

Pub.301 sup.

# Sailing Directions for South and East Coasts of Honshu

Supplement No. 10

1 May 2026



**Japan Coast Guard**

## Explanatory Notes

Sailing Directions for South and East Coasts of Honshu - Supplement No.10 is issued to correct the outdated information in Publication No.301 Sailing Directions for South and East Coasts of Honshu which was published in March 2021.

This supplement contains the information which has been gathered through the work of Hydrographic and Oceanographic Department, Japan Coast Guard by 26 September 2025.

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

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

1 May 2026

Hydrographic and Oceanographic Department,  
Japan Coast Guard

## CAUTION

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

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

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

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

Page	Updated parts (title, port name, etc.)	Remarks
'Supplement record entering table'		
5	Weather Information	The said page of supplement No.8 is cancelled.
14	Aids to Navigation	The said page of supplement No.9 is cancelled.
14-1	Aids to Navigation	The said page of supplement No.9 is cancelled.
27	Fisheries	The said page of supplement No.7 is cancelled.
36	Navigational Warnings Provision of information by the website Safety Information of the Sea	The said page of supplement No.3 is cancelled.
70	Hachinohe Ko	
71	Hachinohe Ko	The said page of supplement No.4 is cancelled.
104	Sendai-Shiogama Ko	The said page of supplement No.9 is cancelled.
105	Sendai-Shiogama Ko	The said page of supplement No.7 is cancelled.
105-1	Sendai-Shiogama Ko	7 lines transferred from the previous page.
121	Kashima Ko	
124	Kashima Ko	The said page of supplement No.4 is cancelled.
161	Chiba Ku and Outer Harbour	
162	Chiba Ku and Outer Harbour	
170	Tokyo Ku	The said page of supplement No.1 is cancelled.
171	Tokyo Ku	
172	Tokyo Ku	
173	Tokyo Ku	The said page of supplement No.1 is cancelled.
189	Yokohama Ku	The said page of supplement No.2 is cancelled.
220	Shimizu Ko The West Coast of Suruga Wan	The said page of supplement No.6 is cancelled.
241	Approaches to Mikawa Wan Atsumi Wan	
275	Yokkaichi Ko	The said page of supplement No.1 is cancelled.
276	Yokkaichi Ko	7 lines transferred from the previous page.
281	Yokkaichi Ko	The said page of supplement No.9 is cancelled.
299	Owase Ko	The said page of supplement No.6 is cancelled.
316	Kochi Ko	The said page of supplement No.7 is cancelled.

## RECORD OF CHANGES

Supplement No.	Publication date	Correction made	
		Date	Name
Supplement No.1	26 November 2021		
Supplement No.2	25 March 2022		
Supplement No.3	16 September 2022		
Supplement No.4	17 February 2023		
Supplement No.5	29 September 2023		
Supplement No.6	23 February 2024		
Supplement No.7	27 September 2024		
Supplement No.8	14 March 2025		
Supplement No.9	31 October 2025		
Supplement No.10	1 May 2026		
Supplement No.11			
Supplement No.12			
Supplement No.13			
Supplement No.14			
Supplement No.15			
Supplement No.16			
Supplement No.17			
Supplement No.18			
Supplement No.19			
Supplement No.20			

\* This volume is continuously revised with an interval of about 7 or 8 years.

Supplements are available on the website:

URL [https://www1.kaiho.mlit.go.jp/TUHO/shoshi/tsuiho/supplement\\_en.html](https://www1.kaiho.mlit.go.jp/TUHO/shoshi/tsuiho/supplement_en.html)

**Local maritime forecasts and warnings.** Forecasts and warnings related to the area covered by this volume and the vicinity that issued by the observatory are provided by Japan Coast Guard (JCG) coast radio station through radiotelephone services, NAVTEX system and marine radio meteorological report at any time and regularly. (Refer to Chapter 8 Marine casualties “Communication Services of Japan Coast Guard”).

5

**Weather charts, etc.** Weather charts and the like prepared by the Japan Meteorological Agency are transmitted by the JMA radio facsimile broadcast (JMH).

Call sign	Emission	Frequency (kHz)
JMH	F 3 C	3622.5
JMH2		7795
JMH4		13988.5

In addition, various types of weather information are available through No.2 radio broadcast by NHK (Nippon Hoso Kyokai) and facsimile transmission by Kyodo News ~~Service~~.

10 **Marine Weather information for ships.** Local meteorological and oceanographic condition such as wind direction and speed, atmospheric pressure and wave height have been observed at 132 major navigation sites all over the nation. The most updated information obtained at those sites is available via phone and also posted on the internet for ensuring the safety of the navigation and marine leisure, e.g., pleasure boating and fishing, in the coastal area. The list of the observation sites and reference of traffic signs can be referred in Vol. 1 List of Aids to

15 Navigation in Publication No.411.

**Fog information.**

Providing office	Call sign	Frequency	Enforcement standard	Sea area	Report time
The 2th Regional Coast Guard Headquarters	SHIOGAMA COAST GUARD RADIO	156.8 MHz (ch16) 156.6 MHz (ch12)	Visibility less than 1,000m	SANRIKU OKI	The fix time Japanese and English
The 3th Regional Coast Guard Headquarters	YOKOHAMA COAST GUARD RADIO		Visibility 2,000m or less	URAGA SUIDOU	At any time Japanese and English
The 4th Regional Coast Guard Headquarters	NAGOYA COAST GUARD RADIO		Visibility 2M or less	IRAGO SUIDO	At any time Japanese and English

~~Weather offices. — Weather offices for the areas covered by this volume are as follows:~~

20 **Weather information offices.** Weather information offices of the JMA for the areas covered by this volume are as follows:

[Replaced by a new table]

Headquarters (Phone number)	Remarks
Sendai Regional Headquarters (+81-22-290-5320)	Automated voice guidance (in Japanese)
JMA Headquarters (+81-3-5422-1018)	
Osaka Regional Headquarters (+81-6-6949-1300)	

\*: This mark is located outside the mention area, but show the Weather office having jurisdiction over the same area.

25

**AIS Signal Station** Ship-ridden receivers of AIS (Automatic Identification System) or radars Capable of displaying on AIS multiple display or ECDIS (Electronic Chart Display and Information System) indicating the facilities for emitting radio waves on their display screens in order to show symbol marks and such to be the Aid to Navigation to navigating vessels. The classification can be divided into Real and Virtual. A Real in which AIS Signal Station are juxtaposed to an Aid to Navigation, and a Virtual in which an Aid to Navigation that does not actually exist is displayed on a radar, etc.

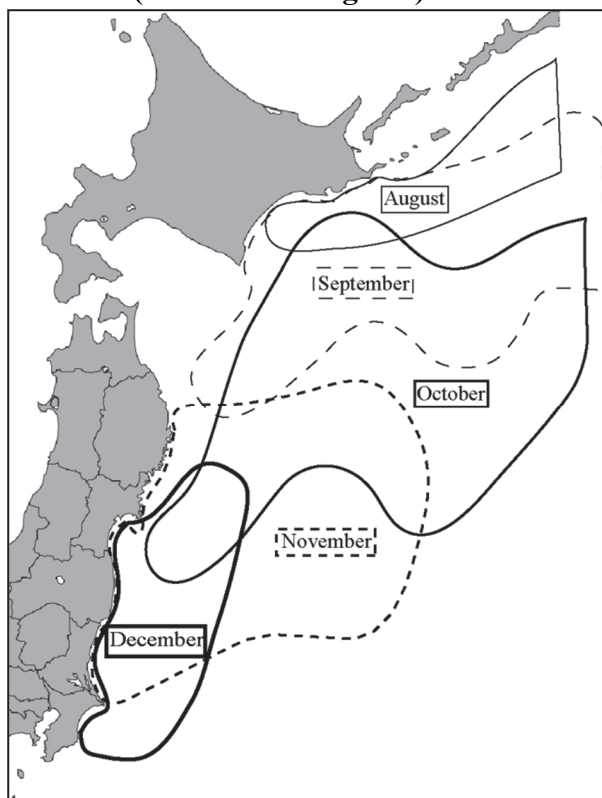
In the vicinity of area depicted this Sailing Directions, there are 25 AIS signal stations.

Details of AIS signal stations are given in Publication No. 411, "List of Aids to Navigation, Volume 1."

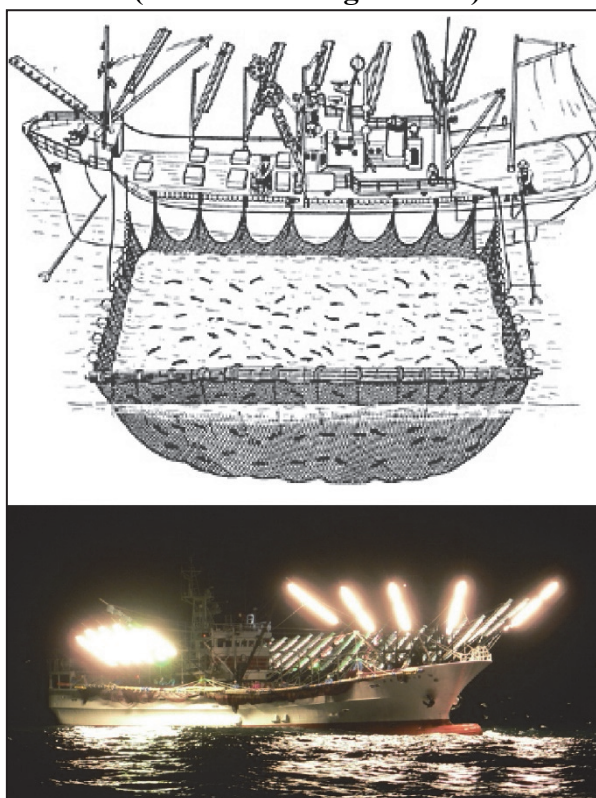
AIS Signal Station Name	Position	Classification	Remarks
Tokyo Wan Entrance Virtual AIS aid to navigation No.1	35° 05.8' N, 139° 44.5' E	Virtual	Controlled by Tokyo Wan Vessel Traffic Service Center.
Tokyo Wan Entrance Virtual AIS aid to navigation No.2	35° 08.1' N, 139° 45.2' E	Virtual	Controlled by Tokyo Wan Vessel Traffic Service Center.
Tokyo Wan Entrance Virtual AIS aid to navigation No.3	35° 10.4' N, 139° 45.9' E	Virtual	Controlled by Tokyo Wan Vessel Traffic Service Center.
Tokyo W Passage No.6	35° 34.8' N, 139° 48.1' E	Virtual	Controlled by Tokyo Wan Vessel Traffic Service Center.
Keihin Kawasaki Sea Berth	35° 28.0' N, 139° 46.1' E	Real	
Uraga Suido Traffic Route Center No.1	35° 12.7' N, 139° 46.6' E	Real	Fitted with Uraga Suido Traffic Route Center No.1 Light Buoy
N end of recommended route off the W coast of Izu O Shima	34° 48.0' N, 139° 17.0' E	Virtual	Controlled by Tokyo Wan Vessel Traffic Service Center.
S end of recommended route off the W coast of Izu O Shima	34° 42.2' N, 139° 10.0' E	Virtual	Controlled by Tokyo Wan Vessel Traffic Service Center.
E end of N entrance of Irago Suido Traffic Route	34° 34.8' N, 136° 59.4' E	Virtual	Controlled by Ise Wan Vessel Traffic Service Center.
SE of Irago Suido Traffic Route	34° 32.4' N, 137° 01.8' E	Real	Fitted with Ise Wan No.2 light buoy
Nakayama Suido Development and Conservation Route No.1	34° 37.7' N, 136° 58.6' E	Real	Fitted with Nakayama Suido Development and Conservation Route No.1 Light Beacon
Yokkaichi Ko Showayokkaichi Oil Sea Berth	34° 55.8' N, 136° 42.2' E	Real	
Kantorisaki SE Floating Fish Haven facilities	33° 30.7' N, 136° 05.7' E	Real	Fitted with the Kantorisaki SE Floating Fish Haven Facility Light
Kashinosaki E Floating Fish Haven facilities	33° 27.9' N, 135° 57.6' E	Real	Fitted with the Kashinosaki E Floating Fish Haven Facility Light

