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Sailing Directions for Seto Naikai

Supplement No.3

November 26, 2021



Japan Chart 150th

Japan Coast Guard

Explanatory Notes

Sailing Directions for Seto Naikai- Supplement No.3 is issued to correct the outdated information in Publication No.303 Sailing Directions for Seto Naikai which was published in February 2019.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 English translation of SETO NAIKAI PILOT Supplement No.3 issued on February 26, 2021 and No.4 issued on August 6, 2021 as well as the information which has been gathered through the work of Hydrographic and Oceanographic Department, Japan Coast Guard.

The instructions for amending, deleting or adding of the previous issues are indicated in this supplement. It also contains an index to be referred to the pages on which they are mentioned. The index is listed in ascending 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 gray background. Chart images, tables or pictures which are 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 the original page number. In case that sheets had spanned multiple pages by adding large volume of text or image, sub-number is inserted after the page number.

November 26, 2021

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 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 safety of navigation and protecting the marine environment, the Japan Coast Guard (here in referred to as JCG) publicizes information that could affect 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.

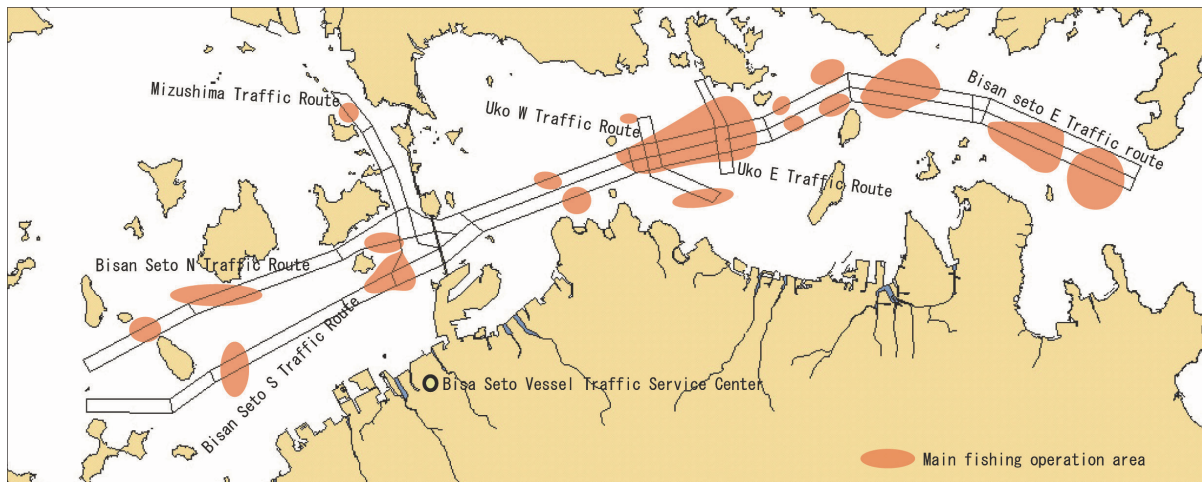
Sailing Directions published by JCG are intended solely for the purpose of providing information for safe navigation. The contents included in the Sailing Directions does not reflect the Japanese Government's official stance regarding the laws, regulations, and proclamations of other countries.

Cover: About the new Japan Coast Guard badge

In 2021 we mark the 150th anniversary since launch of the first-ever “made in Japan” chart production project in 1871. In recognition of this important milestone in the history of Japan's nautical chart, we are proud that all of the charts and publications issued from this year will carry the new Japan Coast Guard badge.

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Fig.2 Main fishing operation area in Bisan Seto and adjacent sea of Stow-net Fishery

Spanish mackerel and butterfish drift-net fishery. Spanish mackerel and butterfish drift-net fishery is done in the area of Osaka Wan, Harima Nada, Bisan Seto, Hiuchi Nada, Aki Nada, Iyo Nada and Suo Nada. Spanish mackerel fishery is mainly carried out at night and butterfish fishery is carried out throughout the day and night. Generally, the fishing season separates in the spring and the autumn. (Refer to Fig.3.)

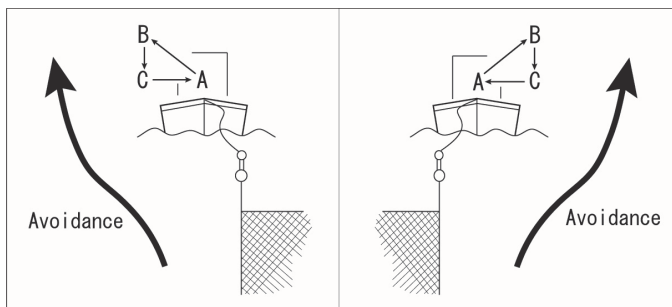
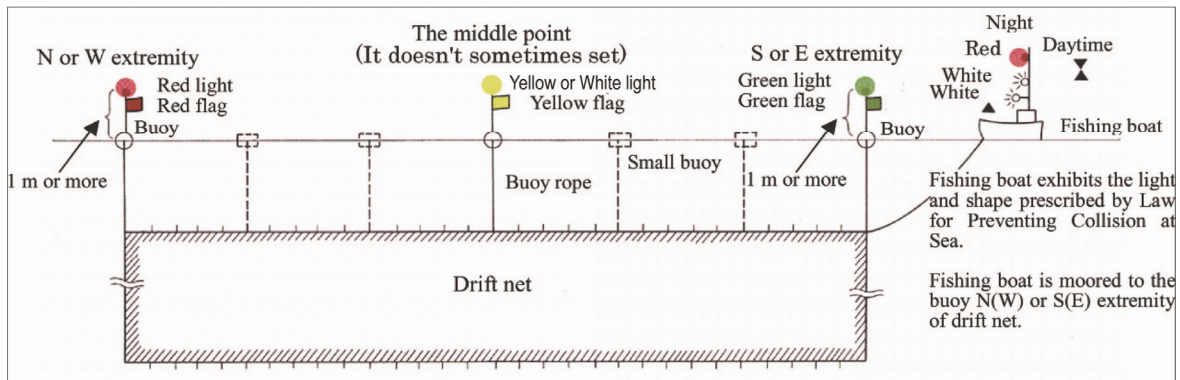
Drift-nets are thrown into the sea all together around before the sunset.

This method is to shoot at night the net with 600~2,000m length (less than 3,000m at Osaka Wan) and 8~24m depths at the right angle against the tide. Drifts it to a current for about 1~7 hours, and takes the Spanish mackerel and butterfish which migrates. Fishing boats put on the revolving light (yellow in color) when setting the net and also use the same light when it is necessary to warn the another vessel that closely approaches. Another vessel may be signed by lamplight etc. from a fishing boat for the prevention from net cutting.

The main fishing operation area in Osaka Wan is the offing of the NW side of Kansai International Airport.

Refer to Fig.4 on page 16 for the main fishing operation area in Bisan Seto and adjacent sea.

Fig.3 Schematic diagram of Spanish Mackerel and butterfish Drift-net Fishery etc.



Avoidance signal for passing vessels
 White light or flag signal in order of
 A, B and C (The belonging fishing
 boat in Okayama Prefecture and
 Kagawa Prefecture.)

Maritime Search and Rescue Organizations

Japan Coast Guard. The sea adjacent to Japan is divided into 11 regions each of which has its Regional Coast Guard Headquarters. Contact list of the headquarters and subordinate departments is as follows.

Regional Headquarters	Coast Guard Office	Coast Guard Station	Detachment of Coast Guard	Air Station etc.	
The 5th Regional Coast Guard Headquarters 1-1 Hatoba, Chuo-Ku, Kobe-shi TEL: +81-78-391-6551	Osaka TEL: +81-6-6571-0221	Sakai TEL: +81-72-244-1771		Kansai Airport Coast Guard Air station TEL: +81-72-455-1235	
		Kishiwada TEL: +81-72-422-3592			
	Kobe TEL: +81-78-331-5611	Nishinomiya TEL: +81-798-22-7070			
	Himeji TEL: +81-79-231-5063	Kakogawa TEL: +81-79-435-0671			
	Tokushima TEL: +81-885-33-2246				
Wakayama TEL: +81-73-402-5850	Kainan TEL: +81-73-492-0134				
The 6th Regional Coast Guard Headquarters 3-10-17 Ujinakaigan, Minami- Ku, Hiroshima- shi TEL: +81-82-251-5111	Mizushima TEL: +81-86-444-9701			Hiroshima TEL:+81-848-86-9191	
	Tamano TEL: +81-863-31-3423				
	Hiroshima TEL: +81-82-253-3111	Yanai TEL: +81-820-23-2250			
		Iwakuni TEL: +81-827-21-6118			
	Kure TEL: +81-823-21-0123		Kinoe TEL: +81-846-62-0807		
	Onomichi TEL: +81-848-22-2108	Fukuyama TEL: +81-84-943-5950			
	Tokuyama TEL: +81-834-31-0111		Kudamatsu TEL: +81-833-41-3022		
			Mitajiri Nakanoseki TEL: +81-835-23-9898		
	Takamatsu TEL: +81-87-821-7013	Sakaide TEL: +81-877-46-5999			
		Shodo Shima TEL: +81-879-82-5999			
Matsuyama TEL: +81-89-951-1196					
Imabari TEL: +81-898-32-2882	Niihama TEL: +81-897-32-0118		Mishima Kawanoe TEL:+81-896-24-4498		
Uwajima TEL: +81-895-22-1591					
The 7th Regional Coast Guard Headquarters 1-3-10 Nishikaigan, Moji- ku, Kita Kyushu- shi TEL: +81-93-321-2931	Moji TEL: +81-93-321-3215	Shimonoseki TEL: +81-832-67-1711	Kokura TEL: +81-93-571-6091	Fukuoka TEL: +81-92-441-8315	
		Ube TEL: +81-836-21-2410			
		Kanda TEL: +81-93-436-3356			
	Wakamatsu TEL: +81-93-761-2497				

Chapter 9 ACQUISITION METHOD OF THE DANGEROUS INFORMATION

The Japan Coast Guard publishes nautical charts, sailing directions, and others necessary for ensuring navigation safety, and at the same time, provides information to maintain these publications up-to-date and necessary information on the safety of traffic of vessels.

Navigational Warnings

NAVAREA XI Navigational Warnings. For the safety of vessels navigating in NAVAREA XI (Western Northern Pacific Ocean and SE Asia sea areas) pursuant to provisions of the World-Wide Navigational Warning Service, information crucial in emergencies is provided by the EGC (Enhanced Group Calling) system by satellite communication, INMARSAT, in English. The system receives information with a designated receiver, and is provided by internet as well. In particular, information of high urgency (active submarine volcano, drift mine, falling flying objects such as satellite, etc. and obstructions, etc.) is provided all the time.

NAVTEX Navigational Warnings. Along with information for the safety of vessel traffic within 300M of the Japanese coastal area, NAVTEX delivers information needing urgent reporting, and it is received with its designated receiver. The information is provided by internet ~~and cell phone~~ as well.

Cast station	Identification character	Language used	Emission	Frequency	Regular transmission starting time (JST)
Moji	H	Japanese	F1B	424 kHz	0117 0517 0917 1317 1717 2117
		English		518 kHz	0210 0610 1010 1410 1810 2210

Local Navigational Warnings. For the safety of vessels navigating waters under the Regional Coast Guard Headquarters jurisdictional district, waters under the Coast Guard Office jurisdiction or nearby sea, Japan Coast Guard provides the information needing urgent reporting from local coast radio stations by the radiotelephone system. And the information is provided by Internet or cell-phone as well.

Coast station	Language used	Emission	Frequency	Starting time of re-transmission (JST)
Moji	Japanese English	F3E	156.8 MHz (ch16)	10h 02m 40s 16h 02m 40s
Hiroshima				10h 15m 00s 16h 15m 00s
Kobe				10h 32m 40s 16h 32m 40s

In addition, even a cell-phone can use the warning of the area along the shore through the Internet.

Notices to Mariners

Notices to Mariners. Japan Coast Guard Hydrographic and Oceanographic department provided information for updating nautical charts and ensuring traffic safety at sea on the Internet every Friday.

Regional Coast Guard Headquarters Notices to Mariners. Local information useful for safe and efficient navigation in and around the area covered by each Regional Coast Guard Headquarters is issued of the Headquarters.

The information is provided by email, facsimile and on Internet website (in Japanese) once a week.

Offer of the information by the webpage

1. Notices to Mariners and Navigational Warnings.

Notices to Mariners and Navigational Warnings are provided on the website as well.

URL: https://www1.kaiho.mlit.go.jp/TUHO/keiho/navarea11_en.html

URL: https://www1.kaiho.mlit.go.jp/TUHO/tuho/nm_en.html

2. Regional Coast Guard Headquarters and offices, etc. provide updates including navigation safety information and events, etc. by internet.

URL of Japan Coast Guard Headquarters, etc. for the area covered by this volume is as follows.

Japan Coast Guard Headquarters and others	URL
The 5th Regional Coast Guard Headquarters	https://www.kaiho.mlit.go.jp/05kanku/
The 5th Regional Coast Guard Headquarters Hydrographic and Oceanographic Department.	https://www1.kaiho.mlit.go.jp/KAN5/
The 6th Regional Coast Guard Headquarters	https://www.kaiho.mlit.go.jp/06kanku/
The 6th Regional Coast Guard Headquarters Hydrographic and Oceanographic Department.	https://www1.kaiho.mlit.go.jp/KAN6/
The 7th Regional Coast Guard Headquarters	https://www.kaiho.mlit.go.jp/07kanku/
The 7th Regional Coast Guard Headquarters Hydrographic and Oceanographic Department.	https://www1.kaiho.mlit.go.jp/KAN7/top.htm

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Safety Information of the Sea

The Japan Coast Guard operates on real time “ Safety Information of the Sea” at Regional Coast Guard Headquarters and such across the nation on pieces of info addressed to ranging from ship operators as pleasure, fishing boats and /or shore anglers to marine leisure affection donates which are observed at lighthouses and such at various locations on weather and oceanographic phenomena and occurrences of marine accidents on “Safety Information of the Sea”, we try to classify, put up gathered materials order for easy understanding and provide through the internet and electronic mail.

URL https://www6.kaiho.mlit.go.jp/index_en.html

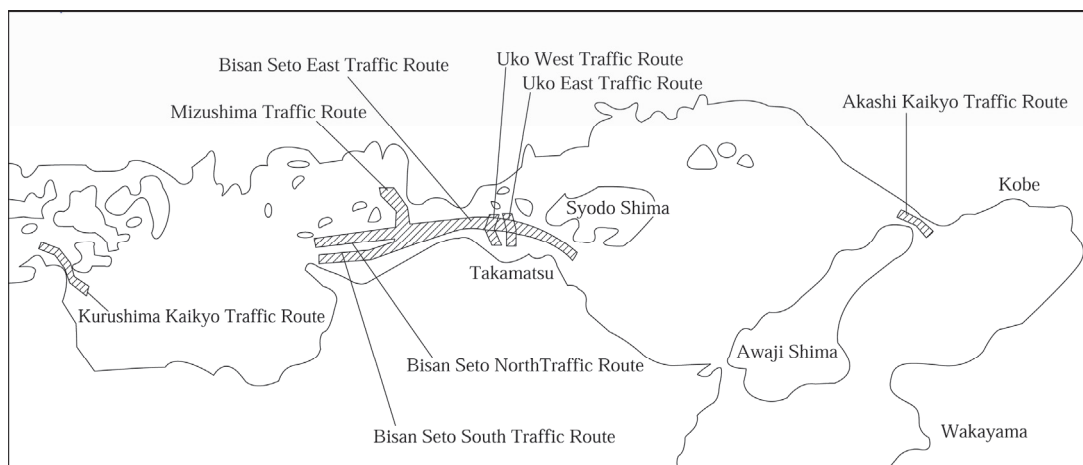
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Chapter 10 LAWS AND REGULATIONS

Maritime Traffic Safety Law. (Refer to Fig.6.) The purpose of this Law is to ensure the safety of vessels’ traffic by prescribing special modes of navigation and by effecting control for preventing danger to vessels’ traffic in the trafffic congested areas, namely Tokyo Wan, Ise Wan and Seto Naikai.

