and tsunami information, issuing warnings, and issuing and cancelling evacuation advisories for all vessels in the harbour. (Inquiry: Kanda Coast Guard Station)

Precaution for stormy weather. Moji Coast Guard Office requests vessels to refrain from anchoring in order to prevent marine accidents caused by stormy weather (e.g., anchor dragging) in the sea area around Shin Kita Kyushu Airport.

Subject vessels: Vessels with gross tonnage of 100t or more.

The area required to refrain from anchoring: the sea area within 3M from the edge of Shin Kita Kyusyu Airport Approach Light Bridge（33°51.9′N 131°01.9′E) and Shin Kita Kyushu Airport connecting bridge light (C2 light) (33°49.4′N 131°01.3′E).

The period required to refrain from anchoring: From the time when the blizzard or snowstorm warning is issued to the time when the warning is cancelled in Kanda-town, Kyoto district, Fukuoka Prefecture.

Maritime authorities and facilities.

Name	Telephone	Name	Telephone
Kanda Coast Guard Station	+81-93-436-3356	Kanda Sub-Branch Customs, Moji Customs	+81-93-436-1458
Kanda Port Authority	+81-93-434-0585		

Tug boat. 8 tugboats (35～760PS) are available.

Supplies. Water supply boats and fuel oil supply boats are available.

Nakatsu Ko(33°37′N 131°15′E) (Charts JP1101, W1246) (JP NAT)

(Photographed in December 2016)

Port designated by Port Regulations Law	Open port	Quarantine port	Immigration port	Domestic animal quarantine port	Plant protection port	Major port
○	○					○

General Information. Nakatsu Ko lies in the SW of Suo Nada, about 15M SE of Kanda Ko, and extend two prefecture Oita and Fukuoka. Within 1 to 2.5M around this port is shallow less than 5m and around the coast is to dry.

Landmarks.

Landmark	Position	Remarks
Cement silo	33°36.6′N 131°14.7′E	

Landmarks.

Landmark	Position	Remarks
Takasaki Yama	33°15.0′N 131°31.0′E	628m high.
Beppu Tower	33°16.9′N 131°30.4′E	100m high, silver colored television tower lighting red. Prominent.
Tsurumi Dake	33°17.0′N 131°26.0′E	1,375m high, there is a conspicuous house (lighting) on the top. Prominent, there is a ropeway.
Jishoji Yama	33°18.0′N 131°29.0′E	169m high, there is a memorial monument.

Roadstead.

1. Beppu Hakuchi (33°17′N 131°31′E, Chart W1219) Beppu Hakuchi is located on the S of Beppu Ko. There is a basin in front of the center of the city area, and there is a yacht harbor on the N of the basin.

2. Beppu-Kokusaikanko Hakuchi (33°18′N 131°31′E, Chart W1219) Beppu-Kokusaikanko Hakuchi is a roadstead surrounded by E Breakwater and Offing Breakwater nearly in the center of the port. There are many liners coming /going this port from/to ports on the coast of Seto Naikai.

3. Kamegawa Hakuchi (33°20′N 131°30′E) Kamegawa Hakuchi is on the N end of Beppu City and the area around 400m from the coast is good for anchoring. There is **Kamegawa Gyoko** in front of the central part of the city.

4. Hiji Hakuchi (33°21′N 131°32′E) Hiji Hakuchi is on the N end of Beppu Ko and the coast of Hiji-Cho is 10~40m in depth with the bottom material of mud. It is a good shelter point for small vessels, without dangers except for Ikari Se and Oki-no-Se.

Facilities.

Name	Position	Length (m)	Depth (Approx. m)	Capacity (DW×vessel)	Remarks
No.1 Wharf -4.5m Quay	33°17.9′N 131°30.3′E	130	2.5~3.5	500×2	
No.2 Wharf S -5.5m Quay	33°18.0′N 131°30.3′E	100	5.5	2,000×1	For passenger vessel
No.2 Wharf N -5.5m Quay		130	5~5.5	2,000×1	For ferry
No.3 Wharf -5.5m Quay	33°18.3′N 131°30.3′E	190	4.5~7	2,000×2	For ferry
No.3 Wharf -7.5m Quay		135	7~12.5	5,000×1	For passenger vessel
No.3 Wharf -12m Quay		275	12~12.5	50,000×1	For passenger vessel
No.4 Wharf -10m Quay	33°18.5′N 131°30.3′E	280	9.5~10	30,000×1	Foul ground in front

Safety measure against abnormal weather including typhoon and tsunami. In order to prevent accidents due to abnormal weather including typhoon and tsunami, Abnormal Weather Safety Measures Committee of Oita Ko and its neighboring ports communicates with the vessels mooring in the port and gives instructions regarding warnings, evacuations, and restrictions in the event of abnormal weather. (Inquiry: Oita Coast Guard Office)

Supplies. Fresh water supply is available at Beppu Hakuchi and Beppu-Kokusaikanko Hakuchi.