E end of recommended route Off the coast of Shio-no-Misaki	33°25.9'N, 135°52.5'E	Virtual	Controlled by Osaka Wan Vessel Traffic Service Center.
W end of recommended route Off the coast of Shio-no-Misaki	33°24.3'N, 135°45.3'E	Virtual	Controlled by Osaka Wan Vessel Traffic Service Center.
S of recommended route Off the coast of Shio-no-Misaki	33°22.7'N, 135°45.3'E	Virtual	Controlled by Osaka Wan Vessel Traffic Service Center.
Wabukasaki SW Floating Fish Haven Facilities	33°25.5'N, 135°27.3'E	Real	Fitted with the Wabukasaki SW Floating Fish Haven Facility Light
Iehiesaki SW Floating Fish Haven Facilities	33°26.3'N, 135°18.3'E	Real	Fitted with the Iehiesaki SW Floating Fish Haven Facility Light
Migusasaki SW Floating Fish Haven Facilities	33°27.5'N, 135°07.7'E	Real	Fitted with the Migusasaki SW Floating Fish Haven Facility Light
Setosaki SW Floating Fish Haven Facilities	33°30.3'N, 135°05.3'E	Real	Fitted with the Setosaki SW Floating Fish Haven Facility Light
Tosa-kuroshio Marine Farm No.10 Facilities	33°01.2'N, 134°07.2'E	Real	Fitted with the Tosa-kuroshio Marine Farm No.10 Facility Light
Tosa-kuroshio Marine Farm No.18 Facilities	33°29.1'N, 133°12.1'E	Real	Fitted with the Tosa-kuroshio Marine Farm No.18 Facility Light
Tosa-kuroshio Marine Farm No.20 Facilities	33°01.0'N, 133°35.0'E	Real	Fitted with the Tosa-kuroshio Marine Farm No.20 Facility Light
Tosa-kuroshio Marine Farm No.21 Facilities	32°23.2'N, 132°28.9'E	Real	Fitted with the Tosa-kuroshio Marine Farm No.21 Facility Light

**Fig. 7 Fishing ground of Pacific sauries stick held dip net fishery ( Schematic diagram)**



**Fig. 8 Fishing method of Pacific sauries stick held dip net fishery ( Schematic diagram etc.)**



5 **Boat seine fishery.** At Ise Wan, Mikawa Wan, and the Pacific coastal of Atsumi Hanto, the boat seine fishery operation to capture sand eels etc. is performed actively almost throughout the whole year. It is necessary to exercise caution to boat seine fishery in particular, because 2 fishing boats are pulling a fishing net reaching up to a maximum length of 500 m together as a pair. The operation time lasts from the sunrise until around 1100 JST.

10 When mariners found these fishing boats, vessels should navigate a distance sufficient to avoid them and should not approach the operational area of them. [Furthermore, Ise Wan Vessel Traffic Service Center and Nagoya-Ko Vessel Traffic Service Center provide information about "Sand-eel fishery"](#). (Refer to Fig. 9)

15 **Shelter fishery for dorados.** Many bundled bamboos for shelter fishery that marking flags and natural woods are attached and ranged over the length of 10 m, are placed offshore of Tosa Wan. The fishing gears are fixed on the bottom of the sea by an anchor and ropes. It is necessary to exercise caution to navigating in the sea area because there are cases when longline fishery and dragnet fishery are operated around the fishing gears. (Refer to Fig. 10)

**Fish havens.** There are many fish havens in the coastal waters the locations of which are indicated on nautical charts. Notification of fish havens which is not described in nautical charts and which may hinder navigation is made through general Notices to Mariners and Regional Coast Guard Headquarters Notices to Mariners.

20 **Other fishery.** 15 sets of surface type fish aggregating device are installed in the sea area between the E about 15 M of Muroto Saki and the S about 20 M of Shio-no-Misaki, as it is a kind of shelter fishery which utilizes a habit that large migratory fishes such as tunas, skipjacks, dorados are attracted to driftwoods. It is necessary to exercise caution to navigating in the sea area because there are cases when longline fishery and dragnet fishery are operated around the fishing gears.

**Japan Navigational Warnings.** Traffic safety for Japanese vessels in the Pacific Ocean, the Indian Ocean, and nearby sea, information needing urgent reporting is provided via internet. Kyodo News delivers information for vessels by facsimile broadcasting and also through the Japan Fisheries Telecommunication Station in Japan.

In particular, information of high urgency (active submarine volcano, drift mine, act of international dispute, falling flying objects such as satellite and others, and other matters that **cause** urgent and serious danger for vessels) is provided on the website at all times.

### Provision of information by the website

1. Navigational Warnings, Notices to Mariners, etc.

10 Navigational Warnings, Notices to Mariners, etc. are provided on the following website.

Classification	URL
Navigational Warnings	<a href="https://www1.kaiho.mlit.go.jp/TUHO/keiho/navarea11_en.html">https://www1.kaiho.mlit.go.jp/TUHO/keiho/navarea11_en.html</a>
Notices to Mariners	<a href="https://www1.kaiho.mlit.go.jp/TUHO/tuho/nm_en.html">https://www1.kaiho.mlit.go.jp/TUHO/tuho/nm_en.html</a>
Addition, List of Aids to Navigation Vol.1	<a href="https://www1.kaiho.mlit.go.jp/TUHO/shoshi/toudai/e_toudai.html">https://www1.kaiho.mlit.go.jp/TUHO/shoshi/toudai/e_toudai.html</a>
Supplement of Sailing Directions	<a href="https://www1.kaiho.mlit.go.jp/TUHO/shoshi/tsuiho/supplement_en.html">https://www1.kaiho.mlit.go.jp/TUHO/shoshi/tsuiho/supplement_en.html</a>

2. Regional Coast Guard Headquarters and offices, etc. provide updates on navigation safety information, events and others on the website.

URL of Regional Coast Guard Headquarters and offices covers by this volume are follows:

	Regional Coast Guard Headquarters and offices	URL
2nd Region	2nd Regional Coast Guard Headquarters	<a href="https://www.kaiho.mlit.go.jp/02kanku/">https://www.kaiho.mlit.go.jp/02kanku/</a>
	2nd Regional Coast Guard Headquarters Hydrographic and Oceanographic Dept.	<a href="https://www1.kaiho.mlit.go.jp/KAN2/">https://www1.kaiho.mlit.go.jp/KAN2/</a>
3rd Region	3rd Regional Coast Guard Headquarters	<a href="https://www.kaiho.mlit.go.jp/03kanku/">https://www.kaiho.mlit.go.jp/03kanku/</a>
	3rd Regional Coast Guard Headquarters Hydrographic and Oceanographic Dept.	<a href="https://www1.kaiho.mlit.go.jp/KAN3/">https://www1.kaiho.mlit.go.jp/KAN3/</a>
4th Region	4th Regional Coast Guard Headquarters	<a href="https://www.kaiho.mlit.go.jp/04kanku/">https://www.kaiho.mlit.go.jp/04kanku/</a>
	4th Regional Coast Guard Headquarters Hydrographic and Oceanographic Dept.	<a href="https://www1.kaiho.mlit.go.jp/KAN4/">https://www1.kaiho.mlit.go.jp/KAN4/</a>
5th Region	5th Regional Coast Guard Headquarters	<a href="https://www.kaiho.mlit.go.jp/05kanku/">https://www.kaiho.mlit.go.jp/05kanku/</a>
	5th Regional Coast Guard Headquarters Hydrographic and Oceanographic Dept.	<a href="https://www1.kaiho.mlit.go.jp/KAN5/">https://www1.kaiho.mlit.go.jp/KAN5/</a>

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### Safety Information of the Sea

The Japan Coast Guard operates **in** real time “Safety Information of the Sea” at Regional Coast Guard Headquarters and such across the nation on **information** 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 **it** through the internet and electronic mail.


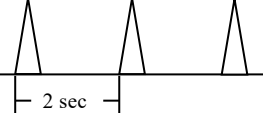

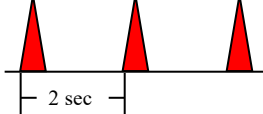

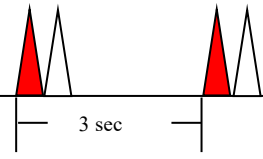

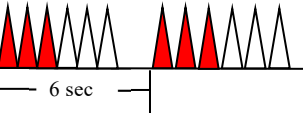
URL [https://www6.kaiho.mlit.go.jp/index\\_en.htm](https://www6.kaiho.mlit.go.jp/index_en.htm)

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**Pilotage.** Pilotage is available on request to Licensed Pilots' Association, Hachinohe Pilotage District (Refer to Chapter 6 "PILOTAGE" of Part 1).

**Signals.** **Certain** vessels, when entering or leaving Niida Kawa and Kyu-Mabechi Kawa, should navigate subjected to the corresponding traffic control signals on Hachinohe Coast Guard Office Hachinohe Signal Station. (Refer to Article 20-2, Appended table 4 of the Regulations for the Enforcement of the Port Regulations Law).

[Replaced by a new table]

Designation	Position	Signal		Meanings of signals
		Unlighted marks	Lighted marks	
Inward signal	Flashing signal: 40° 31' 48" N 141° 31' 25" E	One black cone (point up) 	One white flash every two seconds 	Inward-bound vessels may enter the port. Outward-bound vessels of 200 G/T or more shall stop navigating and stand by. Vessels of less than 200 G/T may leave the port.
Outward signal	Shapes signal: 40° 31' 42" N 141° 31' 17" E	One black square 	One red flash every two seconds 	Outward-bound vessels may leave the port. Inward-bound vessels of 200 G/T or more shall wait outside the passage except in Section 2 (limited to W of a line drawn 180° from the E end of Kawaragi S Breakwater) keeping out of the ways of vessels navigating in the passage. Vessels of less than 200 G/T may enter the port.
Prohibition inward and outward signal		Two black cones (points together) 	One red flash and one white flash every three seconds 	Inward-bound vessels of 200 G/T or more shall wait outside the passage except in Section 2 (limited to W of a line drawn 180° from the E end of Kawaragi S Breakwater) keeping out of the ways of vessels navigating in the passage. Outbound vessels of 200 G/T or more shall stop navigating and stand by. Vessels of less than 200 G/T may enter or leave the port.
Prohibition inward and outward signal excluding vessels of permitted by the Captain of the Port		The combination of two black cones (points together) and one red flag 	Three red flashes and three white flashes within six seconds 	All traffic prohibited except vessels permitted by the Captain of the Port.