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Fig.6 Traffic Routes to which the Maritime Traffic Safety Law is applied



In Seto Naikai the Law is applied for almost whole areas excluding only a part like port area. Within the applicable areas there are 8 traffic routes established. And there is Designation of Track in the sea areas nearby Sumoto Offing Light buoy and Yura Seto, N part of Osaka Wan, near entrance/exit on the W and E side of Akashi Kaikyo Traffic Route, around Tsuru Shima Suido, Obataka Seto and nearby Ondo-no-Seto.

5 This Law covers general navigation for each traffic route, specific navigation for each traffic route, special traffic rules for special vessels such as huge vessels, vessels carrying dangerous cargo at traffic routes, navigation in sea areas off traffic routes, traffic control, etc. for hazard prevention, marks by rights, etc., measures to aid safe navigation of vessels and preventive measures against danger.

10 In accordance with Partial Amendment of the Act in Maritime Traffic Safety (Law No.53 of 2021), a new system has been established and enacted since 1st July 2021, in Tokyo Wan , Ise Wan and Seto Naikai (including Osaka Wan) to take all possible measures to prevent accidents caused by anchor dragging when extreme weather such as extraordinary strong typhoon is expected, which recommends or orders ships to evacuate the bay or not to anchor in the bay.

The followings are regulated commonly to each traffic route.

1. General Navigation Rules

Navigation Rules	Contents
Obligation to navigate traffic routes	When vessels of 50m or more in length navigate between two locations defined by the Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism, they should use nearby traffic routes designated. (Article 4 of the Maritime Traffic Safety Law; Article 3 of the Regulations for the Enforcement of the Maritime Traffic Safety Law)
Restriction on the speed	In the whole area of Mizushima Traffic Route and the designated areas of Bisan Seto East, North and South Traffic Route, No vessels should navigate at a water speed greater than 12kn except when the vessel crosses the traffic route. (Article 5 of the Maritime Traffic Safety Law; Article 4 of the Regulations for the Enforcement of the Maritime Traffic Safety Law)
Measures to indicate the destination	Vessels of 100 t or more, with a whistle, shall signal to show direction when entering or leaving traffic routes, or crossing traffic routes. Vessels (excluding vessels without whistles, without Automatic Identification System, and vessels not operating Automatic Identification System pursuant to the provision of Article 3-16 Proviso of Regulations for the Enforcement of Mariners Law) shall transmit necessary information such as ports of destination and courses, etc. as destination information of Automatic Identification System, while navigating traffic routes. (Article 7 of the same Law and Article 6 of Regulations for the Enforcement of the same Law)
Instructions for waiting off traffic routes	Where there might be hazards to vessels navigating in the passage, taking topography, tidal currents, other natural conditions and conditions of shipping traffic into consideration, in Akashi Kaikyo Traffic Route, Bisan Seto East Traffic Route, Bisan Seto North Traffic Route, Bisan Seto South Traffic Route, Uko East Traffic Route, Uko West Traffic Route, Mizushima Traffic Route and Kurushima Kaikyo Traffic Route, Commandant Japan Coast Guard may direct vessels to wait off traffic routes during the period necessary to prevent the hazard.

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2. Notification concerning the navigation of huge vessels, etc.

Captains of huge vessels, etc. shall report information such as the name, Gross tonnage, Length, estimated time of navigating the traffic routes and communication methods of the vessels to the Vessel Traffic Service Center that has jurisdiction over the traffic route when navigating the traffic routes designated by Maritime Traffic Safety Law (Article 22 of Law and Articles 13 and 14 of Regulations for the Enforcement of the Law and Japan Coast Guard Notice No. 109, 1973, "Notice of Reporting Methods Pertaining to Navigation of Huge Vessels, etc.")

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Refer to Part 3 Coastal Routes and Harbors about when, what and how to report, etc.

(1) Timing of notification

<ul style="list-style-type: none">• Huge vessels• Vessels more than 160m in length• Vessels of 25,000t or more carrying dangerous liquefied gas• Vessels towing or pushing long objects	By noon of the day prior to the estimated date of entering the traffic
<ul style="list-style-type: none">• Vessels less than 160m more than 70m in length• Vessels carrying dangerous cargo (Vessels carrying dangerous cargo other than the above)	By 3hours before the estimated time of entering the traffic route.

(3) Method of Notification of traffic routes

Radio communications

Name of coast radio station	Call sign	Call name	Calling frequency	Working frequency
Kobe	JGD	KOBE COAST GUARD RADIO	156.8 MHz (ch16) 2,189.5 kHz	156.6 MHz (ch12)
Hiroshima	JNE	HIROSHIMA COAST GUARD RADIO		2,177 kHz 2,150 kHz
BISAN MARTIS		BISAN MARTIS	156.8MHz (ch16)	156.65MHz (ch13)
KURUSHIMA MARTIS		KURUSHIMA MARTIS	156.65MHz(ch13)	156.7MHz (ch14) 161.1MHz (ch22)

- 5 If it is difficult to make a direct communication with each radio station in the above, following stations in the below may be used.

Name of coastal radio station	Call sign	Call name	Calling frequency	Working frequency
Otaru	JNL	HOKKAIDO COAST GUARD RADIO	156.8 MHz (ch16) 2,189.5 kHz	156.6 MHz (ch12) 2,177 kHz 2,150 kHz
Shiogama	JNN	SHIOGAMA COAST GUARD RADIO		
Nagoya	JNT	NAGOYA COAST GUARD RADIO		
Yokohama	JGC	YOKOHAMA COAST GUARD RADIO		
Moji	JNR	MOJI COAST GUARD RADIO		
Kagoshima	JNJ	KAGOSHIMA COAST GUARD RADIO		
Naha	JNB	OKINAWA COAST GUARD RADIO		

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~~Telegraph:—Telegraph shall be sent to the Vessel Traffic Service Center for each navigation route to be taken.~~

Radio communication (VHF telephone):

Captain of vessel must call and report to the coast radio station belonging to the Japan Coast Guard using one of the listening frequencies listed in the table above for each navigation route that the vessel is going to take.

Telephone: Captain of vessel must report to the relevant Vessel Traffic Service Center for each navigation route to be taken.

FAX (facsimile): Captain of vessel must report to the relevant Vessel Traffic Service Center for each navigation route to be taken. (unacceptable by other offices)

NACCS: Vessels must report to the relevant Vessel Traffic Service Center on the NACCS Internet site for each navigation route to be taken.

For your reference: NACCS stands for Nippon Automated Cargo and Port Consolidated System.

Any change in the notification shall be made through Kobe or Hiroshima Station.

FAX number of departments in charge of the traffic route and contact address of inquiry are in the following.

Traffic Route	Center in charge	FAX number	Contact address
Akashi Kaikyo	Osaka Wan Vessel Traffic Service Center	+81-799-82-3033	Administrative Controller +81-799-82-3030, 3032
Bisan Seto East Uko East Uko West Bisan Seto North Bisan Seto South Mizushima	Bisan Seto Vessel Traffic Service Center	+81-877-49-1413 or +81-877-49-1156	Administrative Controller +81-877-49-2220, 2221
Kurushima Kaikyo	Kurushima Kaikyo Vessel Traffic Service Center	+81-898-31-9666	Administrative Controller +81-898-31-9000

Reference: Addresses of each Vessel Traffic Service Center are in the following.

- Osaka Wan Vessel Traffic Service Center: 914-2 Nojima-etzaki, Awaji-shi, 656-1725
- Bisan Seto Vessel Traffic Service Center: 3810-2 Aza Aonoyama, Udatsu-cho, Ayauta-gun, 769-0200
- Kurushima Kaikyo Vessel Traffic Service Center: 2-5-100 Minato-cho, Imabari-shi, 794-0003

3. Within sea areas designated by this law, navigation tracks for vessels shall be specified, and vessels shall navigate designated tracks as much as possible in the sea areas where traffic routes are not specified. 4 tracks in Osaka Wan and its vicinity and 1 track respectively in Ondo-no-Seto and Tsurushima Suido ; sea area near Sumoto offing light buoy and Yura Seto, N of Osaka Wan, near E and W entrance of Akashi Kaikyo Traffic Route, Tsurushima Suido and Ondo Seto are designated respectively.

4. Measures for assisting the safe navigation of vessels

For specified vessels 50 m or longer and which are required to navigate traffic routes pursuant to provisions of Article 4 of Law, and navigating traffic routes or certain sea areas surrounding traffic routes, Japan Coast Guard Commandant shall provide certain information found necessary to be observed by the specified vessels, and the specified vessels shall observe such information (Article 29-2 of Law, Article 23-2 and Article 23-3 of Regulations).

The Commandant of the Japan Coast Guard can recommend for specified vessels to take necessary measure for the prevention of hazards or the observance of navigation rule. Moreover the Commandant of the Japan Coast Guard can demand a report about the action which takes based on the recommendation to the recommended vessel (Article 29-3 of Law, Article 23-4 of Regulations).

5. Measures to be taken under abnormal weather conditions, etc .

(1) A system of recommendations and orders when abnormal weather and extreme sea state are expected.

(Article 32 in the Maritime Traffic Safety Act)

① In the event that an extraordinary strong typhoon may hit the area, recommendation will be given to certain vessels, such as large ships, to leave the bay to safe outside areas or to refrain from entering the bay.

② When a typhoon is approaching, recommendation will be given to the ships in the bay to refrain from anchoring at designated areas and to take enhanced measures to prevent the anchor dragging.

(2) The system of providing safety information and danger avoidance advisory by the Vessel Traffic Service Center (Articles 33 and 34, in the Maritime Traffic Safety Act, Articles 43 and 44, in the Act on Port Regulation)

① For individual ships navigating or anchoring in the waters around coastal facilities, accident prevention information, such as anchor dragging risks will be provided and their listening watch is mandatory.

② When an extraordinarily approaching vessels were recognized, they are advised to take measures to avoid danger.

(3) The Consultation Committee Scheme to smoothly exercise the evacuation from bay, etc. (Article 35, in the Maritime Traffic Safety Act)

The purpose of the Consultation Committee Scheme is to establish the Consultation Committee at each sea area with the members comprising of the Japan Coast Guard, Maritime/Port Authorities and Administrations to coordinate actions to be taken against typhoons, such as evacuation timing, ships that need to evacuate, recommendation promulgation system, etc. to prepare ships' smooth evacuation when typhoon is approaching.

Port Regulations Law. This law is intended to ensure the safety of traffic in ports and to keep ports in order. It prescribes the matters concerning entering and leaving ports, navigation, traffic control signals, method of anchoring, preservation of traffic routes, dangerous substances, lights, and so on.

The law of each port of Hanshin, Onomichi-Itozaki, Hiroshima, Kanmon and Takamatsu regulates the special rules such as specific navigation, method and restriction of anchoring, navigation warning, traffic control signals, indication of course and destination and etc..

Details are prescribed in each relevant port of “Part 3 Coastal Routes and Harbors”.

~~Regarding all ports designated by Port Regulations Law, the following are the new provisions of Law of Partial Revision of Port Regulations and Maritime Traffic Safety (Law No. 69, 2009):~~

1. Indication of Destination

Vessels, navigating within the ports or near the borders of the ports, shall have transmitted the signals stipulated in a notice by Japan Coast Guard Commandant as destination information of Automatic Identification System (AIS) in order to inform other vessels of the courses (Article 11 Paragraph 1 of Regulations for the Enforcement of Port Regulations Law, signals to be transmitted as destination information of Automatic Identification System to inform other vessels of the courses pursuant to the Provision of Article 11 Paragraph 1 of Regulations for the Enforcement of Port Regulations Law (Japan Coast Guard Notice No. 94, 2010)). Symbol indicating ports of destination are listed for areas in this sailing directions relating to ports designated by Port Regulations Law as well as names of the ports as destination information of Automatic Identification System to be transmitted. (Refer to Tables on page 31 and 32.)

As for the latest information, see the following [URL](#).

[URL https://www.kaiho.mlit.go.jp/syoukai/soshiki/toudai/navigation-safety/pdf/ri-hu.pdf](https://www.kaiho.mlit.go.jp/syoukai/soshiki/toudai/navigation-safety/pdf/ri-hu.pdf)

2. Measures in the event of abnormal weather, oceanographic phenomena or marine disasters, etc.: Japan Coast Guard may restrict navigations or give orders to leave the port, etc. or provide recommendations to vessels when it is found to be necessary to prevent danger or ease congestion in the case of sudden events such as natural disasters or marine disasters, etc. (Article 39 Paragraph 3 and Paragraph 4 of Port Regulations Law).

Law on the Territorial Sea and the Contiguous Zone. The Territorial Sea of Japan is defined as the zone extending to 12 M outside of the baseline. The Contiguous Zone is a zone concerning what necessary measures to be taken to prevent violation of laws pertaining to Customs, National finance, Immigration Control and sanitation in Japanese territory, and also to punish the violators. It is defined as a zone extending to 24 M outside to the baseline.

The area of Seto Naikai, as internal waters, is delineated by the following boundaries:

1. A line drawn from Kii Hi-no-Misaki Light (33°52.9'N 135°03.7'E) to Kamoda Misaki Light (33°50.0'N 134°45.0'E).
2. A line drawn from Sada Misaki Light (33°20.6'N 132°00.9'E) to Seki Saki Light (33°16.0'N 131°54.1'E).
3. A line drawn from Takenoko Shima Daiba Hana (33°56.8'N 130°52.4'E) to Wakamatsu Dokai Wan Entrance Breakwater Light (33°56.5'N 130°51.0'E).

Law on Navigation of Foreign Ships through the Territorial Sea and Internal Waters. This law is intended to maintain the sailing order of foreign vessels, controlling any suspicious activities, and securing safety in the territorial waters or internal waters in Japan.

Methods of navigation, obligation of advance notification, inspections and deportation orders etc. for foreign vessels are provided by this law.

Prohibited Activities; when navigating in Japanese territorial waters and internal waters, the following activities are prohibited.

1. *stopping, *anchoring, *mooring, prowling or any other activity not having a direct bearing on passage, (*; except while in port)
2. Passage through Japanese internal waters (such as the “Seto Naikai” inland sea) without calling at any Japanese port.

The provisions in this law may not apply insofar as the above-mentioned activities are rendered necessary by force majeure or distress, or for the purpose of rendering assistance to persons, vessel or aircraft in danger or distress. Force majeure includes fire, flooding, refuge from inclement weather/storms, mechanical failure/disablement safety of life at stake (e.g. medical evacuation), etc.. Notwithstanding the provisions of this law, foreign vessels shall comply with

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.