Medical facilities.

Name	Telephone
National Hospital Organization, Beppu Medical Center	+81-977-67-1111
National Hospital Organization, Nishibeppu National Hospital	+81-977-24-1221

Maritime traffic. Car ferries are operated for Yawatahama Ko, Matsuyama Ko and Hanshin district.

Pilotage. Pilotage is available on request to Naikai Pilot Associations. (Refer to Chapter 6 “PILOTAGE” of Part 1 on page 8.)

Facilities.

Name	Point	Length (m)	Depth (Approx. m)	Capacity (D/W×vessel)	Remarks
Ikushi Wharf No.1~5 Quay	33°14.8′N 131°35.4′E	295	0.5~4	700×5	Foul ground in front
Ikushi Wharf No.6・7 Quay		245	6.5~7	5,000×2	
Ikushi Wharf No.8 Quay		45	6	700×1	
Ikushi Wharf No.9・10 Quay		160	2.5~6	3,000×2	
Sumiyoshi Wharf No.1・2 Quay	33°15.2′N 131°36.2′E	370	9~9.5	15,000×2	Foul ground in front
Sumiyoshi Wharf No.3~7 Quay		469	4~5.5	3,000×5	
Sumiyoshi Wharf No.8 Quay		100	3.5~4	700×2	
Sumiyoshi Wharf No.9~15 Quay	33°15.1′N 131°36.4′E	570	3~4.5	700×7	
Sumiyoshi Wharf No.16 Quay		105	4.5	3,000×1	
Otozu Public Quay No.1~3	33°15.7′N 131°40.3′E	390	4.5~6.5	5,000×3	Foul ground in front
Otozu Public Quay No.4・5		180	2~5	2,000×2	Foul ground in front
Tsurusaki E Quay	33°15.5′N 131°41.4′E	480	3.5~4.5	700×8	
Tsurusaki W Quay		420	2.5~5.5	700×4 2,000×2	
Tsurusaki Waste Oil Disposal Place Quay No.1	33°16.0′N 131°41.1′E	60	3.5	1,000×1	
Tsurusaki Waste Oil Disposal Place Quay No.2		100	3.5~4.5	2,000×1	
Ozai Public Quay No.1	33°14.9′N 131°44.7′E	120	4.5	700×2	
Ozai Public Quay No.2		230	3.5	500t class	
Ozai Public Quay No.3~8		540	4.5~5.5	2,000×6	
Ozai Public Quay No.9		160	7.5	5,000×1	
~~Ozai Public Quay No.11~~		~~150~~	~~4~~	~~500×1~~	
Ozai Public Quay No.12~15		520	3.5~7.5	5,000×4	
Ozai Public Quay No.16・17		425	9.5~12	15,000×1 30,000×1	
Ozai Public Quay No.18		150	3.5~4	500t class	
Ozai Public Quay No.19		170	10	10,000×1	Container crane
Ozai Public Quay No.20		280	14	50,000×1	Container crane
Public Quay No.1・2	33°14.9′N 131°46.5′E	260	7.5	5,000×2	
Public Quay No.3~5		270	5~5.5	2,000×3	

Overhead cables. Overhead cables (vertical clearance of 49m and 63m) are respectively crossing the estuary of Onakajima Kawa and the estuary of Otozu Kawa in the bottom of Otozu Hakuchi.

Safety measure against abnormal weather including typhoon and tsunami. In order to prevent accidents due to abnormal weather including typhoon and tsunami, Abnormal Weather Safety Measures Committee of Oita Ko and its neighboring ports communicates with the vessels mooring in the port and gives instructions regarding warnings, evacuations, and restrictions in the event of abnormal weather. (Inquiry: Oita Coast Guard Office)