**Caution:** (1) **Vessels of 200 G/T or more intending to pass through the fairway must notify Hachinohe Signal Station (Tel: +81-178-33-3177) of their scheduled date and time in advance. Any changes to the information in this notification must also be reported promptly.**

(2) **When a vessel of less than 200 G/T intends to navigate the fairway while towing vessels, rafts or other objects, it must notify the port of the planned date and time of passage in advance.**

**Landmarks.**

Landmark	Position	Remarks
Kabu Shima	40° 32.3' N, 141° 33.5' E	An islet; a shrine and two monuments stand in the center. The rocky northern half is a breeding ground of sea gulls and is whitened by their

[Replaced by a new table]

#### Landmarks.

Landmark	Position	Remarks
Kabu Shima	40° 32.3' N, 141° 33.5' E	An islet; a shrine and two monuments stand in the center. The rocky northern half is a breeding ground of sea gulls and is whitened by their droppings from Feb. to Aug.
Silos and Belt Conveyor	40° 31.9' N, 141° 33.0' E	In a mining factory yard; those are conspicuous from a distance.
Hachinohe O Hashi	40° 31.8' N, 141° 31.4' E	31 m high; there is a bridge lights at the center and a signal mast at the E end.
Oil Tanks	40° 32.0' N, 141° 31.0' E	Painted in various colors, blue, light yellow etc.
Hachinohe LNG Terminal	40° 32.7' N, 141° 31.6' E	There are 2 cylindrical LNG tanks with spherical tops (50m high, 80m diameter).

**Passages.** The E Passage and the W Passage are located respectively in the E side and W side of Shirogane W Breakwater. In addition, the section No.2 in the port have two channels (Niida Kawa and Kyu-Mabechi Kawa) beyond the Hachinohe O hashi, and they are controlled by the port traffic by signals (Refer to item “Signals”).

**Directions.** Approaching from N, steer for Same Kado, bearing 180° from a position NE about 6 M of Shiriya Saki, then enter the port passing W of Hachinohe Ko Outer Harbour Middle Breakwater N Light (40° 33.7' N, 141° 32.1' E). Approaching from S, alter course to 270° when Samekado Light (40° 32.4' N, 141° 34.6' E) abeam with a distance of 3 M. Proceed to enter the port between the Middle Breakwater and No. 2 Middle Breakwater. But large vessels are recommended to enter the port from the W of Middle breakwater due to the extension construction for No. 2 Middle Breakwater.

**Entry restricted.** In order to prevent fire hazard, no vessel is allowed to enter within a radius of 30 m 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.

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.

**Precaution for entering the port.** Ko Ne (40° 32.6' N, 141° 33.2' E; a rocky reef, minimum 3.2m deep) within the port lies close to a route and hardly experiences any breakers. Shallows are nearby, and caution is required when anchoring.

Hachinohe Ko approach is a place with many marine disasters involving fishing boats. In particular, during the dense fog period of the summer which coincides with the peak fishing season of the cuttlefishing, many fishing boats operate at night in the offing and return to the port early in the morning. During this period, large vessels entering the port should avoid the morning and evening hours, when fishing vessel traffic is heavy. Vessels navigating this area at night are advised to avoid the fishing area and proceed outside of them.

Care is necessary against foul substances scattered in the port.

While large LNG tankers are entering or departing the port, entry is prohibited within the area connected following points by a line: Middle Breakwater, Hattaro North Breakwater and the berth of ENEOS LNG Service Hachinohe LNG Terminal.

**Bridge buildings.** There is Hachinohe Seagull Bridge (40° 32.0' N, 141° 31.5' E, height 4.5 ~ 5.5 m) between the S extremity of Kawaragi No.1 Pier and the petroleum base SW of it, and Hachinohe O Hashi (Refer to item “Landmarks”) at the entrance of Industrial Section 1 at the estuary of the Niida Kawa.

**Anchorage.** The S side of Shirogane N and W Breakwaters gives a good holding ground, but caution is required that the roadstead is narrow and swells sometimes enter over the breakwaters in strong northerly winds. Section 3 is recommended as an anchorage except in rough weather.

Quarantine anchorage (40° 33.9' N, 141° 33.1' E) is situated NE of Middle Breakwater. Anchorage for vessels carrying dangerous substance is provided in Section 3.

divided into 4 sections, No.1 to 4. There is a prescribed passage from Section 2 to 4. This port is one of the leading fishing bases in Japan and, at the same time, is a principal port in the Sendai- Shiogama industrial zone.

Shiogama Gyoko (38° 19.4' N, 141° 02.8' E) is located in the Section 1 of Shiogama Ku. Sendai Ku was constructed by means of dredging the area about 1 M SW of Kouga Saki (Goten Zaki) for the purpose of developing the local industrialization.

Shiogama Ku Sections 1 and 2 (collectively called as 'inner port') are well sheltered and safe.

**Safeguards against Typhoon and Tsunami.** In order to prevent marine disasters caused by typhoon and tsunami etc., Sendai-Shiogama Ko Tsunami and Typhoon etc. Safety Measures Council is established to issue information on typhoons, tsunamis etc. to vessels and concerned parties in the port, and gives countermeasures to be taken including warning arrangements, evacuation orders and instructions, restrictions on entry into the port, cancellation of them, etc. (Inquiries: Miyagi Coast Guard Office).

**Tides.** In Sendai-Shiogama Ko, mean higher high water is 1.4 m, mean lower low water is 0.3 m, and mean sea level is 0.92 m.

**Tidal currents.** In Yogasaki Suido (passage), flood (ebb) stream flows WNW (ESE) at the rate of 1.8 (2.6) kn.

**Port communications.**

With the Captain of the Port.

Port communications by a VHF radiotelephone system between a vessel and Captain of the Port are available.

Call name	Frequency	Hours of Operation	Contact	Remarks
SHIOGAMA COAST GUARD RADIO	16 / 12ch	24 hours	Miyagi Coast Guard Office	

With the Port Authority.

Port communications by a VHF radiotelephone system between a vessel and the Port Authority are available.

Call name	Frequency	Hours of Operation	Contact	Remarks
SENDAI PORT RADIO	16 / 11, 12, 14ch	24 hours	TEL: +81-22-357-0701	Sendai Port Area VTIS Center


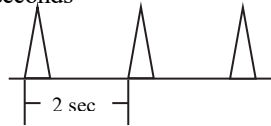

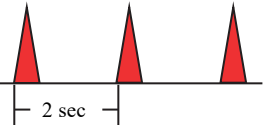
**Pilotage.** Pilotage is available through Licensed Pilots' Association, Sendai Pilotage District (Refer to Chapter 6 "PILOTAGE" of Part 1).

**Signals.** Traffic control signals on fairway are indicated by Miyagi Coast Guard Office Shiogama Signal Station (38° 19.4' N, 141° 04 .2' E) on Mahanashi Shima.


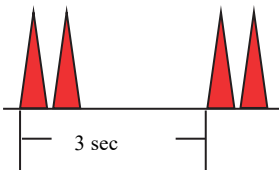

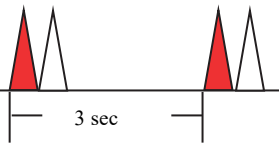

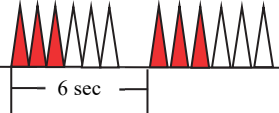
**Certain** vessels, when entering or leaving this fairway, should navigate subjected to the corresponding traffic control signals on Miyagi Coast Guard Office Shiogama Signal Station. (Refer to Article 20-2, Appended table 4 of the Regulations for the Enforcement of the Port Regulations Law).

The traffic control signals are as follows.

[Replaced by a new table]

Designation	Signal		Meaning of signal
	Unlighted marks	Lighted marks	
Inward signal	One black cone (point up) 	One white flash every two seconds 	Inward-bound vessels may enter the port. Outward-bound vessels of 500 G/T or more shall stop navigating and stand by. Vessels of less than 500 G/T may leave the port.
Outward signal (Sendai Thermal Power Station)	One black square 	One red flash every two seconds 	Outward-bound vessels may leave the port, provided that vessels of 500 G/T or more departing from Section 1 and Section 2 shall stop navigating and stand by. Inward-bound vessels of 500 G/T or more shall wait outside the passage and E of a line joining the Hanabuchi Saki Harbour Limit Beacon and the peak of Kenashi Shima, keeping out of the ways of outward-bound vessels navigating in the passage. Vessels of less than 500 G/T may outer.

[Replaced by a new table]

Outward signal (Section 1 and Section 2)	One black square, above One red square flag 	Two red flashes every three seconds 	Outward-bound vessels may leave the port, provided that vessels of 500 G/T or more departing from Sendai Thermal Power Station quay shall stop navigating and stand by. Inward-bound vessels of 500 G/T or more shall wait outside the passage and E of a line joining the Hanabuchi Saki Harbour Limit Beacon and the peak of Kenashi Shima, keeping out of the ways of outward-bound vessels navigating in the passage. Vessels of less than 500 G/T may enter the port.
Prohibition inward and outward signal	Two black cones (points together) 	One red flash and one white flash every three seconds 	Inward-bound vessels of 500 G/T or more shall wait outside the passage and E of a line joining the Hanabuchi Saki Harbour Limit Beacon and the peak of Kenashi Shima, keeping out of the ways of outward-bound vessels navigating in the passage. Outward-bound vessels of 500 G/T or more shall not leave the port from Sendai Thermal Power Plant or Section 1 and Section 2. Vessels of less than 500 G/T may enter or leave the port.
Prohibition inward and outward signal excluding vessels of permitted by the Captain of the Port	The combination of two black cones (points together) and One red flag 	Three red flashes and three white flashes within six seconds 	All traffic prohibited except vessels permitted by the Captain of the Port.

**Landmarks.**

Landmark	Position	Remarks	
Shiogama Ku	Ha Shima	38° 19.0' N, 141° 11.1' E	A flat islet, 26 m high; a lighthouse stands on the SW end.
	A beacon	38° 19.0' N, 141° 09.7' E	A pole of harbour limit, white, stands on the SE end of Karato Shima.
	Tomi Yama	38° 23.8' N, 141° 06.5' E	124 m high.
	Funairi Shima	38° 19.2' N, 141° 07.2' E	An island located on the N side of the E entrance to the passage.
	Karakai Shima	38° 19.0' N, 141° 07.3' E	An island located on the N side of the E entrance to the passage. 18 m high.
	Mizu Shima	38° 19.3' N, 141° 06.1' E	22 m high.
	Jizo Shima	38° 19.4' N, 141° 04.3' E	An islet surmounted by a lighthouse. The N groin which submerges in HW lies between Mahanashi Shima.
	Yo-ga-Saki	38° 19.3' N, 141° 03.9' E	Tamon San lies on top of the cape.
	Hanabuchi Saki	38° 18.0' N, 141° 05.4' E	A cape appearing black with pine trees on it and conspicuous from a distance. A white pole, 25 m high, stands on the end. Hanabuchi Light is located in Ho-ga-Saki about 850 m to the SW.
	A chimney	38° 20.2' N, 141° 02.7' E	67 m high, grey.
Sendai Ku	A chimney	38° 16.5' N, 141° 02.3' E	183 m high, grey, located in the yard of Shin-Sendai Thermal Power Station. Refinery Tanks in the yard are also conspicuous.
	Sendaiko silo	38° 16.3' N, 141° 01.2' E	Grey, prominent.

**Passages.** A passage, 130 m wide, runs in Shiogama-Ku from a position S about 0.6 M of Funairi Shima to N of Teizan Wharf by Yogasaki Suido. In addition, there is a fairway that W of a line joining the peak of Mizu Shima and the peak of Futatsu Shima (38° 18.4' N, 141° 06.1' E; 20 m high) is under traffic control.

**Directions.** Heading for Shiogama-Ku, from a position S about 2M of Namishima outside the port, then steer 302° from same light buoy, and enter the passage.

It is necessary to exercise caution because there are dangerous reefs on both sides of the route.