Typhoon and tsunami safety measures.

Anchorage area in the vicinity of Kansai International Airport is designated 3 M offshore from the airport.

Advisory is issued when the extreme weather occurs in accordance with the provisions of Maritime Traffic Safety Act.

The information about the sea area advised to be refrained from anchoring are transmitted from the virtual AIS Aids to Navigation signal until the advisories are lifted.

The details of the advisory:

1. More than 100 tons should not anchor in areas within 3 nautical miles from Kansai International Airport.

2. Ships anchoring in the areas within 3 nautical miles from Kansai International Airport, should leave the areas immediately, Advisory is not applied for the ships listed below.

(1) Ships that need to anchor for public service purposes including the protection of lives and properties and the preservation of public order;

(2) Ships belonging to the Japan Coast Guard;

(3) Ships authorized by the Commander of the 5th Regional Coast Guard Headquarters as needing to anchor to avoid danger to maritime traffic.

(4) Ships other than the above and the ships in the Applicable areas where are authorized by the Commander of the 5th Regional Coast Guard Headquarters:

Target field: The area within 3 nautical miles from the coastline of Kansai International Airport (KANKU Island),

Duration: The duration specified by the Commander of the 5th Regional Coast Guard Headquarters, taking account of the possibility that gale/snowstorm warning may be issued for Izumisano, Sennan or Tajiri-cho/Sennan-gun of Osaka Prefecture.

(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)

5 **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, Tomogashima, 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
10 Law. In that traffic route vessels must follow traffic method regulated in the same law. There is Akashi Kaikyo Ohashi striding over 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 4M from the coast.

15 **Weather.** Near Akashi Kaikyo there occurs geographically a strong wind and wind wave. When a low pressure develops off Wakasa 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.

20 **Oceanography.** Chopping wave occurring in the off of Semento Iso 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.

of vessels.

(3) ADVICE: Advice pursuant to the Provision of Article 31 of Maritime Traffic Safety Law.

(4) INSTRUCTION: Instructions under Article 10-2 and Article 23 of Maritime Traffic Safety Law.

(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/07_users_manual.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.

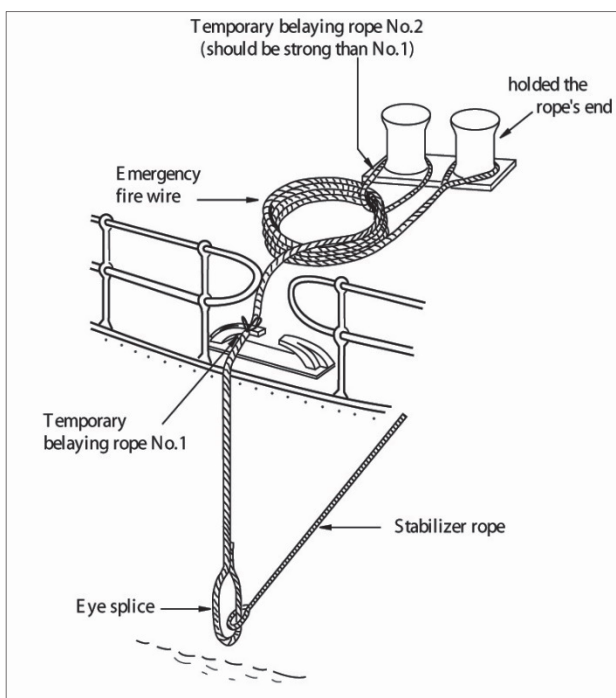
3. Navigation rules for sea areas in the vicinity of the entrance of Akashi Kaikyo Traffic Route

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.

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.

Fisheries.

1. There are many fishing boats for drift net and dragnet, pleasure boats for fishing near Harima Nada Kita Koro. Especially there are many boats in the E of Kami Shima and in the N of Tanga Shima.
2. There are many aquaculture facilities (from September to May of the next year) of the laver around the coastal area of Harima Nada Kita Koro and Ie Shima.

NW coast of Awaji Shima {SE of Harima Nada} (Charts JP106, JP131, W150B)

General Information. In the coast from E Saki to Ei Saki located in a position SW about 12M of E Saki, there are a series of cliffs protecting SE winds. Especially the NW area of **Tomishima Ko** (port designated by Port Regulations Law) with 10 ~ 15m in depth is a good anchorage with sand (bottom material). However, shoals, aquaculture facilities, fish havens in the **Yoko Mama** of the anchorage and the tide current along the shore must be paid attention. And in the area within 2 ~ 3M in the NW coast of Awaji Shima, there are many aquaculture facilities and fish havens.

Landmarks.

Landmark	Position	Remarks
Joryuji San	34°31'N 134°55'E	515m high.
Sen San	34°22'N 134°50'E	448m high, looking like Mt. Fuji.
Ei Saki	34°28'N 134°49'E	Round cliff tip. In the midway between Myojin Hana, there is a mark of big landslide.
Myojin Hana	34°27'N 134°48'E	White cliff tip. On the top trees grow densely. Connected with main island at a shallow channel it looks like a small island.
Goshiki Hama	34°21'N 134°44'E	Pine-covered area is prominent.
Kariko Saki	34°20'N 134°41'E	Many black rocks on the tip.
Maruyama Saki	34°18'N 134°39'E	Look like a solitary island from the distance. Good landmark in navigating Naruto Kaikyo. At a position NE about 1,800m of this, there are 15 wind-turbine (85m high).

Anchorage.

1. The area in the vicinity of 1.5 M to NW of Tomokawa Ko, lies NW coast of Awaji Shima, has a depth between 10 m and 15 m, affords good anchorage, sheltered from SE wind. Bottom material is mainly sand and good for anchoring but caution must be paid to cross rapids in the **Yoko Mama**, tidal currents, aquaculture facilities and fish havens in the S of Awaji Shima.

2. The outside of the 10m depth contour line between **Yoko Mama** and **Ei Saki** of the W from **Tomishima** Ko becomes deep suddenly. Large vessels could anchor at sea area (quality of the bottom is sand.) between the 10m depth contour line and the 20m depth contour line. But caution must be paid to aquaculture facilities for seaweed and fish havens.

Fisheries. In the area within 2M from the shore all over the NW coast of Awaji Shima excluding the fairway there are aquaculture facilities for seaweed (from September to June of the next year) and also many fish havens on the coast.

Naruto Kaikyo ~ E entrance of Bisan Seto {coast of Shikoku} (Chart JP106)

General Information. Between **Hyude Wan** and Okushi Saki located in a position WNW about 20M of Hyude Wan, there are small bays such as Hiketa Wan, **Matsubara Ura**, **Umashino Wan**, Tsuda Wan and **Oda Wan**.

At every bay anchoring could be made but full caution must be paid since there are many fishery nets set. Sanbonmatsu Ko (a port designated by Port Regulations Law) located in the middle is a shelter port for small vessels.

Bisan Seto (Charts JP137A, JP137B)

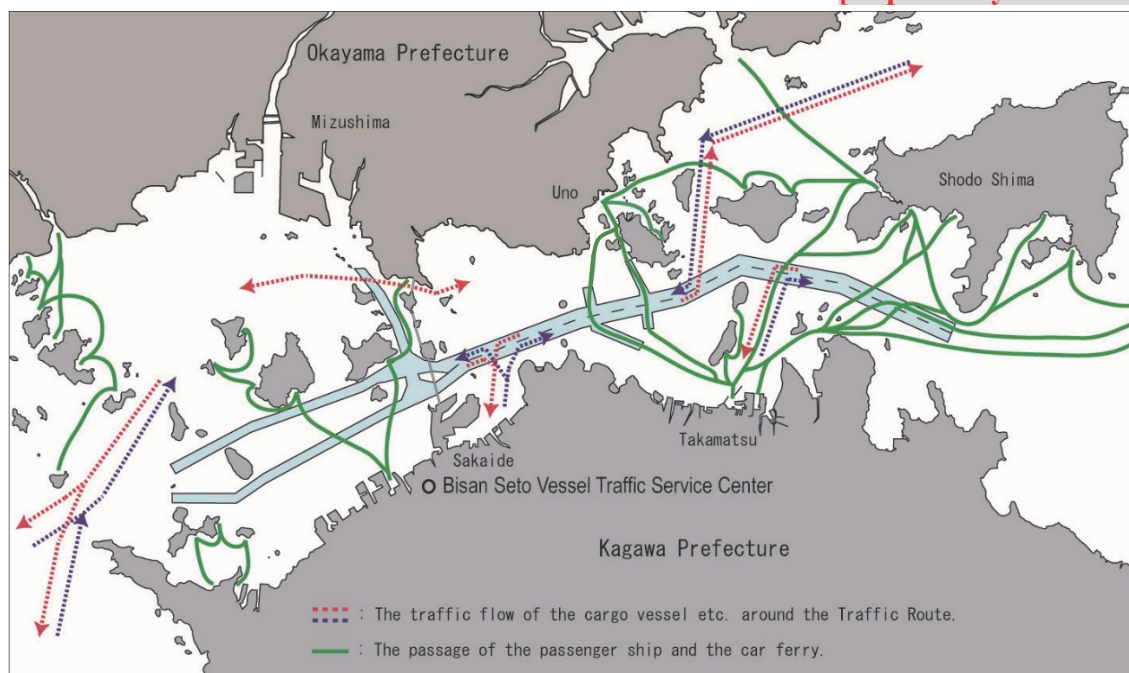
General Information. Bisan Seto is a long and narrow strait extending E and W with the E entrance between Jizo Saki and Okushi Saki, and the W entrance between Mu Shima and Mi Saki. This area is the most crowded with marine traffic in Seto Naikai. Since there are many vessels navigating, Bisan Seto Traffic Route, ferry boats crossing between

the ports of Honshu, Shikoku and the island in Bisan Seto (Refer to Fig.21.) and many fishing boats operating in a good fishery place for Stow-nets fishery and Spanish mackerel drift net (Refer to the section of Fishery in Chapter 7 “NAVIGATIONAL PRECAUTIONS” of Part 1 on page 12.). It is known that fog often occurs from spring to summer.

5

Fig.21 Reference chart of the vessel traffic in Bisan Seto and adjacent sea

[Replace by a new chart]



Tidal currents. The current flows toward E and W, and in the central area between O-Zuchi Shima and Ko-Zuchi Shima, the E-going (or W-going) current flows from about 35 minutes before High water (or Low water) to about 35 minutes before Low (or High) water at Uno Ko. However, due to scattered islands and shallow waters everywhere, the current velocity and direction vary depending on the landform, creating counter current areas in the lee of islands and overfalls and eddies creating everywhere.

The spring rate in Bisan Seto Traffic Route is over 2.5kn everywhere, exceeding 3kn in the SW area of Seto-Ohashi Bridge and narrow waterways.

Navigation Rules. Vessels shall observe the following in addition to navigation pursuant to the provisions of Maritime Traffic Safety Law at Bisan Seto East Traffic Route, Bisan Seto North Traffic Route, Bisan Seto South Traffic Route, Uko East Traffic Route, Uko West Traffic Route, Mizushima Traffic Route and nearby sea areas:

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)

(1) Vessels (other than those not equipped with a whistle and less than 100 t) 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.24, Fig25 on page 70, Fig.26 on page 75 and Fig27 on page 76.)

(2) Vessels (other than those not equipped with a whistle, Automatic Identification System and not operating Automatic Identification System pursuant to Article 3-16 of Regulations for the Enforcement of Mariners Law) shall transmit information concerning the port of destination and other necessary information to make course notification as destination information of Automatic Identification System, while navigating traffic routes.

(Note1): Refer to the section of (Note1) of Navigation Rules in Akashi Kaikyo on page 49.

2. Instructions for waiting off the traffic route. (Article 10-2 of Maritime Traffic Safety Law and Article 8 of Regulations for the Enforcement of Maritime Traffic Safety Law)

30

The name and the Abbreviation of the position reporting line and so on

Name	Abbreviation	Position
Bisan Seto South Traffic Route W	SW Line	A line drawn $\pm 180^\circ$ from Futaomote Shima lighthouse to the shore (Awa Shima).
Bisan Seto South Traffic Route S	SS Line	A line connecting the N end Awa Shima Yagura Hana and the N end of Shamijima.
Mizushima N	MN Line	A line drawn $\pm 75^\circ$ from Futo-Noji Shima triangulation point to the coast.
Mizushima W	MW Line	A line drawn from Futo-Noji Shima triangulation point to the point 180° 2,000m the ports of Honshu, Shikoku and the island in Bisan Seto.
Mizushima E	ME Line	A line connecting the Nishi-no-Saki Traffic Control Station and the W end of Hitsuisi Shima.
Bisan Seto East Traffic Route S	ES Line	A line drawn 90° from Ko-Sei Shima triangulation point to the coast and a line from Ko-Sei Shima triangulation point to a point drawn 238° and 2,860m distant.
Uko S	US Line	A line connecting Megi Shima triangulation point and the top of Kushi-no-Yama.
Uko N	UN Line	A line connecting the N end of Kama Shima and Manaita Ishi Light Beacon.
Ishima Suido	EN Line	A line connecting the NE end of Nao Shima Tsuno Saki and Te Shima Reita Saki.
Takamatsu NE	ET Line	A line connecting the S end of Ogi Shima and the N end of O shima.
Takamatsu E	EY Line	A line connecting the N end of Kabuto Shima and the N end of Taka Shima.
Bisan Seto East Traffic Route E	EE Line	A line connecting Shodo Shima Jizo Saki and Okushi Saki.

7. Maintenance of Communication with Bisan Seto Vessel Traffic Service Center.

- Vessels with a VHF radiotelephone (ch16, 156.8 MHz) shall stay in touch with Bisan Seto Vessel Traffic Service Center in case of information provided pertaining to the safety of navigation while in passages, main routes to passages and in sea areas surrounding the passages. Vessels with ch13 shall keep watch on this channel as well as ch16, since Bisan Seto Traffic Service Center may make a call by ch13 when ch16 is congested.
- Radio broadcast

The following radio stations broadcast the information on huge vessels expected to pass through a traffic route.

Radio station	Frequency	Remarks
NHK 1st Broadcast, Hiroshima	1, 071 KHz	From 1850 to 1900 weekday
NHK 1st Broadcast, Okayama	603 KHz	From 1850 to 1900 every day

- Fog information

When the visibility in Bisan Seto is under 2,000m or less, fog information is broadcast by the following organizations on any occasions.

Broadcast	Frequency	Remarks
The 6th Regional Headquarter (Hiroshima Coast Guard Radio)	VHF (F3E 156.6MHz (ch12))	Japanese and English
NHK 1st Broadcast, Hiroshima	1, 071 KHz	Japanese
NHK 1st Broadcast, Okayama	603 KHz	
NHK 1st Broadcast, Yamaguchi	675 KHz	
NHK 1st Broadcast, Matsuyama	963 KHz	
NHK 1st Broadcast, Takamatsu	1,368 KHz(Takamatsu) 1,584 KHz(kannonji)	
Chugoku Broadcast, Hiroshima	1, 350 KHz	
Chugoku Broadcast, Fukuyama	1, 530 KHz	

8. Preparation of Charts

Vessels navigating in Seto Naikai should prepare at least the following charts (Covering the areas they plan to navigate) and obtain recent information of ports in advance.

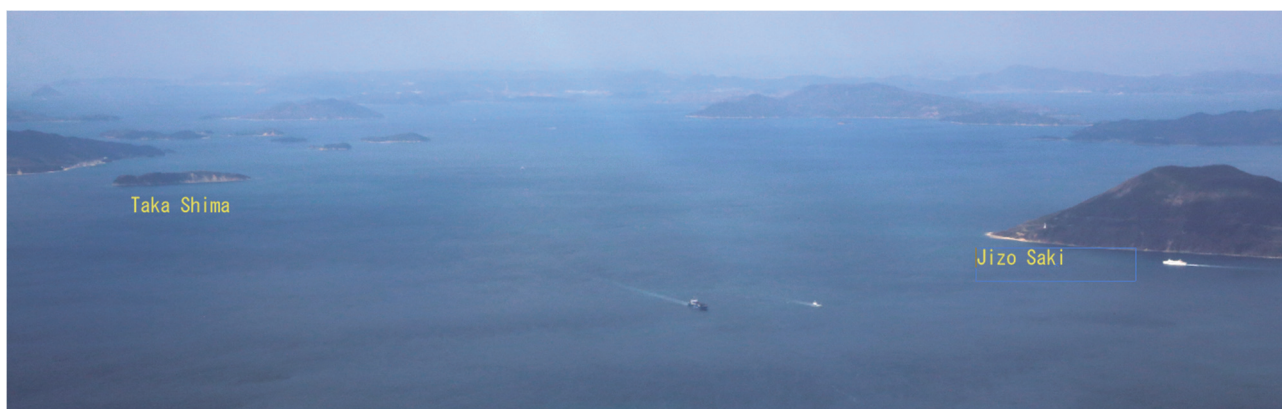
JP104 KURUSHIMA KAIKYO AND APPROACHES	JP153 BISAN SETO AND BINGO NADA	W1122 CENTRAL PART OF BISAN SETO
JP132 KURUSHIMA KAIKYO	W154 UNO KO AND APPROACHES	JP1127A EASTERN PART OF MIZUSHIMA KO
JP137A EASTERN PART OF BISAN SETO	JP1102 IYO NADA AND APPROACHES	JP1127B WESTERN PART OF MIZUSHIMA KO
JP137B WESTERN PART OF BISAN SETO	JP1108 AKI NADA AND HIROSHIMA WAN	W1218 BEPPU WAN, USUKI WAN AND APPROACHES
W141 AKI NADA AND APPROACHES	W1116 MIZUSHIMA KO AND APPROACHES	
JP152 OBATAKE SETO	JP1121 SAKAIDE KO	

9. Navigation of foreign flag vessel

Foreign flag vessels should obey and grasp the following items when navigating in Seto Naikai.

- Enforcement of the basic items such as proper watch, confirmation of vessel position and watch on VHF.
- Items to be noticed in navigation such as the peculiarity of weather and oceanography in Seto Naikai.
- Operation of fishing boat by stow-nets and Operation of fishing boat by Spanish mackereldrift nets in the area of Bisan Seto. (Refer to the section of Fishery in Chapter 7 “NAVIGATIONAL PRECAUTIONS” of Part 1 on page 12.)

Eastern part of Bisan Seto (Charts JP137A, JP137B)



(Photographed in February 2017)

General information. This part describes the area from Jizo Saki {Shodo Shima} to Ko-Sei Shima (34°22'N 133°51'E, N side of Sakaide Ko) along Bisan Seto East Traffic Route, designated by Maritime Traffic Safety Law.

Caution must be exercised since the traffic route and its vicinity are narrow and tortuous, and numerous fishing boats and vessels as well as car ferries and passenger vessels which connecting the ports of Houshu, Shikoku and the islands in Bisan Seto, transit the strait.

At Bisan Seto East Traffic Route, vessels must follow the navigation method regulated by Maritime Traffic Safety Law. The W part of Bisan Seto East Traffic Route crosses Uko East Traffic Route and Uko West Traffic Route also designated by the Maritime Traffic Safety Law, therefore the rules of avoidable action is regulated. (Refer to the section of Navigation Rules on pages 67 ~ 69.)

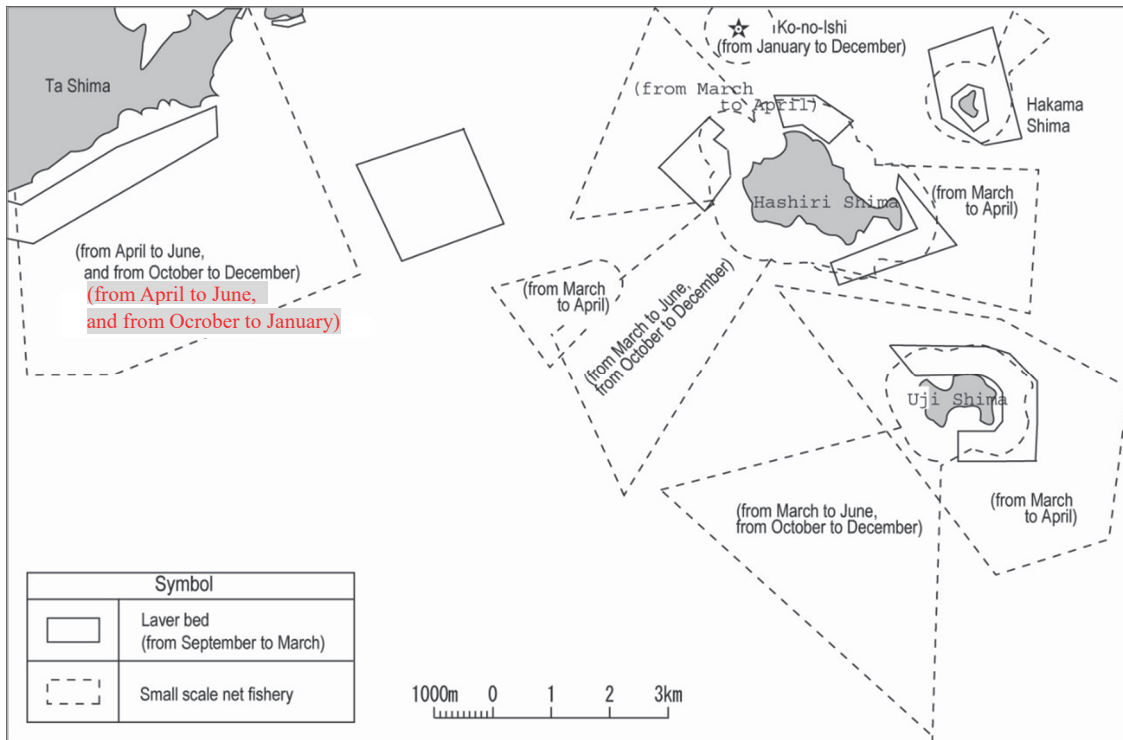
The depth of the E part of Bisan Seto East Traffic Route is generally 20m or more in the depth, but at some shoal such as Taka Se (the depth of 16.2m) in the WSW of Jizo Saki the depth is less than 20m. There are many shallow points between islands on the both sides of the traffic route. Shodo Shima is the next biggest island in Seto Naikai Awaji Shima, and Ikeda Wan in the S coast of Shodo Shima is a good anchorage but caution must be paid to many

PRECAUTIONS” of Part 1 on page 12.)

There are often many fishing boats in operation near SW of Mi Saki and in the area near Ibuki Shima and Marugami Shima.

- 2. As around April to June in early spring, buoys of fixed fish traps are set near 0.5M line in the N of No.5 (34°15.2'N 133°25.4'E) ~ No.6 (34°16.1'N 133°29.0'E) Bingo Nada Koro Light Buoys. Therefore vessels proceeding W-ward in a recommended track must be careful. According to the report from ferries, in the area in the season vessels navigate keeping enough a distance from other vessels (Refer to Fig.29.).

10 **Fig.29 Reference chart for fixed fish trap at Bingo Nada (Approaches Uji Shima)**



Bingo Nada (Chart W130)

15 **General information.** The route is divided into 4 routes in the area between Mu Shima and Mi Saki (in the vicinity of No.7 Light Buoy on Bingo Nada Traffic Route). They are the recommended route and 3 routes (heading W-ward to Mihara Seto, heading NNW-ward to Fukuyama Ko, and heading SW-ward to Niihama Ko) branching from the recommended route.

20 A depth is about 20m in the area diverging from the recommended route reaching Mihara Seto. But a depth is about 10m at the E entrance to Mihara Seto. In the vicinity of Uji Shima and Hyakkan Shima, there are laid fixed fish traps and the part of the nets crosses the route. Therefore, it would be advisable for vessels to sail in the main route as much as possible and to proceed toward Mihara Seto from the area near No.5 Bingo Nada Traffic Route Light Buoy.

The route reaching Fukuyama Ko, the depth is more than 15m. There are many islands and dangerous reefs in the N of Bingo Nada.

Landmarks.

Landmark	Position	Remarks
Hyotan Shima	34°17'N 133°03'E	35m high. Gourd-shaped small island.
Kannon Yama	34°16'N 133°05'E	472m high, lies in the SW of Ikuchi Shima.
Iwagi Shima	34°16'N 133°09'E	Top (370m high) looks like a flat peak from the S and N and like a pointed peak from the E and W.
Hakata Shima	34°13'N 133°05'E	Top (304m high) lies almost in the center of the W part and is pointed and prominent.
Tsuba Shima	34°13'N 133°09'E	Top (88m high) rises on the S end and there is a Rock cliff.

Overhead bridge. Tatara Ohashi Bridge (vertical clearance of 40m) lies between the SW end of Ikuchi Shima and Omi Shima Tatara Misaki (34°15.5'N 133°03.4'E).

5 **Overhead cables.** An overhead cable (vertical clearance of about 46 m) spans the channel between Hakata Shima and Tsuba Shima. Two overhead cables (vertical clearance of about 31 m and 40 m, respectively) spans the channel between Tsuba Shima and Akahone Shima. Two overhead cables (vertical clearance of about 36 m and 32 m, respectively) between Iwagi Shima and Akahone Shima.

Hakata Seto ~ Nagae Seto (Chart W103)

10

General information. At the channel reaching Nagae Seto passing between Ikuchi Shima and Iwaki Shima from the halfway of Hakata Seto there are many shallows near the W entrance in the S of Ikuchi Shima. Depth of navigable water more than 10m at most places, excluding the narrowest point near **Tobinoko Shima** (34°16.8'N 133°08.5'E, 24m high) in the N of Iwaki Shima. The fairway in the S of Tobinoko Shima is the navigable width (10m or more in depth) is less than 80m.

15

There are dangers scattered on both coasts in the area between Iwaki Shima and Ikuna Shima of Nagae Seto. There are shallows extended on the W coast of Sa Shima (with the least depth of 1.8m).

Overhead bridge. Between the SE end of Ikuna Shima and the N end of Sa Shima, there is Ikuna Hashi Bridge (vertical clearance of about 24m). A bridge (about 39m high) spanning the channel between Iwaki Shima and Ikuna Shima is under construction.

20

Overhead cables. There are 2 overhead cables (vertical clearance of 43m and 45m) between Iwaki Shima and Ikuna Shima.

Hanaguri Seto (Chart W1447)

25

General information. This is a narrow channel curved in S-shape going between Omi Shima and Hakata Shima after diverging from Hakata Seto, and the navigable width (depth of over 10m) at the narrowest point is about 100m. Cargo vessels less than 500t and fishing boats are navigating. At this channel, visibility is bad and the current is rapid with the shallows located on both sides, moreover there are many casualties occurring, therefore vessels unfamiliar with this area should not navigate here.

30

Tidal currents. In Hanaguri Seto, the current is SW bound and NE bound, and the maximum current velocity is 6.3kn. The tide turns about 35 minutes earlier than the one in Nagasaki Seto.

Landmarks.

Landmark	Position	Remarks
Ko Shima	34°15'N 133°03'E	15m high.
Kojo Shima		18m high.
Shimo Komaruko Shima	34°13'N 133°03'E	There is a lighthouse.

Overhead bridge. There is Omishima Kyo Bridge near the narrowest point (vertical clearance of about 36m).

35

Overhead cable. There is one overhead cable (vertical clearance of 36m) neat the narrowest point.

Tidal current signals. Since the current is rapid at Kanmon Kaikyo, there are tidal current signal stations at Daiba Hana and He Saki in addition to Hinoyamashita. These stations indicate the updated situations of the tidal current at Hayatomo Seto day and night in the followings.

1. By **electric display board**

5 The current direction (E or W), the current velocity in knots (0~13 figures), and the trend of the velocity (↑ ; increasing, or ↓ ; decreasing) at Hayatomo Seto are indicated by **electric display board** in real time.

2. Internet service:

URL: <https://www1.kaiho.mlit.go.jp/KAN7/top.htm>

Landmarks.

10 E entrance and Hayatomo Seto

Landmark	Position	Remarks
He Saki	33°58.0'N 131°01.0'E	There is a lighthouse and a tidal current signal station. There is a white-colored stone statue on the reef at the tip of the cape.
Manju Shima	34°00.0'N 131°02.0'E	It is a small island with 50m height in Chofu-Ku and at the S tip there is a lighthouse. At about 0.8M W of this island there is Kanju Shima (38m high) and both are wooded with trees.
A big chimney	34°00.1'N 131°00.2'E	202m high, this is a big chimney of Shimonoseki power plant of Chugoku Electric Company and prominent from the distance.
Moji Saki	33°58.0'N 130°58.0'E	It is a low cape in the S of the narrowest of Hayatomo Seto and on the tip there is a lighthouse. A big tower (for overhead cable, 115m high) at about 140m SE of the lighthouse is conspicuous.
Kojo San	33°57.0'N 130°58.0'E	It is 175m high mountain shaped like a helmet and prominent from the distance. Near the top there is a steel tower (214m high).
Hi-no-Yama and the vicinities	33°58.0'N 130°58.0'E	Hino Yama (268m high) is a flat-top mountain with 2 towers (315m high at the NE side and 299m high at the SW side). On the S side of the coast there is Hinoyamashita Tidal Current Signal Station and Shimonoseki Leading Lights from E.

Hayatomo Seto to the W entrance of Kanmon Kaikyo

Landmark	Position	Remarks
Kazashi Yama	33°55'N 130°57'E	Top (362m high) looks peaked from the SW direction.
Kirigatani Yama	33°53'N 130°56'E	Top (385m high) looks conic from the NW direction and is prominent.
Hiko Shima	33°56'N 130°55'E	There are Hikoshima Leading Lights (On the E side) and Koseto Leading Lights (On the N side),
Takenoko Shima	33°57'N 130°53'E	Located at the NW of Hiko Shima, and there is a tidal current signal station.
3 leading lights	Opposite coast of Hiko Shima (coast of Kyushu)	From Komorie to Akasaka, where in the vicinity of the Kanmon Kaikyo Vessel Traffic Service Center, there are Oseto No.1 ~ No.3 leading lights.