**Standby instructions off the passages.** When visibility is 500 m or less and vessels of 500 G/T or more are navigating passages in Sendai-Shiogama Ko, Captain of the Port of Sendai-Shiogama Ko may give instructions to stand

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7 lines transferred from the previous page.

by off the passage during the necessary period of time to prevent danger to vessels. Instructions are issued by the VHF radiotelephone system, called by Japan Coast Guard vessels or by other appropriate methods. Refer to “Notice to Specify Methods, etc. of Article 8-2 of Instructions Under the Regulations for the Enforcement of the Port Regulations Law” (Japan Coast Guard Notice No. 163, 2010).

**Entry restricted.** In order to prevent fire hazard, no vessel is allowed to enter within a radius of 30 m 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.

Call name	Frequency	Hours of Operation	Contact	Remarks
YOKOHAMA COAST GUARD RADIO	16 / 12ch	24 hours	Kashima Coast Guard Station	Matters relating to Kashima Ko (except for the traffic control report).
KASHIMA HARBOR COAST GUARD RADIO				Matters relating to the traffic control report in Kashima Ko.

With the Port Authority.

Port communications by a VHF radiotelephone system between a vessel and the Port Authority is available.

Call name	Frequency	Hours of Operation	Contact	Remarks
IBARAKI PORT RADIO	16 / 12, 14ch	24 hours	TEL: +81-299-82-7438	

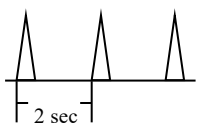

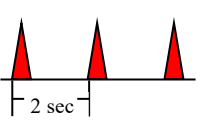

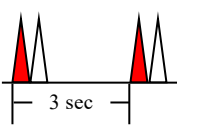

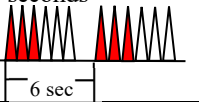

- 5 **Pilotage.** Pilots are available on request through Licensed Pilots' Association, Kashima Pilot District (Refer to Chapter 6 "PILOTAGE" of Part 1).

**Signals.** Traffic control signals on Kashima Fairway are indicate by Kashima Signal Station (35° 55.8' N, 140° 41.7' E) and Kashima Central Signal Station (35° 54.7' N, 140° 40.2' E) at the head.

- 10 **Certain** vessels, when entering or leaving this fairway, should navigate subjected to the corresponding traffic control signals on those signal stations. (Refer to Article 20-2, Appended table 4 of the Regulations for the Enforcement of the Port Regulations Law).

The traffic control signals are as follows.

[Replaced by a new table]

Designation	Signals		Meanings of signals
	Kashima Signal Station	Kashima Central Signal Station	
Inward signal	One white flash every two seconds 	 Flashing letter "I"	Inward-bound vessels may proceed to the fairway. Outward-bound vessels with a length of 70 m or more (excluding vessels less than 1,000 G/T) shall stop navigating and stand by. However, vessels may take departure through the fairway when instructed by the Captain of the Port. Outward-bound vessels with a length of less than 70 m or less than 1,000 G/T may take departure through the fairway.
Outward signal	One red flash every two seconds 	 Flashing letter "O"	Outward-bound vessels may take departure through the fairway. Inward-bound vessels with a length of 70 m or more (excluding vessels less than 1,000 G/T) shall avoid the course of other outward-bound vessels and stand by off the fairway. However, vessels may proceed to the fairway when instructed by Captain of the Port. Inward-bound vessels with a length of less than 70 m or less than 1,000 G/T may proceed to the fairway.
Free signal	One red flash and one white flash every three seconds 	 Flashing letter "F"	Inward-bound vessels with a length of 190 m or more (tankers of 1,000 G/T or more) shall avoid the course of other outward-bound vessels and stand by off the fairway. Outward-bound vessels with a length of 190 m or more (tankers of 1,000 G/T or more) shall stop navigating and stand by. Inward-bound and outward-bound vessels with a length of less than 190 m (tankers less than 1,000 G/T) may proceed to and take departure through the fairway.
Prohibition signal	Three red flashes and three white flashes within six seconds 	 Flashing letter "X"	All traffic prohibited except the vessels instructed by Captain of the Port.

A signal board on Kashima Signal Station is possible to see from each direction of 032° or 107° or 205°.

within radius of 3 M from S Breakwater Light.

**Facilities.**

Name	Position	Length (m)	Depth (approx. m)	Capacity (D/W×vessel)	Remarks	
Gaiko Public Wharf A Quay	35° 57.9' N, 140° 41.6' E	280	12 ~ 14	10,000 × 1	Aseismatic quay	
Fukashiba Public Quay	35° 55.5' N, 140° 41.9' E	300	5.5 ~ 6	2,000 × 3		
N Public Wharf	C Quay	35° 55.6' N, 140° 39.2' E	170	10	10,000 × 1	
	D Quay	35° 55.7' N, 140° 39.2' E	170	10	10,000 × 1	
	E Quay		170	10	12,000 × 1	With a gantry crane
Ikemukai Quay	35° 54.1' N, 140° 40.7' E	114	5		There are many overhead cables.	
S Public Wharf	A, B Quays	35° 53.2' N, 140° 41.1' E	370	10	15,000 × 2	
	C ~ F Quays	35° 53.0' N, 140° 41.1' E	each 130	6	5,000 × 4	
	G, H Quays	35° 52.9' N, 140° 41.3' E	each 185	10	15,000 × 2	

Apart from the above table, there are many private berths in the port.

5 **Supply.** Fresh water is available.

**Maritime authorities and facilities.**

Name	Telephone
Kashima Coast Guard Station (Captain of the Port)	+81-299-92-2601
Kashima Branch Customs	+81-299-92-2558
Kashima Maritime Branch of Tokyo District Transport Bureau	+81-299-92-2604
Kashima Detached Office of Tokyo Quarantine Station	+81-299-92-2603
Kashima Sub-branch, Tokyo Branch of Yokohama Plant Protection Station	+81-299-92-3404
Mito Branch Office of Tokyo Regional Immigration Services Bureau (Located in Mito City)	+81-29-300-3601
Ibaraki Prefectural Kashima Port Office	+81-299-92-2111

**Tugboats and Ferryboats.** Tugboats and ferryboats are available.

**Medical facilities.**

Name	Telephone	Remarks
Hakujuji General Hospital	+81-299-92-3311	

10

**Inubo Saki** (35° 43' N, 140° 52' E) (Charts W57, W1050)

**General information.** This article describes the area from estuary of Tone Kawa to the W extremity of Byobu-ga-Ura, WSW about 7 M.

15 Inubo Saki is a cape at the E extremity of peninsula projecting into sea on the S of Tone Kawa estuary; its E coast consists mostly of sandy beaches; the S coast is black cliffs, about 20 ~ 40 m high, the upper part of which is covered with red clay. Besides Inubo Saki at the E extremity, SE and SW extremities are called Nagasaki Hana and Inuwaka Hana respectively. Tokawa Gyoko and Naarai Ko are located respectively on the E side and NW side of Inuwaka Hana. Byobu-ga-Ura consists of steep cliffs extending for about 5 M.

Inubo Saki is fringed with many small islands and rocks, which make access to this area dangerous.

20 The water in front of Byobu-ga-Ura is shallow for a good distance from the shore and surf is heavy.

**Fog.** Fog sets from late May to late August; it is most frequent in July; it generally disappears within daytime, but may remain throughout the day in S wind.

**Landmarks.**

Landmark	Position	Remarks
Inubo Saki	35° 43' N, 140° 52' E	A cape surmounted by a lighthouse at the end. This promontory gives a good radar response.
Atago Yama	35° 42' N, 140° 51' E	A wooded mountain, 74 m high.

Call name	Frequency	Hours of Operation	Contact	Remarks
YOKOHAMA COAST GUARD RADIO	ch16/12	24 hours	Chiba Coast Guard Office	Matters relating to Chiba Ko (except for the traffic control report).
TOKYO MARTIS	ch16/12 · 13 · 14 · 66 · 69		Tokyo Wan Traffic Service Center	Matters relating to the traffic control report in Chiba Passage and Ichihara Passage (Limited to matters the traffic control report). After calling and responding, talking with “Chiba” at the beginning.

With the Port Authority.

Port communications by a VHF radiotelephone system between a vessel and the Port Authority are available.

Call name	Frequency	Hours of Operation	Contact	Remarks
CHIBA PORT RADIO	16 / 12, 11, 14, 18, 20, 22ch	24 hours	TEL: +81-43-241-6445	


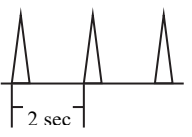
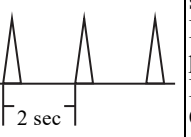

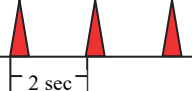
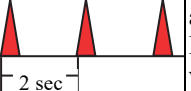
- 5 **Pilotage.** Pilotage is available on request through Licensed Pilots' Association, Tokyo Bay Pilotage District (Refer to Chapter 6 “PILOTAGE” of Part 1).

**Signals.** Traffic control signals are indicate by Chiba Light Beacon: (35° 34.1' N, 140° 02.7' E) and Chiba Chuoko Signal Station (35° 35.7' N, 140° 05.4' E).

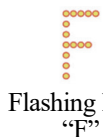
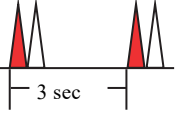
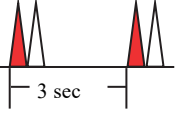

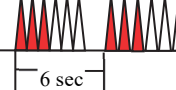
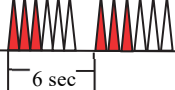
Traffic control signals.

- 10 **Certain** vessels, when entering or leaving Chiba Passage or Ichihara Passage, shall navigate subjected to the corresponding traffic control signals on each signal station. (Refer to Article 20-2, Appended table 4 of the Regulations for the Enforcement of the Port Regulations Law).

The traffic control signals are as follows. [Replaced by a new table]

Designation	Chiba Passage		Ichihara Passage	Meanings of signals
	Chiba Light Beacon Signal Station	Chiba Chuoko Signal Station	Chiba Light Beacon Signal Station	
	Methods of lighting letter	Methods of flashing light	Methods of flashing light	
Inward signal	 Flashing letter “T”	One white flash every two seconds 	One white flash every two seconds 	Inward-bound vessels may proceed to the passage. Outward-bound vessels with a length of 50 m or more (excluding vessels less than 500 G/T) shall stop navigating and stand by. However, vessels may take departure through the passage when instructed by the Captain of the Port. Outward-bound vessels with a length of less than 50 m or less than 500 G/T may take departure through the passage.
Outward signal	 Flashing letter “O”	One red flash every two seconds 	One red flash every two seconds 	Outward-bound vessels may take departure through the passage. Inward-bound vessels with a length of 50 m or more (excluding vessels less than 500 G/T) shall avoid the course of other outward-bound vessels and stand by out of the passage. However, vessels may proceed to the passage when instructed by the Captain of the Port. Inward-bound vessels with a length of less than 50 m or less than 500 G/T may proceed to the passage.

[Replaced by a new table]

Free signal	 Flashing letter "F"	One red flash and one white flash every three seconds 	One red flash and one white flash every three seconds 	<b>Chiba Passage</b> Inward-bound vessels with a length of 140 m or more (tankers of 1,000 G/T or more) shall avoid the course of other outward-bound vessels and stand by out of the passage. Outward-bound vessels with a length of 140 m or more (tankers of 1,000 G/T or more) shall stop navigating and stand by. Inward-bound and outward-bound vessels with a length of less than 140 m (tankers less than 1,000 G/T) may proceed to and take departure through the passage.
		<b>Ichihara Passage</b> Inward-bound vessels with a length of 125 m or more (tankers of 1,000 G/T or more) shall avoid the course of other outward-bound vessels and stand by out of the passage. Outward-bound vessels with a length of 125 m or more (tankers of 1,000 G/T or more) shall stop navigating and stand by. Inward-bound and outward-bound vessels with a length of less than 125 m (tankers less than 1,000 G/T) may proceed to and take departure through the passage.		
Prohibition signal	 Flashing letter "X"	Three red flashes and three white flashes within six seconds 	Three red flashes and three white flashes within six seconds 	All traffic prohibited except the vessels instructed by the Captain of the Port.