Near W entrance of Kanmon Kaikyo

Landmark	Position	Remarks
Mutsure Shima (Mutsurejima)	33°58'N 130°52'E	There are 2 radio towers (with parabolic antenna) on the top (104m high). There is a lighthouse at the NE side of the island.
Kuro Saki	34°00'N 130°55'E	It is the point of a steep cliff with a flat and since at the N flat cultivated land goes into the inland it is prominent.
Ai-no-Shima	34°00'N 130°49'E	It is a flat island wooded with trees and there are 2 small islands connected each other on a rock ledge at a low water near the N end of the island.
Shira Shima	34°00'N 130°43'E	It consists of O Shima (128m high) and Me Shima (84m high) and there is an Oil Storage Sea-Berth in the E side of O Shima. Kabe Shima at about 200m N of O Shima is prominent.

Guidance for safe navigation. The 7th Coast Guard Headquarters the following guidance for safe navigation.

1. Report to Kanmon Kaikyo Vessel Traffic Service Center

(1) Methods of Report in Advance and Report of Change under Port Regulations Law, etc.

Vessels shall make a report according to the following instructions.

5

Form of the report

Advance report(Change report)

To Captain of the Kanmon Port

10 (Via Chief, Kanmon Kaikyo Vessel Traffic Service Center)

Report date

Reporter name

Annexed table of report in advance

Legal report matters	
1. Name of Vessel	
2. Gross tonnage and Length	GT meters
3. Estimated date and time of entry Hayatomo-Seto Waterway (Under Kanmon Bridge)	Date . . . Time :
4. Method of communication	VHF/Tel:
5. Berth name of Kanmon Ko (*)	Berth name:
*Not necessary if you do not berth	
Arbitrary report matters	
6. Call Sign	
7. MMSI	
8. Kind of Vessel	
9. Departure berth name & Departure time or Entry line name & Passage time Leaving line name & Passage time	
10. Maximum draft at the time of the pass through the passage	Meters
11. Kinds of dangerous cargo and amount of each type	Kind: m ³ , m ³ , m ³
12. Arrangement of pilot	Yes / No

15 Reporting methods

- By the radiotelephone

Japan Coast Guard Communications Station (7th Regional Coast Guard Headquarters) accepts the reports.

Name of communication station	Means of report	Call sign	Calling frequency	Working frequency
7th Regional Coast Guard Headquarters	VHF Radiotelephone	Moji Coast Guard Radio	156.8MHz (ch16)	156.6MHz (ch12)

20 When communicating with the center by the radiotelephone system, call up "MOJI COST GUARD RADIO" and ask for connection to the center for direct communication.

The message shall be prefixed by "KANMON KAIKYO", which is an abbreviation for the Chief of Kanmon Kaikyo Vessel Traffic Service Center and report contents with the number of each item in the form on the Report in Advance.

- In writing (Delivery or mail to the following address):

Operation and Control Div., Kanmon Kaikyo Vessel Traffic Service Center 2-10-11, Matsubara, Moji-Ku, Kitakyushu-Shi 800-0064

25

- By telephone, etc.
TEL: +81-93-372-0090 (or 0099)
FAX: +81-93-381-4499

- On-line
Need to obtain ID and password from Sea-NACCS Center.
(Contact) <https://bbs.naccscenter.com/dfw/nss/>

- Methods of Report of Change, etc.

From item 1 to 5 in the form of the report (Refer to “Form of the report” on page 150.) are statutory reporting items, and immediate Report of Change is required if any change has been made. However, in case of change in the estimated time of arrival to the entrance of Hayatomo Seto Fairway (The 3rd item of the report matter.), report when there is change of 15 minutes or more.

Report of Change shall be made prefixed by "KANMON KAIKYO" (which is an abbreviation for the Chief of Kanmon Kaikyo Vessel Traffic Service Center) followed by "AMENDMENT" by wireless communication, and shall be made prefixed by "AMENDMENT" and follow the procedure of Report in Advance by means of telephone.

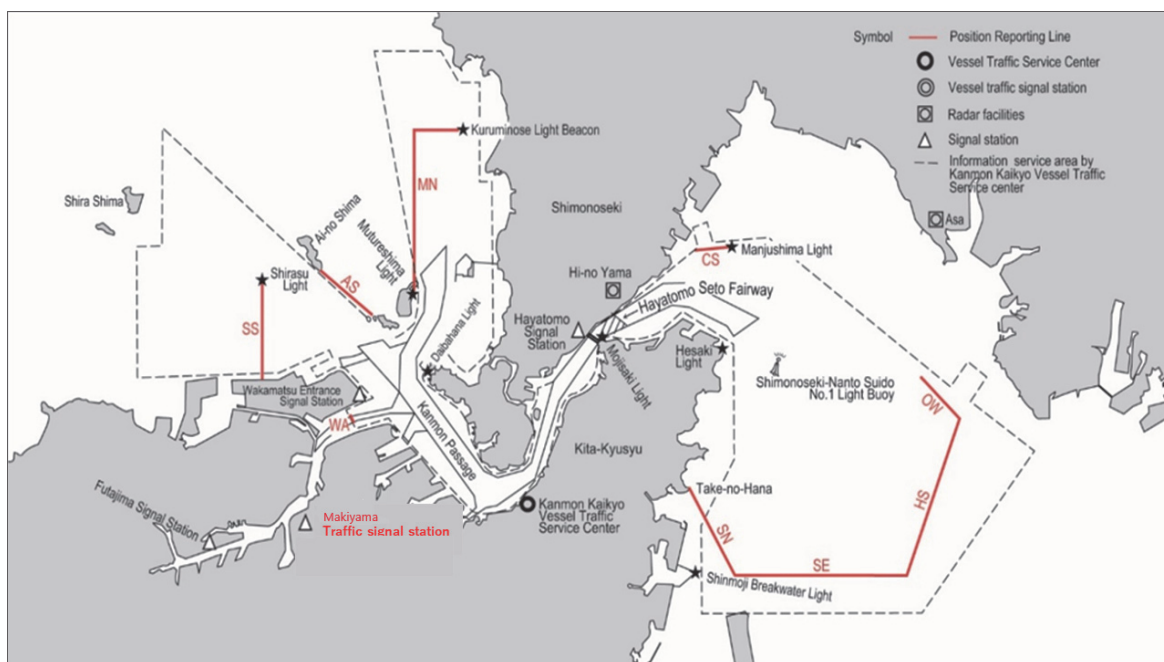
(2) Position Report

- Vessels subject to Position Report, reporting time and items.

Vessels shall make a Position Report to Kanmon Kaikyo Vessel Traffic Service Center at the time of crossing the Position Report Line or departure followed by the instructions in the chart below. However, vessels that are not subject to Position Report may make a Position Report. Time of departure means the time of leaving or weighing anchor to enter Kanmon Passage or Kanmon Passage 2 and gathering speed toward the passages.

Types of vessels subject to report	Reporting time	Reporting items
Vessels of 300 GT or more but less than 10,000 GT (or Tankers less than 3,000 GT) intending to enter Kanmon Passage or Kanmon Passage 2 from the outside of Kanmon Ko port areas (excluding vessels with Automatic Identification System (AIS) and operating it appropriately).	At the time of passing the Position Reporting Line.	Name of the vessel, Call sign, Abbreviated name of the Position Reporting Line, Gross tonnage, Draft and Destination.
Vessels of 10,000 GT or more (or Tankers of 3,000 GT or more) intending to enter to Kanmon Passage or Kanmon Passage 2 from the outside of Kanmon Ko port areas.		Name of the vessel, Call sign, Abbreviated name of the Position Reporting Line.
Vessels of 300 GT or more leaving from Kanmon Ko (excluding Hibiki Shinko-Ku and Shinmoji-Ku)	At the time getting underway. However, for vessels leaving from Wakamatsu Passage from the sea areas on the W side of WA line is at the time of passing WA line. For vessels leaving from Chofu Ku is at the time of passing CS line.	Name of the vessel, Call sign, Abbreviated name of the Position Reporting Line, Gross tonnage, Draft and Destination.
Vessels towing objects (including pushing and side-towing) navigate in Kanmon Passage and Kanmon Passage 2 (excluding vessels with AIS and operating it appropriately).	At the time passing the Position Reporting Line. However, reporting time for vessels leaving the port is the time getting underway, and for vessels leaving from Wakamatsu Passage from the sea areas on the W side of WA line, reporting time is at the time of passing WA line. And for vessels leaving from Chofu Ku is at the time of passing CS line.	Name of the vessel, Call sign, Abbreviated name of the Position Reporting Line, Gross tonnage, Draft, Destination, Length overall of the towing and Object.

Fig.50 Information Service Area by Kanmon Kaikyo Vessel Traffic Service Center and Position Reporting Lines



2. Reports to Wakamatsu Port Control Office, etc.

5 (1) Methods of Report in Advance and Report of Change under Port Regulations Law, etc.

- Vessels shall make a report according to the following instructions:

Form of report

Advance report	
<p>To Captain of the Kanmon Port (Via Chief, Wakamatsu Port Control Office)</p>	
Report date	
Reporter name	
Telephone number	
1. Name of Vessel	
2. Gross tonnage and Length	G/T meters
3. Estimated date and time of entry Wakamatsu Waterway	Date . . . Time :
4. Estimated date and time of leaving the berth	Date . . . Time :
5. Method of communication	VHF, Tel(-)
6. Berth name	
7. Shift within Wakamatsu Waterway	<u>Berth change from</u> () <u>Berth change to</u> ()
8. Flag/Kind of Vessel	
9. Maximum draft at the time of entry Wakamatsu Fairway	
10. Last port	
11. Nest port	
12. Kinds of dangerous cargo and amount of each type	<u>kind</u> () <u>amount</u> ()
13. Arrangement of pilot	Yes / No
14. Remarks	

Reporting methods

- By the VHF radiotelephone system

Japan Coast Guard Communication Station (The 7th Regional Coast Guard Headquarters) accepts the reports.

Name of communication station	Means of report	Call sign	Calling frequency	Working frequency
Wakamatsu Port Control Office	VHF Radiotelephone	WAKAMATSU HARBOUR COAST GUARD RADIO	156.8MHz (ch16)	156.6MHz (ch12) 156.7MHz (ch14) 160.925MHz (ch66)

5 ~~When communicating with Wakamatsu Port Control Office, etc. by the VHF radiotelephone, call up "WAKAMATSU HARBOUR COAST GUARD RADIO" by ch12 and communicate directly.~~

Report shall be made report the contents with the number of each item in the form of Report in Advance.

Report of Change shall be made the procedure of Report in Advance.

- In writing (Delivery or mail to the following address)

10 Wakamatsu Port Control Office
5-1-3, Makiyama, Tobata-Ku, Kitakyushu-Shi 804-0053

- By telephone, etc.

TEL: +81-93-871-2482
FAX: +81-93-881-6094

- On-line

Obtain ID and password from Sea-NACCS Center.

(Contact) <https://bbs.naccscenter.com/dfw/nss/>

(2) Position Report to Kanmon Kaikyo Vessel Traffic Service Center

20 Vessels of 300 GT or more leaving from Wakamatsu Passage from the sea area on the W side of WA line and vessels towing objects (including pushing and side-towing) shall make Position Report to Kanmon Kaikyo Vessel Traffic Service Center at the time of passing WA line.

Refer to "1-(2) Position Report" on page 146.

(3) Maintenance of Communication with Wakamatsu Port Control Office, etc.

25 ~~Vessels equipped with VHF radiotelephone shall maintain a watch on channel 16 or frequency 156.8 MHz, while transiting within the area of Wakamatsu Fairway, Okudokai Passage and Wakamatsu Ku, excluding Section 5 and Section 6, for communications related to safety of navigation.~~

3. Preparation of Charts

(1) Vessels navigating in Kanmon Kaikyo should prepare at least the following charts and obtain recent information of ports in advance.

JP 135 KANMON KAIKYO	JP 1265 KANMON KO WAKAMATSU
W 1264 NORTHERN PART OF KANMON KO	JP 1266 KANMON KO SHIRA SHIMA AND APPROACHES
JP 1262 EASTERN PART OF KANMON KO	JP 1267 WESTERN PART OF KANMON KO
JP 1263 MIDDLE OF KANMON KO	

(2) Within the jurisdiction of The 7th Regional Coast Guard Headquarters, the list of necessary nautical charts for navigational safety, if the Maritime Traffic Safety Law is applied in the water to be navigated.

Classification of scheduled navigation area	Charts required for safe navigation
Suo Nada	JP1101 SUO NADA AND APPROACHES
Bungo Suido	JP151 BUNGO SUIDO
Iyo Nada and Bungo Suido	W1218 BEPPU WAN, USUKI WAN AND APPROACHES
The vicinity of Kanmon Kaikyo	JP127 EAST ENTRANCE OF KANMON KAIKYO AND APPROACHES JP135 KANMON KAIKYO JP1262 EASTERN PART OF KANMON KAIKYO

4. Information related to visibility.

5 When visibility becomes poor (due to fog, mist, snow or other reasons) in Kanmon Ko and in the areas surrounding the port (hereinafter referred to as "Kanmon Ko, etc."), Kanmon Kaikyo Vessel Traffic Service Center provides information related to visibility as "Fog Information".

Vessels shall keep watch and ward and pay sufficient attention to navigation when Fog Information is announced while navigating Kanmon Ko, etc.

10 (1) Fog Information criteria

- The condition that the visibility became 2,000m or less.
- The condition that the visibility became 1,000m or less.
- The condition that the visibility became 500m or less.
- The condition that the visibility recovered 2,000m or more.

15 (2) Announcement method

Announcement from Kanmon Kaikyo Vessel Traffic Service Center (KANMON MARTIS)

- VHF radiotelephone (ch14)
- MF radiotelephone (1,651 kHz in Japanese, 2,019 kHz in English)
- AIS binary messages

20 (3) Navigational warnings from The 7th Regional Coast Guard Headquarters (MOJI COAST GUARD RADIO) by the VHF radiotelephone (ch12).

(4) Patrol vessels and crafts

The Captain of the Kanmon Ko requests vessels to take the following the guidance for safe navigation.

1. Control of traffic meeting on reciprocal courses in Hayatomo Seto Fairway

25 In Hayatomo Seto Fairway, following vessels shall not meet up each other.

- (1) Between vessels (other than oil carriers): Each vessel of 10,000t or more
- (2) Between oil carriers: Each vessel of 3,000t or more
- (3) Between vessels (other than oil carriers) and oil carriers: Between vessels (other than oil carriers) of 10,000t or more and oil carriers of 3,000t or more

30 2. Temporary anchoring in the waters around Mutsure Shima (Refer to Fig.51 on page 156.)

(1) The vessel which is applied

Vessels intending to enter or pass through Kanmon Ko, planning to temporarily anchor area around Mutsurejima for the reason such as waiting for a pilot or tide turning and corresponding to any of the following;

- The gross tonnage of the vessels is 30,000t or more
- The draft of the vessels is 10m or more

35

(2) Temporary anchorage area

Vessels fitting requirements mentioned above shall anchor in one of the following temporary anchorage areas.

- From sunrise to sunset

The sea area N of the line drawn from Koshiki Iwa (33°59'28"N 130°49'58"E) to the point of 090° 2,900m,

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

General information.

1. It is located about 5M NNE of Hi-no-Misaki and is indented toward NE for about 2M. W winds are blocked by Ari Shima (at the port entrance), **Ichi-no-Hai**(33°56.1'N 135°03.7'E, the SW of Ari Shima) and the breakwater (extending toward the N from Ichi-no-Hai).