#### Private signals.

Idemitsu Kosan Co., Ltd. transmits information by private signals on the mast (35° 29.8' N, 140° 01.8' E) for vessels which are berthing or intending to berth at Product Quays in Chiba Refinery/Plant.

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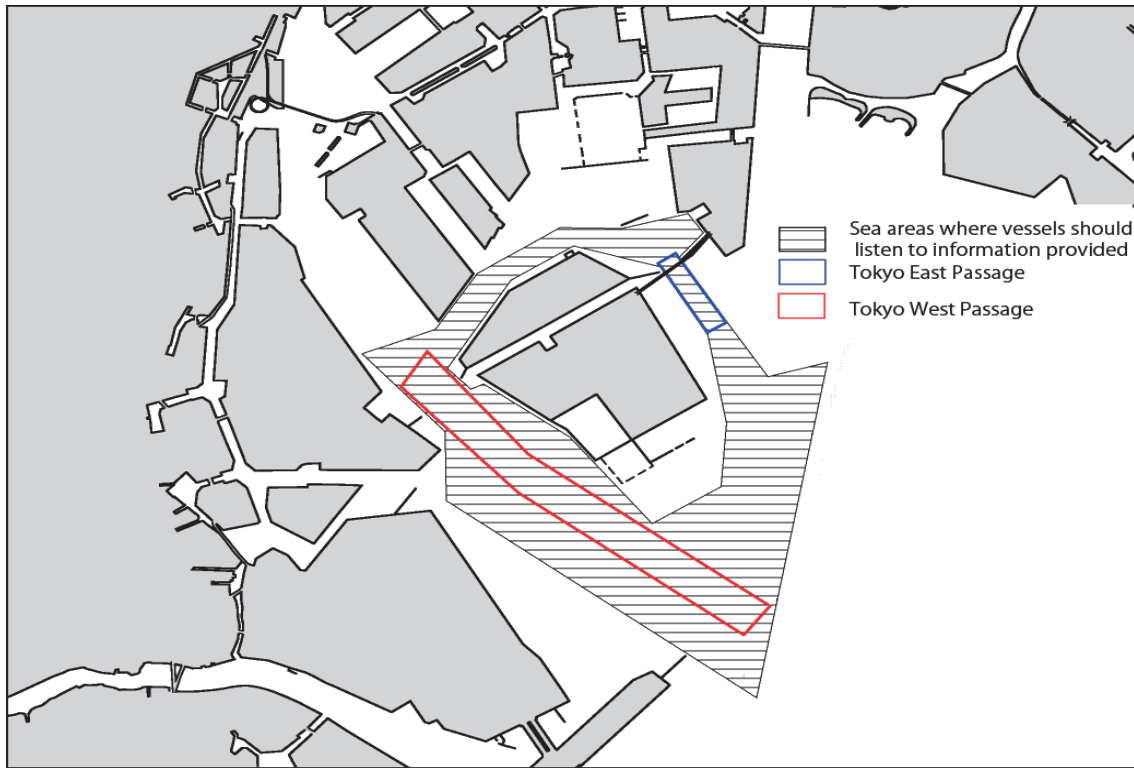
The private signals are as follows.

Designation		Remarks
Signals	Meanings of signals	
White lighting	Wait to moor at Product Quays in Chiba Refinery/Plant; a vessel is departing from the quays.	
White flashing	Moored at Product Quays in Chiba Refinery/Plant.	

#### Landmarks.

Landmark	Position	Remarks
A sea-berth	35° 30.7' N, 139° 56.2' E	Keiyo Sea-Berth; a dolphin berth, 470 m long and 50 m wide. A sea-berth light with radar reflector, 34 m high, is fitted on the middle. A subsidiary light is fitted on each NE part and SW part, and a motor siren is attached to each light of both ends.
2 chimneys	35° 27.7' N, 139° 58.5' E	Each 204 m high, a cream coloured flue with blue at the top; located in the yard of Sodegaura Thermal Power Station.
3 chimneys	35° 29.1' N, 140° 01.0' E	Each 205 m high, a cream coloured flue with blue at the top; located in the yard of Anezaki Thermal Power Station.
A chimney	35° 31.0' N, 140° 02.8' E	154 m high, red and white; located in the yard of Kyokuto Petroleum Industries, Ltd.
2 chimneys	35° 32.9' N, 140° 04.3' E	Each 183 m and 153 m high, a cream coloured flue with blue at the top, located in the yard of Goi Thermal Power Station.
2 chimneys	35° 34.0' N, 140° 06.3' E	Each about 200 m high, a white coloured flue, chimney stack of octagonal prism type, located in the yard of Chiba Thermal Power Station.
3 chimneys	35° 34.5' N, 140° 05.7' E	Each 207 m (red and white), 204 m (cream coloured), 104 m (cream coloured) high respectively; located in the yard of East Japan Works, JFE Steel Corporation.
A tower	35° 36.0' N, 140° 05.9' E	Chiba Port Tower, 125 m high, rhombic shape.

**Fig.34 The sea area where the specified vessels shall report listen to the information in Keihin Ko, Tokyo Ku (except in cases of emergency)**





5 **Signals.** Traffic control signals on Tokyo E Passage are indicated at 4 signal stations of 15 Go Chi S (35° 36.8' N, 139° 50.1' E), 15 Go Chi N (35° 37.1' N, 139° 49.9' E), Central Breakwater (35° 36.8' N, 139° 48.6' E) and 10 Go Chi (35° 36.9' N, 139° 47.7' E). And those on Tokyo W Passage are indicated at 5 signal stations of Harumi (35° 38.8' N, 139° 46.4' E), Aomi (35° 36.9' N, 139° 46.6' E), Aomi No.2 (35° 36.8' N, 139° 46.5' E), Oi (35° 34.8' N, 139° 47.1' E) and Haneda Senpaku (35° 32.5' N, 139° 49.5' E).





10 **Certain** vessels, when entering or leaving those passages, shall navigate subjected to the corresponding traffic control signals on those signal stations. (Refer to Article 20-2, Appended table 4 of the Regulations for the Enforcement of the Port Regulations Law).

The traffic control signals are as follows.


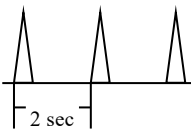

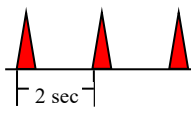

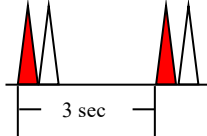

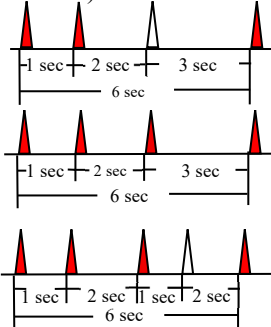
Tokyo E Passage. **[Replaced by a new table]**

Designation	Signal Stations	Meanings of signals
	15 Go Chi S, 15 Go Chi N, Chuobo, 10 Go Chi	
Inward signal	 Flashing letter "T"	Inward-bound vessels may proceed to the passage. Outward-bound vessels with a length of 50 m or more (excluding vessels less than 500 G/T) shall stop navigating and stand by. Outward-bound vessels with a length of less than 50 m or less than 500 G/T may take departure through the passage.
Outward signal	 Flashing letter "O"	Outward-bound vessels may take departure through the passage. Inward-bound vessels with a length of 50 m or more (excluding vessels less than 500 G/T) shall avoid the course of other outward-bound vessels and stand by out of the passage. Inward-bound vessels with a length of less than 50 m or less than 500 G/T may proceed to the passage.


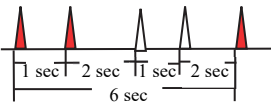

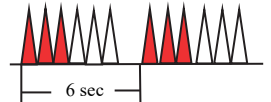
[Replaced by a new table]

Free signal	 <p>Flashing letter "F"</p>	<p>Inward-bound vessels with a length of 150 m or more (tankers of 1,000 G/T or more) shall avoid the course of other outward-bound vessels and stand by out of the passage.</p> <p>Outward-bound vessels with a length of 150 m or more (tankers of 1,000 G/T or more) shall stop navigating and stand by.</p> <p>Inward-bound and outward-bound vessels with a length of less than 150 m (tankers less than 1,000 G/T) may proceed to and take departure through the passage.</p>
Switching notice signal	 <p>Alternating flashing of letters "X" and "I" (or "O", or "F")</p>	<p>Inward-bound and outward-bound vessels navigating in the passage may proceed to and take departure through the passage.</p> <p>Inward-bound and outward-bound vessels out of the passage with a length of 50 m or more (excluding vessels less than 500 G/T) shall avoid the course of other inward-bound and outward-bound vessels on the passage and stand by out of the passage.</p> <p>Inward-bound and outward-bound vessels out of the passage with a length of less than 50 m or less than 500 G/T may proceed to and take departure through the passage.</p> <p>The signal will change to flashing "I" (or "O", or "F") soon.</p>
	 <p>Flashing letter "X"</p>	<p>Inward-bound and outward-bound vessels navigating in the passage may proceed to and the take departure through the passage.</p> <p>Inward-bound and outward-bound vessels out of the passage shall avoid the course of other inward-bound and outward-bound vessels on the passage and stand by out of the passage.</p> <p>The signal will change to lighting "X" soon.</p>
Prohibition signal	 <p>Lighting letter "X"</p>	<p>All traffic prohibited except the vessels instructed by the Captain of the Port.</p>

Tokyo W Passage. [Replaced by a new table]

Designation	Signal Stations		Meanings of signals
	Aomi, Aomi No.2, Harumi	Haneda, Oi	
	Methods of lighting letter	Methods of flashing light	
Inward signal	 Flashing letter "I"	One white flash every two seconds 	Inward-bound vessels may proceed to the passage. Outward-bound vessels with a length of 100 m or more shall stop navigating and stand by. However, vessels may take departure through the passage when instructed by the Captain of the Port. Outward-bound vessels with a length of less than 100 m may take departure through the passage.
Outward signal	 Flashing letter "O"	One red flash every two seconds 	Outward-bound vessels may take departure through the passage. Inward-bound vessels with a length of 100 m or more shall avoid the course of other outward-bound vessels and stand by out of the passage. However, vessels may proceed to the passage when instructed by the Captain of the Port. Inward-bound vessels with a length of less than 100 m may proceed to the passage.
Free signal	 Flashing letter "F"	One red flash and one white flash every three seconds 	Inward-bound vessels with a length of 300 m or more (tankers of 5,000 G/T or more) shall avoid the course of other outward-bound vessels and stand by out of the passage. Outward-bound vessels with a length of 300 m or more (tankers of 5,000 G/T or more) shall stop navigating and stand by. Inward-bound and outward-bound vessels with a length of less than 300 m (tankers less than 5,000 G/T) may proceed to and take departure through the passage.
Switching notice signal	 Alternating flashing of letters "X" and "I" (or "O", or "F")	Two red flashes and one white flash every six seconds (or three red flashes every six seconds, or three red flashes and one white flash every six seconds) 	Inward-bound and outward-bound vessels navigating in the passage may proceed to and take departure through the passage. Inward-bound and outward-bound vessels out of the passage with a length of 100 m or more shall avoid the course of other inward-bound and outward-bound vessels on the passage and stand by out of the passage. Inward-bound and outward-bound vessels out of the passage with a length of less than 100 m may proceed to and take departure through the passage. The lighting letter signal will change to flashing letter "I" (or "O", or "F") and the flashing light signal will change to 1 white flashing every 2 seconds (or 1 red flashing every 2 seconds, or 1 red flashing and 1 white flashing every 3 seconds) soon.

[Replaced by a new table]

	 <p>Flashing letter "X"</p>	<p>Two red flashes and two white flashes every six seconds</p> 	<p>Inward-bound and outward-bound vessels navigating in the passage may proceed to and take departure through the passage.</p> <p>Inward-bound and outward-bound vessels out of the passage shall avoid the course of other inward-bound and outward-bound vessels on the passage and stand by out of the passage.</p> <p>The lighting letter signal will change to lighting letter "X", and the flashing light signal will change to 3 red flashes and 3 white flashes every 6 seconds soon.</p>
Prohibition signal	 <p>Lighting letter "X"</p>	<p>Three red flashes and three white flashes every six seconds</p> 	<p>All traffic prohibited except the vessels instructed by the Captain of the Port.</p>

**Landmarks.**

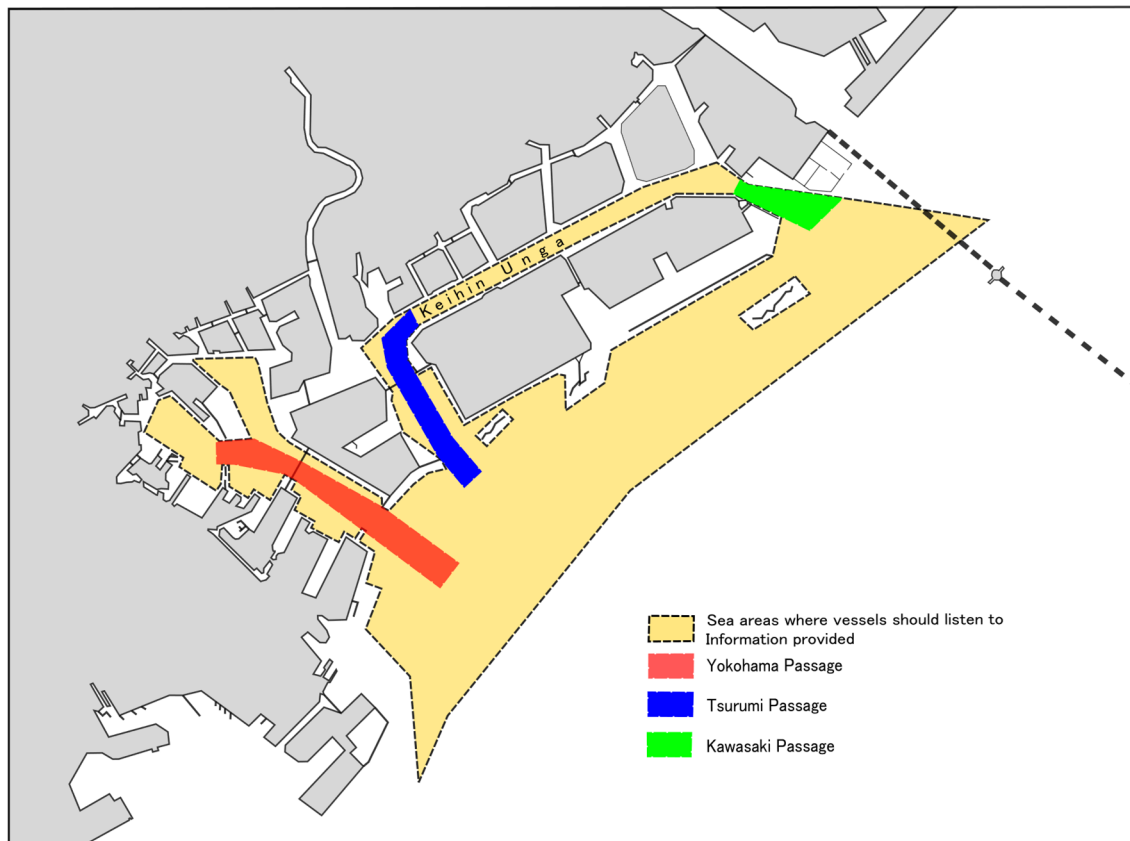
Landmark	Position	Remarks
A bridge building	35° 38.2' N, 139° 45.8' E	Rainbow Bridge, a suspension bridge structure with 2 gate-type piers, white. The vertical bridge clearance is about 50 m high.
A ferris wheel	35° 37.6' N, 139° 46.9' E	About 123 m high, located in Tokyo 13 Gochi (1).
A bridge building	35° 36.6' N, 139° 49.6' E	Tokyo Gate Bridge, a truss bridge structure with box girders, white. The vertical bridge clearance is about 52 m high.

**Indication of Course and Destination, etc. (Refer to Fig. 35)**

Indication of Course and Destination (Japan Coast Guard Notice No.35, 1995) and Symbol showing Destination of Automatic Identification System (Japan Coast Guard Notice No. 94, 2010)	Flag Signals	Symbols showing the destination in the port	Meanings of Signals and Symbols
	2nd substitute, L	L	Proceeding to mooring facilities on the W side of 15 Go Chi or N side of 15 Go Chi.
	2nd substitute, M	M	Proceeding to 10 Go Chi (1), 11 Go Chi Lumber Wharf, Tatsumi Wharf, M1, M2 dolphin berths or 12 Go Chi Log Handling Pond mooring buoy berths.
	2nd substitute, V	V	Proceeding to 10 Go Chi (2) or Odaiba Liner Wharf .
	2nd substitute, H	H	Proceeding to mooring facilities N of the line joining Harumi Signal Station and the S extremity of Shibaura Wharf.
	2nd substitute, T	T	Proceeding to mooring facilities E of the line joining Harumi Signal Station and the NW extremity of Toyosu Wharf.
	2nd substitute, A	A	Proceeding to Ariake Wharf or piers for the Government in Odaiba.
	2nd substitute, S	S	Proceeding to Shinagawa Wharf.
	2nd substitute, R	R	Proceeding to Tokyo International Cruise Pier or Aomi Container Wharf .
	2nd substitute, O	O	Proceeding to JERA Co. Oi Thermal Power Station Pier, Oi Container Wharf, Oi Marine Products Wharf Quay, Oi Food Wharf or mooring facilities W of the line joining the S extremity of Oi Food Wharf and the N extremity of Oi Wharf No.2.
	2nd substitute, C	C	Proceeding to mooring facilities in the Central Breakwater-inner Reclaimed land.
2nd substitute, C · W	C · W	Proceeding to mooring facilities in the Central Breakwater-outer Reclaimed land the West side.	

[Replaced by a new figure]

**Fig.40** Sea area where the specified vessels shall **report listen to** the information (Keihin Ko, Yokohama Ku and Kawasaki Ku) (except in cases of emergency)



5 **Restrictions to the navigational traffic and others** (Article 38 of the Port Regulations Law, Article 20-2 of the Regulations for the Enforcement of the Port Regulations Law).

The Captain of the Port shall instruct the necessary measures concerning operation of the concerned vessels in Chiba Passage and Ichihara Passage when there is a fear of causing danger in vessel navigation and instruct to alter its expected time of navigating in the concerned passage when necessary to arrange another ship to be watchful of the course of the concerned principal vessel.

10

**Information provided by the Captain of the Port shall be listened to** (Article 41 of the Port Regulations Law, Article 20-3 of the Regulations for the Enforcement of the Port Regulations Law).

Through the VHF wireless phones in attention to ships net tonnage 500 G/T and over, the Captain of the Port shall provide information on the sunken ships detrimental to navigation and other pieces of information to which the designated vessels are supposed to be listen (Refer to Fig.33 and Fig.28) for safe navigation in the concerned routes.

15

The designated ships shall listen to information provided by the Captain of the Port while navigating in the applicable waters pursuant to the Port Regulations Law (Refer to Fig.33 and Fig.28).

**Advices for Adherence to the navigation rules and the prevention of dangers** (Article 42 of the Port Regulations Law, Article 20-5 of the Regulations for the Enforcement of the Port Regulations Law).

20 The Captain of the Port shall advise the concerned vessels measures regarding adherence to the navigation rules, course change and others to prevent dangers over the VHF wireless phones.

**Instruction for waiting out of the passage** (Article 14-2 of the Port Regulations Law, Article 8-2 of the Regulations for the Enforcement of the Port Regulations Law).

25 When **there** is a difficulty from keeping a safe distance to other vessels impeding smooth navigation such as staying etc., vessels of 50m in length and upwards (excluding vessels of less than 500G/T) which are navigating or going to navigate in the passage may be instructed to wait out of the passage by the Captain of the port. And the instruction may

Fujimi	Fujimi Wharf	No. 1, 2 Quays	34° 59.6' N, 138° 30.2' E	113	4 ~ 5	700 × 2	Feeding stuffs and fertilisers
		No. 3 Quay	34° 59.6' N, 138° 30.1' E	140	7.5 ~ 8.5	5,000 × 1	Cement, Crane
		No. 4, 5 Quays	34° 59.7' N, 138° 30.0' E	480	12	30,000 × 2	Crane, Wood chips, Cement, Grain
		No. 6, 7 Quays	34° 59.9' N, 138° 29.8' E	329	8.5 ~ 9.5	10,000 × 2	Feeding stuffs and fertilisers, Grain
Tsukama	Tsukama Quay	35° 00.3' N, 138° 30.3' E	71	—	1,000 × 1	Metal, Crane	

Apart from the above table, there is a crude oil handling pier NE of Ejiri Wharf; private mooring facilities are located on the both sides of Section 2. Basins are provided in Sodeshi, Ejiri, Shimizu, Tsukama and Miho.

5 **Supplies.** Fresh water and fuel oil are available. Ice can also be supplied at Ejiri Wharf.

**Repair.** Available.

**Maritime authorities and facilities.**

Name	Telephone
Shimizu Coast Guard Office (Captain of the Port)	+81-54-355-0225
Shimizu Branch Customs	+81-54-352-6116
Okitsu Sub-branch of Shimizu Branch Customs	+81-54-369-3571
Shimizu Chosha, Shizuoka Branch of Chubu District Transport Bureau	+81-54-352-0174
Shimizu Quarantine Branch Office of Nagoya Quarantine Station	+81-54-352-6012
Shimizu Annex of Animal Quarantine Service	+81-54-353-5086
Shimizu Branch of Nagoya Plant Protection Station	+81-54-352-3775
Shizuoka Branch Office of Nagoya Regional Immigration Bureau	+81-54-653-5571
Shizuoka Prefectural Shimizu Port Authority	+81-54-353-2201

**Tugboats and Ferryboats.** Tugboats and ferryboats are available.

10 **Oil waste disposition facilities.**

Name	Application	Hours of operation	Waste oil to be disposed	
			Waste heavy oil	Waste light oil
Kurenai sangyo	+81-54-334-1310	0800 ~ 1700	Bilge, water ballast, tank cleaning water, collect oil, slop oil, sludge etc.	Water ballast, tank cleaning water, slop oil, sludge etc.