2. The depth is 5~25m in the port, the bottom materials is good for anchoring, and the vessels less than 3,000t navigating between Tanabe Ko and Wakayama-Shimotsu Ko are using for shelters except for SW winds.

There are many sheltering vessels at the typhoon season and in November and December.

Landmarks.

Landmark	Position	Remarks
Ari Shima	33°57.0'N 135°04.0'E	70m high, the W side is a steep cliff.
Kasane Yama	33°57.7'N 135°05.6'E	263m high round mountain with a radio tower on it. It could be a good mark in low visibility.
Leading light	33°56.5'N 135°04.9'E	

Anchorage.

Good anchorage for large vessels is available at the N side (the depth of about 15~16m) of the port entrance on a straight line from **Tobi Shima** (33°57.4'N 135°05.8'E, 7m high) and the N end of Ari Shima, and at the bottom (the depth of about 11m, the bottom materials of mud) of the bay seeing **Nagai-no-Hana** (33°57.8'N 135°06.1' E) at 336°.

Safeguards against Typhoon and Tsunami. In order to prevent marine casualties caused by Typhoon and Tsunami etc., The Wakayama Kihoku Chiku typhoon and tsunami etc. 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 and cancellation thereof. (Contact inquiry: Wakayama Coast Guard Office)

Facilities.

Name	Position	Length (m)	Depth (m)	Capacity (D/W×vessel)	Remarks
Mooring Quay	33°57.6'N 135°06.8'E	145	3~5	700×2	
Sakurajima Quay	33°57.4'N 135°06.4'E	245	3.5~8	2,000×1	Exclusively utilized for Cement Company and could be used for general vessels only in emergency.

Supplies.—Fuel oil is available by tank truck.

Repairs.

Name	Telephone	Remarks
M.E.S-K.H.I Yura Dockyard Co., Ltd.	+81-738-65-1112	

Waste oil disposal facilities.

Name	Application	Hours of Operation	Waste oil to be disposed	
			Waste heavy oil	Light waste oil
Wakayama Oil Refinery, ENEOS corporation	Safe Environment Group +81-737-85-1010	24hours	Bilge • Water ballast	Water ballast

Medical facilities.

Name	Telephone
Wakayama Medical University Hospital	+81-73-447-2300
Kainan Municipal Hospital	+81-73-482-4521

Maritime traffic. Car ferries are operated between Wakayama Ku and Tokushima-Komatsushima Ko.

5 **Tokushima-Komatsushima Ko (34°02'N 134°36'E) (Chart W1126) (JP TKX)**

Specified port	Open port	Quarantine port	Immigration port	Domestic animal quarantine port	Plant protection port	Major Port
○	○	○	○	○	○	○

General information. Tokushima-Komatsushima Ko is located nearly in the middle of the W side of Kii Suido. There are Tokushima Ku and Komatsushima Ku within the port area. Tokushima Ku (former Tokushima Ko) is divided into 2 sections, namely, Section 1 and Section 2, and Komatsushima Ku (former Komatsushima Ko) is divided into 3 sections, namely, Section 1, Section 2 and Section 3. There is a passage at Komatsushima Ku Section 1.

Weather. Throughout the year the N to W winds is the most, followed by SE winds.

Within the harbor it is calm except for E winds.

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

15 **Anchorage.** Quarantine anchorage is located at Komatsushima Ku Section 3 and anchorage of vessels carrying dangerous cargo is nominated to Komatsushima Ku Section 2.

Entry restricted. For the time from December 19, 2018. In order to prevent fire hazard, no vessel is allowed to enter within a radius of 30m from tankers (including tank ships) carrying flammable dangerous substance at berthing or anchoring in the port except the vessels permitted by Captain of the Port.

20 It is required that such tankers show a sign “Loaded flammable dangerous substance” which is discernible by night while berthing or anchoring in the port.

Tug boat. Tug boats are available at Komatsushima Ku.

Supplies. There are supply vessels at Tokushima Ku and oil supply vessels at Komatsushima Ku.

Repairs.

Name	Telephone
Shin Kurushima Tokushima Dock Co., Ltd.	+81-885-32-2565

25 **Safeguards against Typhoon and Tsunami.** In order to prevent marine casualties caused by Typhoon and Tsunami etc., The Tokushima-Komatsushima Ko typhoon and tsunami etc. 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 and cancellation thereof. (Contact inquiry: Tokushima Coast Guard Office)

30 **Medical facilities.**

Name	Telephone
Tokushima Prefectural Central Hospital	+81-88-631-7151
Tokushima Red Cross Hospital	+81-885-32-2555

Landmarks.

Landmark	Position	Remarks
Tanks	34°28.8'N 135°21.9'E	Painted white, within the premises of oil company.
Chimney	34°28.6'N 135°21.3'E	100m high, within Clean Center.
Radio tower	34°27.4'N 135°22.0'E	86m high, painted red and white.
Conspicuous house	34°24.7'N 135°18.0'E	256m high above ground, lighting obstacle light (red) of air navigation. Rinku Gate Tower Building.

Prescribed passages.

1. Kishiwada Passage is about 2,410m in length, 250m in width and 12m in depth from the N of Section 1 to the entrance to the berth of the log pond in the S.

2. Izumi-Sano Passage is about 2,200m in length, 220m in width, 11~13m in depth from the N of Section 3 to the entrance to Sano Gyoko in the S.

Both of them are indicated by light buoys and breakwater lighthouses, and caution must be paid since the depth in the outside of passages is shallow.

Anchorage. Quarantine anchorage is located near the SW end of Section 2, and the anchorage for vessels carrying dangerous cargo is nominated in the area around 1.5M NE of quarantine anchorage.

Port communication. Port Communication could be made between the vessel and the Port Authority by the radio telephone.

Call name	Frequency	Hours of operation	Contact address	Remarks
SAKAI PORT RADIO	ch16/11, 12, 18, 19, 20 (priority is ch19, 20)	24hours	+81-6-6615-7131	

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

Facilities. (Including Sano Gyoko)

Name	Position	Length (m)	Depth (Approx. m)	Capacity (D/W×vessel)	Remarks	
Section 1	Kishiwada No.15 landing place	34°28.6'N 135°22.6'E	290	3.5~4	500t class	
	Kishiwada No.1 and 2 Quay	34°28.8'N 135°22.4'E	425	10~12	15,000×1 30,000×1	
	Tadaoka No.2 landing place	34°30.0'N 135°23.0'E	290	3.5~4	500t class	
Section 2	Shinkaizuka No.1 Quay A~E Berth	34°27.4'N 135°20.8'E	450	5.5	2,000×5	
	Shinkaizuka No.2 Quay A~D Berth	34°27.8'N 135°20.7'E	520	7.5	5,000×4	
	Shinkaizuka No.2 Quay E, F Berth	34°27.8'N 135°20.6'E	each 130	7.5	5,000×2	
	Shinkaizuka No.3 Quay	34°27.9'N 135°20.5'E	240	12	30,000×1	
	Kaizuka No.1 Quay	34°27.1'N 135°21.1'E	202	6~6.5	3,000×2	
	Kaizuka No.2 Quay	34°27.3'N 135°21.2'E	400	6	3,000×3	
	Kaizuka No.1~4 landing place	34°27.2'N 135°21.3'E	900	3~4	500t class	
	Hannan No.1~3 landing place	34°27.6'N 135°21.6'E	1,000	4	500t class	
	Hannan No.1 Quay	34°27.7'N 135°21.3'E	360	4.5	700×6	
	Hannan No.2 Quay	34°27.8'N 135°21.3'E	240	3.5~4	700×4	
Hannan No.3 Quay	34°28.0'N 135°21.5'E	180	4.5	1,000×3		
Hannan No.4 Quay		420	4.5	1,000×7		

	Hannan No.4, No.5 landing place	34°28.0'N 135°21.9'E	1,070	3.5~4	500t class	
Section 3	Sano Gyoko public Quay	34°25.7'N 135°19.4'E	101	3	50×5	
	Sano Gyoko S Quay	34°25.5'N 135°19.3'E	230	3~5.5	2,000×2	
	Sano Gyoko Ccentral Quay	34°25.6'N 135°19.5'E	800	—	2,000×7	
	Sano Gyoko N Quay	34°25.8'N 135°19.6'E	230	5~6	2,000×2	

Safeguards against Typhoon and Tsunami. 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 and cancellation thereof. (Contact inquiry: Osaka Coast Guard Office)

Maritime authorities and facilities.

Name	Telephone	Name	Telephone
Kishiwada Coast Guard Station (Captain of the Port)	+81-72-422-3592	Kishiwada Office, Osaka Quarantine Station	+81-6-6571-3521 (via Osaka Quarantine Station)
Kishiwada Sub-Branch, Sakai Branch Customs of Osaka Customs	+81-72-439-1176	Osaka Ports Harbours Bureau Senshu Ports & Coasts Division HannanConstructionManagement Department	+81-72-439-5261

Tug boats. There are many private tugboats.

Ferry boats. Ferry boats are available.

Supplies. Water supply boats are available.

Medical facility.

Name	Telephone
Local independent administrative corporation Rinku general medical center	+81-72-469-3111

Hanshin Ko (Chart JP1103)

Specified port	Open port	Quarantine port	Immigration port	Domestic animal quarantine port	Plant protection port	Strategic International port
○	○	○	○	○	○	○

(The table above is excluding Amagasaki-Nishinomiya-Ashiya Ku. Refer to page 190 for the contents of the same section.)

General information. Hanshin Ko is one of leading large ports in Japan located in the NE of Osaka Wan. The harbor area was not either expanded or reduced but merged with old Osaka Ko, Kobe Ko and Amagasaki-Nishinomiya-Ashiya Ko and became Hanshin Ko.

Tidal currents. In the vicinity of Hanshin Ko Osaka ku, the cuurent flows S-ward most of the time. At the W-going current in Akashi Kaikyo, the current flows from off shore of Sakai City and Kishiwada City to Akashi Kaikyo. At the E-going current in Akashi Kaikyo, the current flows S-ward along the E coast of Osaka Wan.

Storm surge. Strong SW winds raise the sea surface of Osaka Wan up to 1.3m, while a typhoon is passing.

Osaka Maritime Traffic Signal Station (Osaka Harbor Radar). This station performs the report of the contents of marine disasters etc. that may affect navigating vessels in ~~Terahama Hamadera~~ Passage, Sakai Passage, and Osaka Passage, and in Hanshin Ko Sakai Senboku Ku and Osaka Ku, the status of measures against them, and other matters necessary for the safety of navigation of vessels. In addition, based on a request from a vessel, the position of the vessel and other matters necessary for the safe navigation of the vessels are provided. (Refer to the section of "Maritime Traffic Signal Station" of "LIST OF AIDS TO NAVIGATION (Pub. No. 411)")

Advance Reporting. (Refer to “Navigational Precautions” of “Port regulations” on page 184.)

Send the Advance Reporting to the Traffic Control Room, **Port Traffic Control, Osaka Coast Guard Office.** Also, confirm the Traffic Control Signals Information at the above section.

The information addressee.

5 1. Telephone

Sakai Passage	TEL +81-6-6599-0176	FAX +81-6-6599-0178
Hamadera Passage	TEL +81-6-6599-0177	FAX +81-6-6599-0178

2. VHF

Call name	Frequency
OSAKA HARBOR RADAR	ch16/14, 66

10 **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.

However, don't enter the area within 50m from loading LNG tanker.

Anchorage. Quarantine anchorage is located in the NW of the entrance to Hamadera Passage. Usual anchorage is in Section 6 and Section 7.

15 **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	Contact address	Remarks
Captain of the Port	KOBE COAST GUARD RADIO	ch16/12	24hours	Osaka Coast Guard Office	Matters about the traffic control report of Hamadera Passage and Sakai Passage. Matters about Osaka Passage and Osaka Ku.
				Sakai Coast Guard Station	Matters about Sakai-Senboku Ku in Hanshin Ko except the above.
Port Authority	SAKAI PORT RADIO	ch16/11,12, 18, 19, 20 (priority is ch19, 20)	24hours	+81-725-21-7217	

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Facilities.

Name		Position	Length (m)	Depth (Approx.m)	Capacity (D/W×vessel)	Remarks	
Section 2	Ohama Wharf No.1 Quay	34°35.3'N 135°27.3'E	60	4.5	700×1		
	Ohama Wharf No.2 Quay		270	5~5.5	2,000×3		
	Ohama Wharf No.3 Quay		240	5.5~6.5	4,000×2		
	Ohama Wharf No.4 Quay		165	8~8.5	10,000×1		
	Ohama Wharf No.5 Quay		370	10	15,000×2		
	Ohama Wharf No.6 Quay		130	7	5,000×1		
	Shiohama No.1 Quay	34°35.3'N 135°27.8'E	360	6~7	4,000×3		
	Sakaihama No.1 Quay	34°35.4'N 135°26.8'E	130	7.5	5,000×1		
Section 5	Sukematsu Wharf	34°31.5'N 135°27.3'E	No.1 Quay	280	9	10,000×1	
			No.2 Quay	390	7	5,000×3	
			No.3 Quay	390	7.5	5,000×3	
			No.4 Quay	390	7.5	5,000×3	
			No.5 Quay	390	7.5	5,000×3	
			No.6 Quay	180	5.5	2,000×1	
			No.7 Quay	390	7.5	5,000×2	
			No.8 Quay	480	12	30,000×2	
			No.9 Quay	300	12	30,000×1	
	Komatsu No.1 Quay	34°30.8'N 135°24.1'E	360	5~5.5	2,000×4		
			390	6~7	5,000×3		
			230	5.5	2,000×2		
	Matsunohama No.1 Quay	34°30.8'N 135°24.6'E	450	5.5	2,000×5		
			450	5.5	2,000×5		
	Shiomi Wharf	34°30.6'N 135°23.2'E	No.1 Quay	480	3~4.5	700×8	
			No.2 Quay	555	9~10	15,000×3	
			No.3 Quay	555	10	15,000×3	
			No.4 Quay	260	7.5	5,000×2	
No.5 Quay			720	11.5~12	30,000×3		
No.6 Quay			370	10	15,000×2		
Yunagi No.1 Quay	34° 31.2'N 135° 23.1'E	260	11	18,000×1			

Typhoon and tsunami safety measures. In order to prevent marine casualties caused by disasters including typhoons and tsunamis, Osaka Prefecture Osaka City Subcommittee on Tsunami Countermeasures and 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 in Sakai LNG No.2 Tanker Berth, Sakai Senboku Ko Pier (Cosmo Oil Co., Ltd., Sakai Refinery Crude Oil Pier, Osaka Gas Corp. Senboku No.2 Factory LNG Co., Ltd., LNG Center Pier).

[recommendation for self-restraint of anchoring]

Vessels: In principal, for vessels with gross tonnage of 100 tons or more, should not anchor at the area within 3 nautical miles from the piers of the Sakai-Senboku Port.

Sea area: A range of 3 nautical miles from the Piers of the Sakai-Senboku port.

Periods: If a weather phenomenon could potentially arise, such as windstorm or snowstorm related weather warning announcement in the port of Sakai-Senboku area.

Maritime authorities and facilities.