**Medical facilities.**

Name	Telephone	Remarks
Shizuoka City Shimizu Hospital	+81-54-336-1111	

**Maritime traffic.** There is a car ferry service (1,554 t) to Toi Ko.

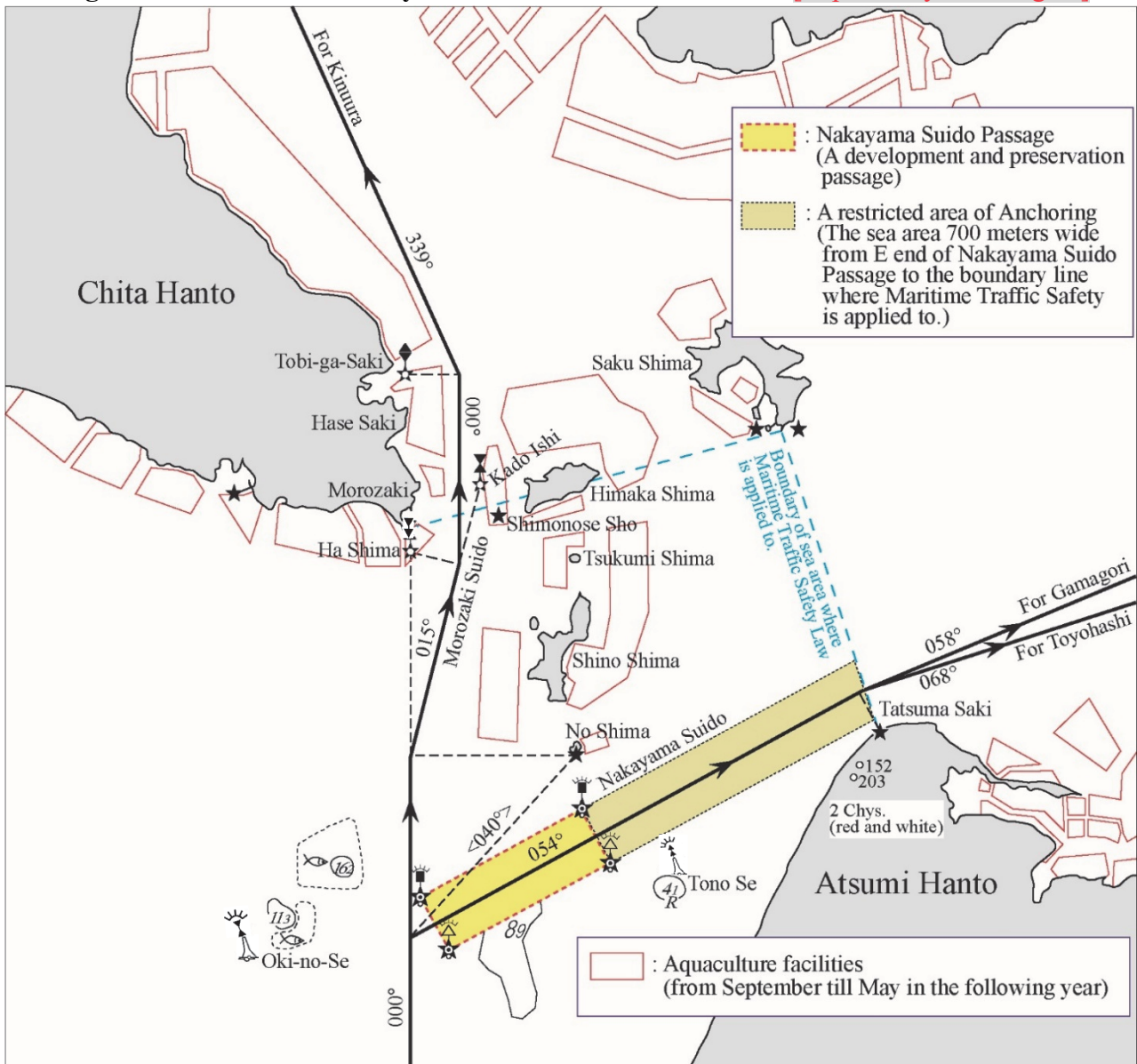
15 **The West Coast of Suruga Wan** (Chart W1075)

**General information.** The coast between Miho Saki and Omae Saki has few indentations and consists of low lying beaches of stones and sand with Wada Hana located almost in the center. The lands around the lower reaches of Abe Kawa and Oi Kawa are flat but the area N of Oi Kawa is a mountainous region with Udo Yama and Takakusa Yama lying close to the shore.

The area S of Katsumada Kawa estuary (34° 44' N, 138° 14' E) forms a trapezoidal shaped tableland, 90 m high. There is no high peak on the inland up to about 20 km from the coast.

The 10 m depth contour runs around 0.5 M offshore. The waters near Miho Saki and Wada Hana are deep to the shore and there are many dangerous reefs scattered in the vicinity of Omae Saki.

25 Yoshida Gyoko (34° 45' N, 138° 16' E) and Sagara Ko (34° 41' N, 138° 13' E) on this coast are only for use of local vessels.

**Fig. 51 Directions for Nakayama Suido and Morozaki Suido** [Replaced by a new figure]**Atsumi Wan** (Chart JP1052)

**General information.** The S shore of Atsumi Wan consists of beaches of sand and pebbles, and both ends are low-lying lands. Mountains, about 200 m high, including Kinugasa Yama ( $34^{\circ} 40.5' N$ ,  $137^{\circ} 14.4' E$ ; 278 m high), are ranging close to the central part of the shore.

Mikawa Ko (Gamagori district, Toyohashi district, and Tahara district) is located in the E.

On the N coast projects a peninsula on the central part with Hashida Hana at its SW extremity. Kuramai Ko ( $34^{\circ} 46' N$ ,  $137^{\circ} 10' E$ ) lies on the N side of the peninsula and Higashi-Hazu Ko ( $34^{\circ} 47' N$ ,  $137^{\circ} 08' E$ ; Port Code: JP HGH) is located on the NW side. The Port Regulations Law is applied to Higashi-Hazu Ko.

The water is 20 m deep or less with sandy and muddy bottom, every place in which affords anchorage.

Along W half of the S coast, the 10 m depth contour generally lies close to the shore, 0.8 M or less offshore. Neither island nor dangerous reef exists in the area. Along the N coast W of Hashida Hana, the 10 m depth contour lies 1.5 ~ 2 M offshore, inside of which islands and dangerous reefs are scattered.

The water between Hashida Hana and Hime Shima ( $34^{\circ} 43' N$ ,  $137^{\circ} 15' E$ ) is about 10 m deep; further inside of the bay is shallow to a good distance from the shore where the 5 m depth contour lies 0.5 ~ 1.5 M offshore.

With the Port Authority.

Port communications by a VHF radiotelephone system between a vessel and the Port Authority are available.

Call name	Frequency	Hours of Operation	Contact	Remarks
YOKKAICHI PORT RADIO	ch16 / 11, 12	24 hours	TEL: +81-59-366-7042	

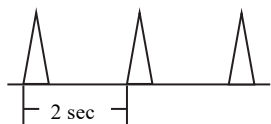
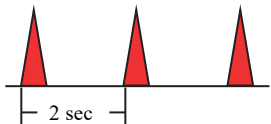
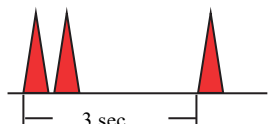
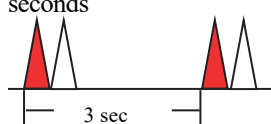
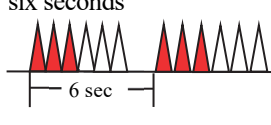
5 **Pilotage.** Pilotage is available on request through the Ise-Mikawa Wan Pilot Association (Refer to Chapter 6 “PILOTAGE” of Part 1).

**Signals.** Traffic control signals are indicated by Yokkaichi Signal Station (34° 57.1' N, 136° 38.3' E) and Yokkaichi Breakwater Signal Station (34° 56.7' N, 136° 39.7' E), and private signals are shown by Passage 2 Private Signal Tower (34° 58.4' N, 136° 39.9' E) and Passage 3 Private Signal Tower (34° 59.2' N, 136° 40.6' E).

Traffic control signals.

10 **Certain** vessels, when entering or leaving Passage 1 or Umaokoshi Passage, shall navigate subjected to the corresponding traffic control signals on Yokkaichi Signal Station and Yokkaichi Breakwater Signal Station. (Refer to Article 20-2, Appended table 4 of the Regulations for the Enforcement of the Port Regulations Law).

The traffic control signals are as follows. [Replaced by a new table]

Designation	Signal type	Meanings of signals
Inward signal	One white flash every two seconds 	Inward-bound vessels may proceed to each passage. Outward-bound vessels of 500 G/T or more shall stop navigating and stand by. Outward-bound vessels less than 500 G/T may take departure through each passage.
Outward signal through Passage 1	One red flash every two seconds 	Outward-bound vessels may take departure through Passage 1. Outward-bound vessels of 500 G/T or more intending to take departure through Umaokoshi Passage shall stop navigating and stand by. Outward-bound vessels less than 500 G/T intending to take departure through Umaokoshi Passage may take departure through the passage. Inward-bound vessels of 500 G/T or more shall avoid the course of other outward-bound vessels and stand by out of each passage. Inward-bound vessels of less than 500 G/T may proceed to each passage.
Outward signal through Umaokoshi Passage	Two red flashes every three seconds 	Outward-bound vessels may take departure through Umaokoshi Passage. Outward-bound vessels of 500 G/T or more intending to take departure through Passage 1 shall stop navigating and stand by. Outward-bound vessels less than 500 G/T intending to take departure through Passage 1 may take departure through the passage. Inward-bound vessels of 500 G/T or more shall avoid the course of other outward-bound vessels and stand by out of each passage. Inward-bound vessels of less than 500 G/T may proceed to each passage.
Restriction signal	One red flash and one white flash every three seconds 	Inward-bound vessels of 3,000 G/T or more shall avoid the course of other outward-bound vessels and stand by out of each passage. Outward-bound vessels of 3,000 G/T or more shall stop navigating and stand by. Inward- bound and outward-bound vessels less than 3,000 G/T may proceed to and take departure through each passage.
Prohibition signal	Three red flashes and three white flashes every six seconds 	All traffic prohibited except the vessels instructed by the Captain of the Port.

7 lines transferred from the previous page.

Private signals.

5 For the purpose of avoiding head-on situation of vessels within the passage, Yokkaichi Port Authority provides information for vessels of 500 G/T or more intending to pass through Passage 2 and Passage 3 by private signals.

Those vessels should adjust an arrival in or a departure from the port in accordance with private signals by Passage 2 Private Signal Tower and Passage 3 Private Signal Tower.

The private signals are as follows.

(1) Passage 2 Private Signal Tower

Designation	Signal type	Meanings of signals
Voluntary inward signal	1 blue flashing every 6 seconds	Vessels of 3,000 G/T or more are proceeding or will proceed in Passage 2. Vessels of 500 G/T or more should avoid head-on situation within the passage.
Voluntary turning round signal	2 red flashing every 6 seconds	Vessels of 3,000 G/T or more are turning round after taking departure from Kasumi No. 9 Pier. Vessels of 500 G/T or more should avoid head-on situation within the passage.
Voluntary outward signal	1 red flashing every 6 seconds	Vessels of 3,000 G/T or more are taking departure or will take departure through Passage 2. Vessels of 500 G/T or more should avoid head-on situation within the passage.

10

(2) Passage 3 Private Signal Tower

Designation	Signal type	Meanings of signals
Voluntary inward signal	2 white flashings every 4 seconds	Vessels of 20,000 G/T or more are proceeding or will proceed in Passage 3. Vessels of 500 G/T or more should avoid head-on situation within the passage.
Voluntary Outward signal from Kawagoe zone	2 red flashing every 4 seconds	Vessels of 20,000 G/T or more are taking departure or will take departure from E1 Pier (JERA Kawagoe Thermal Power Station LNG Berth). Vessels of 500 G/T or more should avoid head-on situation within the passage.
Voluntary Outward signal from Kasumigaura zone	3 red flashings every 4 seconds	Vessels of 20,000 G/T or more are taking departure or will take departure through Passage 3. Vessels of 500 G/T or more should avoid head-on situation within the passage.