Name	Telephone	Name	Telephone
Sakai Coast Guard Station (Captain of the Port)	+81-72-244-1771	General Affairs and Operations Division, Senshu Ports & Coasts Department, Osaka Ports and Harbours Bureau	+81-725-21-7217
Sakai Branch Office, Osaka Customs	+81-72-244-4474	Sakai-Senboku Construction Management Division, Senshu Ports & Coasts Department, Osaka Ports and Harbours Bureau	+81-72-238-5241

Tug boats. Many tug boats are available.

Ferry boats. Ferry boats are available.

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

Landmarks.

Landmark	Position	Remarks
Radar tower	34°38.6'N 135°22.7'E	Painted white, there is a lighthouse on the top.
Tanks	34°39.0'N 135°25.0'E	Painted white, there are a lot of tanks.
Conspicuous house	34°38.3'N 135°24.9'E	260m high. Osaka Prefectural Government Sakishima Building.
Bridge	34°38.7'N 135°26.3'E	Minato Ohashi Bridge. About 49m high. Painted red, Gerber truss bridge.
Chimney	34°37.0'N 135°24.3'E	205m high, painted pale sky-blue, light up the W side at the night, within the premises of power station.
	34°39.9'N 135°24.4'E	127m high, There is a huge ellipse painted gold structure on the top, painted red and white.

Prescribed passages. Osaka Passage lies S of Yumeshima with a length of about 1,600m, a width of about 400m and a depth of about 15m.

5 **Fairways.** Nanko Fairway is located to the area about 0.6M SE from Osaka Nanko S Breakwater Light (34°37.7'N 135°23.4'E) with about 300m in width and 12m in depth.

Caution. Vessels proceeding toward near Osaka Ko Silo Quay at Section 2, should pay caution at near Ajikawa Quay to barges or small vessels sailing out from the SE of Tenpozan O-hashu Bridge.

Advance Reporting. (Refer to “Navigational Precautions” of Port regulations on page 191.)

10 Send the Advance Reporting to the Traffic Control Room, Osaka Coast Guard Office. Also, confirm the Traffic Control Signals Information at the above section.

The information addressee.

1. Telephone

Nanko Fairway and Waters of Kizugawa Unga TEL +81-6-6599-0175

15 2. VHF

Call name	Frequency
OSAKA HARBOR RADAR	ch16/14, 66

The signal indicating that tide gate of each river is closed at storm surge coming is hanged on a signal pole near the estuary of each river, Kizu Kawa, Shirinashi Kawa.

20 **Navigation adjustment.** The Port and Harbor Bureau, City of Osaka is making operational adjustment in order to prevent vessels of 5,000t or more from meeting in the sea area near the entrance of Osaka Passage in Section 6. If there is a possibility that vessels may meet each other, it is necessary for subject vessels to adjust the time of operation, etc.

25 **Entry Prohibited.** Together with the execution of New island construction work, entry prohibited area was established in the north of offing Osaka Reclaimed Land in Section 6, New island district, and navigation and anchoring of vessels are prohibited. However, vessels engaged in New island construction work and vessels permitted by the Captain of the Port shall be excluded.

Entry restricted. Along with the execution of New Island construction work, navigation restricted area was established in the southwest area of Osaka Passage for the purpose of organizing the flow in the vicinity of the junction of the vessels entering and leaving the same Passage with the vessels entering and leaving the South Port and ensuring the safety of vessel traffic and vessel navigation is restricted.

30 Restriction matters are as follows:

- 1 Vessels entering or leaving navigation restricted area shall avoid the course of vessels of more than 500t in the navigation restricted area in the same direction.

- 2 Vessels should not anchor or release towing vessel in navigation restricted area excepted the following cases:
 - (1)When intending to avoid marine disasters.
 - (2)When engaging in rescue of human life or a vessel in imminent danger.
 - (3)When obtaining the approval of the Captain of the Port.
- 5 3 When the vessel encounter another vessel in navigation restricted area, it should sail along the right side as much as possible.

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.

5 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.

10 **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.

15 **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	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.2 Shinko Jetty I·J		357	8.5~9.5	15,000×1	
	No.3 Shinko Jetty M·N		373	9~11	10,000×2	
	No.4 Shinko Jetty O·P	591	9~11	15,000×1 50,000×2		
	Naka Jetty A	34°40.8'N 135°11.3'E	220	8~9	10,000×1	
	Naka Jetty B~E		470	5~9	5,000~ 10,000×4	
	Takahama Quay	34°40.8'N 135°11.1'E	294	6~7	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		423		7~9	10,000×2	
H		34°39.8'N 135°11.0'E	211	9	10,000×1	
I			278	9	10,000×1	
J·K			265	6~7	5,000×2	
U·V Quay		34°40.0'N 135°12.0'E	340×2	12	70,000×1	

2. To enter Hirohata Ku Section 1, vessels navigate Hirohata Passage. After passing the passage, vessels proceed on the leading line (2 lights one line at 000°) of Hirohata Leading Light (34°47.1'N 134°37.8'E) and enter into the inner harbor.

Prescribed passages.

- 5 1. East Passage is about 1,800m in length, about 300m in width and about 14m in depth, from the S direction to Higashi Ku Section 1.
2. Shikama Passage is about 1,600m in length, about 240m in width and about 11~12m in depth, from the S direction to Shikama Ku Section 1.
- 10 3. Hirohata Passage is about 4,000m in length, about 350m in width and 14~17m in depth, from the S direction to Hirohata Ku Section 1.

Precautions for navigation. At all the 3 passages in the above, vessels are pressed heavily away E-ward, when strong seasonal W winds blow in winter under the ebb tide near the entrance to the breakwater, also affected by the E current. And caution must be paid to the case that under such conditions the bow suddenly turns left and the stern presses away to the right after the fore is inside the breakwater while entering the port.

15 **Private signal.**

~~1. The signal station at the base of the breakwater at Higashi Ku, privately signals (light) informing in and out of LNG vessels at East Passage.~~

2. Shin Nippon Steel Corporation Hirohata Signal Station at Hirohata Ku, privately signals (electric indication) informing for berthing vessels at Shin Nippon Steel Hirohata Quay and Hirohata Ku Public Quay.

20 **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. However, in case of the upper stream of some rivers like Noda Kawa, don't enter the area within 15 m from the tanker carrying flammable dangerous cargo at berth or anchor and don't enter the area within 50m from loading LNG tanker.

Anchorage. There are nominated anchorage for vessels carrying dangerous cargo in each harbor area.

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

Facilities.

Name		Position	Length (m)	Depth (Approx.m)	Capacity (D/W×vessel)	Remarks
Shikama Ku	Nakashima Public Quay	34°46.5'N 134°39.6'E	390	5.5~7	2,000×4	
	Nakashima No.1·2 Quay	34°46.2'N 134°39.6'E	260	7.5	5,000×2	
	Nakashima No.3·4 Quay		480	12	30,000×2	
	Shikama No.1 Quay	34°46.6'N 134°39.4'E	80	5	1,000×1	
	Shikama No.2 Quay		135	7.5	5,000×1	
	Shikama No.3~6 Quay		680	10	12,000×4	
	Shikama No.7~9 Quay		720	12	30,000×3	
	Senbakawa No.1~4 Quay	34°46.6'N 134°39.2'E	360	3~4.5	2,000×4	
	Senbakawa No.5~12 Quay		1,040	5.5~7.5	5,000×8	
	Irifune Quay	34°46.8'N 134°39.1'E	180	4~4.5	2,000×2	
Hirohata Ku	Hirohata No.1 Quay	34°46.9'N 134°37.4'E	130	7.5	5,000×1	
	Hirohata No.3 Quay	34°46.8'N 134°37.6'E	280	14	50,000×1	
Aboshi Ku	Kibi No.1·2 Quay	34°46.6'N 134°36.4'E	180	3~5	2,000×2	
	Kibi No.3 Quay		130	7.5	5,000×1	

Advance reporting.

1. Controlled vessel (200m or more in length) which intends to enter or departure the port on the traffic route is required to provide an advance report of the scheduled entry or departure to the Captain of Mizushima Port (via the Bisan Seto Vessel Traffic Service Center) by noon of the day before the estimated date of entry or departure.

5 2. Vessel which has notified in accordance with the estimated time shall notify the Captain of the Port of any change in the estimated time without delay. (Refer to Article 38 Paragraph 2 of Port Regulations Law)

Anchoring prohibited. Vessels are prohibited to anchor in the areas from the N entrance of Mizushima Port Traffic Route to the back of port, and from the E side of the S entrance to the Inner Harbor Passage to near Katsura Shima, and on the temporary passage on the S coast of JFE Steel Co., Led. West Japan Works.

10 **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.

Anchorage. Quarantine anchorage is in the SW side of Noji Shoto.

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	Contact address	Remarks
Captain of the Port	HIROSHIMA COAST GUARD RADIO	ch16/12	24hours	Bisanseto Vessel Traffic Service Center	Matters relating to Mizushima Port Traffic Route (traffic control report only).
Port Authority	MIZUSHIMA PORT RADIO	ch16/11, 12, 18, 21	24hours	+81-86-526-0301	

15

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

Safeguards against Typhoon and Tsunami. In order to prevent marine casualties caused by Typhoon and Tsunami etc., The Mizushima Ko Typhoon, etc. measures 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 and cancellation thereof. (Contact inquiry: Mizushima Coast Guard Office)

20

Maritime authorities and facilities.

Name	Telephone	Name	Telephone
Mizushima Coast Guard Office (Captain of the Port)	+81-86-444-2967	Okayama Transport Branch, Mizushima Maritime Office, Chugoku District Transport Bureau	+81-86-444-7750
Mizushima Branch Customs, Kobe Customs	+81-86-448-3375	Mizushima Port Authority	+81-86-444-7141
Mizushima Detached Office, Hiroshima Quarantine Station	+81-86-444-7701	Mizushima Branch of Hiroshima Sub-Station, Kobe Plant Protection Station	+81-86-444-6001
Mizushima Port Branch Office, Uno Port Office, Chugoku Regional Development Bureau	+81-86-522-0507		

Medical facility.

Name	Telephone
Kurashiki Central Hospital	+81-86-422-0210

Fairways.

1. There is a dredged fairway with about 300m in width and about 10m in depth reaching the power station in the N from about 0.4M NNE of Shimo-mizushima.
2. There is a dredged fairway with about 150m in width and about 7.5m in depth reaching the W of Tama Shima No.4 Pier in the N from about 1.5M WNW of Shimo-Mizu Shima.
3. There is a dredged fairway in the E to the estuary of Takahashi Kawa. Further there is a fairway reaching Tamashima-Otoshima Chiku in the NW from the N of the dredged fairway.

Although these fairways are indicated by light buoys, caution must be paid since both sides of the E and W of the fairways are steep shallows.

Facilities.

Name	Position	Length (m)	Depth (Approx. m)	Capacity (D/W×vessel)	Remarks
Tamashima Foreign Trade No.1 Wharf	34°30.5'N 133°41.0'E	370	10	15,000×2	
Tamashima No.1 Wharf	34°31.2'N 133°40.2'E	630	5.5	2,000×7	
Tamashima No.2 Wharf	34°31.0'N 133°40.6'E	380	4	700×5	
Tamashima No.3 Wharf	34°30.8'N 133°40.2'E	730	5.5	2,000×8	
Tamashima No.4 Wharf	34°30.5'N 133°40.2'E	780	7.5	5,000×6	
Tamashima Harbor Island No.4 Wharf	34°30.2'N 133°40.3'E	520	7.5	5,000×4	
Tamashima Harbor Island No.5 Wharf	34°30.2'N 133°40.9'E	380	4	200(for small cargo vessel) 300(for tugboat)	
Tamashima Harbor Island No.7 Wharf,1	34°29.7'N 133°41.0'E	320	12	120,000×1	
Tamashima Harbor Island No.7 Wharf,2	34°29.5'N 133°41.0'E	100	5.5	1,640×1	
Tamashima Harbor Island No.7 Wharf South Side		108	5.5	1,640×1	
International Container Terminal Wharf	34°30.1'N 133°41.0'E	340	10	10,000×2	
		240	12	23,600×1	
Tamashima Landing Place	34°31.2'N 133°40.2'E	653	4	700×9	

Overhead bridge. Near the harbor limit of Takahashi Kawa, the Kurashiki Minato Ohashi Bridge (Vertical clearance of 10m) connects Tamashima Chiku with Mizushima Chiku.

Overhead cables.

The position approximate		The number	Vertical clearance (m)
Near the estuary of Takahashi Kawa	34°31.4'N 133°41.8'E	1	E side; 25 W side; 23
Otoshima Landing Place	34°31.4'N 133°40.9'E	1	26
W side of Tamashima No.1 Wharf	34°31.2'N 133°40.0'E	2	39 · 32

Supplies. There are water supply valves equipped at principal quays and fuel supply boats are available.

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	Kaita -5.5m Quay	34°21.4'N 132°31.0'E	720	5	2,000×8	
	Kaita -7.5m Quay		650	7.5	5,000×5	
	Ujina Foreign Trade No.1~5 Wharf	34°21.3'N 132°28.5'E	955	8~9	15,000×5	Obstructions in the front
	Ujina Foreign Trade Wharf Dolphin	34°21.1'N 132°28.2'E	95	9	—	
	Civic Pier	34°21.2'N 132°27.8'E	180	3~4	500×2	
Section 3	Dejima E No.1 Quay	34°21.0'N 132°27.0'E	160	3~7.5	5,000×1	Obstructions in the front
	Dejima E No.2 Quay		180	3.5~4.5	700×3	
	Dejima W No.1 Quay	34°21.4'N 132°26.8'E	480	2.5~4.5	700×8	Obstructions in the front
	Dejima W No.2 Quay		685	4~6	2,000×7	
	Dejima -14m Quay	34°21.0'N 132°26.4'E	330	14	50,000×1	For container ship
	Dejima -7.5m Quay		150×2	7.5	5,000×2	For container ship and PCC Obstructions in the front
	Dejima -5.5m Quay		110	5.5	2,000×1	Obstructions in the front
	Hatsukaichi Mokuzaiko No.1—4 Mooring Pile	34°20.6' N 132°21.4' E	585	10	5,000×3	The E side and the E of the S side
			240	12	30,000×1	The W of the S side
	Shonan Quay	34°20.4'N 132°20.7'E	371	9~9.5	15,000×2	
	Hatsukaichi Timber Quay	34°21.0'N 132°21.3'E	190	6~7.5	5,000t×1	
	Itsukaichi No.1 Quay	34°21.0'N 132°21.8'E	390	7.5	5,000t×3	
	Itsukaichi No.2 Quay		450	5.5	2,000t×5	
	Itsukaichi No.3 Quay		70	4.5~5.5	1,000t×1	
	Itsukaichi No.4 Quay	34°20.9'N 132°22.0'E	190	11	18,000×1	
Itsukaichi -12m Quay	34°20.9'N 132°22.0'E	270	12	30,000×1		

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Directions.

1. In entering from the E, vessels sail N on Hashirajima Suido, alter the course to Iwakuni Ko N Breakwater Light after passing Hiroshima Wan No.2 Light Buoy(34°08.3'N 132°21.8'E) and then alter the course to 298° proceeding to quarantine anchorage. (See Fig.37, Directions for Hiroshima Wan on page 119)

2. In entering from Obatake Seto, order to avoid the prohibited area of sailing in the offing of U.S. Army as mentioned above, vessels sail in the E side (a little) of the middle between Kabuto Shima and Himeko Shima. The vessels gradually turn to the left on reaching Iwakuni Ko C Light Buoy and proceeding toward the inner harbor.

Navigation prohibited. The area between the line connecting B, C and D Light Buoys in Iwakuni Ko and the coast in the W of the line, navigation is prohibited.

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.

Anchorage. The point in the SW at the estuary of Monzen Kawa with 10~15m in depth and the bottom material of mud, is a good shelter place at NW winds.

Quarantine anchorage is nominated in about 1M SW of Atada Shima(34°11.5'N 132°18.4'E) and anchorage for vessels carrying dangerous cargo is nominated within a 400m radius 0.6M E of Iwakuni Ko N Breakwater Light in Section 1.

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

Call name	Frequency	Hours of operation	Contact address
HIROSHIMA COAST GUARD RADIO	ch16/12	24hours	Iwakuni Coast Guard Office

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
Shozoku Wharf No.1,2 Berth	34°11.7'N	180	9.5	2,000×2	
Shozoku Wharf No.3,4 Berth	132°14.3'E	185	5~5.5	15,000×1	
Shinminato N Quay		80	5.5	2,000×1	
Shinminato N No.1 Quay	34°11.2'N	90	5.5	2,000×1	
Shinminato N No.2 Quay	132°14.3'E	260	6.5~7.5	5,000×2	
Shinminato S Quay		370	10	5,000×2	
Muronoki -5.5m Quay		180	3.5~5	2,000×2	
Muronoki -7.5m Quay	34°10.7'N	260	7~7.5	5,000×2	
Muronoki -10m Quay	132°14.7'E	185	8.5~10	15,000×1	
Muronoki -12m Quay		240	12	30,000×1	
Surface Log Pond along Side Quay	34°10.6'N 132°14.9'E	205	10	15,000×1	

The largest vessel to enter the port. In 1997, tanker “NORD ATLANTIC” (90,747t, draft 15.5m) berthed at the crude oil pier of ENEOS Corporation.

Safeguards against Typhoon and Tsunami. In order to prevent marine casualties caused by Typhoon and Tsunami etc., The Iwakuni Ko and Otake Ko Typhoon and Tsunami, etc. Measures 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: Iwakuni Coast Guard Office)

Maritime authorities and facilities.

Name	Telephone	Name	Telephone
Iwakuni Coast Guard Station (Captain of the Port)	+81-827-21-6118	Tokuyama-Kudamatsu · Iwakuni Branch, Hiroshima Quarantine Station	+81-834-21-1091
Iwakuni Branch Customs, Moji Customs	+81-827-21-7138	Iwakuni Harbor Management Office	+81-827-22-2271

Tug boat. Several tug boats are available.

Ferry boat. Several ferry boats are available.

5 **Supplies.** A fuel oil supply boat is available. There are water supply facilities at each quay and wharf.

Waste oil disposal facility.

Name	Application	Hours of operation	Kind of waste oil disposed	
			Heavy waste oil	Light waste oil
ENEOS Corporation	Supply and Demand Group TEL: +81-827-24-6104	0800~1630	Bilge · Water ballast · Collect oil	Water ballast · Tank cleaning water

Medical facility.

Name	Telephone
National Hospital Organization, Iwakuni Clinical Center	+81-827-34-1000

10 **Maritime traffic.** Express passenger boats are operated for the islands in the vicinities.

Yanai Ko (33°57'N 132°08'E) (Chart JP152) (JP YAN)

Specified port	Open port	Quarantine port	Immigration port	Domestic animal quarantine port	Plant protection port
○					

15 **General Information.** Yanai Ko is located in about 14M SSW of Iwakuni Ko with the bottom toward NW and there is a seaberth exclusively used for large LNG vessels within the harbor. **Yanai Gyoko** is located in the N within the port.

Landmarks.

Landmark	Position	Remarks
Chimney	33°57.1'N 132°07.5'E	205m high, painted grey, with an aeronautical warning light, within a power station.
Gas tanks		Within a power station.

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.

20 **Facilities.**

Name	Position	Length (m)	Depth (Approx.m)	Capacity (D/W×vessel)	Remarks
Prefectural Quay	33°57.3'N 132°08.1'E	90	4	2,000×1	
E Quay	33°57.4'N 132°08.2'E	240	4	700×4	

The largest vessel to enter the port. On October 16, 2014, LNG tanker “ARUSA FURIYA” (137,535t, draft 12.2m) berthed at LNG Discharging Pier of Yanai Power Station.

25 **Safeguards against Typhoon and Tsunami.** In order to prevent marine casualties caused by Typhoon and Tsunami etc. The Yanai Ko and neighborhood surface Typhoon and Tsunami Measures Conference is established to issue

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), 20, 22	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	
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	

	Tanoura Ku	2nd Substitute Flag T	T	Heading for the mooring facilities in Tanoura Ku (except for Tachinoura Wharf Quays and Tachinoura No.1 Landing Place)
		2nd Substitute Flag U, W	U W	Heading for Tachinoura Wharf No.1~6.
		2nd Substitute Flag U	U	Heading for Tachinoura Wharf Quay No.7~8.
		2nd Substitute Flag U, S	U S	Heading for Tachinoura Wharf Quay No.9~No.29.
		2nd Substitute Flag U, E	U E	Heading for Tachinoura Wharf Quay No.30~42 and Tachinoura No.1 Landing Place.
	Moji Ku	2nd Substitute Flag M	M	Heading for the mooring facilities in Moji Ku.
	Shimonoseki Ku	2nd Substitute Flag S	S	Heading for the mooring facilities in Shimonoseki Ku
	Nishiyama Ku	2nd Substitute Flag N	N	Heading for the mooring facilities in Nishiyama Ku (except for the moorthing facilities in Fukuura Wan)
		2nd Substitute Flag N, F	N F	Heading for the mooring facilities in Fukuura Wan in Nishiyama Ku.
	Kokura Ku	2nd Substitute Flag K, A	K A	Heading for Takahama basin, Oil/LPG Common Pier or Oil-Only Pier of Sunatsu Kanematsu Yuso Kokura Oil Tank Facilities.
		2nd Substitute Flag K, S	K S	Heading for the mooring facilities in Sunatsu Hakuchi or Murasaki Kawa Hakuchi.
		2nd Substitute Flag K, H	K H	Heading for the mooring facilities in Hiagari Hakuchi or Hiagari Kita Hakuchi.
		2nd Substitute Flag R	R	Heading for the mooring facilities among Sakai Kawa Kyushu Electric Power Pier from Kita-Kyushu Shi Hiagari Loading Place or among Kyushu Chemical Industries Pier from Nippon Steel Chemical Tobata No.1 Pier in Wakamatsu Ku Section 5.
		2nd Substitute Flag R, S	R S	Heading for Nippon Steel Blast-Fumace Slag cement No.1 Berth, No.3 Berth and Quay for the raw material vessel or the mooring facilities among Sakai Kawa Public Quay from Nippon Steel Chemical Product Shipmant Quay in Wakamatsu Ku Section 5.

Maritime authorities and facilities.

Name	Telephone	Name	Telephone
The 7 th Regional Coast Guard Headquarters	+81-93-321-2931	Tobata Branch Customs, Moji Customs	+81-93-881-5858
Moji Coast Guard Office (Captain of the Kanmon Ko; excluding Wakamatsu Ku · Hibiki-Shinko Ku)	+81-93-321-0398	Wakamatsu Sub-Branch, Tobata Branch Customs, Moji Customs	+81-93-761-4445
Kokura Detachment of Moji Coast Guard Office	+81-93-571-6091	Kitakyushu Office of Fukuoka Regional Immigration Bureau	+81-93-582-6915
Shimonoseki Coast Guard Station	+81-832-67-1711	Shimonoseki Office of Hiroshima Regional Immigration Bureau	+81-83-261-1211
Office of the Traffic Control in Wakamatsu Port (Makiyama Signal Station)	+81-93-761-4200	Moji Detached Office of Fukuoka Quarantine Station	+81-93-321-3056
Wakamatsu Coast Guard Office Wakamatsu Port Traffic Control Office (Makiyama Maritime Traffic Signal Station)	+81-93-871-2482 FAX: +81-93-881-6094	Shimonoseki Office of Moji Detached Office, Fukuoka Quarantine Station	+81-832-66-1402
Kanmon Kaikyo Vessel Traffic Service Center	+81-93-381-6699 FAX: +81-93-381-4499	Moji Plant Protect Station	+81-93-321-1404
Kyusyu District Transport Bureau	+81-93-472-2312	Wakamatsu Office, Moji Plant Protect Station	+81-93-751-0790
Moji Maritime Office of Fukuoka Branch, Kyushu District Transport Bureau	+81-93-322-2700	Shimonoseki Office, Moji Plant Protect Station	+81-832-66-4442
Wakamatsu Maritime Office of Fukuoka Branch, Kyushu District Transport Bureau	+81-93-751-8111	Moji Branch, Animal Quarantine Station	+81-93-321-1116
Shimonoseki Maritime Office, Kyushu District Transport Bureau	+81-832-66-7151	Moji Local Marine Accident Tribunal	+81-93-331-3721
Moji Customs	+81-50-3530-8306	Moji Office, Japan Transport Safety Board	+81-93-331-3707
Tanoura Sub-Branch, Moji Customs	+81-93-321-3996	Port & Harbour Bureau, Shimonoseki City Government-	+81-83-266-3150
Shimonoseki Branch Customs, Moji Customs	+81-83-266-5376		

Repairs.

Name	Telephone	Name	Telephone
Kanmon Dock Service Co., Ltd.	+81-83-266-8311	Sansei Co., Ltd. Shimonoseki	+81-83-267-3525
Kyoritsu Dockyard Co., Ltd.	+81-83-266-0248	TOA Corporation, Shimonoseki	+81-83-246-1111
Kyokuyo Shipyard Corporation	+81-83-246-1291	Nagato Dockyard Co., Ltd.	+81-83-223-8251
Mitsubishi Heavy Industries, Shimonoseki	+81-83-266-5978		

2. Shimonoseki Ku (33°57'N 130°56'E) (Charts JP1262, JP1263) (JP SMJ)



(Photographed in January 2017)

General information.

- 5 1. Shimonoseki Ku is located in front of Shimonoseki-Shi facing Kanmon Kaikyo. It has been developed as a commercial port as a result of the establishment of Kanpu Ferry Passage and the increase of cargos transported between various places throughout Japan.
2. The reverse S letter shaped narrow channel between Hiko Shima and Honshu is called Ko Seto, and it has Shimonoseki Gyoko. The E entrance is connected to Kanmon Kaikyo through the water gate between the reclaimed
10 land from Honshu side and Hiko Shima, but only small vessels can sail through. Ko Seto is also included in the harbor area and Port Regulations Law is applied.

Cautions at typhoon. Winds are stronger at Shimonoseki side than at Moji side when the E strong winds blow, the difference sometimes becomes 10m/s.

Tidal currents.

- 15 1. After 2~2.5 hours from the time of the turn of tidal currents (E-going to W-going) at the center of Hayatomo~~no~~ Seto, a weak counter current flowing E-ward, occurs in front of Hananocho Basin. After that counter current expands nearly to the boundary with main current, making a clock-wise return current with the maximum rate of less than 1kn.
- This return current lasts until the end of W-going current with small scale. Then it flows E or NE in the whole section about 1 hour after the time of the turn of tidal current (W-going to E-going) at the center of Hayatomo~~no~~ Seto.
- 20 2. In the channel between Hiko Shima and Ganryu Shima, currents flow N at the same time with E-going currents of Hayatomo Seto and S with W-going.

The current velocity is about 2.2kn in the mid-channel. The turn of tidal currents in the mid-channel is almost at the same time as at Hayatomo Seto, but a little faster on the W coast.

- Traffic control signals.** Hayatomo Signal Station displays traffic control signals by **electric display board**. (Refer to
25 “Traffic Control signals in Hayatomo Seto Fairway” of Part 2 on page 146.)

Landmarks.

Landmark	Position	Remarks
Tanks	33°55.1'N 130°52.0'E	Painted sky-blue color, within the premises of LNG base.
Chimneys	33°55.5'N 130°50.9'E	206m, 122m, 123m high, all are painted red and white, 202m high, painted grey, within the premises of the power station and steelworks.
Wakamatsu Entrance Signal Station	33°56.4'N 130°50.7'E	Electric display board is prominent.
Maki Yama	33°53.3'N 130°48.7'E	75m high, There is a signal station.

Passage.

1. Wakamatsu Passage that divides from Kanmon Passage, reaching Yahata Hakuchi is about 9~10m in depth.
2. Tobata Passage that divides from Kanmon Passage, reaching Seitetsu Tobata Hakuchi is about 17m in depth.
3. Okudokai Passage that divides from Wakamatsu Passage, reaching the inner of Dokai Wan is 8~9m in depth.
4. Anse Passage reaching Anse Hakuchi from Kanmon Passage 2 is about 13m in depth.

Each passage is indicated by many light buoys and lighted beacon. Caution must be paid for the shallow areas outside the passage.

Within Dokai Wan, especially at Okudokai Passage full caution must be paid to the effect of shallow water and the effect of side wall. Near the connecting point of Wakamatsu Passage and Okudokai Passage, the visibility is bad because it is obstructed by Katsurajima. When vessels that depart from Yahata Hakuchi and Okudokai Passage meet, it is difficult for both vessels to know the existence of another vessel until they come close to each other.

Traffic Control Signals. At Wakamatsu Passage in the W side of the line drawn at 349° from 1,335m 184.5° of Wakamatsu Entrance Signal Station (this fairway will hereinafter be referred to as “Wakamatsu Fairway”), the traffic control of Okudokai Passage and Wakamatsu Ku (excluding Section 5 and Section 6) are operating by Wakamatsu Port Traffic Control Office (Wakamatsu Coast Guard Office).

At Wakamatsu Entrance Signal Station, Makiyama Signal Station and Futajima Signal Station, traffic control is done by electric display board for vessels of 300t or more (prohibition signal: controlled all vessels) as followings. (See Regulation for the Enforcement of the Port Regulations Law, Article 20-2, Appended Table 4)

Signal	Meaning	
Flashing letter “I”	Priority for entering	<ul style="list-style-type: none"> • Vessels can enter the port. • Vessels of 300t or more intending to depart the port should wait. • Vessels of 300t or less can depart the port.
Flashing letter “O”	Priority for departure	<ul style="list-style-type: none"> • Vessels can depart the port. (However, vessels of 300t or more are prohibited from moving between Yahata Hakuchi (Wakamatsu Ku section 2 which is S of Line A) and Okudokai Passage.) • Vessels of 300t or more intending to enter should wait outside of the passage E of Line B and give right of way to departure vessels. • Vessels of 300t or less can enter the port.
Flashing letter “F”	Passage allowed	<ul style="list-style-type: none"> • Vessels of 500t or more intending to enter the port should wait outside of the passage E of Line B and give right of way to departing vessels. • Vessels of 500t or more intending to depart the port should wait. • Vessels of 500t or less can enter and depart the port.
Alternate flashing of letters “X” and “I”	Advance Signal	<ul style="list-style-type: none"> • Vessels of 300t or more navigating in the fairway can enter and depart the port. • Vessels of entry more than 300t at the outside of the fairway should wait outside of the passage E of Line B.