**Landmarks.**

Landmark	Position	Remarks
A chimney	34° 56.6' N, 136° 39.0' E	143 m high, red and white.
A chimney	34° 57.7' N, 136° 38.7' E	128 m high, red and white, located in the yard of Yokkaichi Refinery, Cosumo Oil Co., Ltd.
3 chimneys	34° 58.4' N, 136° 38.7' E	Two of them are 124 m high; the other is a chimney stack, 204 m high; all are light gray. They stand at the yard of JERA Yokkaichi Thermal Power Station.
2 chimneys	34° 59.1' N, 136° 39.4' E	One is 186 m high; the other is a flare stack, 113 m high; both are red and white.
A conspicuous building	34° 59.6' N, 136° 39.5' E	Yokkaichi Port Building; glassed-in wall, 103 m high
2 chimneys	35° 00.4' N, 136° 41.3' E	One is 203 m high, gray; the other is 205 m high, light gray; both are chimney stacks. They stand at the yard of JERA Kawagoe Thermal Power Station.

15

Self-imposed restraint waters of anchoring.

Name	Areas or places
Y-1	The extended waters from the E entrance of Passage 1 to offing 300 m wide and 1,500 m long.
Y-2	The extended waters from the E entrance of Passage 2 to offing 400 m wide and 1,500 m long.
Y-3	The waters enclosed by the line drawn at 130° from Yokkaichi Ko Passage 3 Light Beacon No. 2, the line drawn from Yokkaichi Ko Passage 3 Light Beacon No. 2 to Yokkaichi Ko Passage 3 Light Beacon No. 1, the line drawn at 146° from Yokkaichi Ko Passage 3 Light Beacon No. 1, and the boundary line between Y-4 waters.
Y-4	The circular area within a radius of 0.4 M (740.8 m) centred at Yokkaichi Ko Passage 3 Offing Light Buoy.
Y-5	The waters of 500 m wide on the line which are connected between the position 270° 1,250 m from the N extremity of Isewan Sea-Berth and Yokkaichi Ko Passage 3 Offing Light Buoy.
Y-6	The circular area within the radius of 1,000 m centred at Cosmo Sea-Berth. (Limited to cases where there are berthing vessels.)
Y-7	The circular area within the radius of 1,000 m centred at Showayokkaichi Sea-Berth. (Limited to cases where there are berthing vessels.)

**Facilities.**

Name	Position	Length (m)	Depth (Approx. m)	Capacity (D/W × vessel)	Remarks	
Coal Wharf No. 7	34° 56.9' N, 136° 38.0' E	125	4.5 ~ 7	5,000 × 1		
No. 1 Wharf	No. 1 Quay	34° 56.9' N, 136° 38.2' E	100	5.5	2,000 × 1	
	South base		60	—	—	
	No. 2, 3 Quays	34° 56.9' N, 136° 38.4' E	245	6 ~ 8.5	10,000 × 1	
	No. 4, 5 Quays	34° 57.0' N, 136° 38.4' E	215	5.5 ~ 9.5	10,000 × 1	
	No. 6 Quay	34° 57.1' N, 136° 38.3' E	179	2 ~ 2.5	300 × 3	
No. 2 Wharf	No. 8 Quay	34° 57.1' N, 136° 38.4' E	190	9.5	15,000 × 1	
	No. 9 Quay	34° 57.1' N, 136° 38.5' E	200	10	15,000 × 1	
	No. 10 Quay	34° 57.1' N, 136° 38.6' E	200	4.5 ~ 5	2,000 × 2	
	No. 11 Quay	34° 57.2' N, 136° 38.5' E	200	10 ~ 11	15,000 × 1	
	No. 12 Quay		140	5 ~ 5.5	1,000 × 2	
	No. 19 Quay	34° 57.3' N, 136° 38.4' E	110	5	1,000 × 1	
No. 3 Wharf	No. 13 Quay	34° 57.3' N, 136° 38.6' E	245	12	30,000 × 1	
	No. 14 Quay	34° 57.3' N, 136° 38.7' E	220	10	15,000 × 1	
	No. 15 Quay		245	10	12,000 × 1	
	No. 16 Quay	34° 57.4' N, 136° 38.5' E	114	6.5	5,000 × 1	
	No. 17, 18 Quays	34° 57.3' N, 136° 38.4' E	163	5.5	2,000 × 2	
Kasumi W No.1 Pier	34° 59.4' N, 136° 39.1' E	450	4	700 t class		
Kasumigaura S Wharf	No. 22 Quay	34° 59.3' N, 136° 40.5' E	280	14	60,000 × 1	With 2 unloader cranes.
	No. 23 Quay	34° 59.3' N, 136° 40.4' E	240	12	40,000 × 1	With 1 gantry crane.
	No. 24, 25 Quays	34° 59.4' N, 136° 40.1' E	240 × 2	12	40,000 × 2	
	No. 26 Quay	34° 59.5' N, 136° 39.9' E	300	13.2	30,000 × 1	With 2 gantry cranes.
	No. 27 Quay	34° 59.6' N, 136° 39.8' E	240	12	25,000 × 1	With 1 gantry crane.
	No. 30 ~ 36 Quays	34° 59.6' N, 136° 39.3' E	420	4.5	700 × 7	
	No. 37 ~ 41, 43, 44 Quays	34° 59.8' N, 136° 39.6' E	630	5.5	2,000 × 7	
	No. 60 ~ 62 Quays	34° 59.2' N, 136° 40.6' E	390	7.5	5,000 × 3	
	No. 70 ~ 73 Quays	34° 59.7' N, 136° 39.7' E	300	4.5	700 × 4	
No. 74, 75 Quays	34° 59.8' N, 136° 39.9' E	130 × 2	7.5	5,000 × 2		
Kasumigaura N Wharf No. 80 Quay	34° 59.8' N, 136° 40.2' E	330	14	50,000 × 1	With 3 gantry cranes.	
Hamazono Wharf No. 50 ~ 59 Quays	34° 59.7' N, 136° 39.2' E	600	4.5	700 × 10		
Fuso Wharf	No. 1, 2 Quays	35° 00.3' N, 136° 39.9' E	123	4.5	750 × 2	
	No. 3 Quay	35° 00.2' N, 136° 39.9' E	85	4.5	1,500 × 1	
	No. 4, 5 Quays	35° 00.2' N, 136° 39.8' E	125 × 2	7.5	5,000 × 2	
	No. 6 Quay	35° 00.1' N, 136° 39.7' E	170	7.5	5,000 × 1	

Apart from the above table, there are many private mooring facilities in the S part of Section 1, in Umaokoshi in Section 3 and Kasumi-ga-Ura.

There are mooring facilities for large liquefied gas tankers in the Kasumigaura and Kawagoe districts.

**Supplies.** Fresh water and fuel oil are available.

**Facilities.**

Name	Position	Length (m)	Depth (Approx. m)	Capacity (D/W×vessel)	Remarks
No.1 Quay	34° 04.5' N, 136° 12.2' E	120	3.5 ~ 4	300 t × 2	
- 5.5 m Quay	34° 04.5' N, 136° 12.2' E	91	5.5	500 t class	
No.2 Quay	34° 04.4' N, 136° 12.1' E	73	2 ~ 3.5	300 t × 2	
No.2 Pier	34° 04.4' N, 136° 12.1' E	114	2.5 ~ 4	700 × 2	
Mooring Quay	34° 04.4' N, 136° 12.1' E	124	1 ~ 1.5		
No.3 Quay	34° 04.3' N, 136° 12.2' E	80	1 ~ 1.5	1,000 t × 1	
No.4 Quay	34° 04.3' N, 136° 12.2' E	161	3.5 ~ 4.5	2,000 t × 2	
Tenma Quay	34° 04.5' N, 136° 12.4' E	120	4		
Tenma S Quay	34° 04.6' N, 136° 12.2' E	110	4		
Tenma Tip Quay	34° 04.6' N, 136° 12.3' E	30	3.5		

Apart from the above table, there are private quays and piers.

**Supplies.** Fresh water, fuel oil and ice are available.

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**Maritime authorities and facilities.**

Name	Telephone
Owase Coast Guard Office	+81-597-25-0118
Owase Branch Office, Yokkaichi Customs Branch, Nagoya Customs (To be contacted to Yokkaichi Customs Branch, Nagoya Customs)	+81-59-353-6421
Owase Katsuura Detached Office of Nagoya Quarantine Station (To be contacted to Yokkaichi Quarantine Branch Office of Nagoya Quarantine Station)	(+81-59-352-3574)

**Tugboats.** Tugboats are arranged from other ports when tankers enter this port.

**Medical facilities.**

Name	Telephone	Remarks
Owase General Hospital	+81-597-22-3111	

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is available.


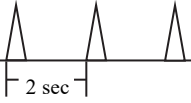

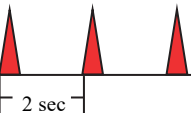

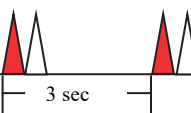

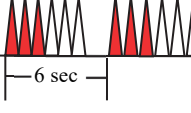
**Passage.** A passage stipulated in the law, about 3 M long, 120 ~ 210 m wide, about 7 ~ 9 m deep, leads between the area E of Tanezaki Hama and the area SE of No. 1 Wharf at the head.

**Directions.** From about 1 M off the entrance, steer for Kochi Ko Tanezaki Breakwater Light (33° 30.3' N, 133° 34.5' E), bearing 277°; when Kochi-koguchi Breakwater Light (33° 30.1' N, 133° 35.0' E) with abeam to No.7 Wharf steer to the right, gradually steer to the left toward the entrance of the port and face to the passage entrance. After that follow the passage to each anchorage.

**Signals.** Traffic control signals on Kochi Fairway (Passage S of a line drawn at 090° from Kochi Ko Mimase Light (33° 30.4' N, 133° 33.6' E)) are indicated by Katsurahama Signal Station (33° 30.0' N, 133° 34.5' E) and Urado Signal Station (33°29.9' N, 133° 33.7' E) at the W of Urado O-Hashi.

**Certain** vessels, when entering or leaving this fairway, shall navigate subjected to the corresponding traffic control signals on those signal stations. (Refer to Article 20-2, Appended table 4 of the Regulations for the Enforcement of the Port Regulations Law).

The traffic control signals are as follows. **[Replaced by a new table]**

Designation	Methods for displaying signals		Meanings of signals
	Unlighted marks (Day signals)	Lighted marks (Day and Night signals)	
Inward signal	One black cone shape (point up) 	One white flash every two seconds 	Inward-bound vessels may enter the port. Outward-bound vessels of 100 G/T or more shall stop navigating and stand by. Vessels of less than 100 G/T may leave the port.
Outward signal	One black square shape 	One red flash every two seconds 	Outward-bound vessels may leave the port. Inward-bound vessels of 100 G/T or more shall wait outside the fairway, keeping out of the ways of outward-bound vessels navigating in the fairway. Vessels of less than 100 G/T may enter the port.
Signals prohibiting entry and departure for ships of 1,000 G/T or more (tankers of 500 G/T or more)	One black cone shape (points together) 	One red flash and one white flash every three seconds 	Inward-bound vessels of 1,000 G/T (tankers of 500 G/T or more) or more shall wait outside the fairway, keeping out of the ways of outward-bound vessels navigating in the fairway. Outward-bound vessels of 1,000 G/T (tankers of 500 G/T or more) or more shall stop navigating and stand by. Vessels of less than 1,000 G/T (tankers of less than 500 G/T) may enter or leave the port.
Prohibition inward and outward signal	The combination of two black cones (points together) and one red flag 	Three red flashes and three white flashes every six seconds 	All traffic prohibited except vessels instructed by Captain of the Port.